



UNIVERSITY OF VICTORIA

1985 - 1986  
CALENDAR

## INQUIRIES

The University's telephone number is: (area code 604) 721-7211.

The University telex number is: 049-7222.

The University's mailing address is: University of Victoria, Box 1700, Victoria, British Columbia, Canada, V8W 2Y2.

Inquiries from prospective students in regard to the following should be directed to the officer or office shown.

### Admission and Advice About Programs

All Faculties, Schools and Programs, except Law, Graduate Studies:  
Director of Admission Services

Faculty of Law:  
Dean, Faculty of Law

Faculty of Graduate Studies:  
Dean, Faculty of Graduate Studies

### Counselling

Director, Counselling Services

### Financial Aid

Student Financial Aid Office

### Day Care

Coordinator, Day Care Services

### Health Services

Director, Health Services

### Housing and Residence Accommodation

Manager, Housing and Conference Services

### Parking Permits

Manager, Traffic, Security and Motor Pool

### Summer Session

Director, University Extension

### Textbooks

Manager, Bookstore

Inquiries from other persons in regard to the contents of this Calendar or the University in general should be directed to the Secretary of Senate.

## OFFICE HOURS

The offices of the University are open throughout the year from 8:30 a.m. to 4:30 p.m., Monday to Friday, except on statutory holidays.

## UNIVERSITY APPLICATION DEADLINES

### Application for Winter Session

No assurance can be given that applications received after the deadline dates can be processed in time to permit registration in the Winter Session. (This does not apply to Law — applications received after March 31 will not be considered.)

|             |   |
|-------------|---|
| January 31  | School of Nursing (2 year program).   |
| February 28 | Faculty of Education (professional year only).<br>School of Social Work.  |
| March 31    | Faculty of Law; School of Child Care;<br>Health Information Science.  |
| May 31      | Applications outside Canada — programs other than those listed above.<br>Faculty of Engineering<br>Faculty of Graduate Studies. |
| July 15     | Applicants in Canada — programs other than those listed above.  |
| November 30 | Second term courses — for third and fourth year students only (not applicable to students in attendance in the first term).     |

### Application for Summer Studies

|             |   |
|-------------|---|
| February 28 | Courses beginning in May (first admission).   |
| March 31    | Courses beginning in May (reregistration).  |
| April 30    | Courses beginning in July (not applicable to students taking courses beginning in May). |

### Application for Undergraduate Graduation

|            |                    |
|------------|--------------------|
| July 1     | Fall Graduation.   |
| December 1 | Spring Graduation. |

N.B. Each of the above dates is a fixed due date. If a fixed date falls on a holiday, Saturday or Sunday, the nearest following day of business will be considered as the deadline.

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## NOTICE CONCERNING FEES

*It is expected that it may be necessary to increase fees above the levels shown in this Calendar effective for the 1985-86 Winter Session. Notification of any required changes in the current fee schedules will be given as far in advance as possible by means of a supplement to this Calendar.*

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### Other University Publications of Interest to Prospective Students

#### *Admissions Handbook*

Provides information on the University, programs and courses offered and procedures to follow in seeking admission. Available from the Director of Admission Services.

#### *Transfer Guide: College-University*

Lists college courses and their University of Victoria equivalents. Available from the Director of Admission Services.

#### *Summer Studies Supplement*

Lists offerings available in the period May through August. Available from the Director, University Extension.

#### *Division of University Extension Supplement*

Lists credit offerings available in the late afternoon and evening. Available from the Director, University Extension.

#### *Division of University Extension Calendar*

Lists nondegree programs; issued in the fall and spring. Available from the Director, University Extension.



UNIVERSITY OF VICTORIA

# *Calendar* 1985-86

The University of Victoria operates under the authority of the *University Act* (R.S.B.C. 1979 c. 419) which provides for a Convocation, Board of Governors, Senate and Faculties. The *University Act* describes the powers and responsibilities of those bodies, as well as the duties of the officers of the University. Copies of this Act are held in the University Library. Persons who wish to purchase copies may do so through the Printer to the Queen's Most Excellent Majesty, The Parliament Buildings, Victoria, British Columbia, Canada.

The official academic year begins on July 1. Changes in Calendar regulations normally take effect with the beginning of the Winter Session each year. Nevertheless the University reserves the right to revise or cancel at any time any rule or regulation published in this Calendar or its supplements.

The Calendar is published annually in the Spring by the Registrar under authority granted by the Senate of the University.

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# SESSIONAL CALENDAR

## 1985

| JANUARY 1985  | FEBRUARY 1985   | MARCH 1985  | APRIL 1985  |
|---|---|---|---|
| S M T W T F S<br>- - 1 2 3 4 5<br>6 7 8 9 10 11 12<br>13 14 15 16 17 18 19<br>20 21 22 23 24 25 26<br>27 28 29 30 31 - -<br>- - - - - - | S M T W T F S<br>- - - - - 1 2<br>3 4 5 6 7 8 9<br>10 11 12 13 14 15 16<br>17 18 19 20 21 22 23<br>24 25 26 27 28 - -<br>- - - - - -    | S M T W T F S<br>- - - - - 1 2<br>3 4 5 6 7 8 9<br>10 11 12 13 14 15 16<br>17 18 19 20 21 22 23<br>24 25 26 27 28 29 30<br>31 - - - - - | S M T W T F S<br>- 1 2 3 4 5 6<br>7 8 9 10 11 12 13<br>14 15 16 17 18 19 20<br>21 22 23 24 25 26 27<br>28 29 30 - - - -<br>- - - - - -  |
| MAY 1985  | JUNE 1985   | JULY 1985   | AUGUST 1985   |
| S M T W T F S<br>- - - 1 2 3 4<br>5 6 7 8 9 10 11<br>12 13 14 15 16 17 18<br>19 20 21 22 23 24 25<br>26 27 28 29 30 31 -<br>- - - - - - | S M T W T F S<br>- - - - - 1<br>2 3 4 5 6 7 8<br>9 10 11 12 13 14 15<br>16 17 18 19 20 21 22<br>23 24 25 26 27 28 29<br>30 - - - - -    | S M T W T F S<br>- 1 2 3 4 5 6<br>7 8 9 10 11 12 13<br>14 15 16 17 18 19 20<br>21 22 23 24 25 26 27<br>28 29 30 31 - - -<br>- - - - - - | S M T W T F S<br>- - - - 1 2 3<br>4 5 6 7 8 9 10<br>11 12 13 14 15 16 17<br>18 19 20 21 22 23 24<br>25 26 27 28 29 30 31<br>- - - - - - |
| SEPTEMBER 1985  | OCTOBER 1985  | NOVEMBER 1985   | DECEMBER 1985   |
| S M T W T F S<br>1 2 3 4 5 6 7<br>8 9 10 11 12 13 14<br>15 16 17 18 19 20 21<br>22 23 24 25 26 27 28<br>29 30 - - - - -<br>- - - - - -  | S M T W T F S<br>- - 1 2 3 4 5<br>6 7 8 9 10 11 12<br>13 14 15 16 17 18 19<br>20 21 22 23 24 25 26<br>27 28 29 30 31 - -<br>- - - - - - | S M T W T F S<br>- - - - - 1 2<br>3 4 5 6 7 8 9<br>10 11 12 13 14 15 16<br>17 18 19 20 21 22 23<br>24 25 26 27 28 29 30<br>- - - - - -  | S M T W T F S<br>1 2 3 4 5 6 7<br>8 9 10 11 12 13 14<br>15 16 17 18 19 20 21<br>22 23 24 25 26 27 28<br>29 30 31 - - - -<br>- - - - - - |

### WINTER SESSION — FIRST TERM

#### September 1985

- 2 Monday Labor Day.\*
- 3 Tuesday Registration in person in all faculties begins. Details of place and time are mailed to all students receiving authorization to register or reregister in September 1985. No registration in the Professional Years in Education will be accepted after this date.  
Beginning of all Professional Years in Education.  
Only one day for registration in Faculty of Law.  
First term classes begin, First Year, Faculty of Law.
- 4 Wednesday Last day of registration (except as above).  
First term classes begin. Second and Third Years, Faculty of Law.
- 5 Thursday First term classes begin (except as above).
- 6 Friday First day of period for dropping and adding courses which begin in first term in Faculties other than Law.
- 11 Wednesday Senate meets. Last day for course changes in Faculty of Law.  
Last day of 5 day period for late registration with permission.
- 16 Monday Board of Governors meets.
- 18 Wednesday Last day of period for adding courses which begin in the first term. All change forms must be deposited by 4:00 p.m. on this date, at Records Services (for undergraduates) or the Faculty of Graduate Studies (for graduates).
- 30 Monday Last day for paying first term fees without penalty.

#### October 1985

- 2 Wednesday Senate meets.
- 14 Monday Thanksgiving Day.\*

- 21 Monday Board of Governors meets.
- 30 Wednesday Awards Recognition Ceremony.
- 31 Thursday Last day for withdrawing from first term courses without penalty of failure. All forms must be deposited by 4:00 p.m. on this date, at Records Services (for undergraduates) or the Faculty of Graduate Studies (for graduates).

#### November 1985

- 6 Wednesday Senate meets.
- 11 Monday Remembrance Day.\*
- 12 Tuesday Reading Break (except Law).\*
- 13 Wednesday Reading Break (except Law).\*
- 18 Monday Board of Governors meets.
- 30 Saturday Fall Convocation.

#### December 1985

- 4 Wednesday Last day of classes in first term (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).  
Senate meets.
- 7 Saturday First term examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
- 16 Monday Board of Governors meets.
- 21 Saturday First term examinations end. End of first term, all faculties.
- 25 Wednesday Christmas Day.\*
- 26 Thursday Boxing Day.\*

# SESSIONAL CALENDAR 1986

| JANUARY  | FEBRUARY  | MARCH   | APRIL  | MAY  | JUNE   |
|--|---|---|--|--|--|
| S M T W T F S<br>1 2 3 4<br>5 6 7 8 9 10 11<br>12 13 14 15 16 17 18<br>19 20 21 22 23 24 25<br>26 27 28 29 30 31 | S M T W T F S<br>1<br>2 3 4 5 6 7 8<br>9 10 11 12 13 14 15<br>16 17 18 19 20 21 22<br>23 24 25 26 27 28             | S M T W T F S<br>1<br>2 3 4 5 6 7 8<br>9 10 11 12 13 14 15<br>16 17 18 19 20 21 22<br>23 24 25 26 27 28 29<br>30 31 | S M T W T F S<br>1 2 3 4 5<br>6 7 8 9 10 11 12<br>13 14 15 16 17 18 19<br>20 21 22 23 24 25 26<br>27 28 29 30    | S M T W T F S<br>1 2 3<br>4 5 6 7 8 9 10<br>11 12 13 14 15 16 17<br>18 19 20 21 22 23 24<br>25 26 27 28 29 30 31 | S M T W T F S<br>1 2 3 4 5 6 7<br>8 9 10 11 12 13 14<br>15 16 17 18 19 20 21<br>22 23 24 25 26 27 28<br>29 30    |
| JULY   | AUGUST  | SEPTEMBER   | OCTOBER  | NOVEMBER   | DECEMBER   |
| S M T W T F S<br>1 2 3 4 5<br>6 7 8 9 10 11 12<br>13 14 15 16 17 18 19<br>20 21 22 23 24 25 26<br>27 28 29 30 31 | S M T W T F S<br>1 2<br>3 4 5 6 7 8 9<br>10 11 12 13 14 15 16<br>17 18 19 20 21 22 23<br>24 25 26 27 28 29 30<br>31 | S M T W T F S<br>1 2 3 4 5 6<br>7 8 9 10 11 12 13<br>14 15 16 17 18 19 20<br>21 22 23 24 25 26 27<br>28 29 30       | S M T W T F S<br>1 2 3 4<br>5 6 7 8 9 10 11<br>12 13 14 15 16 17 18<br>19 20 21 22 23 24 25<br>26 27 28 29 30 31 | S M T W T F S<br>1<br>2 3 4 5 6 7 8<br>9 10 11 12 13 14 15<br>16 17 18 19 20 21 22<br>23 24 25 26 27 28 29<br>30 | S M T W T F S<br>1 2 3 4 5 6<br>7 8 9 10 11 12 13<br>14 15 16 17 18 19 20<br>21 22 23 24 25 26 27<br>28 29 30 31 |

## WINTER SESSION — SECOND TERM

### January 1986

- 1 Wednesday New Year's Day.\*  
6 Monday Second term classes begin in all faculties.  
Registration in person for third and fourth year students receiving authorization to register in courses beginning in the second term. Registration in person for all new graduate students. (Not applicable to students in attendance in the first term.)  
8 Wednesday Senate meets.  
13 Monday Last day for course changes in Faculty of Law.  
17 Friday Last day for adding courses which begin on January 6. All change forms must be deposited by 4:00 p.m. on this date, at Records Services (for undergraduates) or the Faculty of Graduates Studies (for graduates).  
20 Monday Board of Governors meets.  
31 Friday Last day for paying second term fees without penalty.

### February 1986

- 5 Wednesday Senate meets.  
17 Monday Board of Governors meets.  
19 Wednesday Reading Break.\*  
20 Thursday Reading Break.\*  
21 Friday Reading Break.\*  
28 Friday Last day for withdrawing from full year and second term courses without penalty of failure. All forms must be deposited by 4:00 p.m., on this date, at Records Services (for undergraduates) or the Faculty of Graduate Studies (for graduates).

### March 1986

- 5 Wednesday Senate meets.  
17 Monday Board of Governors meets.  
28 Friday Good Friday.\*  
31 Monday Easter Monday.\*

### April 1986

- 2 Wednesday Senate meets.  
4 Friday Last day of classes in the second term (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).  
7 Monday Examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).  
21 Monday Board of Governors meets.  
23 Wednesday End of examinations for all faculties except Law. End of Winter Session (except for Faculty of Law and Professional Years in Faculty of Education, see below).  
30 Wednesday End of examinations for Faculty of Law.

## MAY-AUGUST 1986

(see Summer Studies supplement for complete dates)

### May 1986

- 1 Thursday Earliest date on which Summer Studies courses begin. Senate meets.  
12 Monday May-August and May-June first term courses begin.  
16 Friday Last day of final practicum of Professional Years (regular programs) in Faculty of Education.  
19 Monday Victoria Day.\*  
20 Tuesday Board of Governors meets.  
21 Wednesday Special Senate meeting (tentative).  
30 Friday Spring Convocation.  
31 Saturday Spring Convocation.

### June 1986

- 4 Wednesday May-June first term courses end. Senate meets (date to be announced).  
5 Thursday May-June second term courses begin.  
16 Monday Board of Governors meets.  
27 Friday May-June courses end.  
30 Monday Reading Break.\*

### July 1986

- 1 Tuesday Canada Day.\*  
3 Thursday Summer Session courses begin.  
25 Friday Summer Session first term ends.  
28 Monday Summer Session second term begins.  
30 Wednesday Supplemental examinations for Winter Session 1985-86 begin.

### August 1986

- 1 Friday Supplemental examinations for Winter Session 1985-86 end.  
4 Monday British Columbia Day.\*  
8 Friday May-August classes end.  
11 Monday May-August examinations begin.  
19 Tuesday May-August examinations end.  
20 Wednesday Summer Session ends. End of Summer Studies.

\* Classes are cancelled on all holidays and during reading breaks. Administrative offices and academic departments are closed on holidays. The McPherson Library is closed on all holidays except Good Friday and Easter Monday.

# GENERAL INFORMATION

## HISTORICAL OUTLINE

The University of Victoria came into being on July 1, 1963, but it had enjoyed a prior tradition as Victoria College of sixty years distinguished teaching at the university level. This sixty years of history may be viewed conveniently in three distinct stages.

Between the years 1903 and 1915, Victoria College was affiliated with McGill University, offering first and second year McGill courses in Arts and Science. Administered locally by the Victoria School Board, the College was an adjunct to Victoria High School and shared its facilities. Both institutions were under the direction of a single Principal: E.B. Paul, 1903-1908; and S.J. Willis, 1908-1915. The opening in 1915 of the University of British Columbia, established by Act of Legislature in 1908, obliged the College to suspend operations in higher education in Victoria.

In 1920, as a result of local demands, Victoria College began the second stage of its development, reborn in affiliation with the University of British Columbia. Though still administered by the Victoria School Board, the College was now completely separated from Victoria High School, moving in 1921 into the magnificent Dunsmuir mansion known as Craigdarroch. Here, under Principals E.B. Paul and P.H. Elliott, Victoria College built a reputation over the next two decades for thorough and scholarly instruction in first and second year Arts and Science.

The final stage, between the years 1945 and 1963, saw the transition from two year college to university, under Principals J.M. Ewing and W.H. Hickman. During this period, the College was governed by the Victoria College Council, representative of the parent University of British Columbia, the Greater Victoria School Board, and the provincial Department of Education. Physical changes were many. In 1946 the College was forced by postwar enrollment to move from Craigdarroch to the Lansdowne campus of the Provincial Normal School. The Normal School, itself an institution with a long and honourable history, joined Victoria College in 1956 as its Faculty of Education. Late in this transitional period (through the cooperation of the Department of National Defence and the Hudson's Bay Company) the 284 (now 381) acre campus at Gordon Head was acquired. Academic expansion was rapid after 1956, until in 1961 the College, still in affiliation with U.B.C. awarded its first bachelor's degrees.

In granting autonomy to the University of Victoria, the *Universities Act* of 1963 vested administrative authority in a Chancellor elected by the Convocation of the University, a Board of Governors, and a President appointed by the Board; academic authority was given to a Senate which was representative both of the Faculties and of the Convocation.

The historical traditions of the University are reflected in the Arms of the University, its academic regalia and its house flag. The B.A. hood is of solid red, a colour that recalls the early affiliation with McGill. The B.Sc. hood, of gold, and the B.Ed. hood, of blue, show the colours of the University of British Columbia. Blue and gold have been retained as the official colours of the University of Victoria. The motto at the top of the Arms of the University, in Hebrew characters, is 'Let there be Light'; the motto at the bottom, in Latin, is 'A Multitude of the Wise is the Health of the World.'

## UNIVERSITY REGALIA

### Visitor

|                  |   |
|------------------|---|
| <i>Gown</i>      | royal blue wood broadcloth, trimmed with gold silk taffeta. |
| <i>Headdress</i> | black velvet mortarboard, trimmed with gold braid.          |

### Chancellor

|                  |  |
|------------------|--|
| <i>Gown</i>      | purple corded silk, trimmed with purple velvet and gold braid. |
| <i>Headdress</i> | black velvet mortarboard, trimmed with gold braid.             |

### President

|                  |  |
|------------------|--|
| <i>Gown</i>      | royal blue corded silk, trimmed with blue velvet and gold braid. |
| <i>Headdress</i> | black velvet mortarboard, trimmed with gold braid.               |

## Board of Governors

|                  |   |
|------------------|---|
| <i>Gown</i>      | Cambridge (Doctor of Music) pattern, grey material, with gold and blue ribbon trim. |
| <i>Headdress</i> | black cloth mortarboard, with black silk tassel.                                    |

## Honorary Doctorate of Laws (Hon. LL.D.)

|                  |  |
|------------------|--|
| <i>Gown</i>      | Cambridge (Doctor of Music) pattern, scarlet wool broadcloth, trimmed with blue-purple silk taffeta. |
| <i>Hood</i>      | Aberdeen pattern, outside shell of scarlet wool broadcloth, lined with blue-purple silk taffeta.     |
| <i>Headdress</i> | Tudor style in black velvet with red cord trim.  |

## Honorary Doctorate

|                      |  |                      |                    |                  |                   |                  |  |
|----------------------|--|----------------------|--------------------|------------------|-------------------|------------------|--|
| <i>Gown</i>          | Cambridge (Doctor of Music) pattern, scarlet wool, front facings and sleeve lining of black silk taffeta.  |                      |                    |                  |                   |                  |  |
| <i>Hood</i>          | Aberdeen pattern, outside shell of black wool, lined with silk taffeta in a solid colour with a one inch band of black velvet on the outside edge.<br><table> <tr> <td>Hon.D. Litt. — white</td> <td>Hon.D.F.A. — green</td> </tr> <tr> <td>Hon.D.Ed. — blue</td> <td>Hon.D.Mus. — pink</td> </tr> <tr> <td>Hon.D.Sc. — gold</td> <td></td> </tr> </table> | Hon.D. Litt. — white | Hon.D.F.A. — green | Hon.D.Ed. — blue | Hon.D.Mus. — pink | Hon.D.Sc. — gold |  |
| Hon.D. Litt. — white | Hon.D.F.A. — green   |                      |                    |                  |                   |                  |  |
| Hon.D.Ed. — blue     | Hon.D.Mus. — pink  |                      |                    |                  |                   |                  |  |
| Hon.D.Sc. — gold     |  |                      |                    |                  |                   |                  |  |
| <i>Headdress</i>     | Tudor style in black velvet with red cord trim.  |                      |                    |                  |                   |                  |  |

## Bachelors

|                  |   |                |               |              |                  |              |                 |                |                     |
|------------------|---|----------------|---------------|--------------|------------------|--------------|-----------------|----------------|---------------------|
| <i>Gown</i>      | traditional (Canadian) Bachelor's style, in black.  |                |               |              |                  |              |                 |                |                     |
| <i>Hood</i>      | Aberdeen pattern (B.A., B.Sc., and B.Ed., without neckband and finished with two cord rosettes; B.F.A., B.Mus., B.S.N., B.S.W., LL.B., with mitred neckpiece), outside shell of silk taffeta in a solid colour, lined with identical material. Faculty colours are as follows:<br><table> <tr> <td>B.A. — scarlet</td> <td>B.Mus. — pink</td> </tr> <tr> <td>B.Sc. — gold</td> <td>B.S.N. — apricot</td> </tr> <tr> <td>B.Ed. — blue</td> <td>B.S.W. — citron</td> </tr> <tr> <td>B.F.A. — green</td> <td>LL.B. — blue-purple</td> </tr> </table> | B.A. — scarlet | B.Mus. — pink | B.Sc. — gold | B.S.N. — apricot | B.Ed. — blue | B.S.W. — citron | B.F.A. — green | LL.B. — blue-purple |
| B.A. — scarlet   | B.Mus. — pink   |                |               |              |                  |              |                 |                |                     |
| B.Sc. — gold     | B.S.N. — apricot  |                |               |              |                  |              |                 |                |                     |
| B.Ed. — blue     | B.S.W. — citron   |                |               |              |                  |              |                 |                |                     |
| B.F.A. — green   | LL.B. — blue-purple   |                |               |              |                  |              |                 |                |                     |
| <i>Headdress</i> | standard black cloth mortarboard with black silk tassel.  |                |               |              |                  |              |                 |                |                     |

## Masters

|                  |  |
|------------------|--|
| <i>Gown</i>      | traditional (Canadian) Master's style in black.  |
| <i>Hood</i>      | similar in design and colour to the respective Bachelor's hoods (M.P.A. — russet), but with mitred neckpiece and a narrow band of black velvet one inch from edge of hood on the outside only. |
| <i>Headdress</i> | standard black cloth mortarboard with black silk tassel.   |

## Doctors

|                  |   |
|------------------|---|
| <i>Gown</i>      | Cambridge style, black silk, front facings and sleeve linings of scarlet silk.                  |
| <i>Hood</i>      | Oxford Doctor's Burgon shape, shell of scarlet silk, lined with blue silk, border of gold silk. |
| <i>Headdress</i> | black velvet mortarboard with red tassel fastened on left side.                                 |

NOTE: On ceremonial occasions, participants without degrees wear the standard black undergraduate cap and gown as described above for bachelors.

## GLOSSARY OF UNIVERSITY TERMS

New students will find the following definitions helpful in becoming familiar with terms used in the University.

*Aegrotat* — Literally, "he is ill"; transcript notation accompanying a letter grade assigned where illness or similar affliction affected the student's performance.

*Auditor* — A student who pays a fee to sit in on a course without the right to participate in any way. Auditors are not entitled to credit. (See page 13.)

*Award* — See list of definitions under Scholarships and Awards.

*Chairman* — In the Academic Regulations in the section under General Information, this means the Chairman of a Department, the Director of a School, Centre or Program, and in the case of Law students, the Dean of the Faculty.

*Convocation* — Academic assembly; body composed primarily of graduates of the University.

*Corequisite* — A specific course or requirement which must be undertaken at the same time as a prescribed course.

*Course* — A particular part of a subject studied, such as English 121.

*Credit Unit* — Positive numerical value used in assigning the value of a course, such as Economics 100 (3 units).

*Department* — An academic unit. This term also refers to a faculty, school or division, as the context requires.

*Discipline* — A subject of study within a department.

*Full Time Student* — An undergraduate student undertaking 12 or more units of study in the Winter Session.\*

*Grade Point* — Positive numerical value given to an alphabetical letter grade used in assessment of academic performance.

*Graduate Student* — A student who has received a Bachelor's degree or equivalent and who is enrolled in a program leading to a Master's or Doctoral degree.

*Lower Level Courses* — Courses numbered from 100 to 299.

*Major* — The subject or area of specialization or emphasis in a degree program.

*Part Time Student* — An undergraduate student undertaking fewer than 12 units of study in the Winter Session.\*

*Plagiarism* — A form of cheating by means of the unacknowledged, literal reproduction of ideas and material of other persons in the guise of new and original work. See Statement on Cheating, page 15.

*Prerequisite* — A preliminary requirement which must be met before registration in a prescribed course.

*Probation* — A period of trial for a student whose registration is subject to academic conditions.

*Program* — The courses of study organized to fulfill an academic objective, such as a B.Sc. program.

*Registration* — The process of formally enrolling in courses.

*Regular Student* — A student who is registered as a candidate for a University of Victoria degree, or in credit courses leading to a University of Victoria Diploma.

*Section* — The division of a course, e.g. Section Y01 of French 100.

*Session* — Designated period of time during which courses of study are offered, i.e., Winter Session, Summer Session.

*Special Student* — A student who is admitted to credit courses but who is not a candidate for a University of Victoria degree or diploma.

*Student* — A person who is enrolled in at least one credit course at this University.

*Term* — A period of time in the academic year: a term in the Winter Session consists of 13 weeks, in the Summer Session, approximately 3 weeks (F = First Term; S = Second Term).

*Transcript* — A copy of a student's permanent academic record.

*Transfer Credit* — Credit for courses at the postsecondary level.

*Undergraduate Student* — A student registered in an undergraduate faculty or in a program leading to a Bachelor's degree or an undergraduate diploma.

*Unclassified* — Refers to the year in which certain students are registered.

*Upper Level Courses* — Courses numbered from 300 to 499.

*Year* — A minimum of 15 units of courses; the level within a program of study or the level of a course, e.g., First Year student, First Year course (Physics 110).

\* See Faculty of Graduate Studies for graduate students.

## CALENDAR CHANGES

The official academic year begins on July 1. Changes in Calendar regulations normally take effect with the beginning of the Winter Session in September each year. Nevertheless the University reserves the right to revise or cancel at any time any rule or regulation published in the Calendar or its supplements.

## ACADEMIC SESSIONS

The Winter Session is divided into two terms — the first, September to December; the second, January to April. The period May through August is administered under Summer Studies. The Calendar Supplement for Summer Studies is published separately. A list of credit courses offered in the late afternoon and evening is also published separately. (See inside front cover.)

## PROGRAMS OFFERED

The University offers the following degrees through the Faculty of Arts and Science, the Faculty of Education, the Faculty of Engineering, the Faculty of Fine Arts, the Faculty of Graduate Studies, the Faculty of Human and Social Development, the Faculty of Law: Bachelor of Arts; Bachelor of Education (Elementary Curriculum) and Bachelor of Education (Secondary Curriculum); Bachelor of Engineering; Bachelor of Fine Arts; Bachelor of Laws; Bachelor of Music; Bachelor of Science; Bachelor of Science in Nursing; Bachelor of Social Work; Master of Arts; Master of Education; Master of Fine Arts; Master of Music; Master of Public Administration; Master of Science; Doctor of Philosophy. Also offered are programs in Education for graduates seeking teacher certification and for persons wishing to teach native languages, a Diploma Program in Public Sector Management for persons in interior centres in the Province, and a Diploma Program in Applied Linguistics; all of which are credit programs.

### Cooperative Education Program:

The University offers students in certain programs the opportunity to undertake studies involving work in industry, government or some professions. See page 27.

## ACADEMIC ADVICE

In choosing undergraduate degree programs, students are strongly urged to consult the Calendar prescriptions for the degree program desired. Advice may be obtained from the advising centres and departments of the faculties.

Students who register in the Faculty of Arts and Science or the Faculty of Fine Arts and who intend to undertake studies at a later date in the Faculty of Education should plan their programs with this in mind. Advice may be obtained from the Advising Centre of the Faculty of Education. Similarly, academic advice about the professional programs in the Faculty of Human and Social Development is available from faculty members of the appropriate school, on an appointment basis.

## PREPROFESSIONAL STUDIES

Students who intend to complete a year or two of studies and then transfer to another university are urged to design their program so that they will meet the requirements of the other institution they plan to attend. In this connection, by proper selection of First Year courses in Arts and Science, students may equip themselves to enter the first year of Forestry, and the second year of Agriculture, Physical Education, Pharmacy, at certain other universities. Courses preparatory to Medicine, Dentistry, Architecture, etc., may be taken at the University for studies elsewhere. See page 27, Preprofessional Education. Advice may be obtained from the Advising Centre of the Faculty of Arts and Science.

## CAREER INFORMATION AND VOCATIONAL COUNSELLING

The University recognizes the importance of career planning and decision making, and all students are urged to investigate and explore career opportunities early in their University stay, especially those relating to their academic studies. The Counselling Services, the Canada Employment Centre on Campus, and the Alumni Association are available to students with career questions and concerns. A detailed description of these services appears on pages 21, 24 and 26.

## ENTRANCE AWARDS AND FINANCIAL AID

The University offers a number of scholarships to students entering from senior secondary schools in British Columbia. Complete details about these awards and other entrance awards offered by agencies outside the University are found at the back of the Calendar. Application forms may be obtained from the office of the Administrative Registrar.

Financial aid schemes open to all students attending the University are described under Financial Aid at the back of the Calendar. Information in regard to financial aid may be obtained from the Student Financial Aid Office, whose personnel will be pleased to give whatever advice and assistance they can.

## HANDICAPPED STUDENTS

The University aims to provide adequate services and facilities for its handicapped students. While the number of such students who have attended has been relatively small, students with a wide range of disabilities have successfully completed programs at the University. Victoria usually has little snow or ice in the wintertime, the residences can accommodate students using wheelchairs, the buildings on campus are largely accessible, and there is a continuing effort to improve accessibility to the facilities of the University.

Services to handicapped students are provided by a number of students, staff and faculty. These services are outlined in a pamphlet available from Admission Services. Although some services and facilities may be limited, every effort will be made to assist individual students.

Handicapped students who have questions or who feel they may need special assistance should contact Counselling Services.

## LIMITATION OF ENROLLMENT

The University reserves the right to limit enrollment, and to limit the registration in, or to cancel or revise, any of the courses listed. The curricula may also be changed, as deemed advisable by the Senate of the University.

Except in special circumstances, no student under the age of sixteen may be admitted to the First Year, or under the age of seventeen to the Second Year.

## LIMIT OF RESPONSIBILITY

The University of Victoria accepts no responsibility for the interruption or continuance of any class or course of instruction as a result of an act of God, fire, riot, strike, or any cause beyond the control of the University of Victoria.

## CATEGORIES OF STUDENTS

Each student who has been authorized to register in a faculty other than Graduate Studies is designated as one of the following:

1. Regular student — A student admitted to credit courses as a candidate for a degree or diploma.
2. Special student — A student admitted to credit courses but not a candidate for a degree or diploma.

For categories of graduate students, see Faculty of Graduate Studies.

## CLASSIFICATION OF UNDERGRADUATES BY YEAR

Classification of Regular Students by Year is based on the number of units completed, as follows:

|                   |                               |
|-------------------|-------------------------------|
| Below 12 units    | First Year                    |
| 12 to 26½ units   | Second Year                   |
| 27 to 41½ units   | Third Year                    |
| 42 units or above | Fourth Year (4 year programs) |
| 42 to 56½ units   | Fourth Year (B.Ed only)       |
| 57 units or above | Fifth Year (B.Ed only)        |

Special Students are unclassified as to Year.

## COURSE VALUES AND HOURS

Each course which is offered for credit has a unit value. A full course normally has a value of 3 units. In the course outline given in each of the faculties, the number of units assigned to each course is given in brackets immediately following the course number. Thus ANTH 305(1½) indicates that Anthropology 305 has a value of 1½ units.

The hours assigned for lectures or seminars, laboratory or practical sessions and tutorials in a course are indicated in the following examples:

- (3-0; 3-0) — 3 hours lecture/seminar per week, both terms.  
 (3-0) — 3 hours lecture/seminar per week, one term only.  
 (2-1; 2-1) — 2 hours lecture/seminar and 1 hour laboratory or practical session per week, both terms.  
 (3-0-1) — 3 hours lecture/seminar and 1 hour tutorial per week, one term only.

The period in which a course is given is indicated by the use of one of the following:

September-December  
 January-April  
 September-April  
 May-August

## LECTURE AND LABORATORY SCHEDULE

The schedule of classes for the Winter Session is published in early July.

## ADMISSION

Each student is required as part of his first application to furnish the information necessary for the University record, and to sign the following declaration:

*I hereby accept and submit myself to the statutes, rules and regulations, and ordinances of the University of Victoria, and the Faculty in which I am registered, and to any amendments thereto which may be made while I am a student of the University, and I promise to observe the same.*

See page 13 for Medical Requirement.

Inquiries relating to admission to the Faculty of Graduate Studies should be addressed to the Dean of Graduate Studies.

Inquiries relating to admission to the Faculty of Law should be addressed to the Dean of Law.

All inquiries relating to admission to faculties other than Graduate Studies and Law should be addressed to the Director of Admission Services. Details follow:

### APPLICATION FOR ADMISSION Undergraduate Faculties (except Law)

1. Persons seeking admission for the first time must obtain an Application for Admission from the Director of Admission Services. This

form must be returned, fully completed, to the Director of Admission Services by the date specified for the faculty or program applied for (see inside front cover of this Calendar).

2. Students are reminded that all questions on the application form must be answered. In particular, students applying for financial aid must be able to give their Social Insurance number. For example, Government requires that applicants for Canada Student Loans have a Social Insurance number. Application for a number may be made through the Canada Employment and Immigration Commission.
3. Persons applying for admission to Summer Studies 1985 who plan to attend the Winter Session 1985-86 must submit an Application for Reregistration to Records Services (see page 11), and may apply for Winter Session up to the end of the first week of classes in Summer Studies, instead of 15 July.
4. Each applicant applying for the first time must arrange for two (2) official transcripts of secondary school records and of any higher studies taken to be sent directly by the issuing institution to Admission Services. Every applicant is required to state the names of all education institutions of secondary or higher level attended and to submit evidence of the standing obtained at each. In addition, teachers whose professional training was not completed within 10 years prior to their application to the Faculty of Education must submit the following for consideration by the Faculty Admissions and Adjudication Committee:

- (a) resume of all teaching experience including dates, locations and grade levels, and indicating whether full time, part time, or substitution; and
  - (b) copies of the most recent Superintendent's and/or Principal's Reports, and
  - (c) letter(s) from Principal(s) attesting to teaching effectiveness in substitution roles, if applicable, and
  - (d) copy of Teacher's Card as issued by the Ministry of Education.
5. An evaluation payment of \$35 must accompany the application for admission for every applicant whose records originate, in whole or in part, outside the Province of British Columbia. This fee is not required of visiting students. It is not refundable, nor can it be applied to tuition.
  6. Candidates presenting transcripts from academic institutions outside North American may be required to supply a catalogue or syllabus showing the description of courses studied and the duration of those courses.
  7. Transcripts in languages other than English or French must be submitted together with official, notarized translations into English or French.
  8. The University reserves the right to limit enrollment. In addition, although applicants may be admissible to the University, it may not be possible to grant them entry to the specific program they would wish to follow.
  9. Applicants should consult the program prerequisites in the chart on page 9, since, in certain cases, the applicant must demonstrate special aptitudes beyond the normal academic requirements, e.g., in Music, Physical Education, etc.
  10. All applicants will be informed in writing of their acceptance or rejection as soon as their application can be processed by Admission Services. Applicants should wait for written confirmation before setting out for the University. This is particularly applicable to applicants who live at some considerable distance from Victoria.
  11. An applicant who does not meet the published requirements for admission to the University owing to exceptional circumstances may apply for a waiver of the specific admission regulation to the Senate Committee on Admission and Reregistration, c/o the Director of Admission Services. Such a request should be accompanied by the required application form and documents mentioned above and any letters of support from persons who are familiar with the applicant's abilities and circumstances.
  12. Any applicant, including those mentioned in paragraph 11, above, whose application for admission is rejected and who is able to provide information that was not presented initially may request in writing to the Senate Committee on Admission and Reregistration, c/o of the Director of Admission Services, that the application be reconsidered. Such a request should include the additional information together with any supporting documents from persons familiar with the applicant's abilities and circumstances.  
The Senate Committee on Admission and Reregistration will consider all the documentation presented and will make a final decision regarding the application, subject to review by the Senate Committee on Appeals on the grounds of specific procedural error (see Avenues of Appeal and Redress, page 13).
  13. The University of Victoria does not require applicants to undertake the aptitude and achievement tests administered by the College Entrance Examination Board (CEEB). Applicants, particularly those from outside British Columbia, may, if they so desire, include the results of such tests when making application for admission. These results, however, will not be accepted in lieu of the published requirements for admission.

### ADMISSION REQUIREMENTS

The following regulations notwithstanding, the University reserves the right to reject applicants for admission on the basis of their overall academic records, even if they technically meet entrance requirements:

#### 1. Applicants from British Columbia and Yukon Secondary Schools:

The qualifications below are approved by the Senate of the University. Inquiries relating to Secondary School Graduation should be addressed to the Ministry of Education, Victoria, B.C., or to the Superintendent of the applicant's school district.

##### (a) Graduates of British Columbia and Yukon Secondary Schools:

The requirement for admission to the University in 1985-86 is graduation from senior secondary school, as prescribed by the Ministry of Education of the Province of British Columbia, including:

- (i) Successful completion of Algebra 11, English 11, Social Studies 11, and a Science 11 *or* a Language 11 (a Beginners' Language 11 will *not* be accepted in place of a Language 11 course), and
- (ii) a minimum overall C+ average calculated on English 12 and three additional academic 12 level subjects selected from the Curriculum Reference Chart as approved by the Ministry of Education. Acceptable subjects are Algebra 12, Biology 12, Chemistry 12, French 12, Geography 12, Geology 12, Geometry 12, German 12, History 12, Latin 12, Literature 12, Mathematics 12, Physics 12, Probability and Statistics 12, Spanish 12, Western Civilization 12.

One alternative Grade 12 course may be considered in individual cases at the discretion of the Senate Committee on Admission and Reregistration, c/o Director, Admission Services.

For students graduating from secondary schools in 1984 and thereafter, Grade 12 Provincial Examinations must be written in each subject presented for admission if the examination was available in the year in which the subject was taken.

### Effective September, 1986.

The Grade 12 admission requirements will remain as outlined above but the Grade 11 admission requirements will be revised as follows: (except for the Faculty of Fine Arts, see below)

Successful completion of Algebra 11, English 11, Social Studies 11, a Science 11, *and* a Language 11 (a Beginners' Language 11 will *not* be accepted to satisfy the Language 11 requirement).

Acceptable Language 11 subjects, selected from the Curriculum Reference Chart as approved by the Ministry of Education, are French 11, German 11, Latin 11, Spanish 11.

Applicants who wish to substitute a Locally Developed (LD) language subject for the Language 11 requirement must arrange through the Principal to have an outline submitted for evaluation by the University of Victoria.

Applicants whose first language is not English may apply for an exemption from the Language 11 requirement. Such applicants will be required to demonstrate written and verbal fluency in their native language.

These requirements have been approved by the Senate of the University and apply to all applicants except those applying for a program in the Faculty of Fine Arts which has alternative requirements authorized by the Senate (see page 177).

Normally, applicants must have fulfilled the above requirements by June of the year in which admission is being sought.

Additional requirements for admission to specific programs offered by the faculties of the University are shown in the chart on the next page.

Applicants whose overall average is between C and C+ will be considered for admission by the Senate Committee on Admission and Reregistration which will make a general assessment, based primarily upon performance in academic subjects, of their capacity for success at the University.

Applicants may not receive University credit for senior secondary school courses. However, applicants with high standing may be granted advanced placement. Such applicants are invited to consult with the departments concerned prior to registration in courses.

Applicants who meet the requirement in the first paragraph, above, and who have, while enrolled in a Senior Secondary School, successfully completed courses that are given by a British Columbia college and accepted for transfer credit by the University, may be granted transfer credit for such courses, subject to the regulations in Section 3(b), on page 10. Attention is drawn, in particular, to the second paragraph of that section.

The above regulations apply to graduates of public and other schools in British Columbia which offer the Grade 12 program.

#### (b) Special Admission of Distinguished Students still Registered in Senior Secondary Schools in British Columbia:

- (i) Distinguished senior secondary school students may apply for conditional admission to the University prior to graduation from their secondary school provided that the following criteria are met:
  - (a) The student must be recommended by the Principal of his school.

**DEGREE PROGRAM PREREQUISITES •**

For the convenience of applicants who have graduated from British Columbia senior secondary schools, the secondary school course requirements specified for programs offered with the faculties and departments of schools of the University are assembled in this chart.

**R – Required      O – Optional but Recommended**

| DEGREE PROGRAMS<br>(by Faculty and Department or School) | Gen. Adm.<br>Req only | Alg |   | Biology |    | Chemistry |    | Comp<br>Sci<br>11 | Geog<br>12 | Geom<br>12 | Hist<br>12 | Lang<br>11 | Lit<br>12 | Physics |    | Prog &<br>Stats<br>12 | Science* |    |   |
|--|-----------------------|-----|---|---------|----|-----------|----|-------------------|------------|------------|------------|------------|-----------|---------|----|-----------------------|----------|----|---|
|  |                       | 12  |   | 11      | 12 | 11        | 12 |                   |            |            |            |            |           | 11      | 12 |                       | 11       | 12 |   |
| <b>ARTS AND SCIENCE</b>                                  |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Anthropology   |                       |     | o |         |    |           |    | o                 |            |            |            | o          |           |         |    |                       |          |    | o |
| Astronomy (see Notes 1 & 2)                              |                       |     | R |         |    |           |    |                   |            |            |            |            |           |         | o  | o                     |          |    |   |
| Biochemistry & Microbiology (see Note 1)                 |                       |     | R |         |    | R         | o  |                   |            | o          |            |            |           |         | R  | o                     | o        |    |   |
| Biology (see Notes 1 & 2)                                |                       |     | R | o       | o  | R         | o  |                   |            |            |            |            |           |         | R  | o                     |          |    |   |
| Chemistry (see Notes 1 & 2)                              |                       |     | R |         |    | R         | R  |                   |            |            |            |            |           |         | R  | o                     |          |    |   |
| Classics (incl. Greek & Latin)                           | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Computer Science (see Notes 2 & 3)                       |                       |     | R |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Economics (see Note 1)                                   |                       |     | R |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| English  |                       |     |   |         |    |           |    |                   |            |            |            |            | o         |         |    |                       |          |    |   |
| French Language & Literature                             | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Geography (see Note 2)                                   |                       |     | o |         |    |           |    |                   |            | o          |            |            |           |         |    |                       |          |    |   |
| Germanic Studies   | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Hispanic & Italian Studies                               | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| History  |                       |     |   |         |    |           |    |                   |            |            | o          |            | o         |         |    |                       |          |    |   |
| Linguistics (B.A.)                                       |                       |     | o |         |    |           |    |                   |            |            |            | o          |           |         |    |                       |          |    | o |
| Linguistics (B.Sc.)                                      |                       |     | R |         |    |           |    |                   |            |            |            | o          |           | o       | o  |                       |          |    |   |
| Mathematics (see Note 2)                                 |                       |     | R |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Pacific & Oriental Studies                               | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Philosophy   | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Physics (see Notes 1 & 2)                                |                       |     | R |         |    | o         | o  |                   |            |            |            |            |           |         | R  | o                     |          |    |   |
| Political Science  |                       |     | o |         |    |           |    |                   |            |            | o          |            | o         |         |    |                       | o        |    |   |
| Psychology (see Note 4)                                  |                       |     | o |         |    |           |    |                   |            | o          |            |            |           |         |    |                       | o        | R  | o |
| Slavonic Studies   | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Sociology  |                       |     | o |         |    |           |    | o                 |            | o          |            |            |           |         |    |                       | o        | o  | o |
| <b>EDUCATION</b>   |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Education (Elem) (see Note 5)                            |                       |     |   | o       |    |           |    |                   |            | o          |            |            | o         | o       |    |                       |          |    | R |
| Education (Sec) (see Note 5)                             |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Physical Education (see Note 6)                          |                       |     |   | o       |    | o         |    |                   |            |            |            |            | o         | o       |    |                       |          |    | R |
| Human Performance (see Note 6) Arts                      |                       |     |   | o       |    | o         |    |                   |            |            |            |            | o         | o       |    |                       |          |    | R |
| Human Performance (see Note 6) Science                   |                       |     | R | o       | o  | R         | o  |                   |            |            |            |            | o         | o       |    |                       |          |    |   |
| Leisure Studies (see Notes 2 & 6)                        |                       |     |   | o       |    | o         |    |                   |            |            |            |            | o         | o       |    |                       |          |    | R |
| <b>ENGINEERING</b> (see Notes 2 & 7)                     |                       |     | R |         |    | R         | o  |                   |            |            |            |            |           |         | R  | R                     |          |    |   |
| <b>FINE ARTS</b>   |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Creative Writing (see Notes 2 & 10)                      | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| History in Art   | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Music (see Note 8)                                       | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Theatre (see Note 9)                                     | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Visual Arts (see Note 10)                                | G                     |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| <b>HUMAN &amp; SOCIAL DEVELOPMENT</b>                    |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Child Care (see Note 11)                                 |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    | o |
| Health Information Science (see Note 2)                  |                       |     | R | o       | o  | o         | o  | o                 |            |            |            |            |           |         |    |                       |          |    |   |
| Nursing (see Note 12) 2 year program                     |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |
| Social Work (see Note 13)                                |                       |     |   |         |    |           |    |                   |            |            |            |            |           |         |    |                       |          |    |   |

- \* In addition to the general admission requirements.
- Science = Biology, Chemistry, Earth Science, Geology, Physics.

Note 1: Exceptions may be made by the Department. Although special courses or sections of first-year Chemistry and Physics 102 are available if prerequisites are lacking, students planning to specialize in Astronomy, Biochemistry, Biology, Chemistry, Microbiology or Physics are strongly urged to complete Algebra 12, both Chemistry 11 and 12, at least Physics 11 and preferably Physics 12.

Note 2: Co-operative Education Programs in Biology, Chemistry, Computer Science, Creative Writing, Engineering, Geography, Leisure Studies, Health Information Science, Math (incl. Statistics) and Physics (incl. Astronomy) are available and information may be obtained by contacting the Department concerned.

Note 3: Applicants with credit for Computing Science 11 should consult the Department of Computer Science before registering in Computer Science 110.

Note 4: Recommended — Algebra 12 or Geometry 12 or Probability and Statistics 12.

Note 5: Except for Physical Education teaching areas, students planning a B.Ed. program take their first year in the Faculty of Arts and Science or in the Faculty of Fine Arts. They are referred to the Education Advising Centre when considering their selection of teaching areas. In the second year students transfer to the Faculty of Education.

Note 6: Contact Admission Services early as enrolment is limited. Deadline for returning P.E. experience forms is May 31, 1985. Community Recreation 12 is recommended.

Note 7: Must normally obtain grade of B or better in Algebra 12, and Physics 12.

Note 8: Music requires an audition, aptitude test, and interview for admission to its programs of study. Contact: Administrative Officer, School of Music.

Note 9: Interview required. Theatre also requires an audition for admission to the Third Year of the "acting specialty."

Note 10: First Year — portfolio under consideration. Advanced Standing (Second Year and above) — portfolio required. Contact Chairman of department concerned.

Note 11: Requires one year of College or University study, including appropriate courses as outlined in the calendar.

Note 12: RN Certification required prior to application.

Note 13: Requires two years of College or University Study, including appropriate courses as outlined in the calendar.

- (b) The student must be maintaining a B average in all subjects and an A average in the discipline to be undertaken at the University. If the student elects a discipline not taught in the school attended, the Principal of the school must make a special recommendation, in writing, stating the student's particular aptitudes.
  - (c) The University department concerned must support the student's application.
  - (d) The student must be completing a total of at least 12 courses in Grades XI and XII leading to graduation and should normally be taking as many courses as are required for access to scholarships offered by the Government of the Province.
- (ii) Students interested in undertaking courses and who have satisfied the criteria in (i), a. to d. above should apply to the Director of Admission Services by July 15 for full year courses or half year courses in either term, in the Winter Session.
  - (iii) The University will accept applicants who have met the above criteria and will register them as "special students" in no more than 6 units of work in any given academic session.
  - (iv) Credit towards a degree will be granted by the University for courses successfully completed when the student is authorized to register in a degree program.

(c) *Admission from British Columbia Grade XIII:*

Applicants who have graduated from senior secondary schools in British Columbia and who have undertaken studies in the curriculum of the former Grade XIII of British Columbia will be considered on an individual basis. Those with good records will be admissible; those with marginal records will be considered by the Senate committee on Admission and Reregistration, which will judge each case separately.

**2. Graduates of Secondary Schools Outside British Columbia and the Yukon:**

(a) *Graduates of Canadian Secondary Schools:*

In addition to meeting the requirements shown in the chart on the previous page and the specific requirements below, applicants' academic records are normally required to meet, in standing and in subject matter, the requirements for admission to both this University and a recognized university in their own Province (the University of Alberta for residents of the Northwest Territories).

Alberta, Saskatchewan, Manitoba, New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland, the Northwest Territories: Grade 12 graduation including:

- (a) Successful completion of the equivalent of Algebra 11 (academic), English 11, Social Science 11 (such as History, Geography, etc.), and a Science 11 or Language 11.
- (b) A minimum overall average equivalent to the British Columbia C+ or the equivalent of English 12 and three additional Grade 12 level academic subjects.

Ontario: either Grade 13 graduation with a minimum 65% overall average or students with exceptional ability may be considered after completion of Grade 12 including:

- (a) Successful completion of the equivalent of Algebra 11 (academic), English 11, Social Science 11 (such as History, Geography, etc.) and a Science 11 or Language 11.
- (b) A minimum 75% overall average on the equivalent of English 12 and three academic Grade 12 level subjects.

Transfer credit will not be awarded for Grade 13 courses. Please consult Admission Services for further information.

Students who apply for Grade 12 will be considered for admission at the discretion of the Senate Committee on Admission and Reregistration.

**Note: Effective September 1986, the equivalent of a Science 11 and a Language 11 will be required.**

Québec: Le diplôme d'études collégiales (D.E.C.) on completion of the two year academic course of studies with a minimum overall average of 70%, at a collège d'enseignement général et professionnel (C.E.G.E.P.). Usually, this grants placement in Second Year.

Applicants who have completed two semesters at a C.E.G.E.P. with a minimum overall average of 70% will be considered for admission to First Year.

(b) *Applicants from Other Countries:*

If none of the qualifications below is appropriate to the country in which they received their secondary education, applicants may apply to the Director of Admission Services for consideration on an individual basis.

- (i) British General Certificate of Education (G.C.E.): At least 5 subjects to the Ordinary ('O') level, including English, Mathematics, and a Second Language or a Science (effective September 1986: a Second Language and a Science); at least 3 subjects to the Advanced ('A') level with an average of C, and no grades below D. Applicants presenting these qualifications may be eligible to receive up to 15 units of transfer credit.
- (ii) Cambridge School Certificate: As for the G.C.E. (i) above, with stated standing in Principal Level courses.
- (iii) University of Hong Kong Matriculation Certificate: Standing equivalent to (i) above. Grades of D and E are not acceptable.
- (iv) Certificate of Matriculation issued by a recognized university, indicating admissibility to that university.
- (v) United States: High school graduation, with studies to include at the senior level (equivalent to British Columbia Grades 11 and 12): 4 semesters of English, 2 semesters of a Social Science (such as Geography, History, etc.), 2 semesters of Mathematics (academic), 2 semesters of a science or a second language (effective September 1986: 2 semesters of a science and a second language), and 6 semesters of Grade 12 academic subjects with a grade point average equivalent to a British Columbia C+ on all academic subjects taken at the Grade 12 level.

(c) *Applicants with International Baccalaureate:*

Applicants who have successfully completed the International Baccalaureate Diploma requirements, three subjects at Higher Level and three subjects at Subsidiary Level, are eligible to receive up to 15 units of transfer credit.

**3. Admission from Colleges and Other Universities:**

(a) *Application Procedures:*

Applicants are considered in three groups:

- (i) Those applicants who were eligible for admission to the University, under Regulation 1 or 2 above, before enrolling in another post-secondary institution, and who have maintained an average at least equivalent to the University of Victoria 2.00 on the latest attempted full year or equivalent in college or university courses that are acceptable for transfer credit will apply as described in Paragraph 1, under Application for Admission, on page 7.
- (ii) Those applicants who were not eligible for admission to the University on leaving secondary school, but who have successfully completed at least 12 units (8 semester courses) of college or university study that are acceptable for transfer credit and who have maintained an overall average at least equivalent to the University of Victoria 2.00 on the latest attempted full year or equivalent of study, will apply as described in Paragraph 1, under Application for Admission on page 7.
- (iii) Those applicants who either were not eligible for admission to the University on leaving secondary school, or are not eligible for admission under (i) or (ii) above, are invited to apply to the Director of Admission Services for individual consideration by the Senate Committee on Admission and Reregistration.

(b) *Transfer Credit*

Note: for applicants from British Columbia Colleges: the University of Victoria Transfer Guide, which is available from Admission Services, lists those courses that are acceptable for transfer credit at the University.

Applicants who have failed their last year or who have an overall weak record at another institution will not normally be permitted to transfer to the University of Victoria, even though they may possess the admission requirements for secondary school graduates.

Those persons planning to undertake preliminary studies at another institution should verify in advance that the courses which they propose to take elsewhere may be acceptable for transfer credit in their subsequent program at the University of Victoria.

Transfer credit granted on admission may or may not be applicable to the degree program selected by the student, that is, it is subject to the same regulations as credit earned at the University (See Credit, page 14).

Transfer credit granted in a degree program is limited and may not normally be applied to the final 30 units of the program. Exceptions to this regulation require the approval of the Dean of the Faculty concerned.

If a student's performance warrants a review of transfer credit granted on admission, the University reserves the right to require such a student to make up any deficiencies (without additional credit) before proceeding to studies at a higher level. These decisions would normally be taken at the department level.

#### 4. Institutes of Technology and Colleges of Applied Arts and Technology:

A student with a completed Diploma from an Institute of Technology or College of Applied Arts and Technology may be admitted if the student has attained at least an overall average of 70%. The student should not normally expect to receive more than 15 units of credit, but in individual cases, at the discretion of the department(s) concerned, more credit might be granted. Consideration of admission and transfer credit will be given for a completed two year program at an Institute of Technology or for a three year program from a College of Applied Arts and Technology.

#### 5. Admission of Mature Applicants:

The University of Victoria is most willing to assist persons who are at least 21 years of age to complete their higher education even though they may not possess formal university entrance requirements. Students who have taken a full year or equivalent of university level courses are not eligible to apply under this regulation.

The Senate Committee on Admission and Reregistration deals with applications from mature persons on an individual basis. Candidates applying for admission are asked to carry out the following steps:

- Request an Application for Admission by writing to the Director of Admission Services.
- Return the Application for Admission together with a letter written by the applicant outlining work experience and relevant personal background, including reasons for wanting to attend university.
- Arrange to have an official transcript of all academic work sent directly to Admission Services by the issuing institution.
- Submit two reference forms from employers or persons who know the applicant well.

An interview with the Director of Admission Services or representative may be required after a completed application and the above mentioned letter, forms and transcripts have been received.

#### 6. Letter of Permission:

Students who wish to take courses at the University of Victoria for credit at their home university must have a Letter of Permission, in lieu of an official transcript, sent directly by the issuing institution to Admission Services, University of Victoria. For further information, contact the Director of Admission Services.

#### 7. Applicants Whose First Language is not English:

The University requires that:

- Applicants for admission whose first language is not English, and who have not resided in Canada or other English speaking countries for the five years immediately prior to the beginning of the session for which application is made, must take the test of English as a Foreign Language (TOEFL) and submit scores by July 31. A score of not less than 575 on the Test of English as a Foreign Language is required for admission to the University. Applicants whose first language is not English but who have resided in Canada or other English speaking countries for the five years immediately prior to the session for which application is made are not required to take the Test of English as a Foreign Language.

Note: Applicants must designate the University of Victoria as a receiving institution for the test results. Student copies are not acceptable.

- All students who are admitted to the University must take the British Columbia English Placement Test, unless they have satisfied one of the conditions stipulated for transfer students or are exempted under the regulations governing part time students (see English Requirement, page 12).

Information concerning the Test of English as a Foreign Language, and the times and places at which it is administered, may be obtained by writing to Education Testing Service, Princeton, N.J. 08540, U.S.A. Applications are available from the University's Counselling Services.

## REREGISTRATION

All inquiries relating to reregistration in undergraduate faculties should be addressed to the Administrative Registrar.

### APPLICATION FOR REREGISTRATION

- Students who were registered in the most recent session at the University *may* be authorized automatically for reregistration without the submission of an application; some students will be required to complete an application. Students who were not registered in the most recent session must submit an application for reregistration. Consult the Records Services Office for details.
- A student who has been required to withdraw from the University in the past because of unsatisfactory progress or standing and who wishes to be considered for reregistration must include with the application a letter, addressed to the Senate Committee on Admission and Reregistration, c/o Records Services, which states why the student believes the application should be accepted. (See Standing, page 18.)

The Senate Committee on Admission and Reregistration will consider all the documentation presented and will make a final decision regarding the student's application, subject to review by the Senate Committee on Appeals on the grounds of specific procedural error (see Avenues of Appeal and Redress, page 13).

- Students who have registered at another university or college since last in attendance at the University are required to state the names of all educational institutions of postsecondary level attended and to submit official transcripts of their academic records at the institutions attended, by the due dates shown on the inside front cover of this Calendar. An evaluation fee of \$35 must accompany the application for reregistration for every applicant whose records originate in whole or in part outside the Province of British Columbia. This fee is not required from "visiting students" or from students who obtained a Letter of Permission from the University of Victoria to study elsewhere. The fee is not refundable, nor can it be applied to tuition.
- If the results of deferred examinations affect the standing of a student, an Authorization to Reregister will not be issued until examination results are available.

## REGISTRATION

### Completion of Registration:

Inquiries relating to registration in undergraduate faculties other than Law should be addressed to the Director of Records Services. Inquiries relating to the registration in the Faculty of Graduate Studies should be addressed to the Admissions and Records Officer, Graduate Studies. See Faculty of Law for regulations concerning registration in that Faculty.

In addition to completing the procedures mentioned above under the headings Application for Admission and Application for Reregistration all students in the Winter Session are required to register at times announced by the University (see Sessional Calendar, pp. 3 and 4). Each new student, by Letter of Admission, and each returning student, by Authorization to Reregister will be informed of the time and place for registration. Sessional fees are payable at the time of registration.

All Letters of Admission or Authorizations to Reregister that are not used to register in the term and session to which they apply are automatically cancelled. Students who are issued a Letter of Admission or Authorization to Reregister for September may not use this document for entry in January (see Registration for One Term Only).

Registration in any course is not confirmed until:

- all course prerequisites have been met;
- the required registration procedures have been completed;
- all required fees have been paid (see Payment of Accounts, page 19); and
- classes in the course have begun and the student is in attendance.

Departments reserve the right to cancel the registration in a course of a student who fails to attend that course within seven calendar days of the commencement of the term, or of any student who is not able to demonstrate that all course prerequisites have been met.

A student who for medical or compassionate reasons is unable to attend a course during the first seven calendar days of the term may apply to the department within that time to confirm registration in that course and the department may confirm the registration.

(See Student Responsibility, below, Attendance at Lectures, page 14, and Voluntary Withdrawal, page 18.)

**Student Responsibility:**

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, students are responsible for the completeness and accuracy of their registration. They must ensure that there is no discrepancy between the program they are following and that recorded in Records Services and that all changes, including those in address and telephone number are reported promptly to Records Services. Students may not take courses for which they have not registered, and may not drop courses without permission. Students who register in a course for which they have previously received credit or for which they have received equivalent credit on transfer must indicate this by entering DUP (duplicate) on their registration forms.

Students who have credit for courses taken more than seven years ago at the University must consult the departments to ensure that courses they may wish to take have not been taken previously under a different number.

A letter mailed to a student's address as currently on record in Records Services will be deemed adequate notification to the student for all matters concerning the University.

**Late Registration:**

The period for late registration in the Winter Session is the first five days of classes; in the Summer Studies, the first two days of classes.

**Students with Unsatisfactory Standing:**

No student with unsatisfactory standing will be permitted to register without permission of the faculty concerned.

**Registration for Both Terms in Winter Session:**

Students planning to undertake studies in both terms of the Winter Session must register in September for all courses they intend to take, including single term courses beginning in January.

**Registration for One Term Only:**

If suitable single term courses are available, students may:

- (a) register during the registration period for September for a program of courses to be taken in the First or Second Term (see inside cover for due dates of applications);
- (b) register during the registration period for January for a program of courses to be taken in the Second Term (see inside cover for due dates of applications).

**Changes in Registration: (See due dates on pages 3 and 4)**

1. Students may add and drop courses during the first ten days of classes in the First Term and during the first ten days of the Second Term upon submission of the appropriate change form to Records Services.
2. Students may drop First Term courses until the last day of classes in October and Full Year and Second Term courses until the last day of classes in February provided they submit the academic change form to Records Services, signed by the appropriate Dean. Failure to notify Records Services by the specified date will result in the student receiving a failing grade for the course. (See refunds for dropping a course, page 20.)
3. A student who has a grade of E or F in a First Term course may re-register in the course if it is offered in the Second Term, provided that the student will be registered in not more than 9 units in the Second Term. A student who has an E in the First Term course may take a Second Term course which lists the First Term course as a prerequisite only with the permission of the department concerned.
4. Any undergraduate student, who after registration decides to drop all courses, is withdrawing from the University and must notify Records Services in writing. (See Withdrawal, page 18.)

**Concurrent Registration at Another Institution:**

Normally a student may not be registered concurrently in courses offered at the University of Victoria and in university level courses offered at another institution. In exceptional circumstances, such registration may be permitted but only with the prior consent of the Dean of the Faculty concerned or the Administrative Registrar.

**Registration in Graduate Courses by Undergraduates:**

Students in their final year of a Bachelor's degree program who have a grade point average of at least 6.00 in the previous year's work may be permitted to register in up to 3 units of graduate courses on the recommendation of the department concerned and with the consent of the Dean of Graduate Studies. Students in the Public Administration Diploma program who have completed at least 9 units of course work, and have a grade point average of at least 6.00, may be permitted to register in up to 4½ units of graduate courses in Public Administration upon the recommendation of the Director and subject to the approval of the Dean

of Graduate Studies. Apart from students admitted to the Faculty of Graduate Studies, no students other than those mentioned above may register in graduate courses.

**Application for Graduation:**

See Graduation, page 18.

**English Requirement for Undergraduates:**

All students enrolling in the University for the first time, who do not have credit for three units or more of university level English courses, are required to write the British Columbia English Placement Test (E.P.T.). Exceptions are noted below. Results of the E.P.T. are valid for placement purposes for the two academic years following the writing of the test.

Students who achieve a satisfactory standing in the British Columbia English Placement Test shall be deemed to have satisfied the University English Requirement and need take only those English courses which may be required in their degree program. Students who fail to achieve a satisfactory standing in the British Columbia English Placement Test are directed as follows:

- Those whose first language is English must register in English 099 for the first term and in English 115 for the second term. Students in English 099 may not take any other English course until they have completed 099. Those who fail English 099 in the first term must repeat the course in the second term. If such students fail the course again, they may repeat it only in the subsequent summer session; should they not do so, or do so and fail, they will normally be denied permission to return to the University in any future session until they have demonstrated the required level of competence in English. Such denials are subject to appeal to the Senate Committee on Admission and Reregistration. Students may also take English 099 in Summer Session prior to their first year at the University; such students would then take English 115 in the Fall, unless they fail English 099 (in which case they would still have three opportunities to pass the course). To qualify for reregistration, students must register in English 115 in the term following successful completion of 099 and in each subsequent term attended until passed. (Any deviation from this sequence must have approval from the Director of First Year English.) Upon successful completion of English 115 these students will have satisfied the University English Requirement.
- Those whose first language is not English must follow the same procedure as for those whose first language is English, but such students may be required to take Linguistics 099 either instead of or before English 099 according to their performance on the test and the decision of the English and Linguistics departments. Students who are registered to take Linguistics 099 will be admitted to the University only in September when the course begins and will follow one of these patterns:
  - (i) Some students may be permitted to move out of Linguistics 099 at the end of first term, and will then proceed to English 099.
  - (ii) Upon completion of Linguistics 099, students will be required to take English 099 prior to English 115.
  - (iii) Students who fail Linguistics 099 will be required to repeat the course in the next year. If they pass the course at the second attempt, they will proceed according to (i) or (ii) above; if they fail Linguistics 099 at the second attempt, they will be required to withdraw from the University for insufficient command of the language of instruction.

For students who are placed initially in either English 099 or Linguistics 099, successful completion of English 115 is necessary to satisfy the University English Requirement. There must be no interruption in the sequence of courses without the permission of the Director of First Year English. The repetition of Linguistics 099, English 099, or English 115 must also occur in the next term attended. It should be noted that in the early weeks of English 099 and Linguistics 099 students may be switched from one course to the other or to English 115 upon the recommendation of the instructor.

**Exceptions:**

- I. Letter of Permission  
Those students who are admitted on a Letter of Permission are not obliged to satisfy the University English Requirement.
- II. Part time Students  
Part time students are encouraged to take the E.P.T. or otherwise satisfy the University of English Requirement before registering, but are not required to do so until they have accumulated three units of credit or wish to enroll in any English course.

### III. Transfer Students

Students who enter the University from other postsecondary institutions shall be deemed to have satisfied the University English Requirement if they have any of the following:

1. Satisfactory E.P.T. scores not more than two years old.
2. Specific equivalency for English 115 or 215.
3. Three units or more of transfer credit for English courses.

All other transfer students will be required to take the E.P.T. and to proceed, with regard to English courses, in the same manner as those enrolling for the first time.

Students enrolling for the first time will not be permitted to register unless they present valid E.P.T. scores or demonstrate that they are in one of the Exception categories above.

Students must attempt to write the E.P.T. on one of the scheduled dates; the exam will generally be given in March, July, September (prior to registration), and December. British Columbia senior secondary school students are encouraged to take the March exam; they may obtain information about the E.P.T. from their school principal, or the Educational Research Institute of British Columbia, No. 701-601 West Broadway, Vancouver, B.C. V5Z 4C2. Also, B.C. students and those coming from other provinces or countries can obtain information about writing the E.P.T. on the University of Victoria campus from Admission Services or the Department of English.

### AUDITING A COURSE

An individual who is either a registered student or a member of the community may be permitted to audit up to 3 units of undergraduate courses in a session. Registration as an Auditor is subject to the following conditions:

- (a) The individual must receive permission from the department concerned.
- (b) Admittance to the class is dependent upon the class size and other factors that the instructor and the department establish.
- (c) The degree of participation in the course is at the discretion of the department.

- (d) Attendance shall grant no entitlement to an academic record of such attendance and shall not be considered as meeting admission, prerequisite or course requirements for any University credit program.
- (e) Graduate courses are not open to persons who are not registered in the Faculty of Graduate Studies, except as provided by the regulations of that Faculty.
- (f) The fee, shown in the fee schedule in the Calendar, is payable at the time of registration and is not refundable. (See para. 7, page 20.)

### INDIVIDUALLY SUPERVISED STUDIES

Individually supervised studies may be undertaken during the Winter Session; such studies will normally consist of Directed Studies courses. Students interested in pursuing such studies should contact the Advising Centre in the Faculty of Education or the appropriate department chairman in the other faculties. The availability of such courses will be determined by the department concerned.

For individually supervised studies in the Summer see the Summer Studies Supplement to this Calendar.

### MEDICAL REQUIREMENT

A medical examination is not compulsory except for students taking Physical Education courses. The medical examination is not provided by the University; it must be obtained at the student's own expense.

The University, through the Health Services, may require a student to take a medical examination at any time during attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole.

#### Students not Residents of Canada:

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete.

Such students are not eligible to receive hospital or medical insurance from the Province of British Columbia until they have established residency in the Province for 12 consecutive months. In the interim they must purchase hospital and medical insurance as a condition of registration.

Further information is found under Health Services, page 22.

## AVENUES OF APPEAL AND REDRESS

Students who have grounds for believing themselves unjustly treated within the University are encouraged to seek all appropriate avenues of redress or appeal open to them.

#### Nonacademic Matters:

Matters that are not strictly academic may be brought to the attention of appropriate University officials or bodies through the Counselling Services, the Student/Faculty Liaison Committee or similar faculty committee, the Dean or the President. In addition, the student may wish to consult the Alma Mater Society's Ombudsman (see page 25).

#### Academic Matters:

Academic matters fall within the purview of course instructors, the departments, the Faculties and the Senate.

Depending on the nature of the academic matter of concern to the student, the order in which the student should normally seek redress is first, the course instructor; second, the departmental chairman; third, the Dean of the Faculty; and finally, the Senate. In addition, the student may wish to consult the Alma Mater Society's Ombudsman (see page 25). A student seeking a formal review of an assigned grade should consult the regulations on page 17.

#### Appeals to the Senate:

Once all the appropriate recourses have been exhausted, students may have the right of final appeal to the Senate. Except on those matters in which the sole question raised turns on the exercise of academic judgement, students may appeal to the Senate on all matters which are within

the jurisdiction of the Senate as set out in the *University Act*. The Senate has delegated to its Standing Committee on Appeals the authority and responsibility to decide on behalf of the Senate all appeals from students on those matters which they may appeal to Senate. Students should lodge their appeal in writing with the Secretary of Senate and should include with the appeal a clear and precise statement of:

- (a) the decision or act or treatment which is being appealed (including the name of the person or body whose decision, etc., is being appealed);
- (b) the reasons why the appellant believes the appeal should be allowed;
- (c) the remedy or relief which the appellant is seeking.

Unless provided for otherwise in a specific Calendar regulation an appeal to the Senate must be filed within six months of the decision being appealed.

The decisions of the Senate Committee on Appeals are final and may not be appealed to the Senate.

#### Petitions:

Students whose circumstances are such that an academic regulation appears to cause them undue hardship are encouraged to consult their faculty advising centre or departmental chairman to determine whether the regulation is subject to waiver by the Dean of the faculty on petition by a student. The Dean's decision in such matters is final, subject to review by the Senate Committee on Appeals on grounds of specific procedural error (see above).

## ACADEMIC REGULATIONS

*Students should refer to the Calendar entries of the individual faculties for any additional or more specific academic regulations.*

### ATTENDANCE AND COURSE LOAD

#### Attendance at Lectures:

Students are expected to attend all lectures in each course for which they are enrolled. Admission to a lecture or laboratory may be refused by the instructor for lateness, misconduct, inattention or neglect of duty. Students who neglect their academic work, including assignments, may be debarred from the Christmas or the final examinations in a course. (See Term Assignments and Debarment from Examinations, page 16.)

#### Absence Consequent on Illness:

Students who are absent because of illness, an accident or family affliction should report to their instructors on return to classes.

#### Minimum Course Load:

Credit for courses may be accumulated by full time or part time studies in the Winter Session, or by studies in the Summer Studies. In certain programs, however, students are expected to commit themselves to studies in the Winter Session and to a specific number of units of courses; for example, Honours programs in Arts and Science require 15 to 18 units in each Winter Session. Students are therefore referred to the Calendar entries of the individual faculties for information on programs that require a commitment to a specific number of units of courses in each Winter Session.

Students should note that present regulations governing Canada Student Loans require a minimum enrollment of 9 units, and that to qualify for nearly all undergraduate scholarships, bursaries and prizes administered by the University, the terms of the awards require enrollment in a minimum of 15 units in each Winter Session, except as noted on page 251.

#### Maximum Course Load:

1. No student may register in more than 18 units in the period September-April.
2. No student may register in more than 9 units in either of the periods September-December and January-April.
3. No student may register in more than 9 units in the period May-August. A student registered in this period has the choice of registering in a maximum of 6 units of May-June courses or a maximum of 6 units of July-August courses.

Exceptions to these regulations require the prior written approval of the Dean.

#### Final Year Studies:

Normally, all students must complete the final 15 units of courses at the University of Victoria. In exceptional circumstances, however, a student may take the final year of study at another university, subject to the regulations mentioned under Graduation, page 18, and to the prior consent of the Dean of the faculty concerned.

A student authorized to attend another institution who accepts a degree from that institution abrogates any right to a University of Victoria degree until the student has satisfied the University's requirements for a second bachelor's degree. (See page 19.)

### REGULATIONS CONCERNING PRACTICA\*

#### General:

Through its several faculties\*, the University reserves to its individual departments, schools and programs, the right to approve any agency or institution that provides placements for student practica, and to change any placement assigned to a student. The student, however, has the right to be informed in writing of the reasons for any change in placement. While the University accepts a responsibility to provide a sufficient number of practicum opportunities to serve the needs of all registered students, a student may be required to withdraw from a practicum course if none of the available practicum agencies will accept that particular student.

#### Dates:

The dates of practica will be established by each faculty, department, school or program, and will be announced to the students involved at the beginning of each term.

#### Attendance:

Attendance at practicum activities is required. Students are expected to notify the placement agency whenever practicum appointments cannot be kept, and also to inform the course instructor.

#### Unethical or Unprofessional Behavior:

It is the responsibility of the course instructor to inform students of the criteria by which unethical or unprofessional behaviour will be judged in the practicum setting. Instructors who refuse students continued participation in a practicum for misconduct or repeated absence must immediately discuss the matter with their departmental chairman, who shall then either inform the students of the conditions under which they may resume participation in the practicum or require them to withdraw from the practicum course and inform them of the reasons for this in writing.

All students in the Faculty of Education placed in schools for teaching practica will be subject to the provisions of the *School Act* and the B.C.T.F. Code of Ethics. Any such student may be required to withdraw from a practicum for violation of any part of the *School Act*, or B.C.T.F. Code of Ethics or upon a written order from the Board of School Trustees in the district where the student is placed.

All students in the Faculty of Human and Social Development will be subject to the provisions of the codes of ethics of their respective professions, and may be required to withdraw from the practicum for violating these provisions.

#### Denial and Withdrawal:

- (a) Denial  
Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Dean of the faculty.
- (b) Required Withdrawal  
Students may be required to withdraw from the practicum with a failing grade if their performance in the practicum or their practicum preparation is considered unsatisfactory by the Dean of the faculty.
- (c) Voluntary Withdrawal  
Students seeking voluntary withdrawal from a practicum, whether permanent or temporary, must receive permission to do so from their faculty supervisor.
- (d) Notification of Records Services  
Students who withdraw voluntarily from a practicum must notify Records Services in writing. Students who are required to withdraw from a practicum will be withdrawn from any course involved by written notification from the Dean to Records Services.

#### Readmission:

If students who have withdrawn from a practicum for whatever reason later wish to reenter the practicum they must apply for readmission to the course and should not assume that readmission is guaranteed.

\* Approved for the Faculty of Education and the Faculty of Human and Social Development.

#### Appeals:

The normal avenues of final appeal (see above) are available to students who have been required to withdraw from a practicum. Students in the Faculty of Human and Social Development may appeal the decision of the school or program director to the Faculty's Committee on Professional Behaviour in Practica before it is sent to the Dean for a final decision. Students in the Faculty of Education may follow regular appeal procedures within that Faculty.

## CREDIT

#### Accumulation of Credit:

Successful completion of a credit course entitles the student to the recording of such credit on the student's academic record. The application of such credit to a degree or diploma program, however, is subject to the regulations governing the requirements of the program. In the case of a course for which credit has been received and which is repeated, the units will be shown on the student's record in each instance but will count only once toward the degree or diploma unless the course is designated as one that may be repeated for additional credit.

**Credit Limit — Introductory Statistics Courses:**

The maximum allowable number of units of introductory statistics courses that may be taken for degree credit is limited to six, chosen from Biology 250, 304; Economics 240, 340; Geography 300, 321; Psychology 300; Sociology 371, 372, 471; Statistics 250, 251, 253.

**Credit by Course Challenge:**

Course challenge is intended to allow a registered undergraduate student to seek credit in a given undergraduate course on the basis of knowledge or experience acquired outside the University. It involves undertaking a special examination or other form of assessment administered by the relevant department at a time determined in consultation with the student.

Course challenge is not offered by all departments. Where it is offered, it is subject to the following restrictions:

- (a) Credit by course challenge is limited to a maximum of 15 units counting towards the student's degree.
- (b) No course whose equivalent appears on a student's secondary school, college or university transcript may be challenged.
- (c) Once credit in a course at one level has been obtained, its prerequisite in the same subject may not be challenged.
- (d) A specific course may be challenged only once.
- (e) Once the examination or assessment has been administered, the result will be entered on the student's academic record. The student may not choose whether or not the result will be recorded.

Initial inquiries should be directed to Records Services, where application forms may be obtained. The course challenge fee must be paid before the challenge examination is undertaken. If the appropriate departmental chairman permits a course challenge, the chairman shall indicate approval by signing the application form and shall inform the student of the time at which the challenge examination will take place. Once the application has been approved, the course challenge fee is not refundable. (See para. 2(c), page 19.)

A range of authorized assessment techniques is available for evaluating the student's course challenge. Whatever technique is chosen, it shall be such that the examination procedure and the results are recorded and kept in the department.

The chairman, after having approved the results, will report the grade awarded in the course challenge examination to the student and Records Services in writing.

The grade will be entered on the student's academic record and will be used in determining the student's sessional standing.

All students, including newly admitted students, are urged to complete challenge examinations before the end of the period for adding courses, so that any course changes necessitated by the examination results can still be made.

**Advanced Placement or Exemption Without Unit Credit:**

In exceptional circumstances, undergraduate students may already have prepared themselves by independent study or other experience to omit a required course or courses or to undertake more advanced work than that ordinarily prescribed in the initial stages of a departmental program. Students desiring advanced placement in a particular discipline may apply to the department giving courses in that discipline for such placement.

Advanced placement or exemption from a required course carries no unit credit.

**Credit for Courses Passed in a Failed Year:**

A student who registers in a degree program may apply for credit in courses which were passed within a "failed year" either at the University of Victoria (prior to 1970-71) or at another university or college and which are applicable to the student's degree program but for which University credit was not previously granted.

Application for credit in such courses passed at the University of Victoria must be made in writing to Records Services.

Application for credit in such courses passed at other institutions must be made in writing to: The Senate Committee on Admission and Registration, c/o Records Services, University of Victoria. The Committee will judge each case separately on its own merits.

**REPEATING COURSES**

A required course in which a passing grade has not been obtained must be repeated or a permissible substitute taken in the next session attended. However, no course may be taken more than twice unless the course is a required course that is outside the student's main area(s) of study.

No student may repeat a course for additional credit unless the course entry specifically states the course may be so repeated.

**PROMOTION**

Students may not proceed to courses in a higher year unless they take concurrently all courses required to clear deficiencies in the lower years, subject to the limitations mentioned above. Students may proceed only to courses for which they have successfully completed prerequisites to the satisfaction of the department concerned.

**CHEATING**

The standards and reputation of any university are the shared responsibility of its faculty and students. Within the obvious limits implicit in the difference between undergraduate work and specialized research, students at the University of Victoria are therefore expected to observe the same standards of scholarly integrity as their academic and professional counterparts. Clearly, a large part of the work done at the undergraduate level must involve the handling at second hand of ideas and material originally conceived or made accessible by others. Equally clearly, however, there is a difference between the use of an acknowledged restatement of such ideas and material after intelligent and critical assimilation and their unacknowledged, literal reproduction in the guise of new and original work. The latter amounts to cheating; and cheating, whether it take the specific form of *verbatim* and unacknowledged copying from the writing of others (also see Duplicate Essays, below), or whether it appears in other forms, such as the fraudulent manipulation of laboratory processes in order to achieve desired results, the use of commercially prepared essays in place of a student's own work or reference to unauthorized materials in examination circumstances, vitiates the purposes of a university education. While such practices may well stop short of "crime" in the sense that they may escape from the formal rigours of the law, they nevertheless constitute in all cases an offence against intellectual honesty. This renders forfeit not only the integrity of the individual involved but also the reputation of those who condone such lapses. Sanctions will therefore be enforced against cheating, ranging in severity as befits the individual case from simple reimposition of work, through forfeiture of credit for the particular assignment or the particular course involved, to possible suspension from the University in the most extreme, deliberate or persistent cases.

Offences of this kind may, however, occur in a multitude of different ways and circumstances in different disciplines, and, especially at the undergraduate level, their fair treatment will frequently entail the consideration of contingent factors. These require the flexible exercise of equitable jurisdiction at all levels from the individual instructor upwards. The University as a whole does not therefore propound a single comprehensive definition of cheating in all its shapes and forms beyond the general statement of position and principle herein advanced; nor does it specify an invariable code of pains and penalties. It does, however, reserve to its academic departments severally the power, under normal circumstances, to inculcate and enforce proper standards of scholarly integrity by whatever internal procedures seem most appropriate to their respective disciplines, saving only that in matters involving student breaches of academic ethics, appeal may be made to the President if either party to the case so desires.

**IMPROPER BEHAVIOUR AND UNAUTHORIZED ACTIVITIES**

Any student (a) whose behaviour causes or is likely to cause wrongful injury to any person or damage to the University or its property, or (b) who violates the British Columbia liquor regulations within the precincts of the University, or (c) who unlawfully enters a building on the campus, will be reported to the President for disciplinary action and may be suspended, subject to appeal to the Senate.

**GRADING SYSTEM**

|                          | Grade Point Value |  |
|--------------------------|-------------------|--|
| <b>Passing Grades:</b>   |                   |  |
| A+                       | 9                 | First Class**  |
| A                        | 8                 |  |
| A-                       | 7                 |  |
| B+                       | 6                 | Second Class**   |
| B                        | 5                 |  |
| B-                       | 4                 |  |
| C+                       | 3                 | Pass**   |
| C                        | 2                 |  |
| D                        | 1                 |  |
| * COM                    | N/A               | Marginal Pass**<br>Complete (pass)<br>** Undergraduates only   |
| <b>Failing Grades:</b>   |                   |  |
| E                        | 0                 | Conditional supplemental   |
| F                        | 0                 | No supplemental  |
| N                        | 0                 | Did not write examination or otherwise complete course requirements by the end of the term or session; no supplemental |
| <b>Temporary Grades:</b> |                   |  |
| * INC                    | N/A               | Incomplete   |
| * DEF                    | N/A               | Deferred examination granted   |
| * INP                    | N/A               | In Progress  |

\* COM — used only for 0 unit courses and those credit courses designated by the Senate. Such courses are identified in the course listings. INC — used for those Winter Session credit courses designed by the Senate, to be replaced by a final grade by June 1 (except for Education 799, by August 1). Such courses are identified in the course listings. DEF — Used only for courses in which a deferred examination has been granted because of illness, an accident or family affliction. (See below.)

INP — used only for courses designed by the Senate, to be replaced by a final grade by the end of the next Winter Session. If the student does not reregister then the final grade will be N. Such courses are identified in the course listings.

For letter grades authorized for use in the Faculty of Law, see page 238.

The table shown above constitutes the official University grading system used by instructors in arriving at final assessments of student performance.

**Numerical Scores:**

A department may authorize the use of numerical scores or marks in the courses, where appropriate, but each numerical score or mark must in the end be converted to a letter grade. Where a department authorizes the use of a numerical system in its courses, it is the responsibility of the instructor to inform the students in the course of the relationships between the departmental numerical system and the University letter grade system.

**EVALUATION OF STUDENT ACHIEVEMENT****Assessment Techniques:**

For the purposes of evaluating student performance, each department shall formally adopt those assessment techniques which the department considers generally appropriate for its courses, taking care to ensure that instructors within the department have some options.

Techniques commonly used, where appropriate, include the following: assignments; essays; oral or written tests, including midterms; participation in class discussions; seminar presentations; artistic performances; professional practica; laboratory examinations; "open book" or "take-home" examinations; and examinations administered by the instructor or Records Services during formal examination periods. Self evaluation is not permitted to determine the grade in any course, in whole or in part.

Final examinations, other than language orals or laboratory examinations, shall be administered during formal examination periods. Regardless of the techniques chosen by a department, tests counting for more than 15 per cent of the final grade shall not be administered, in any regular thirteen week term, during the last two weeks of classes or in the interval between the last day of classes and the first day of examinations, or, in any Summer Studies course, during the three class days preceding

the last day of the course. Neither the department nor the instructor, even with the apparent consent of the class, has the right to set aside these regulations. No instructor may schedule any test that conflicts with the students' other courses or any examination that conflicts with the students' other examinations in the official examination timetable. No instructor may schedule any test during the last two weeks of classes in a regular thirteen week term unless an advance notice of six weeks has been given to the students in the course.

When beginning a course, the instructor is responsible for ensuring that the departmental chairman and the students in the course are informed in writing:

- of the technique or combination of techniques to be used in the assessment of students' performance in the course;
- of how assignments, tests and other work of the course will be evaluated and the weight which generally will be given to each part of the course;
- where numerical marks form the basis of the evaluation of the course or any part of the course, of the mechanism to be used in converting the marks to final letter grades.

Reviews of final grades are governed by the regulations on page 18.

**Correction and Return of Student Work:**

Instructors are normally to return all student work submitted that will count toward the final grade, except final examinations.

Instructors are to give corrective comments on all assigned work submitted and, if requested to do so by the student, on final examinations.

**Laboratory Work:**

In any course which includes laboratory work students will be required to make satisfactory standing in both parts of the course. Results in laboratory work will be announced by the department concerned prior to the final examinations, and students who have not obtained a grade of at least D will be permitted neither to write the examination nor to receive any credit for the course. If satisfactory standing is obtained in the laboratory work only and the course is repeated, exemption from the laboratory work may be granted with the consent of the department. The same rules may, at the discretion of the departments concerned, apply to non-science courses with laboratory work.

**Duplicate Essays:**

An essay or assignment to be submitted for two courses is acceptable only when both instructors have been informed of the student's intention to submit a duplicate essay or assignment and have given their written permission to the student.

In instances where essays or assignments essentially the same in content are submitted in more than once course without prior written permission of the instructors, partial or total credit for the essay or assignment may be withheld in any or all of the courses involved.

**Term Assignments and Debarment from Examinations:**

In some courses students may be assigned a final grade of N or debarred from writing final examinations if the required term work has not been completed to the satisfaction of the department concerned. Instructors in such courses shall advise students of the standard required in term assignments and of the circumstances under which they would be assigned a final grade of N or debarred from examinations.

**English Deficiency:**

Term essays and examination papers will be refused a passing grade if they are deficient in English; and, in this event, students will be required to pass a special examination in English to be set by the Department of English.

**Examinations:**

Examinations in the Winter Session are held in December and April. Timetables are posted on official University bulletin boards at least two weeks before the dates announced for the beginning of December and April examinations.

**Illness, Accident or Family Affliction at Examination Time:**

- A student who falls ill during an examination or misses an examination because of illness, an accident, or family affliction may be eligible for a deferred examination.
- A student who, though suffering from illness, an accident, or family affliction writes a final examination may also be eligible for a deferred examination.
- In both 1. and 2., above, a physician's certificate or other substantiating document must be submitted to Records Services normally within ten working days of the end of the examination period.

Records Services will communicate with the instructor for an assessment of the student's performance. Deferred examinations are granted only where final examinations are involved. In cases where the instructor does not give a deferred examination but assigns a final grade based on an assessment of the student's performance in the course work, the grade will appear on the student's record with the notation "AEG" (Aegrotat, see Glossary, page 6).

4. For courses finishing in April, deferred examinations are normally held about the beginning of August. For courses which finish in December and are prerequisite to courses starting in January, deferred examinations are normally held by the end of the first two weeks in January. For courses which finish in December and are also offered in the second term, deferred examinations may be given in April. For other courses, deferred examinations are scheduled by arrangement.
5. The grade obtained on a deferred examination will be used in calculating the sessional grade point average. If a deferred examination is not written, the final grade for the course becomes N.

### Regulations Governing Administration of University Examinations:

1. Candidates may not enter the examination room until invited to do so by the invigilator in charge.
2. Candidates are not permitted to enter the examination room after the expiration of one half hour, nor leave during the first half hour of examination. Invigilators should send unusual cases to Records Services at once.
3. Candidates shall not make use of any books or papers other than those provided by the invigilators or authorized by the instructor in charge of the course.
4. Candidates shall not communicate in any way with each other. Candidates are not permitted to ask questions of the invigilator, except in cases of supposed errors in the papers.
5. A candidate who believes there is an error in a paper should report it immediately to the invigilator, and, after the examination, report the error in writing to Records Services. If there are other reasons for complaint, the candidate should communicate with that office within 24 hours.
6. Candidates may not leave the examination room without first delivering their examination booklets to the invigilator.
7. Candidates are advised not to write extraneous material in examination booklets.
8. Candidates who wish to speak to the invigilator should raise their hand or rise in their place.
9. Candidates may be called upon by an invigilator to produce identification papers bearing a photograph to prove their identity.
10. Candidates leaving or entering examination rooms should do so quietly in order not to disturb others. Having left the examination room, candidates are asked not to gather in adjacent corridors, lest they disturb candidates who are still writing.
11. Smoking is not permitted.
12. Candidates who fall ill during an examination should report at once to the invigilator.
13. Candidates who fall ill or suffer an accident or family affliction before an examination should report the circumstances immediately to Records Services.
14. In cases of extreme misconduct, invigilators are empowered to expel candidates from an examination room. Under such circumstances, candidates may be required to withdraw from the University following an investigation of circumstances surrounding the misconduct.

### Release of Grades:

Instructors are permitted to release final grades informally to students in their classes, on request, as soon as the grades have been forwarded to Records Services by the department, on the understanding that formal approval and release is the prerogative of the Senate. Following authorization by the Senate statements of final grades are mailed to students by Records Services (about the end of May for Winter Session courses and early in September for Summer Studies courses).

First term results for full year courses are released by the instructors, not by Records Services.

### Student Access to Final Examinations:

All final examinations are stored in the departmental office or the Records Services Office for six months after the official release of grades except when a review of an assigned grade or an appeal to the Senate Committee on Appeals is in progress. In the case of a review of an assigned grade the relevant material will be retained for a further six

months. In the case of an appeal to the Senate the relevant material will be retained for six months after a final decision has been reached. Students are permitted access to final examination questions and their own answers on request to their instructors or departmental chairmen after the grades have been submitted to the Records Services Office by the departments. This access to the final examinations does not constitute a request for a review of an assigned grade. Students wishing to have grades reviewed should follow the procedure outlined in the following section. Students are allowed to purchase a photocopy of their own final examination answer papers and, unless withheld by the instructor with the agreement of the departmental chairman, of the final examination questions.

### Review of an Assigned Grade:

**Final Grades:** Reviews of final grades are governed by the following regulations, subject to any specific regulations adopted by the faculties:

1. Any request for review of a final grade must normally reach Records Services within 21 days after the release of grades.
2. Each applicant must state clearly in writing the grounds for believing that the grade awarded should be raised.
3. Students should retain all written work returned to them by the instructor during the term and make such work available where the grade to be reviewed has involved such term work.
4. It is the responsibility of each of the faculties to ensure that steps are adopted to be followed in the carrying out of reviews of grades assigned in courses offered within the faculty, and that such procedures provide for examination of the review results by a person or persons not directly involved. Wherever possible, every effort should be made to complete the review process within 21 days after the receipt of the application for review.
5. The grade determined by means of a review shall be recorded as the final official grade, irrespective of whether it is identical to, or higher or lower than, the original grade.

**NOTES:** Prior to application, a student considering a request for a formal review of a final grade ought to make every reasonable effort to discuss the assigned grade with the instructor. Mathematical marking errors will be rectified without recourse to the review procedures. (See Student Access to Final Examinations, above.)

Requests for review or other consideration based on compassionate grounds such as illness are governed by separate regulations (see Illness, Accident or Family Affliction, above).

Prospective applicants are advised that examination papers assigned E or F grades (and D grades in some faculties) are automatically read at least a second time before the grades are recorded. For that reason, an applicant who is eligible for a supplemental examination should prepare for the examination since a change in grade might not be available before the time of the supplemental examination.

**Grades for Term Work:** During the session, students who believe that a grade awarded for term work is unfair should discuss the matter informally with the instructor concerned. If discussion with the instructor fails to resolve the matter, the student should appeal directly to the chairman of the department.

### Undergraduate Supplemental Examinations:

The following regulations apply to all faculties except the Faculty of Law (see regulations of that Faculty) and the Faculty of Graduate Studies.

Supplemental examinations are not offered by all departments. Students will be advised whether or not a supplemental examination will be offered when assessment techniques are announced at the beginning of the course. Where supplementals are permitted by a department, they are governed by the conditions shown below and the regulations that follow:

1. Students may apply to write a supplemental examination in a course only if they have written a final examination and have received a final grade of E in the course.
2. Students taking 15 or more units in the Winter Session will be granted supplemental examinations only if they have passed at least 12 units of courses in that session. The maximum number of units of supplemental examinations allowed is normally 3. However, the Dean of the

student's faculty may authorize supplemental examinations in an additional 3 units if the student will complete a degree by passing all the supplemental examinations granted.

3. Students enrolled in Summer Studies courses or taking fewer than 15 units in the Winter Session may be granted supplemental examinations for no more than 3 units, each such case being judged on the basis of the student's overall standing by the Dean of the student's faculty.
4. A student in the final year of a degree program who obtains a failing grade in a supplemental examination, may be granted a second such examination, at the discretion of the Dean of the student's faculty, if a passing grade in the second examination will complete the student's degree requirements.
5. A student who obtains a grade of E in a course completed in December may, if eligible, either repeat the course in the Second Term if it is offered or write a supplemental examination in August.

Any passing grade obtained on a supplemental examination will be shown in the student's academic record with a grade point value of 1, corresponding to a D, and will be taken into account in the determination of the graduating average and the class of degree, but will not affect the sessional grade point average.

Supplemental examinations cover only the course work covered by written final examinations. If there was no written final examination in the course, or if a passing grade in a supplemental examination will not yield an overall passing grade in the course, a supplemental examination will not be provided.

Supplemental examinations for Summer Studies courses and for courses taken by students who are in attendance only during the First Term of the Winter Session are arranged in consultation with the Dean who grants them. Supplemental examinations for all other courses taken in the Winter Session are written about the beginning of August.

Students who fail to write a supplemental examination at the scheduled time forfeit both their eligibility and any fees paid for the supplemental.

Applications for supplemental examinations, accompanied by the necessary fees, must reach Records Services by the following dates:

- (a) Courses taken by students in attendance only during the First Term, Winter Session — February 15;
- (b) All other Winter Session courses — July 1;
- (c) Summer Studies courses — October 15.

Supplemental examinations for courses mentioned in (a) and (c), above, are scheduled by arrangement. Those for courses mentioned in (b), above, may be written at the University as well as the following British Columbia centres: Cranbrook, Dawson Creek, Kamloops, Kitimat, Penticton, Powell River, Prince George, Prince Rupert, Trail, Vancouver; and at Whitehorse, Y.T. Other centres outside British Columbia are restricted to universities or colleges.

For fees for supplemental examinations, see para. 8 (f), page 20.

## STANDING

### Sessional Grade Point Average:

The sessional grade point average is based only on courses which have a unit value. Courses bearing the grade COM are ignored.

(A grade point average is found by multiplying the grade point value of each grade by the number of units, totalling the grade points for all the grades, and dividing the total grade points by the total number of units.)

### Academic Probation and Minimum Sessional Grade Point Average:

Undergraduates who fail to obtain a sessional grade point average of at least 2.00\* (or equivalent if a University of Victoria student takes courses elsewhere for credit towards a University of Victoria program) are considered to have unsatisfactory standing and will be placed on academic probation for the next session attended.

A student who has a marginal record upon admission may be placed on probation by the Senate Committee on Admission and Registration.

A student who is on academic probation and whose sessional grade point average falls below 2.00\* (or equivalent if a University of Victoria student takes courses elsewhere for credit towards a University of Victoria program) will be required to withdraw, normally for one academic year.

A student who is required to withdraw a second time will not be permitted to register for credit courses at the University for at least five years.

In all cases students will be notified by Admission Services or Records Services that they have been placed on probation. Such students may wish to seek assistance from the appropriate Advising Centre or Faculty Dean's Office, Counselling Services, or to take the Reading Course and

Study Skills Course or Workshops which are offered to all students by Counselling Services.

Depending upon a student's performance during the period of probation, the Dean may at any time either remove the student from probation for the remainder of the session, or acting on a decision of the faculty require that the student withdraw from the University. (See below: Withdrawal for Unsatisfactory Progress.)

Students who are on probation in a session are not eligible for authorization or registration in the subsequent session until their current sessional grade point average has been determined.

This regulation governs all sessions, including Summer Studies (the period May through August).

\* Individual Faculties may set a higher grade point average.

## WITHDRAWAL

A student may be suspended or may be required to withdraw from the University at any time for unsatisfactory conduct or for failure to abide by regulations. (See regulations of the individual faculties concerning mandatory withdrawal.)

### Voluntary Withdrawal:

Any undergraduate student who after registration decides to withdraw from the University must notify Records Services in writing. It is recommended that students visit Counselling Services to discuss their decision and plans and visit their Faculty Advising Centre to discuss their academic status and prospects, before going to Records Services. Students in the Faculty of Law should speak with the Dean. Students who are prevented by circumstances from withdrawing in person must do so by letter addressed to Records Services. Students will be required to obtain clearance from the University, to the satisfaction of Records Services, before being recommended, where applicable, for refund of fees.

Students in the Faculty of Graduate Studies should consult the Dean before giving formal notice of withdrawal.

(See Changes in Registration, paragraph 2, page 12 and dates on pages 3 and 4. Summer Studies students: See Summer Studies Supplement, page 4.)

### Withdrawal for Unsatisfactory Progress During a Session:

Any undergraduate student who has been placed on probation and whose progress is deemed unsatisfactory, may upon the decision of the faculty and on notification by Records Services, be required to withdraw from the University for the remainder of the session. A student so required to withdraw may appeal to the Senate for a review of the case by lodging a written appeal with the Secretary of Senate. (See Avenues of Appeal and Redress, page 13.)

## GRADUATION

### Application for Graduation:

Senate grants degrees in November and May each year. Each candidate for a degree must make formal application for graduation when registering in the final Summer or Winter Session preceding the candidate's anticipated graduation. Candidates who have received permission to complete a course or courses elsewhere must apply for graduation not later than July 1 for fall graduation or December 1 for spring graduation. Special forms for this purpose are available from Records Services.

### Minimum Degree Requirements for Graduation:

Each candidate for a first Bachelor's degree (in a faculty other than Law) is required:

- (a) To have satisfied the University English requirement (see page 12);
- (b) to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 21 of the units must be numbered at the 300 or 400 level, and at least 30 of the units must normally be in courses that have been completed at the University. (See Transfer Credit, page 10, Credit by Course Challenge, page 15, A Second Bachelor's Degree, below, and graduation requirements of the Faculty of Education.)
- (c) to meet the specific degree and program requirements prescribed by the undergraduate faculty in which the candidate is registered.

### Standing at Graduation:

The graduating average of a student in an undergraduate faculty other than Law shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300 and 400 level courses taken or challenged at this University and accepted for credit in the student's degree program in the faculty concerned. If the

total unit value of all such courses does not exceed 30, all such courses will be included in the average. If the total exceeds 30 the average will be taken on a maximum of 30 units of such courses chosen so as to give the highest average, including, where necessary, the appropriate fraction of a course.

Students must have standing at graduation of at least 2.00 in order to graduate.

Students whose graduating averages are 3.50 or higher will be placed in one of the following classes on the basis of the graduating average, subject to any additional requirements specified by the individual faculties and their departments with respect to standing at graduation:

- (a) First Class, an average of 6.50 or higher;
- (b) Second Class, an average between 3.50 and 6.49.

The above does not apply to students who are granted permission to undertake their final year at another university (see page 14). The classes of degrees to be awarded to such students shall be determined by the Dean of the faculty in consultation with appropriate departments.

**Graduation Exercises:**

The formal conferral of degrees takes place at a Convocation ceremony in the fall and spring each year. Graduates become members of the Convocation of the University as soon as their degrees are granted by the Senate.

**A SECOND BACHELOR'S DEGREE**

Under the following conditions, a student who has a bachelor's degree from the University of Victoria or another recognized institution may be allowed to pursue undergraduate studies leading to a second bachelor's degree:

- (a) The student must be admissible to the program of the second degree.
- (b) The principal area of study or academic emphasis of the second

- degree must be distinct from that of the first degree.
- (c) At least 30 units of credit must be completed, beyond those units required for the first degree; normally, 21 of these 30 must be at the 300 or 400 level.
- (d) The student must meet all program and graduation requirements for the second degree beyond those required for the first degree.

In certain cases, it may be possible to complete the requirements of two University of Victoria degrees concurrently, subject in all cases to the conditions mentioned above.

Application to pursue a second bachelor's degree should be made at the time of application for admission or reregistration, as appropriate (see pages 7 to 11). Students currently enrolled in their first bachelor's degree program should make application to the Dean of the appropriate faculty.

The University reserves the right to limit the number of students admitted to the University for the purposes of completing a second bachelor's degree.

**TRANSCRIPT OF ACADEMIC RECORD**

On request of the student, a certified transcript of the student's academic record will be mailed by Records Services direct to the institution or agency indicated in the request. Each transcript shall include the student's complete record at the University to date. Since standing is determined by the results of all final grades in the session, transcripts are not available for first term grades until the end of the session, unless the student has attended the first term only.

Students' records are confidential. Transcripts are issued only at the request of students or appropriate agencies or officials.

Application for a transcript should be made at least one week before the document is required.

Fees for transcripts of academic record: see para. 8 (h), page 20.

**FEES**

**NOTICE**

*It is expected that it may be necessary to increase fees above the levels shown in this section effective for the 1985-86 Winter Session. Notification of any required changes in current fee schedules will be given as far in advance as possible by means of a supplement to this Calendar.*

**1. PAYMENT OF ACCOUNTS**

- (a) The obligation to pay fees for a course or program is incurred upon registration, subject only to adjustments for officially recorded course drops, withdrawal or cancellation of registration.
- (b) Payment of fees is due by the following dates:  
 First term courses/programs . . . . . September 30  
 Full year courses/programs — first half . . . . . September 30  
 — second half . . . . . January 31  
 Second term courses/programs . . . . . January 31  
 Where courses are added in a subsequent month, their fees are due by the end of that month.
- (c) Students are responsible for calculating and paying their fees using the information in this Calendar and the Calendar Supplement. Statements of account are not mailed in advance, but may be collected at Accounting Services immediately prior to September 30 and January 31. Payments must be made by due dates whether or not a statement of account has been issued or received.
- (d) Service charges of 2% a month (minimum \$2.00) are added to overdue accounts.
- (e) Students with overdue accounts are subject to loss of registered status and denial of services. These services include re-registration; use of libraries; access to classes and examinations; issue of loans, awards, grades, transcripts, degrees and documents certifying enrollment or registered status.
- (f) Students who withdraw or otherwise leave the University remain liable for settlement of unpaid accounts and for return of any University property. The University may seek to enforce its rights as a creditor through legal action or the use of collection agencies.

**2. FEES FOR UNDERGRADUATE PROGRAMS OTHER THAN LAW AND ENGINEERING**

|  |               |       |
|--|---------------|-------|
| (a) Tuition, per fee unit . . . . .  | 78.00         |       |
| (b) Additional course fees   |               |       |
| Geography 325 . . . . .  | 20.00         |       |
| Art 220, 232, 233, 240, 321, 322, 323, 331, 332,<br>333, 341, 390, 490 . . . . . | 29.00         |       |
| Geography 427 . . . . .  | 29.00         |       |
| Music 140, 240, 340, 440, 540 . . . . .  | 29.00         |       |
| Theatre 240, 340, 341, 342, 508, 509, 510, 520,<br>521, 523 . . . . .            | 29.00         |       |
| Music 145, 245, 345, 445, 545 . . . . .  | 58.00         |       |
| Art 499 . . . . .  | 72.00         |       |
| History in Art 488, 489 . . . . .  | 273.00        |       |
| (c) Course challenge, per fee unit . . . . .                                     | 39.00         |       |
| (d) Cooperative program fee, per work term . . . . .                             | 156.00        |       |
| (e) Athletics/Recreation, per term   |               |       |
| — 4½ units or more . . . . .   | 8.00          |       |
| — less than 4½ units . . . . .   | 4.00          |       |
| (f) Alma Mater Society, per term   |               |       |
| Activity   | Building Fund |       |
| — 4½ units or more . . . . .   | 17.50         | 10.00 |
| — less than 4½ units . . . . .   | 8.75          | 5.00  |
| (g) Graduation . . . . .   | 25.00         |       |
| (h) Alma Mater Society Graduating Class . . . . .                                | 10.00         |       |

**3. FEES FOR FACULTY OF LAW**

|  |          |
|--|----------|
| (a) Application . . . . .  | 25.00    |
| (b) First year acceptance deposit . . . . .  | 100.00   |
| Forfeited if student does not register, but \$50.00 refundable if withdrawal of application received before August 10. |          |
| (c) Tuition . . . . .  | 1,500.00 |
| (d) Law Students Society . . . . .   | 15.00    |
| (e) Athletics/Recreation, Graduation and Alma Mater Society fees<br>As shown in Section 2.                             |          |

**4. FEES FOR FACULTY OF ENGINEERING**

- (a) Tuition — Engineering courses, per course ..... 125.00  
 — other courses, per fee unit ..... 78.00  
 (b) All other fees, as in Section 2

**5. FEES FOR VISA STUDENTS**

- (a) Visa students registering in undergraduate courses/programs are required to pay tuition fees at 2.5 times the rates shown in preceding sections.  
 (b) Visa students registered (other than under contractual arrangements) and in good standing at April 1, 1984 are exempted from these differential fees until April 1, 1987.

**6. FEES FOR GRADUATE PROGRAMS**

- (a) Public Administration program acceptance deposit ... 100.00  
 Forfeited if student does not register, but \$50.00 refundable if withdrawal of application received 28 days prior to classes.  
 (b) Tuition, per fee unit ..... 167.00  
 (c) Maximum tuition per year (9 fee units) ..... 1,503.00  
 (d) Payment of 15 fee units is required for a Master's degree. However, if all program requirements are completed within 16 months, this will be reduced to 12 fee units.  
 (e) Payment of 22½ fee units is required for a Doctor's degree.  
 (f) When Master's and Doctor's degree are both taken at the University of Victoria, payment of 30 fee units is required in total.  
 (g) Full time Master's candidates who transfer to Doctor's programs may apply tuition paid for the Master's programs towards their Doctor's programs, subject to a limit of one year's tuition if the transfer takes place after 15 months.  
 (h) Reregistration fee, per term ..... 167.00  
 Required from students who have paid the fee units for their degree but have not completed program requirements. For this purpose terms are January-April, May-August, September-December.  
 (i) Tuition fees paid by special and qualifying students do not count towards the fee unit requirement for a degree.  
 (j) Cooperative program fee, per work term (nonthesis programs only) ..... 167.00  
 (k) Athletics/Recreation, per term  
 — Activity ..... 5.00  
 — Building Fund ..... 8.00  
 (l) Graduate Students Society, per term  
 — Activity ..... 5.00  
 — Building Fund ..... 8.00  
 (m) Graduation ..... 25.00

**7. FEES FOR AUDITORS**

- (a) Under age 65, per fee unit — undergraduate ..... 39.00  
 — graduate ..... 83.00  
 (b) Age 65 or over, per fee unit — undergraduate ..... 13.00  
 — graduate ..... 28.00  
 (c) Auditor fees are not refundable.

**8. MISCELLANEOUS FEES**

- (a) Preliminary application for admission ..... 10.00  
 (b) Document evaluation ..... 35.00

- (c) Late registration ..... 35.00  
 (d) Returned cheque ..... 10.00  
 (e) Reinstatement — undergraduate ..... 35.00  
 — graduate ..... 167.00  
 (f) Supplemental examination — per paper — on campus ..... 35.00  
 — off campus ..... 45.00  
 (g) Doctoral dissertation abstract ..... 30.00  
 (h) Transcripts, per request — first copy ..... 4.00  
 — additional copies, each ..... 1.00  
 (i) Education Deduction and Tuition Certificate replacements ..... 4.00  
 (j) Calendar mailing charge — outside Canada ..... 6.00  
 — inside Canada ..... 4.00

**9. REFUNDS FOR DROPPED COURSES, WITHDRAWAL AND CANCELLATION OF REGISTRATION**

- (a) Refunds are based on the officially recorded date of drop, withdrawal or cancellation of registration.

|  | Sessional courses | First term courses | Second term courses |
|--|-------------------|--------------------|---------------------|
| (b) Tuition — undergraduate other than Law |                   |                    |                     |
| On or before September 18                  | 100%              | 100%               | 100%                |
| September 27                               | 80%               | 60%                | 100%                |
| October 11                                 | 70%               | 40%                | 100%                |
| October 31                                 | 60%               | 20%                | 100%                |
| January 17                                 | 50%               | —                  | 100%                |
| January 31                                 | 30%               | —                  | 60%                 |
| February 14                                | 20%               | —                  | 40%                 |
| February 28                                | 10%               | —                  | 20%                 |

- (c) Tuition — students in Law
- |                           |      |  |  |
|---------------------------|------|--|--|
| On or before September 18 | 100% |  |  |
| January 17                | 50%  |  |  |
- (d) Tuition — graduate programs
- |                           |      |      |      |
|---------------------------|------|------|------|
| On or before September 18 | 100% | 100% | 100% |
| January 17                | 50%  | —    | 100% |
- (e) One half of Athletics/Recreation and Student Society fees will be refunded to students withdrawing by September 30 or January 31.

**10. GENERAL FEE REGULATIONS**

- (a) The University reserves the right to change fees without notice.  
 (b) Students registering in Summer Studies should consult the Summer Studies Calendar Supplement.  
 (c) Except where donors direct otherwise, proceeds of student awards received or granted by the University will be applied to unpaid accounts and any excess balance will be paid to the student.  
 (d) Courses are assigned a fee unit value for the purpose of fee assessment. This value is shown in the course description if it differs from the academic unit value.  
 (e) Credit balances in fee accounts will be refunded on request.

## ACADEMIC SERVICES

### LIBRARY

The McPherson Library of the University of Victoria contains over one million volumes, over one and a half million items in microform, and more than 27,500 records and tapes. The Curriculum Laboratory has a specialized collection of over 30,000 volumes and other materials to support student teaching requirements in the Faculty of Education. The University Map Collection, in the Cornett Building, houses over 55,000 maps and 80,000 aerial photographs. The Law Library contains over 100,000 volumes to support the instructional and research requirements of the Faculty of Law; these resources are available to others needing access to legal materials.

With the exception of its Special Collections of rare books and manuscripts, all resources of the McPherson Library are housed in open stacks, to which there is full public access. Special facilities are provided for the use of audio visual and microform materials. Experienced staff are available and willing to assist students and others to take fullest advantage of the Library's resources, including individual or group instruction in use of research library.

### ACADEMIC ADVISING

Each of the undergraduate faculties provides an academic advising service for students contemplating enrollment in programs offered at the undergraduate level. The Advising Centre of the Faculty of Arts and Science is located in room B137 in the Clearihue Building. The Advising Centre of the Faculty of Education is located in room 250, MacLaurin Building. Students in the Faculty of Fine Arts are referred to the Office of the Dean of the Faculty, room 192, MacLaurin Building, for information regarding academic advice. Students in the Faculty of Human and Social Development are referred to the individual schools.

### SPECIAL COURSE IN ENGLISH AS A SECOND LANGUAGE

The Department of Linguistics offers a noncredit course in English for students whose native language is not English. For details see Linguistics 099 on page 97 of the Calendar.

### COMPUTING FACILITIES AT THE UNIVERSITY OF VICTORIA

The University of Victoria offers an extensive range of computing services for students and faculty members. The main computing facility

is located in the Clearihue Building and includes a DEC VAX 11/780 system and dual IBM 4341 CPUs. Access to these systems is provided by approximately 300 time sharing terminals distributed throughout the campus and remote job entry stations in the Cornett and Elliott Buildings.

A terminal facility designed to provide computing services for students contains 60 terminals for general use. Located in the Clearihue Building, this facility also includes VAX and 4341 line printers and punched card equipment.

Interactive and batch software services are supported on the 4341s by the VM/370 and VSI operating systems. Programming languages in common use include FORTRAN, PASCAL, COBOL, PL/I, APL, BASIC and ALGOL. Special purpose packages include the BMD, SAS, SASGRAPH and SPIRES for data base management, and a variety of software for numerical analysis, simulation, graphics string manipulation, and list processing. The UNIX operating system is used on the VAX 11/780.

Information regarding these and other services is available from consultants in Computing Services, and documentation is located in the Computing Reading Room (Clearihue C044).

Computing Services operates regularly every day of the week in order to enable students, faculty, and staff to have access to these services whenever required. Undergraduate and graduate students use the computer to complete assignments in many different courses. Research users include faculty members from nearly all academic departments at the University. New applications in computing are continually being developed for teaching and research purposes, and a major objective of Computing Services is to provide adequate support for the computing requirements of academic programs. Also, for many years, computing services have been provided to the community at large with the emphasis being placed on scientific and educational applications.

In addition, Computing Services also supports the information handling requirements of the McPherson Library, Accounting Services, and Admission and Records Services. These and other administrative departments make regular use of Computing Services for Library administration, circulation controls, payroll, budgets, accounts payable, and student records.

Students who are interested in a computing career may be eligible for further training by summer employment or part time employment during the Winter Session in Computing Services. Some additional opportunities exist from time to time for employment with faculty members as research assistants.

## STUDENT SERVICES

### COUNSELLING SERVICES

#### A Student Service:

The purpose of Counselling Services is to help students to gain the maximum in education, development and satisfaction from their years at University. This may involve clarifying career goals, solidifying educational plans, developing better learning and studying skills, solving personal and interpersonal problems, or developing greater self confidence and a more balanced life style.

#### Education and Career Counselling

Many students are unsure of their educational and career goals. Some do not know what they want to major in or what careers a given major might lead to. Others find it difficult to choose between several majors or possible careers and do not know how and where to find reliable information about different occupations, careers, or educational paths. Counsellors see such students individually or in groups and use various techniques, materials, and tests to help them clarify their interests, abilities, needs, and personal characteristics. Then they teach the individuals how to locate those occupations that best match them and their goals. The emphasis is on assisting individuals to discover their unique potential and then plotting a career path.

#### Counselling for Study and Learning:

It is normal for difficulties to arise in response to the more demanding and varied learning tasks required in a university. Strategies of learning which were successful in high school may not work very well in a university. Individual counselling is provided to assist students to develop and refine their ways of learning, as well as to manage the difficulties which arise in adjusting to university demands — difficulties such as inadequate retention, inefficient reading, exam anxiety, poor time management, procrastination, inability to concentrate, and so on. It is recommended that students enroll in one of the courses shown below in order to prevent academic problems rather than have to correct them later, when under pressure.

*University Learning Skills Course* — This short, noncredit course is offered at the beginning of each term. It is designed to help students develop better techniques for reading, for listening, for organizing and learning material, and for writing essays and exams.

*Study Groups* — These will be organized, on invitation, for particular subjects or courses. Students will be shown how to use group study to enhance learning.

*Workshops* — A number of workshops are offered on Time Management, Reading Efficiency, Exam Writing, and Essay Writing (see below).

*Special Learning Skills Course for New Students* — This special ver-

sion of the University Learning Skills course will be offered in the two weeks prior to fall registration. It will help new and mature students to cope with the university kind of learning.

#### **Personal Counselling:**

Professional counsellors provide a confidential atmosphere in which students can explore any topic or situation and discuss any concerns they may have. Some of the personal problems which students bring to Counselling Services are shyness, lack of self confidence, difficulty communicating with and relating to others, inability to speak up and express themselves, family and relationship conflicts, loneliness, sexual concerns, depressions, loss of interest and feeling "fed-up", questions about aptitudes, disappointment with the University and professors and difficulty in making decisions. Students are helped to sort out their problems, to develop self awareness, to overcome problems by using new coping strategies, and to evolve a personally satisfying philosophy of life.

#### **Group Programs:**

In addition to individual counselling, counsellors offer a number of group programs. Students may arrange to join a particular group by contacting the Counselling Services.

*Career Exploration* — Several programs are offered to help students develop realistic and interesting career goals. They involve the use of psychological tests, the career library, and a computerized analysis of options.

*P.C. Directions* — A computer assisted means of matching one's characteristics and preferences to over 800 occupations.

*Class Participation* — To help students develop presentation and seminar skills and self confidence in the classroom.

*Essay Writing* — A two session workshop with individual follow up dealing with the steps in writing essays and reports.

*Exam Writing* — A two session workshop highlighting tips for preparing for and writing all types of exams.

*Reading Efficiency* — A two session introduction to effective reading comprehension and remembering.

*Time Management* — A workshop to gain more control of one's time, set goals and priorities, control procrastination and improve performance.

*Assertion Training* — A four session program for students who wish to learn and practise standing up for rights, expressing feelings and beliefs, overcoming shyness and taking an active approach to life.

*Communication and Personal Relations* — This is a group program in which the focus is on the development of self awareness, sensitivity to others, communication skills, and emotional expression.

*Eating Disorders* — A self help support group for students who wish to change their eating behaviour patterns.

*Shyness* — To develop self confidence and learn and practise conversational skills for interpersonal situations.

*Stress Management* — To assist in understanding and managing stress in personal and university life.

#### **Advanced Educational Testing:**

Counselling Services is authorized to administer the Scholastic Ability Test and the Achievement Test of the Admissions Testing Program, the Allied Health Professions Admission Test, the Graduate Management Admission Test, the Graduate Record Examinations, the Law School Admission Test, the Medical College Admission Test, the Miller Analogies Test and the Test of English as a Foreign Language.

#### **Appointments:**

Counselling Services are open and available to all students at the University of Victoria. For further information, students should telephone, write or come to Counselling Services, located in the University Centre on the second floor.

## **HOUSING AND CONFERENCE SERVICES**

#### **University Accommodation:**

The University offers single and double room accommodation for 1102 students in four residence complexes, Craigdarroch, Gordon Head, Lansdowne and McGill Residences.

A number of living style options are available. Applicants may request to live in single sex or coeducational areas and may choose an environment which has an academic/social balance or an academic emphasis.

For the interested student a variety of programs are offered which encompass academic, recreational, social and personal development.

Two computer laboratories are located in the residence complex. They provide residence students with the opportunity for the full range of computer activities from personal computing on the stand alone units to

computer science assignments on the University's main frame.

Fees for full room and board for 1984-1985 were:

|             | <i>Single</i> | <i>Double</i> |
|-------------|---------------|---------------|
| First term  | \$1,478.00    | \$1,308.00    |
| Second term | 1,463.00      | 1,294.00      |
| Total       | 2,941.00      | 2,602.00      |

Please contact the Housing Office for 1985-1986 residence fees.

Applications are available by March 1 from the office of Housing Services, University of Victoria. Because of the limited number of spaces available, students, both graduate and undergraduate, should not wait for notice of eligibility to register in the University before submitting an application for residence accommodation. Completed applications are numbered when received by Housing Services and room assignments are made on a first come, first served basis.

All applications must be accompanied by a deposit of \$75.00 which will be credited to second term fees. The first term fees are due on or before August 2. If fees are not paid by the due date, the deposit fee is forfeited and the room assignment cancelled.

Assignment of accommodation will commence in June for students who have returned an application together with the application deposit. All assignments are conditional upon the admission of the student to the University. It is the responsibility of the students to inform Housing Services in writing of their status with Admission Services.

Students who have been assigned residence accommodation may occupy their rooms on Monday, September 2. The residence meal pass becomes effective for breakfast on Tuesday, September 3.

Residence accommodation is available prior to September 2. Written permission from Housing Services is required and approved requests are charged at the Conference Student rate.

Students who are unable to occupy assigned accommodation by September 5<sup>th</sup> the first day of lectures, must notify Housing Services in writing before that date, otherwise the assignment will be cancelled. Fees will be assessed from the beginning of the term.

A student wishing to withdraw from residence is required to give four weeks' notice. An administrative charge of \$25.00 will be assessed.

Further particulars regarding University of Victoria student residences may be found in the Residence Handbook which is available from the office of Housing Services, Craigdarroch Office Wing, University of Victoria.

#### **Off Campus Housing Registry:**

The University maintains a registry of off campus accommodation, in the lobby of the Housing Services Office, Craigdarroch Office Wing. No guarantee can be given that suitable quarters will be found for every student. In offering this free registry service the University does not assume responsibility for agreements made between students and householders.

Every effort is made to keep the registry up to date and to attempt to offer a range of types of accommodation, namely, rooms, room and meals, suites, houses, apartments and motels.

Students may avail themselves of this service any time during the year and are urged if at all possible to use the registry during the summer to seek suitable accommodation for the Winter Session.

#### **Summer Housing:**

Residence accommodation is available throughout the summer months (May-August) for students, families and friends. You are encouraged to spend a few days on campus prior to September opening when you can complete early registration procedures, find off campus housing if you are not staying in residence for the academic year, or merely familiarize yourself with campus and the Victoria area. Reservations are not necessary for this 'bed and breakfast' service. Contact Housing Services for rates and further details.

## **UNIVERSITY FOOD SERVICES**

The University operates a comprehensive food service facility in the Cadboro Commons Building. Two Coffee Gardens, including a Pizzeria, are located on the main floor of the building to provide meals and snacks to all members of the University community. Residents' meals are served in the Cadboro Commons Dining Room located on the second floor of the building. Additional cafeteria and dining facilities are located in the University Centre, on the second floor of the Cadboro Commons Building and in the Begbie Building. Supplementary food service is provided by banks of vending machines in designated areas in the MacLaurin and Elliott Buildings, and by individual machines located throughout the campus.

## UNIVERSITY BOOKSTORE

The Bookstore, located in the Campus Service Building, is owned and operated by the University and, in keeping with University policy, operates on a break even basis.

All required and recommended textbooks are stocked by the Bookstore according to faculty requests.

In addition, the general book section contains 15,000 titles in paperback and hardcover editions to provide background reading, reference material for essays and up to date reading of interest. Special orders may be placed for any book currently in print.

### General Information:

Texts may be returned for refund within 5 business days of purchase. Such books must be in mint condition, unless marked as used when purchased. Students who present their course drop sheet may be granted a return extension for texts purchased for dropped courses up to one month after the beginning of classes. Last date for extension for fall/full year courses is October 6 and for spring courses February 7. A receipt must accompany each refund request.

In each term return privileges will be suspended as follows: fall/full year courses — October 31, spring courses — February 28, summer courses — July 31. May-June courses — special dates will be posted. General books, accompanied by receipt, may be returned for refund within five days from date of purchase.

Sale books and student outlines may not be returned.

Between April 15 and the last of registration in September, and between December 1 and 31, the Bookstore buys used textbooks at half the retail price according to a "want list" prepared from faculty requisitions.

The Bookstore Policy Advisory Committee, composed of faculty and student members, will be interested in any comments regarding the store.

### Campus Shop:

The Campus Shop is adjacent to the Bookstore. Both stores now have a common entrance/exit area.

The Campus Shop offers school and art supplies, gym strip, calculators, lab coats, crested ware, drugstore and gift items, magazines, musical recordings, greeting cards, stationery, games, hosiery, and sporting goods. Returns (with the exception of bathing suits) are accepted with the receipt within five days of purchase. Merchandise must be in original condition and packaging should be unbroken. Additional services are film processing and dry cleaning.

### Sub Post Office:

A Sub Post Office is located in the Campus Shop. Services provide postage, money orders, parcel post and registered mail.

## HEALTH SERVICES

The Health Services Building is located at the South East corner of Parking Lot No. 5.

Hours are 8:30 a.m. - 4:30 p.m., Monday to Friday.

In addition to the medical services required in direct support of various university activities and programs, the Health Services offers general medical treatment, health counselling, nutritional consultations, physiotherapy, dermatology, sports medicine clinics and psychiatric services for the benefit of students. While these services may be utilized by any student, they are offered primarily for the convenience of those students who do not have a regular physician in the Victoria area. Students are responsible for the cost of any such medical services provided, and students not having valid insurance coverage will be billed directly.

All students are required to have medical insurance. Details regarding medical and hospital insurance coverage are available from the Health Services.

### Physiotherapy Services

A physiotherapy clinic is located in the McKinnon Building (066, basement level). During both terms of the Winter Session, the clinic is open from 8:30 a.m. to 10:30 p.m. weekdays for immediate care and advice. Summer hours are posted at the clinic. A physiotherapist is in attendance from 11:30 a.m. to 5:30 p.m. weekdays. Treatment by a physiotherapist can be undertaken only after presentation of a written referral from a physician. Physiotherapy treatments can be billed directly to Medical Services Plan of B.C. or Alberta Health Care. Students with coverage under plans other than these will be billed directly.

### British Columbia Residents

British Columbia students are encouraged to join the Medical Services

Plan of B.C. Students must be resident in British Columbia for one year before they are eligible for medical and hospital insurance coverage under the B.C. Plan.

### Residents of Other Provinces

Students from other Provinces are encouraged to continue their Provincial Medical coverage and are to be prepared to produce a medical insurance identification number. The following plans are acceptable to the University Health Service but may not be acceptable to private physicians' offices, hospital, laboratories, etc.: Alberta, Saskatchewan, Manitoba, Ontario, Northwest Territories, Yukon, and Seaboard. If you have any other provincial plan, the University will bill you and you may be reimbursed by your Medical Plan.

### Nonresidents of Canada

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete. Nonresident students can purchase a medical and hospital plan at the time of registration which provides acceptable sickness and hospital insurance with no deductibles. The rates for 1984-85 were \$300 for a single student and \$725 for a married student for twelve months coverage. These rates are subject to yearly change.

### Illness Involving Examinations

Students are referred to the academic regulations governing illness at the time of examination, found on page 16.

## CHAPLAINS SERVICES

The Chaplains Services are provided for University students, faculty and staff. This joint ministry is offered on an interdenominational basis with the Chaplains and their associates working as an ecumenical team.

The office and meeting space, located in the University Centre, Room A-223, is open Monday to Friday from 9 a.m. to 4 p.m., for listening and sharing across denominational, faculty, philosophical and cultural lines.

### Programs:

Chaplains Services provides the following special interest programs: Marriage Preparation Program, Student Retreats, Worship Services, Pastoral Counselling, and Biblical, Theological and Value Studies.

### University Interfaith Centre:

The University operates an Interfaith Centre for the purpose of religious celebrations and worship for all faiths.

## STUDENT FINANCIAL AID SERVICES

The University operates a Financial Aid services office, located on the second floor of the University Centre, which is open during regular University hours (8:30 a.m. to 4:30 p.m.). Monday through Friday. Students wishing to discuss their financial situation are advised to arrange for an appointment by calling the office at 721-8423, well before they require assistance. A trained staff of financial advisers is available to discuss and advise prospective students about the costs of attending and the potential sources of funds to cover these costs.

Students must take into consideration tuition, books and supplies, food and accommodation, transportation, and day to day living expenses when considering attending a winter session at the University of Victoria. A booklet entitled "Information and Guide to Application" which accompanies the application form for B.C. Student Assistance Program contains a breakdown of costs allowed by the Government for the average student and is helpful in preparing a budget. The booklet, along with application forms and appendices, is available in a kit from the Student Financial Aid Services office. In addition, more specific information is available in several sections on financial aid at the back of this calendar.

If financial assistance is needed to attend, students should know that the following costs were approved by Federal and Provincial student aid agencies for the 1984-85 Academic Year.

### Tuition and Student Government Fees

In 1984-85, the tuition and AMS fees for a student enrolled in 15 units were \$1241 but these fees will vary according to the course load taken and are different for students in Law and Graduate Studies. For specific course costs, consult the preceding section on fees.

### Book and Supplies:

Books and supply costs were allowed at \$305 a year during 1984-85. Students enrolled in courses such as Law, Visual Arts, Music and Theatre may face additional expenses for materials and instruments.

**Food and Accommodation:**

In 1984-85, a single student living away from home (that is, living off campus) was allowed a maximum of \$3200 for food and accommodation or approximately \$400 per month.

Single students planning to live on campus can refer to the rate schedule listed earlier in this section under Housing and Conference Services.

Costs for married students and single parents will vary greatly according to their accommodation and the number and age of their children. The booklet for the B.C. Students Assistance Program referred to earlier is particularly helpful in this regard in a section entitled "Calculating Need for Married Students and Single Parents".

**Transportation:**

Local transportation to and from classes was allowed at the rate of \$10 per week during 1984-85. Students commuting great distances may request additional costs if justified. Students from outside the Victoria area should include the cost of two return trips between their home and the University by the most economical means when proposing their budget for student financial aid.

**Miscellaneous and Exceptional Expenses:**

Students will incur a number of day to day expenses for items such as clothing, laundry, prescription drugs, recreation and entertainment. In addition, some students will have exceptional expenses, either course related (practica, field trips, etc.) or personal (chronic medical problems, support to family, etc.) These expenses should be included in the budget estimates. Students applying for B.C. Student Assistance Program should be sure to provide documentation with respect to any exceptional expense claimed, including B.C. Medical payments. Miscellaneous expenses were allowed at the rate of \$28 per week during 1984-85.

For further details on costs allowed, please read the guide accompanying the B.C. Student Assistance Program carefully.

**ATHLETICS AND RECREATION SERVICES**

The department of Athletics and Recreation Services at the University of Victoria provides a comprehensive program of sports and recreation for all students, faculty and staff at the University. The McKinnon complex includes a large gymnasium (2300 seats), dance studio, apparatus gymnasium, weight training room, 25 metre L shaped swimming pool, squash courts, fitness testing centre and changing and showering facilities. There are several playing fields, a 3,000 seat stadium, and many miles of different length jogging trails through the woods around the campus, along with the Cadboro Bay sailing compound, Lake Cowichan field centre and Elk Lake rowing facility.

Intramural sport leagues, instructional courses, outdoor and aquatics programs cover a wide range of indoor and outdoor activities.

The Athletics program is provided for full time students at the University and consists of Level I and Level II Sports Programs.

The Level II program provides, to the extent that resources permit, opportunities for students to participate in organized competition with off campus teams in a wide variety of sports in and around southwestern British Columbia. Level II sports include men's and women's basketball, men's and women's soccer and swimming.

The Level I program provides athletically gifted students with high quality coaching and high levels of competition so that they can develop their athletic abilities to the fullest while pursuing their studies at the University. Sports offered includes men's and women's basketball, men's and women's cross-country/middle distance, women's field hockey, men's and women's rowing, rugby, soccer and men's and women's volleyball.

The University of Victoria is a member of the Canadian Inter-university Athletic Union competing in the Canada West University Athletic Association conference.

**DAY CARE CENTRES**

Three cooperative day care centres for students, staff or faculty with pre-school-age children are located on the campus. These centres are licensed to take children between the ages of 18 months and five years. A fourth centre located in Hut W is licensed to provide care for children aged 6-12 years in an after school and school closure program. The Provincial government pays subsidies, based on need, toward the fees of these nonprofit centres which are staffed by trained personnel. Registration is limited. Application should be made several months in advance of the date day care services are required. Inquiries and applications should be made to the Coordinator, Day Care Services (721-8500).

**CANADA EMPLOYMENT CENTRE**

The Canada Employment Centre On Campus (formerly Manpower), is operated by the Canada Employment and Immigration Commission in cooperation with the University administration, faculty, and student government, as a service to students.

The main functions carried out at the Centre are:

- Career Information and vocational counselling
- Career employment opportunities
- Part time, casual and summer employment opportunities
- Scheduling of interviews for employers recruiting on campus, including teacher recruitment
- Labour market information
- Assistance in resume writing and job interview preparation

Graduating or graduate students interested in permanent career employment either during or following the academic year should apply at the Centre. On campus career information and employment interviews take place from October through March. Employer interviews can be scheduled during November to April.

Students seeking summer employment, particularly in governmental Career Oriented Programs are advised to contact the Canada Employment Centre on Campus in early November. In May, summer employment opportunities are coordinated through Canada Employment Centre for Students, (specific details are advertised in local newspapers and further information is available through the Centre on campus). In May, summer employment opportunities are coordinated through Canada Employment Centre for Students, (specific details are advertised in local newspapers and further information is available through the Centre on campus).

Students wishing part time employment through the school year may apply as soon as timetables are established, or maintain continuing contact with the Centre or through campus boards.

Career information visits, as undertaken by related employers or association representatives, are ongoing throughout the academic year, with specific details posted as available.

Individual career counselling services are provided at the Centre at any time. Employment Centre on Campus has a Careers Room stocked with literature from many companies. Help and guidance in writing resumes and detailed application procedures are also available and students are invited to make use of the services supplied to them.

The Centre is located in the University Centre, Room B240, 2nd floor, operating Monday-Friday from 8:00 a.m. to 4:30 p.m. Service is available after 4:30 p.m. by appointment. Notices giving day to day information on employment opportunities, both permanent and part time, and on career developments are posted on Employment Notice Boards located in the Elliott (study wing), MacLaurin, Clearihue (main floor, A wing), Cunningham and Cornett Buildings, and the Student Union Building.

**CAREER INFORMATION  
VOCATIONAL COUNSELLING**

Career information and vocational counselling may be obtained from the Counselling Services or the Canada Employment Centre on campus which operates a Careers Information Room. Career discussions with alumni members in various occupational fields can be arranged through the Director of the Alumni Association. Students may also wish to contact faculty advisers in their areas of study for advice pertinent to career planning.

**PHYSICAL EDUCATION, ATHLETICS  
AND RECREATIONAL FACILITIES**

Use of the athletics and recreational facilities or participation in the programs is open to all students paying the athletics and recreation fee, and to faculty and staff who have purchased an activity card from the Athletics and Recreation Office. Faculty, staff and students are also eligible to purchase family membership cards.

The Physical Education, Athletics and Recreational Facilities (P.E.A.R.F.) include two gymnasias, a swimming pool, squash courts, tennis courts, a weight room, and a dance studio, which are all widely used as recreation centres. The University also manages Centennial Stadium, which is operated and financed in cooperation with the four core Greater Victoria municipalities and School District 61.

**University Centre Auditorium:**

Throughout the year, concerts to satisfy most musical tastes are held in the 1,233 seat auditorium. Student prices are offered for most events.

Tickets for attractions are offered on sale in the University Centre box office, which is open from 12:30 to 1:30 p.m., Monday through Friday, from September to April. This office also serves as a campus ticket outlet for many events scheduled in downtown Victoria.

#### **Student Locker Service:**

Free lockers are provided for the use of students in a number of

buildings on the campus. Students wishing to acquire a locker may do so on a first come first served basis by placing a lock on the selected locker. Use of such lockers is subject to University policies regarding cleaning and responsibility for damage or loss to the contents.

Gymnasium lockers may be rented annually from the Department of Physical Education, Athletics and Recreational Facilities (P.E.A.R.I.).

## **STUDENT AFFAIRS**

The Director of Student and Ancillary Services serves as the liaison between Student Societies and the University.

### **ALMA MATER SOCIETY**

The Alma Mater Society is a legally incorporated society in the Province of British Columbia. The Society functions as the recognized means of communication between the undergraduate student body and the faculty, administration and the outside community. The Society is governed by the Board of Directors which consists of four administrative directors, President, Vice President Finance, Vice President Services and Vice President Programs along with fifteen ordinary directors. All members of the board are students and are elected in March of each year for one year terms.

The Alma Mater Society is headquartered in the Student Union Building and promotes a wide range of services and programs. Services operated regularly in the S.U.B. by the A.M.S. include two food service outlets, the Sub Pub, Cinecenta Films, The Martlet newspaper, the A.M.S. Print Shop and the office of the Ombudsman.

The Alma Mater Society also funds a large clubs network, publications such as the Student Handbook, and Telephone Directory. The Society sponsors entertainment through dances and concerts and promotes academic enrichment through speakers and seminars on topical issues. Issues affecting student life such as housing, fees, employment and university governance are handled by the Board of Directors which meets weekly in the Winter Session.

Students are encouraged to participate in all aspects of University life and take an active role in serving the community. The Alma Mater Society President is always available to help students get involved and is eager to help individuals and groups, solve problems and achieve the realization of their projects and ideas.

The Alma Mater Society is the voice of the undergraduate students at the University of Victoria. In order for it to be a relevant and productive voice its members must be active, concerned and involved. Every student has a responsibility to the University community and your Alma Mater Society is your way to make a contribution.

The door is always open.

*President 1984-85: Ms. Joanne Howard (March-Sept. 1984)*

*Ms. Rosemin Keshvani (Sept. 1984-March 1985)*

#### **Office of the Ombudsman, AMS:**

Operating out of Room 133 of the Student Union Building, the Ombudsman functions as an independent, impartial investigator equipped to field student complaints about any department or office on campus. While the office is not empowered to enforce its recommendations, it seeks to ensure that on campus decisions and University regulations are both fair and equitable. The office also acts as an information and referral centre about and to campus operations and services.

All contacts with the Ombudsman's office are confidential.

The Ombudsman can be reached at 721-8357 or messages can be left at the AMS general office. Office hours are advertised in the Martlet and posted at various locations around campus.

### **GRADUATE STUDENTS' SOCIETY**

The Graduate Students' Society was officially recognized by the Senate of the University of Victoria in the fall of 1966, shortly after the establishment of the faculty of Graduate Studies. Through the Executive Council of the Society, it represents the graduate students to the University and the community.

The five members of the Executive of the Society are elected for one year terms by the members of the Society. Executive members may be elected in October or April. Any graduate student registered at the University of Victoria, whether part time or full time, is eligible to vote in Society elections, to hold office in the Executive Council, and to

represent the Society on University and Senate committees.

The Functions of this Society are: (a) to represent the graduate student body in all matters pertaining to the welfare of it as a unit or any of the individuals comprising that body, (b) to represent the academic, teaching and research assistants in communication with the faculty and administration, (c) to act as a liaison between the graduate student body and the faculty and administration, (d) to promote intellectual, social and recreational activities among graduate students, (e) to provide a communication link with the Alma Mater Society of the University and with graduate students from other universities, and (f) to assist incoming graduate students who are experiencing language or accommodation difficulties.

The Society is funded by fees collected at registration by the University for the Society (see page 20). These funds are used to pay the costs of preparing Library/G.S.S. identification cards for graduate students as well as to support the regular functions of the Society, the building fund and athletics and recreation.

Graduate students with ideas, projects, financial difficulties or other problems are urged to contact any member of the Executive for assistance. Executive members may be contacted through the Faculty of Graduate Studies or directly in the G.S.S. offices in the S.U.B.

The Society administers a travel fund to assist graduate students wishing to attend professional meetings and conferences. For information, contact the President of the Society.

*President 1984-85: Mr. Chris Morry*

### **GENERAL CONDUCT**

The University authorities do not assume responsibilities which naturally rest with parents. This being so, it is policy to rely on the good sense of students for the preservation of good moral standards and for appropriate modes of behaviour and dress.

### **HAZING**

The University prohibits hazing.

The attention of students is called to this resolution of the Alma Mater Society:

*The Student's Council shares the concern of the University over hazing during Frosh Week. We wish to point out that any form of hazing is forbidden by University regulation. With the advent of residences and the ensuing growth of the University, this form of conduct has become archaic and will no longer be tolerated. Any behaviour which exceeds the bounds of good taste and common sense will result in disciplinary action by the Student's Council.*

### **CANADIAN ARMED FORCES SUBSIDIZATION PLANS**

The Department of National Defence sponsors programs of university education and leadership training for selected young men and women who have the potential to become officers in the Canadian Armed Forces.

The programs sponsored are the Regular Officer Training Plan (ROTP), Medical Officer Training Plan (MOTP)/Dental Officer Training Plan (DOTP). Training given under these plans is divided into two parts: normal attendance at university throughout the academic year and military training each summer.

Individuals interested in obtaining more information on, or wishing to make application for, any of these plans are requested to contact:

Detachment Commander  
Canadian Forces Recruiting Centre Detachment  
614 Yates Street  
Victoria, B.C. V8W 1K9  
Tel. (604) 388-0847

## ALUMNI ASSOCIATION

The Alumni Association is an organization composed primarily of University of Victoria graduates. It seeks to support the University and to represent the views of graduates within the University community. In addition to these graduates, others are automatic members of the Association by virtue of their being on the Convocation Roll. Such are the Chancellor and the President of the University, members of the Board of Governors and the Senate, all faculty members, some former students of Victoria College and others entered on the roll by Senate regulation, such as emeritus faculty, some University employees and members of the community. Community membership is also available in the Association.

The Association is governed by an Executive elected annually. There are 13 voting members on the Executive and additional ex officio members representing a wide spectrum of University interests may sit at

Executive meetings in a nonvoting capacity.

Policies and programs are developed by the Executive and are implemented by the Association's staff in close cooperation with the University's administration. Funding for Alumni Association programs in support of the University and its students is made available through an annual fund drive and other fund raising projects. The Association membership is informed of activities through mailings and through the Association's publication, "The Torch".

The Alumni Association office is located in room 107, Sedgewick Building. Telephone number: 721-7635.

*President 1984-85:*

Daniel T. Gallacher,  
B.A., M.A. (U. of Vic.),  
Ph.D. (British Columbia)

## UNIVERSITY PUBLICATIONS

Besides this Calendar and the publications mentioned on the inside front cover, the following are designated as authorized University publications:

### *Malahat Review*

An international quarterly of life and letters edited by Constance M. Rooke, B.A., M.A., Ph.D. Subscription: \$15.00 for one year; \$40.00 for three years (overseas, \$20.00 and \$50.00, respectively).

### *The Ring*

A news tabloid published every week and edited by John Driscoll. Circulated on campus free of charge.

### **Canadian Bilingual Dictionary Project:**

The University is currently preparing a revised and enlarged edition of *The Canadian Dictionary/Dictionnaire Canadien*, published in 1962. Project Director: Professor H.J. Warkentyne, Department of Linguistics.

## DIVISION OF UNIVERSITY EXTENSION

The purpose of the Division is to work with the various faculties on the planning and administration of the programs described below.

### **Credit Courses and Programs Offered Off Campus, Evening Credit Courses Offered On Campus and Courses Offered in the Summer Studies Period.**

The announcement of the courses to be offered in the Summer studies period will be issued in February; for on campus evening courses and off campus courses starting in September, a Supplement will be available in June, and for off campus courses beginning in either May or July, a Supplement will be available in March. Copies can be obtained from the Division of University Extension, the local centre of adult education where University courses are offered, and from Admission Services or Records Services at the University.

Academic rules and regulations published in this Calendar, except as described in any Program Supplement to the Calendar, apply to students taking courses under this section.

The University reserves the right to cancel courses when enrollment is not sufficient.

Selection of courses must be made in keeping with Calendar prescriptions for the degree program involved. Students seeking academic advice regarding degree programs should consult the appropriate academic advising centre. Inquiries should be directed to one of the following:

Advising Centre — Faculty of Arts and Science, Room B137, Clearihue Building, Telephone: 721-7566.

Advising Centre — Faculty of Education, Room 250, McLaurin Building, Telephone: 721-7877.

Students in the Faculty of Fine Arts or the Faculty of Human and Social Development should contact the specific department or school direct.

Regulations governing application and registration procedures and fees are detailed in the appropriate Supplement.

### **Professional Development Programs:**

These programs are planned to meet the specific continuing education needs of persons working in the professions. Courses and workshops are offered throughout the Province in cooperation with regional colleges and professional organizations. The primary emphasis of the

University's offerings is on programs for persons working in the areas of Education, Social Work, Nursing, Child Care, Public Administration and Fine Arts. Programs for professionals in other areas are also offered in cooperation with The University of British Columbia and Simon Fraser University.

### **Distance Education**

University Extension supports credit, professional development and community education courses delivered through a variety of instructional methods which permit students to study at a distance from the campus.

Program formats will be some combinations of: Knowledge Network T.V., broadcasts, audio cassettes, video tapes, computer assisted instruction and print. Regular telephone contact time with the instructor is an important component of all distance education courses.

### **Community Education Programs:**

The nondegree program utilizes a variety of educational formats, such as courses, lecture series, workshops, conferences, residential seminars, and symposia. The curriculum is developed in cooperation with departments from all faculties of the University and administrative offices.

Areas covered include: Programs for Women; Seniors; Humanities; Business Management; Science; Adult Education; Liberal Studies; Fine Arts; Health Sciences; Languages. Additional courses are developed as needs arise and academic resources permit.

### *French Language Diploma Program*

In cooperation with the Department of French Language and Literature, the Division offers a *French Language Diploma Program*. The Program consists of five integrated courses designed to develop a level of language competence functional throughout Canada. Students are placed at levels consistent with their initial ability and they progress at their own individual rate. Expected completion time, on the average, is three to four years. The University awards a Diploma to successful candidates.

Special courses for groups can be arranged upon request, if academic resources permit.

For further information on any of the above programs please call or write the Division of University Extension, University of Victoria, P.O. Box 1700, Victoria, B.C. V8W 2Y2. Telephone 721-8451.

## PREPROFESIONAL EDUCATION

The material which follows is only a *guide* to professional education at other universities, and students must not assume that completion of these courses will grant them automatic admission. Students who are seeking advice about professional education should consult the Arts and Science Advising Centre, University of Victoria, where specific information on prerequisites can be obtained. Students who plan to undertake professional studies at other Canadian or American universities are urged to correspond with the universities of their choice prior to their first year at the University of Victoria.

**Please note that course programs for First Year students only are outlined, although it may be possible to complete one or more additional years of study at the University of Victoria.**

### AGRICULTURE

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Physics or Economics

### APPLIED SCIENCE

Suggested courses:  
English  
Mathematics  
Chemistry  
Physics  
Elective

### COMMERCE AND BUSINESS ADMINISTRATION

Students interested in Commerce and Business Administration are advised to consult the Head of the Department of Economics, University of Victoria.

Suggested courses: First Year Arts and Science or its equivalent with standing in 15 units (including Economics, English and Mathematics).

### DENTAL HYGIENE

Suggested courses:  
English  
Chemistry  
Biology  
Psychology  
An elective

### ARCHITECTURE

Suggested courses:  
Art  
English  
Mathematics  
History in Art  
Physics  
Social Sciences

### CHIROPRACTIC

Suggested courses:  
Completion of two years in Arts and Science, the first year of which to include the following:  
Biology  
Chemistry  
Mathematics  
Physics  
Psychology

### DENTISTRY

Completion of at least three years of study on a degree program in Arts and Science including English, Mathematics, Chemistry, Biology, Physics, Biochemistry.

### FORESTRY

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Physics

### MEDICINE

Completion of at least three years of study on a degree program in Arts and Science including English, Mathematics, Chemistry, Biology, Physics and Biochemistry

### PHARMACY

Suggested courses:  
Chemistry  
English  
Mathematics  
Physics or Biology  
Elective

### PSYCHOLOGY

Students wishing to enter a professional school of psychology are advised to complete the B.A. Honours or B.Sc. Honours program in the Department of Psychology, University of Victoria.

### SPEECH AND HEARING SCIENCE

Students intending to pursue studies in the Speech and Hearing Sciences after graduation are advised to consult the Department of Linguistics on the design of their degree program. (The Bachelor of Science in Linguistics offers suitable preparation for this area of study.)

### VETERINARY MEDICINE

Completion of two years in Arts and Science including:  
English  
Physics  
Biology, including Genetics  
Chemistry, including Organic Chemistry  
Mathematics  
Electives: a course in Statistics is recommended and may be applied towards the mathematics requirement.

### HOME ECONOMICS

Suggested courses:  
Chemistry  
English  
Physics (Human Nutrition)  
Mathematics  
Biology  
Social Science (Family Sciences)

### OPTOMETRY

Completion of two years in Arts and Science, the first year of which to include the following:  
Biology  
Chemistry  
Mathematics  
Physics  
Psychology

### REHABILITATION MEDICINE

Suggested courses:  
English  
Mathematics  
Chemistry  
Biology  
Psychology

## COOPERATIVE EDUCATION PROGRAMS

### THE "COOPERATIVE" CONCEPT

Cooperative Education can be described as a process of education which formally integrates the students' academic and career studies on campus with relevant and productive work experience in industry, business, and government.

The accumulation of up to two years of varied and program related work experience enhances the students' intellectual, professional, and personal development, by providing opportunities for applying academic theories and knowledge, evaluating and adjusting career directions, and developing confidence and skills in working with people.

### COOPERATIVE EDUCATION PROGRAMS OFFERED

Cooperative Education Programs are currently offered in the Faculty of Arts and Science (Biology, Chemistry, Computer Science, Geography, Mathematics, Physics), the Faculty of Education: (School of Education: Leisure Studies Major), the Faculty of Engineering (Computer Engineering, Electrical Engineering), the Faculty of Fine Arts (Creative Writing),

the Faculty of Human and Social Development (Health Information Science), and the Faculty of Graduate Studies (Economics, Education Administration, Public Administration, and other graduate areas on an individually negotiated basis.

### ADMISSION

Admission and graduation requirements for Cooperative Education Programs are determined by the individual departments. Consult the calendar entries in these areas for further information.

Students must apply to the appropriate department for admission to the Coop Program. In general, Coop students are required to achieve an above-average academic standing, and to demonstrate the motivation and potential to pursue a professional career.

### WORK TERMS

As an integral component of Cooperative Education Programs, students are employed for a number of work terms, which are arranged and evaluated by the individual departments. For undergraduate programs,

a minimum of four work terms is required (individual departments may require more).

Work terms, normally of four months duration (13 weeks minimum), begin in January, May, and September. Work terms generally alternate with academic terms on campus, and provide productive and paid work experience which is related to the student's program of studies and individual interests.

### GENERAL REGULATIONS

1. Students must register for each work term by completing the Work Term Registration form, which is provided by the Coop Coordinator and which is normally completed when the student accepts an offer of work term employment. Once registered, students are not permitted to withdraw from the work term without penalty of failure, unless specific written permission has been granted by the department.
2. Each work term is evaluated on the basis of the student's performance of assigned work term tasks and a written work term report. The work term period and evaluation (grading: COM, F, or N) are recorded on the student's official academic record, as well as on the official Record of Work Terms, which is attached to the academic record and which also includes work term details (employer, title of report, and position title).
3. A failed work term will normally result in the student being required to withdraw from the Coop Program, subject to review by the department.
4. A Coop Program fee, which is nonrefundable, is assessed in the first month of each work term and is subject to the Fees regulations (p. 19.).
5. In the undergraduate programs, students are required to complete satisfactorily at least four work terms (individual departments may require more). After admission to the program, students are required to register for all scheduled work terms, except for the work term offered by some programs in the summer at the end of first year.
6. Work term reports are normally due for submission to the department during the first month following each work term, at a time established by the department, and are evaluated by the department, and, in some cases, the employer.
7. In the event of a work stoppage within the first nine weeks of a work term, an attempt will be made to arrange an alternative work placement, to enable the student to complete the work term. If the work stoppage occurs after nine weeks, the work term will be accepted for credit providing all other work term requirements are met.
8. The transferability of work terms from other institutions which offer Coop programs is determined by individual Coop departments on the merits of each completed work term. The number of work terms accepted for transfer must be less than 50% of the total number required for completion of the Coop Program.
9. Students who are taking double or combined major degrees (where each area offers a Coop program) may, if eligible, enroll in and undertake work terms in both Coop programs. Students who complete at least two work terms in each area will have the combined nature of their program noted as part of the Coop designation on their official records.
10. To graduate from a Cooperative Education Program, students must complete satisfactorily the minimum number of work terms and maintain the academic standing required by individual departments. Students who elect to graduate before or during the completion of a work term, will not have that work term recorded for credit, and, consequently, may not graduate with the Coop designation.
11. Students registered for work terms are considered to be enrolled in a full time course of studies and may not take university level credit courses without the permission of the department.

# FACULTY OF ARTS AND SCIENCE

Louis D. Costa, A.B. (C.C.N.Y.), M.A., Ph.D. (Columbia), Dean of the Faculty and Dean of Social Sciences  
 Samuel E. Scully, B.A., M.Litt. (Bristol), Ph.D. (Tor.), Dean of Humanities  
 Roger R. Davidson, B.Sc. (Queen's), M.A. (Tor.), Ph.D. (Florida St.), Dean of Science (to June 30, 1985)  
 G. Grant McOrmond, C.D., M.A. (Sask.), Assistant Dean and Director of Academic Advising  
 Linda M. Langwith, B.A. (U. of Vic.), M.A. (Carleton), Advising Officer  
 Marjorie L. Menhenett, B.A. (Wellesley Coll.), M.A. (Calif. Berkeley), Advising Officer  
 Johannes G. Seidel, Senior Academic Assistant, Language Laboratory

## DEGREES OFFERED

The degrees offered in this Faculty are Bachelor of Arts (B.A.) and Bachelor of Science (B.Sc.).

## ACADEMIC ADVICE

**Academic Advising Centre:** Academic advice for the Faculty of Arts and Science is available through the Arts and Science Advising Centre, B137 Clearihue Building. Students seeking information or advice regarding programs, courses, or University and Faculty regulations are invited to visit the Centre, or write to the Director. Appointments with an Adviser may be made by telephoning 721-7566.

**Departmental Advising:** All academic Departments have Advisers generally available throughout the Winter Session who can give detailed information regarding courses and programs within each discipline. Students wishing advice from Departmental Advisers during the summer months should write or telephone the department for an appointment. Students transferring into the Faculty of Arts and Science from a professional program should consult the Department in whose discipline they plan to Major regarding their previous credit.

**Faculty of Education Advising:** Students in the Faculty of Arts and Science who wish to enter the Faculty of Education at a later date are advised to consult the Education Advising Centre, Room 250, MacLaurin Building, before they begin their studies in Arts and Science.

## PROGRAM PLANNING

It is recommended that all students discuss their proposed programs with the Arts and Science Advising Centre and/or with Departmental Advisers well in advance of registration.

Students who may wish to transfer to another university to complete their degree are advised also to consult the university of their choice regarding required courses and transfer equivalencies.

**Course Planning Form:** First year students entering the University of Victoria will be asked to complete a Course Planning Form, listing their proposed courses for the session, and to send it to the Arts and Science Advising Centre for approval. A copy of the approved form will then be returned to the student. Completion of the Course Planning Form will facilitate the registration process.

**Record of Degree Program:** All students in the Faculty of Arts and Science are required to declare a degree program by completing a Record of Degree Program form in consultation with the Arts and Science Advising Centre, preferably near the beginning of their third year of studies, and, in any event, not later than the second term of that year. The purpose of this form is to ensure that proposed courses will meet the requirements for the degree program selected. A copy of the form is placed on file in the Records Office to be used as a record for graduating purposes.

**Limitation of Enrollment:** In certain programs of study, it may not be possible to accommodate all those seeking entry. Consequently, even though applicants may be admissible to the University, the Faculty of Arts and Science may not find it possible to allow the students entry into the program of their first choice. In addition to enrollment limitations, it may be necessary to limit registration in individual courses.

## REQUIREMENTS COMMON TO ALL BACHELOR'S DEGREES IN ARTS AND SCIENCE

Each candidate for a bachelor's degree is required.

- to have satisfied the University English Requirement (see page 12);
- to include in the first 15 units presented for the degree not more than 9 units from any single department, and at least 3 units from each of two other departments;
- to include in the next 15 units presented for the degree not more than 12 units from any single department, and at least 3 units from one other department;
- to include in the remaining units presented for the degree at least 21 units of courses numbered at the 300 or 400 level (this is a general University requirement);
- to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be completed at this University (these are general University requirements; also see Credit by Course Challenge, page 15);
- to present at least 33 units (of the minimum 60 units required for a degree) of courses from *one* of the two following lists, thereby determining the degree requested:

### Bachelor of Arts

Anthropology  
 Classics  
 Economics  
 English  
 Environmental Studies  
 French Language and Literature  
 Geography  
 Germanic Studies  
 Hispanic and Italian Studies  
 History  
 Liberal Studies  
 Linguistics  
 Mathematics  
 Pacific and Oriental Studies  
 Philosophy  
 Political Science  
 Psychology  
 Slavonic Studies  
 Sociology

### Bachelor of Science

Biochemistry and Microbiology  
 Biology  
 Chemistry  
 Computer Science  
 Economics  
 Geography  
 Linguistics (certain courses only, see page 96)  
 Mathematics  
 Physics  
 Psychology

- to meet the requirements for the degree program selected; see below, and under the individual departments, pages 33 to 133.

## DEGREE PROGRAMS LEADING TO THE B.A. AND THE B.Sc.

A student may proceed to either the B.A. or the B.Sc. degree, normally in one of three Programs: Honours, Major, or General (but see section on Joint Honours and Major, below). In most cases, by choosing courses carefully and consulting departmental requirements and prerequisites, students may postpone until the end of the Second Year the decision as to which program to select.

## THE HONOURS PROGRAM

The Honours Program requires specialization in a single field in the last two or three years and is intended for students of above average ability. Students who plan to undertake graduate work are strongly advised to follow an Honours Program.

### Admission to an Honours Program

Students planning to proceed in an Honours Program must consult the Chairman of the Department concerned, or his nominee, as early as possible in their academic career, and in any case, must obtain the consent of the department concerned to enter its Honours Program. This consent will normally be given only if:

- the department offers an Honours Program;
- the student has fulfilled the requirements of the first two years and

has a grade point average of at least 3.50 in the work of the Second Year and in the field in which the student wishes to specialize; and (c) the student has completed all prerequisite courses.

The department concerned must annually renew its permission for a student to continue on an Honours Program. If, in the opinion of the department, the student's work at any time is not of Honours standard, the student may be permitted to transfer to a Major or General program.

#### Requirements of the Honours Program

The number of units required for an Honours Program varies between 60 and 66, depending upon the requirements of the department concerned, which are set out on pages 33 to 133 of this Calendar, and which must be satisfied along with the requirements common to all degrees in the Faculty of Arts and Science, set out above.

A candidate for Honours may be required to present a graduating essay, to pursue a program of directed studies, or to participate in an Honours seminar. The final date for submitting graduating essays or research reports to the departments in the second term is left to the discretion of the department concerned.

A candidate for Honours may be required at the end of the final year to take a comprehensive examination — oral, written, or both.

*Normally a student should complete the requirements for an Honours Program in four academic years. Students who are planning to complete a degree on a part time basis and who wish to be considered candidates for honours should explore the options with the department concerned. Requests for extensions should be made through the department concerned to the Dean's office.*

Honours degrees are of two classes: First and Second. Consult the entry of the department concerned for its requirements for each class of Honours degree. Students who pass their courses but fail to obtain at least Second Class (normally, a graduating average of 3.50 minimum) may, upon the recommendation of the department, be granted appropriate standing in a Major or General program. See Graduation Standing, page 31.

#### Honours Programs Leading to the B.A. or the B.Sc. Degree

A student may proceed to the B.A. or the B.Sc. degree in an Honours Program in one of the following:

##### Bachelor of Arts

Anthropology  
Applied Linguistics  
Classics  
Economics  
English  
French  
Geography  
German  
Greek  
History  
Latin  
Linguistics  
Mathematics  
Philosophy  
Political Science  
Psychology  
Sociology  
Spanish

##### Bachelor of Science

Astronomy  
Biochemistry  
Biology  
Chemistry  
Combined Chemistry  
and Mathematics  
Combined Computer Science  
and Mathematics  
Computer Science  
Economics  
Geography  
Linguistics  
Mathematics  
Microbiology  
Physics  
Physics and Mathematics  
Psychology

**Combined Honours:** Offered in Chemistry/Mathematics; Computer Science/Mathematics. See pages 51, 58 and 102 for details.

**Double Honours:** With the joint approval of the departments concerned, a student may be permitted to meet the requirements for an Honours Program in each of two departments, both leading to the same degree, a B.A. or a B.Sc. Such a program may require an extra year of study, in which case approval of the Dean should be sought.\*

**Joint Honours and Major Programs:** Where it is possible to do so within the period of four academic years required for Honours Programs, a student may elect to complete an Honours Program in one area of study together with a Major Program in another area of study, both leading to the same degree, a B.A. or B.Sc.\*

## THE MAJOR PROGRAM

The Major Program requires some specialization in one field in the last two years, and may permit the student to proceed to graduate study if sufficiently high standing is obtained, or to professional or business careers.

#### Requirements of the Major Program

The Major Program requires:

- the completion of the first 30 units in conformity with the regulations common to all degree programs given above;
- the completion of the remaining units in conformity with the regulations common to all degree programs given above, and including the following:
  - 15 units of courses numbered 300 or 400, selected to meet the requirements of the Major program, as specified by the department concerned;
  - at least 15 units of electives, which may include not more than 9 units prescribed by the Major department as corequisites.

#### Major Programs Leading to the B.A. and B.Sc.

A student may proceed to the B.A. or the B.Sc. degree in a Major program in one of the following:

##### Bachelor of Arts

|                     |             |                   |
|---------------------|-------------|-------------------|
| Anthropology        | French      | Philosophy        |
| Applied Linguistics | Geography   | Political Science |
| Classical Studies   | German      | Psychology        |
| Classics            | History     | Russian           |
| Economics           | Linguistics | Sociology         |
| English             | Mathematics | Spanish           |

##### Bachelor of Science

|                  |              |
|------------------|--------------|
| Astronomy        | Geography    |
| Biochemistry     | Linguistics  |
| Biology          | Mathematics  |
| Chemistry        | Microbiology |
| Computer Science | Physics      |
| Economics        | Psychology   |

In addition, a student may proceed to a B.A. degree in a Major program in one of the following Interdisciplinary Programs:

**B.A. in Liberal Studies:** This is an experimental interdisciplinary program which is found on page 95. No students will be admitted to this program in 1985-86.

**B.A. with Major in Pacific Studies:** The Pacific Studies program is designed to provide a concentration in the area of Pacific Studies for both educational and professional purposes. Details of the program are given on page 107.

**Combined Major:** A student may elect to complete the requirements for a Combined Major Program leading to a B.Sc. in the following areas: Computer Science/Mathematics; Chemistry/Mathematics; Biochemistry/Chemistry; Microbiology/Chemistry; and Physics/Astronomy.

**Double Major:** A student may elect to complete the requirements for each of two Major Programs offered in the Faculty, both leading to the same degree, a B.A. or a B.Sc., except that Biochemistry cannot be combined with Microbiology and Physics cannot be combined with Astronomy for a double major, nor can any Combined Major program be used as a double major with a major program offered by either component department.\*

Students may, with permission of the Dean, arrange for a Double Major B.A. program which will involve satisfying the Major requirements of two disciplines in the Faculty of Arts and Science, one of which normally offers programs leading only to the B.Sc. degree, while the other offers programs leading to the B.A. degree. Details of all such programs must be agreed upon by the student, the representatives of the academic units involved, and the Dean. The signed agreement will be on file in the Records Office.

**Interfaculty Double Honours, Major or General:** Students may arrange for an Interfaculty Double Honours, Major or General program through the Arts and Science Advising Centre. Such programs involve satisfying the Honours, Major, or General requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the students and by representatives of the academic units involved. Students on the interfaculty program will be subject to the regulations of the Faculty in which they are registered.\*

\* A student proceeding towards a B.A. or B.Sc. in a Double Honours, Joint Honours and Major, Double Major or Interfaculty Double Major program, shall be entitled to no more than one bachelor's degree upon completion of any of these programs. Students seeking a second bachelor's degree should consult the regulations on page 19 under A Second Bachelor's Degree.

**The Environmental Studies Program:** This is an interdisciplinary program designed to provide students with a concentration of courses in the area of environmental topics. It does not in itself constitute a degree program, and may only be taken in conjunction with a Major or Honours program, leading to the B.A. or the B.Sc. For details of the Environmental Studies Program, see page 73.

## THE GENERAL PROGRAM

The General Program may lead to professional careers or to graduate studies, depending upon the level of competence demonstrated therein; its distinctive characteristic, however, is the breadth of the education for which it provides.

### Requirements of the General Program

The General Program requires:

- (a) the completion of the first 30 units in conformity with the regulations common to all degree programs given above;
- (b) completion of the remaining units in conformity with regulations common to all degree programs given above, and including the following:
  1. 9 units taken in courses numbered 300 and above in each of *two* fields, as may be specified by the departments concerned;
  2. 12 units of electives which may include not more than 6 units prescribed by the departments as corequisites.

### General Programs Leading to the B.A.

A student may proceed to a B.A. degree in a General program in any *two* of the following:

|                  |                   |
|------------------|-------------------|
| Anthropology     | Linguistics       |
| Chinese Studies  | Mathematics       |
| Classics         | Pacific Studies   |
| Economics        | Philosophy        |
| English          | Political Science |
| French           | Psychology        |
| Geography        | Russian           |
| German           | Sociology         |
| History          | Spanish           |
| Japanese Studies |                   |

A student may also proceed to the B.A. degree in a General program which combines *one* of the above fields with *one* of the following:

|                               |           |
|-------------------------------|-----------|
| Biochemistry and Microbiology | Chemistry |
| Biology                       | Physics   |

### General Programs Leading to the B.Sc.

A student may proceed to a B.Sc. degree in a General program in any *two* of the following departments:

|                               |             |
|-------------------------------|-------------|
| Biochemistry and Microbiology | Mathematics |
| Biology                       | Physics     |
| Chemistry                     | Psychology  |
| Geography                     |             |

## COOPERATIVE EDUCATION PROGRAMS

Please refer to page 27 of the Calendar for a general description of Cooperative Education.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. In general, students participating in the Cooperative Education Program must maintain at least a second class (3.50) average overall. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

In addition to the graduation requirements outlined on page 19, a student must have a graduating average of at least 3.50 in order to graduate with the Cooperative Education notation.

Students may withdraw from the Cooperative Education program at any time and may remain enrolled in a Major or Honours program offered by the Department.

Details of the undergraduate programs in the Departments of Biology, Chemistry, Computer Science, Geography, Linguistics, Mathematics, and Physics are outlined in the Departmental sections of the Calendar.

## OTHER INFORMATION REGARDING CREDIT AND COURSES

### CREDIT FOR SUMMER STUDIES COURSES

Credit obtained in May-August courses may be combined with that obtained in Winter Session to complete degree requirements. The maximum credit for May-August work in any one calendar year is 9 units (see Summer Studies entry elsewhere in this Calendar and the Summer Studies Supplement to the Calendar, published in January).

### TIME LIMIT FOR DEGREE COMPLETION

Although the Faculty of Arts and Science imposes no time limit for the completion of a General or Major B.A. or B.Sc., Honours degrees are normally completed within four years. Certain departments, with the approval of Faculty, may impose stated time limits for the completion of Major and General programs in their areas.

### LANGUAGE LABORATORIES

Many courses offered by modern language departments include language laboratories intended to reinforce the learning of basic speech patterns and idioms and to complement the active use of the language in the classroom.

## CREDIT FOR COURSES OFFERED BY OTHER FACULTIES

**Recognized Courses Offered by Other Faculties:** The following First Year courses in the Faculty of Fine Arts are recognized for elective credit in the Faculty of Arts and Science:

Art 150  
Creative Writing 100  
History in Art 120  
Music 100 A/B, 110, 115, 170  
Theatre 100

Students in other than First Year should note that the following courses in the Faculty of Education and the Faculty of Fine Arts, in addition to those mentioned above, are acceptable for elective credit in the Faculty of Arts and Science.

Art 350  
Creative Writing: All courses marked with an asterisk (see page 178)  
Education-B490  
Music: All courses marked with an asterisk (see page 186)  
Theatre: All courses marked with an asterisk (see page 191)  
History in Art: All courses marked with an asterisk (see page 181)

**Other Courses outside the Faculty of Arts and Science:** In addition to the above courses, students are permitted to take for credit a total of 6 units of free electives chosen without restriction from any undergraduate courses offered in this University (except for Physical Education activity courses, e.g. 104-125, 461, 463, and School Experience or Practicum courses, e.g. Education-P 197, 297, 398, 498), where the regulations of the departments offering the courses permit, and prerequisites are met.

In exceptional cases, a student in a Major or Honours program may receive additional units of credit towards a degree program in the Faculty of Arts and Science for undergraduate courses not recognized in the Faculty of Arts and Science, provided that prior written permission has been obtained from the department in which the student wishes to undertake a Major or Honours program. In no case, however, may such credit be used to replace that specified for the Major or Honours program selected, nor may the credit for such courses be later transferred to another Major or Honours program unless the credit is then accepted by the department concerned.

Students on a General program who may wish to receive credit for more than 6 units for unrecognized courses offered by other faculties must secure the approval of the Assistant Dean of Arts and Science.

## CREDIT FOR STUDIES ELSEWHERE

Students who plan to undertake work at other universities must receive prior approval from the Dean if they wish such courses to be credited towards a degree program in the Faculty of Arts and Science. This applies particularly to courses at the 300 and 400 level and to courses which are included in the last 15 units of a degree program. Upon successful completion of such work, the student must request the Registrar of the other university to send an official transcript of record to the Records Office of the University of Victoria.

Students authorized to attend another institution who accept a degree from that institution abrogate the right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree (see page 19).

Normally, the Faculty requires all students qualifying for a degree to complete at the University of Victoria at least twelve upper level units of the fifteen required for a Major Program, or at least six of the nine upper level units required in each area of the General Program. Students on Honours programs normally may take at another university no more than six upper level units in the discipline in which they are taking Honours, and then only with the approval of the Honours Adviser. In addition, students should complete at the University of Victoria at least eighteen of the twenty-one upper level units required for all degree programs.

#### FOURTH YEAR CREDIT FOR STUDIES IN MEDICINE, DENTISTRY, VETERINARY SCIENCE OR LAW

Students who have taken their first three years at the University of Victoria may be granted a B.A. or B.Sc. after a least one year of a program in Medicine, Dentistry, Veterinary Science or Law, provided that the courses taken toward any one of those programs, when combined with those already taken in their first three years at the University of Victoria, are deemed equivalent to those which would be required to complete either a General or a Major program at the University of Victoria. Only courses which do not overlap courses already completed at the University of Victoria and which are acceptable to the departments concerned will be accepted for credit. The University shall receive assurance from any other institution involved that it will not also grant a Bachelor of Arts or a Bachelor of Science degree for the same work.

A student who contemplates transferring to a medical, dental, veterinary or law school before graduation should consult any departments concerned prior to registering in Third Year so that courses that meet the requirements of a Major or General program are chosen. Following completion of Third Year, the student should then confirm in writing to the Dean that the student intends to transfer to such a school and seek credit for work taken there towards a bachelor's degree from this University.

Upon successful completion of the first year of studies in any of the programs mentioned, the student should submit an official transcript to Records Services, requesting an assessment by the departments concerned. The departments concerned will make the recommendation for a bachelor's degree through the Faculty to the Senate.

Students are referred to page 18 for regulations concerning graduation requirements.

## GRADUATION STANDING

The graduation standing of students in the Faculty of Arts and Science is determined in accordance with the University regulations on page 18 of the Calendar, except that the determination of the class of degree in an Honours program may be subject to conditions specified by the department concerned. Honours students should note, in particular, that the graduating average alone may not form the basis for determining eligibility for a First Class or Second Class Honours degree.

When a student graduates in a Double Honours program or a Combined Honours and Major program, the class of degree shall be determined in accordance with the regulations of each of the two disciplines. If one discipline is governed only by the University regulation (page 18), then in the computation of the graduating average for this discipline, 15 units of the discipline's own required courses shall be used when the number of units earned in upper level courses exceeds 30.

In any case where two different classes of degree result, each class shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.

## COURSES OPEN TO FIRST YEAR STUDENTS

For the guidance of students entering First Year, the following is a list of courses open to First Year students. In some cases prerequisites are specified. In others permission of the department is required. Students should consult the appropriate departmental entry elsewhere in this Calendar. Under certain circumstances, courses numbered 300 and above may be included in a student's graduating average (see page 18).

|                                 |                                  |
|---------------------------------|----------------------------------|
| Anthropology 100A, 100B         | Japanese 100, 201, 302, 303      |
| Astronomy 120                   | Latin 100                        |
| Biology 150                     | Liberal Arts 306, 307            |
| Chemistry 100, 101, 102, 103    | Linguistics 100                  |
| 120, 140, 145                   | Mathematics 100, 101, 102, 151,  |
| Chinese 100, 201, 302,          | 152, 160, 180                    |
| 303A/B, 304A/B                  | Pacific Studies 200, 252         |
| Classical Studies 100           | Philosophy 100, 201, 203,        |
| Computer Science 100, 110, 115  | 211, 214, 222A/B, 232, 233,      |
| Economics 100, 201, 202         | 235, 238, 242, 245, 269          |
| English 099, 115, 116, 121, 122 | Physics 100, 102, 103, 110, 120, |
| French 100, 101, 160, 161, 162, | 125                              |
| 180                             | Political Science 100            |
| Geography 101A/B, 102           | Psychology 100                   |
| Geology 100                     | Russian 100, 149, 301, 304       |
| German 100, 149, 200, 204, 295  | 331, 390, 414                    |
| Greek 100, 160                  | Serbo-Croatian 300               |
| History 205, 210, 220, 230, 234 | Sociology 100                    |
| 236, 240, 242, 252, 260         | Spanish 100, 240, 260, 290       |
| Italian 100, 200                | Statistics 250                   |

## COURSES IN ARTS AND SCIENCES

|   |             |   |     |
|---|-------------|---|-----|
| <i>Course</i>                               | <i>Page</i> |   |     |
| Anthropology                                | 31          | History in Art (see Faculty of Fine Arts) |     |
| Astronomy                                   | 115         | Italian                                   | 88  |
| Biochemistry                                | 35          | Japanese                                  | 107 |
| Biology                                     | 38          | Latin                                     | 54  |
| Chemistry                                   | 49          | Liberal Arts                              | 95  |
| Chinese                                     | 107         | Linguistics                               | 95  |
| Classical Studies                           | 54          | Marine Science                            | 38  |
| Commerce                                    | 61          | Mathematics                               | 101 |
| Computer Science                            | 58          | Microbiology                              | 35  |
| Creative Writing (see Faculty of Fine Arts) |             | Pacific Studies                           | 107 |
| Economics                                   | 61          | Philosophy                                | 111 |
| English                                     | 66          | Physics                                   | 115 |
| Environmental Studies                       | 73          | Political Science                         | 120 |
| French                                      | 75          | Psychology                                | 123 |
| Geography                                   | 78          | Russian                                   | 129 |
| Geology                                     | 78          | Serbo-Croatian                            | 129 |
| German                                      | 85          | Sociology                                 | 130 |
| Greek                                       | 54          | Spanish                                   | 88  |
| History                                     | 89          | Statistics                                | 101 |
|   |             | Women's Studies                           | 133 |

## DEPARTMENT OF ANTHROPOLOGY

Leland H. Donald, B.A. (Emory), Ph.D. (Ore.), Associate Professor and Chairman of the Department  
 William H. Alkire, B.A. (Wash.), M.A. (Hawaii), Ph.D. (Ill.) Professor  
 N. Ross Crumrine, B.A. (Northwestern), M.A., Ph.D. (Arizona), Professor  
 Donald H. Mitchell, B.A., B.Com., M.A. (Brit. Col.), Ph.D. (Ore.), Professor  
 Orville S. Elliot, A.B. (Middlebury), A.M., Ph.D. (Harvard), Associate Professor  
 David S. Moyer, B.A. (Franklin and Marshall Coll.), M.A. (Harvard), Ph.D. (Leiden), Associate Professor  
 Nicholas Rolland, B.Sc., M.A. (Montreal), Ph.D. (Cantab.), Associate Professor  
 Bruce MacLean, B.A. (Man.), M.A., Ph.D. (Columbia), Visiting Assistant Professor (1984-85)  
 Kathleen A. Mooney, B.A. (U. of Vic.), M.A., Ph.D. (Michigan), Assistant Professor  
 Eric A. Roth, B.A. (Missouri), M.A., Ph.D. (Tor.), Assistant Professor  
 Peter H. Stephenson, B.A. (Arizona), M.A. (Calgary), Ph.D. (Tor.), Assistant Professor

### GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 202; for graduate courses see page 35.

### GENERAL, MAJOR AND HONOURS PROGRAMS

While neither Anthropology 100A nor 100B is required for the General Major, or Honours programs, First Year students who plan to undertake any of these programs are urged to enroll in the introductory courses.

**General** — *Second Year:* 200, 240 and 250; *Third and Fourth Years:* nine additional units of Anthropology chosen from courses numbered 300 and above.

**Major** — *Second Year:* 200, 240 and 250; *Third and Fourth Years:* a total of 15 units in Anthropology consisting of:

- (a) 300A;
- (b) at least one of 341A, 341B or 342;
- (c) at least one of 350A, 350B, 451 or 453;
- (d) one and a half units of 322, 323, 324, 325, 326, 327, 329, 334; and an additional one and a half units from the preceding list or from 335, 336, 339A, 339B;
- (e) three units from 400, 401, 416, 417, 418, 441;
- (f) four and one half units from 300B, 300C, 304, 305, 306, 310, 312, 341A, 341B, 342, 350A, 350B, 405, 406, 407, 419, 449, 451, 453; and one of Linguistics 100, 360, 361, or 3 units of Linguistics chosen in consultation with the Department of Anthropology.

Students who are allowed to take 390 or 490 should consult the Department when planning their programs.

NOTE: Anthropology 341A, 341B, or 342 cannot be used to satisfy both requirements (b) and (f). Anthropology 350A, 350B, 451, 453 cannot be used to satisfy both requirements (c) and (f).

**Honours** — *Second Year:* Students who have achieved at least high Second Class standing in Anthropology 200, 240 and 250 may be admitted to the Third Year in the Honours Program with the permission of the Department; *Third and Fourth Years:* Students will offer at least 33 units of which 24 must be in Anthropology and include:

- (a) 300A; 300B or 300C; 350A; 350B; 499; and at least two of 341A, 341B, 342;
- (b) three units chosen from 400, 416, and 417;
- (c) one and a half units from 322, 323, 324, 325, 326, 327, 329, 344; and an additional one and a half units either from the preceding lists, or from 335, 336, 339A, 339B;
- (d) six units chosen to include at least one and a half units from each of the following groups:
  - (i) 300B, 300C, 305, 306, 310, 312, 401, 405, 406, 407, 418, 419;
  - (ii) 341A, 341B, 342, 441, 449, 451, 453.

NOTE: Anthropology 300B, 300C, 341A, 341B or 342 cannot be used to satisfy both requirements (a) and (d).

In addition students will be expected to achieve satisfactory standing in courses in Linguistics and in techniques of analysis chosen in consul-

tation with the Department. Students who are allowed to take Anthropology 390 or 490 should consult the Department when planning their programs.

In addition to University requirements concerning Honours Degrees, the Department of Anthropology requires: (1) a grade point average of 6.50 or higher in upper level courses in Anthropology for a First Class Honours Degree and (2) a grade point average of 3.50-6.49 in upper level courses in Anthropology for a Second Class Honours Degree. A student who fails to attain a grade point average of 3.50 or higher but who completes the requirements for the Major Degree may be awarded a Major Degree.

### UNDERGRADUATE COURSES

#### Prerequisite for Third and Fourth Year Courses:

Courses numbered 300 and above may be chosen as electives if one of the following conditions is satisfied:

- (a) Completion of 100A and/or 100B as a prerequisite and completion of other prerequisites or corquisites specified for the course selected.
- (b) Completion of 200 as a prerequisite or corequisite and completion of other prerequisites specified for the course selected.
- (c) The student has at least Third Year standing and the permission of the course instructor.

NOTE 1: Students qualifying under (b) taking 200 as a *corequisite* and students qualifying under (c) may find it necessary to do additional reading.

NOTE 2: Students who have taken 100A and/or 100B as a First Year elective may also enroll in 200 and/or 240 and/or 250 as electives in their Second or later years.

NOTE 3: For courses carrying A or B designations, A is not a prerequisite of B.

Students should consult the Department concerning courses offered in a particular year.

#### ANTH 100A (formerly half of 100) (1½) INTRODUCTION TO HUMAN EVOLUTION AND PREHISTORY

An introductory survey of the fields of biological anthropology and prehistoric archaeology; topics include the basis of human evolution, a survey of nonhuman primates, the human fossil record, cultural beginnings and stone age cultures, origins and development of agriculture and urban civilizations. September-December. Also January-April (3-0)

#### ANTH 100B (formerly half of 100) (1½) INTRODUCTION TO CULTURAL ANTHROPOLOGY

An introductory survey of the field of ethnology; topics for discussion include subsistence patterns, political and economic systems, kinship, language, religion and magic.

September-December. Also January-April (3-0)

#### ANTH 200 (3) CULTURAL AND SOCIAL ANTHROPOLOGY

An introduction to the analysis of sociocultural systems. Substantive materials will be taken from societies representing different levels of complexity and various parts of the world. (NOTE: Third and Fourth Year students seeking an elective should consider 321 rather than 200.) (*Prerequisite:* At least Second Year standing or completion of 100B)

September-April (3-0; 3-0)

#### ANTH 240 (1½) ARCHAEOLOGY

An introduction to archaeological research and problems of interpretation. Laboratories will provide an opportunity to become familiar with archaeological materials and with some basic techniques of analysis. (*Prerequisite:* At least Second Year standing or completion of 100A)

September-December (2-2)

#### ANTH 250 (1½) PHYSICAL ANTHROPOLOGY

An introduction to the investigation of biological characteristics of human populations; evolution of human populations. Laboratories will introduce students to some basic techniques used in the study of physical anthropology. (*Prerequisite:* At least Second Year standing or completion of 100A)

January-April (2-2)

#### ANTH 300A (formerly part of 300) (1½) KINSHIP AND MARRIAGE

Comparative analysis of kinship and kinship based groups, especially descent groups; marriage in cross cultural perspective; the emphasis is

placed on nonstate societies. (Prerequisite: 200 or permission of instructor)  
September-December (3-0)

**ANTH 300B (formerly part of 300) (1½) COMPARATIVE SOCIAL STRUCTURE**

Comparative analysis of social structure emphasizing material from nonstate societies; nonkin institutions such as age grades and secret societies, as well as those based on kinship as discussed. (Prerequisite: 300A or permission of instructor)  
January-April (3-0)

**ANTH 300C (formerly part of 300) (1½) COMPLEX SOCIETIES IN CROSS CULTURAL PERSPECTIVE**

Cross cultural analysis of societies where stratification and/or the state are major features of society; peasant society, caste, slavery, and the development of social inequality are among the major topics discussed. (Prerequisite: 300A or permission of instructor)  
January-April (3-0)

**ANTH 304 (1½) TECHNOLOGY IN CULTURE**

A review of technology from its protocultural foundations. The course surveys various techniques and places them in chronological, geographical and cultural context. (3-0)

**ANTH 305 (1½) ANTHROPOLOGY OF THE ARTS**

Comparative approaches to the arts in different cultural traditions with special emphasis on the arts of prehistoric and nonliterate cultures. (3-0)

**ANTH 306 (1½) FOLKLORE AND MYTHOLOGY**

Oral traditions of nonliterate peoples. The structure and functions of specific types of material. The relation of the study of folklore and mythology to other interests in Anthropology. (3-0)

**ANTH 310 (1½) ANTHROPOLOGICAL APPROACHES TO COMPARATIVE RELIGION**

Consideration of the various approaches to the study of religion and religious behaviour used by anthropologists. Comparative analysis of belief and ritual systems. (3-0)

**ANTH 312 (formerly 412) (1½) MEDICAL ANTHROPOLOGY**

Practices and beliefs of selected societies related to the concept of "health" are described and problems of disease prevention, identification, and treatment in crosscultural situations are examined. Topics covered may include: epidemiology; disease and evolution; and transcultural nursing and psychiatry. (3-0)

**ANTH 321 (3) CULTURES AND PEOPLES OF THE WORLD**

A broad introductory survey of comparative ethnography, including discussion of the major cultural regions of the world and selected examples of societies at various levels of complexity. (Prerequisite: At least Third Year standing or 100B)  
September-April (3-0: 3-0)

**ANTH 322 (1½) ETHNOLOGY OF NORTH AMERICA**

The major culture areas of aboriginal North America with description and analysis of selected cultures; introduction to problems in the interpretation of North American ethnology. (3-0)

**ANTH 323 (1½) ETHNOLOGY OF CIRCUM-POLAR REGION**

The cultures of Arctic and sub-Arctic Eurasia and North America. (3-0)

**ANTH 324 (1½) ETHNOLOGY OF MIDDLE AMERICA**

An integrated description and analysis of the cultural history and present day economic, social, political, and religious ways of life of selected Indian and mestizo groups of Mexico and Central America; recent changes and modern trends in cultural development. (3-0)

**ANTH 325 (1½) ETHNOLOGY OF SOUTH AMERICA**

An integrated description and analysis of the cultural history and present day economic, social, political, and religious ways of life of selected Indian groups of South America. (3-0)

**ANTH 326 (1½) ETHNOLOGY OF OCEANIA: MICRONESIA AND POLYNESIA**

Ethnological description and analysis of the cultures of Micronesia and Polynesia. (3-0)

**ANTH 327 (1½) ETHNOLOGY OF OCEANIA: AUSTRALIA AND MELANESIA**

Ethnological description and analysis of the aboriginal peoples and cultures of Australia and Melanesia. (3-0)

**ANTH 329 (1½) ETHNOLOGY OF SOUTHEAST ASIA**

An integrated description and analysis of the peoples and cultures of Mainland and Island Southeast Asia. (3-0)

**ANTH 334 (1½) ETHNOLOGY OF SUB-SAHARAN AFRICA**

A survey of the traditional cultures of sub-Saharan Africa; recent changes and problems of modernization. (3-0)

**ANTH 335 (1½, formerly 3) CANADIAN ETHNIC GROUPS**

An anthropological perspective on the ethnic groups of Canada. The groups will be studied in the context of the wider literature of race relations, minority groups, and ethnicity. (3-0)

**ANTH 336 (formerly half of 335) (1½) THE CONTEMPORARY CANADIAN INDIAN**

The native Indian in modern Canadian society. Comparison with the situation of other native peoples in various parts of the world. (not open for credit to students who have three units of credit in 335)  
(3-0)

**ANTH 339A (formerly half of 339) (1½) INDIANS OF THE NORTHWEST INTERIOR**

A survey of the groups and cultures of the Plateau culture area and the adjacent portion of the sub-Arctic culture area. (3-0)

**ANTH 339B (formerly half of 339) (1½) INDIANS OF THE NORTHWEST COAST**

A survey of groups and cultures of the Northwest Coast culture area. (3-0)

**ANTH 341A (formerly half of 341) (1½) EARLY STONE AGE SOCIETIES**

A review of the formative phases in the development of prehistoric cultures and societies during the Pleistocene/early Holocene in Africa, Eurasia and Australasia. Archaeological evidence on cultural beginnings, ecology, subsistence systems, technology and social life of early mankind. (Prerequisite: 240 or permission of the instructor)  
September-December (3-0)

**ANTH 341B (formerly half of 341) (1½) EMERGENCE OF CIVILIZATION**

A review of the archaeological record on: the original of animal/plant husbandry, sedentary village life and pastoralism, technological innovation and social life; of subsequent developments leading to the appearance of the first cities, state institutions and stratified societies in major centres of the Old World. (Prerequisite: 240 or permission of the instructor)  
January-April (3-0)

**ANTH 342 (1½) ARCHAEOLOGY OF PRECOLUMBIAN AMERICA**

A survey of the archaeological record for the development of aboriginal cultures and societies of the New World prior to European colonization, from late Ice Age settlement of North and South America through the appearance of farming villages up to the growth of urban civilizations of middle America and the Andes. (Prerequisite: 240 or permission of the instructor)  
(3-0)

**ANTH 350A (formerly half of 350) (1½) PRIMATOLOGY**

A detailed survey of the field of primatology including taxonomy, genetics, morphology, palaeontology, ecology, zoogeography, growth and behaviour of the primates. (Prerequisite: 250 or permission of the instructor)  
(3-0)

**ANTH 350B (formerly half of 350) (1½) HUMAN PALAEOLOGY**

An examination of the fossil evidence for human evolution emphasizing the interpretation and reconstruction of the human lineage. (Prerequisite: 250 or permission of the instructor)  
(3-0)

**ANTH 390 (1½) SELECTED PROBLEMS IN ANTHROPOLOGY**

Presentation of selected problems in Anthropology. Students interested in this course should enquire at Registration when the course is to be offered and what substantive areas are to be studied. Students may enroll in this course in different areas for a maximum of 3 units. (Prerequisite: Permission of instructor)  
(3-0)

**ANTH 400 (1½, formerly 3) ANTHROPOLOGICAL THEORY**

Survey of selected major developments in anthropological theory in historical perspective. (3-0)

**ANTH 401 (1½) CULTURAL ECOLOGY**

Theories concerning the relationship of human groups, culture and environment; cultural systems as the means which human populations adapt to their environments. (3-0)

**ANTH 405 (1½) ECONOMIC ANTHROPOLOGY**

A comparative analysis of the social context of production, distribution and exchange systems. (3-0)

**ANTH 406 (1½) POLITICAL ANTHROPOLOGY**

Comparative analysis of governing institutions in societies ranging from tribal groups to various types of state organizations. In each type of political system, the modes of allocating decision making powers and administrative authority will be examined. (3-0)

**ANTH 407 (1½) SYMBOLIC ANTHROPOLOGY**

The nature of symbolic systems in human societies; material examined includes not only manifestly symbolic systems such as religion and art but also systems of classification in general, particularly those closely related to the social order. (3-0)

**ANTH 416 (1½) INTRODUCTION TO ANTHROPOLOGICAL RESEARCH: I**

Designed to introduce students to research methods suitable for anthropological problems. Emphasis is placed on formulation of researchable anthropological propositions, research design, and elementary techniques of data analysis. September-December (3-0)

**ANTH 417 (1½) INTRODUCTION TO ANTHROPOLOGICAL RESEARCH: II**

Formal methods of analysis in Anthropology, especially statistics, problems of validation, and the comparative method. (*Prerequisite:* 416, or permission of the instructor) January-April (2-2)

**ANTH 418 (SOCI 418) (1½) SOCIAL CHANGE**

General history of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. (*Prerequisite:* 100A and/or 100B or 200 and SOCI 100, or permission of the instructor) (3-0)

**ANTH 419 (SOCI 419) (1½) MODERNIZATION AND DEVELOPMENT**

An examination of selected theories and research on development, underdevelopment and dependence in the modern world; examples will be taken from various parts of the world, including Canada. (3-0)

**ANTH 441 (1½) ARCHAEOLOGICAL METHOD AND THEORY**

The strategy of research in archaeology; archaeology as a subdiscipline and its comparison with related fields; the course emphasizes theories of research methodology in archaeology as well as the contribution of archaeology to theories of cultural process. (*Prerequisite:* 240) (3-0)

**ANTH 449 (1½) ARCHAEOLOGY OF THE PACIFIC NORTHWEST**

Intensive study of problems of interpreting Pacific Northwest archaeological data. Field trips will be scheduled. (2-3)

**ANTH 451 (1½) HUMAN OSTEOLOGY**

This course is designed to familiarize students with theoretical and methodological approaches to the study of human skeletal remains. (*Prerequisite:* 250 or permission of the instructor) (2-3)

**ANTH 453 (1½) POPULATION STRUCTURE AND HUMAN EVOLUTION**

Analysis of the population dynamics of prehistoric and contemporary preindustrial populations in an evolutionary context. (*Prerequisite:* 250 or permission of the instructor) (2-3)

**ANTH 490 (1½-3) DIRECTED STUDIES**

Students may register for this course in the Fourth Year of the Major or

Honours Program with permission of the Department and the Instructor. (*Prerequisite:* Fourth Year standing and permission of the Department and the Instructor)

**ANTH 499 (3) HONOURS SEMINAR AND GRADUATING ESSAY**

**GRADUATE COURSES**

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

**ANTH 500 (3) SEMINAR IN ANTHROPOLOGICAL THEORY**

**ANTH 501 (1½) SEMINAR IN SOCIAL AND CULTURAL ANTHROPOLOGY**

**ANTH 510 (1½) SELECTED TOPICS IN SOCIAL AND CULTURAL ANTHROPOLOGY**

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

- 510A Social Organization
- 510B Economic Anthropology
- 510C Political Anthropology
- 510D Anthropology of Religion
- 510E Symbolic Anthropology
- 510F Cultural Ecology
- 510G Cultural Change
- 510H Medical Anthropology

**\* ANTH 530 (1½) ETHNOLOGY OF SELECTED AREAS**

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

- 530A North America
- 530B Circum-Polar Region
- 530C Middle America
- 530D South America
- 530E Oceania
- 530F Northeast Asia
- 530G Southeast Asia
- 530H Sub-Saharan Africa
- 530J Pacific Northwest

**ANTH 540 (1½) SEMINAR IN ARCHAEOLOGY AND CULTURE HISTORY**

**\* ANTH 542 (1½) ARCHAEOLOGY OF A SELECTED AREA**

**ANTH 550 (1½) SEMINAR IN PHYSICAL ANTHROPOLOGY**

**\* ANTH 552 (1½) SELECTED TOPICS IN PHYSICAL ANTHROPOLOGY**

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

- 552A Applied Topics in Osteological Methods
- 552B Soft Part Methods in Population Variation
- 552C Anthropometry and Disease
- 552D Primatology

**ANTH 560 (LING 560)(1½) LINGUISTIC ANTHROPOLOGY**

**\* ANTH 590 (1½-3) DIRECTED STUDIES**

**ANTH 597 (0) ORAL EXAMINATIONS**

**ANTH 599 (6) THESIS**

\* Students must consult the Department before enrolling in this course.

**DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY**

Alistair T. Matheson, B.A., M.Sc. (Brit. Col.), Ph.D. (Tor.), Professor and Chairman of the Department  
 Christopher H. Bigland, D.V.M., D.V.P.H. (Tor.), M.Sc. (Alta.), Part time Adjunct Professor

J. Thomas Buckley, B.Sc., Ph.D. (McGill), Professor  
 William W. Kay, B.Sc. (Agr.), M.Sc., Ph.D. (Brit. Col.), Professor  
 John A. McCarter, B.A., M.A. (Brit. Col.), Ph.D. (Tor.), Part time Adjunct Professor (1984-85)

Hamish A. Robertson, B.Sc., Ph.D. (Edin.), Part time Adjunct Professor  
 Trevor J. Trust, B.Sc., M.Sc., Ph.D. (Melbourne), Professor  
 Sydney J. Webb, B.Sc., M.Sc., Ph.D. (London), Part time Adjunct Professor  
 Edward E. Ishiguro, B.A., M.A. (San Francisco St. Coll.), Ph.D. (Ill.), Associate Professor  
 Jack L. Nichols, B.Sc., M.Sc., Ph.D. (Alta.), Associate Professor  
 Terry W. Pearson, B.Sc., Ph.D. (Brit. Col.), Associate Professor  
 Robert W. Olafson, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Alta.), Assistant Professor  
 Rozanne Poulson, B.Sc., Ph.D. (Wales), Part time Adjunct Assistant Professor (1984-85)  
 Paul J. Romaniuk, B.Sc., Ph.D. (McMaster), Adjunct Assistant Professor  
 Hani L. Dick, B.Sc., M.Sc. (Karachi), Ph.D. (Dundee), Senior Laboratory Instructor  
 Glen R. Pryhitka, B.Sc. (Brit. Col.), Senior Laboratory Instructor

## GRADUATE PROGRAMS

For information on studies leading to the M.Sc. or Ph.D. degrees, see page 203, for graduate courses, see page 38.

## GENERAL, MAJOR, AND HONOURS PROGRAMS

The Department offers Honours and Major programs in Biochemistry or Microbiology. Students seeking careers as professional Biochemists or Microbiologists, or those who wish to continue their studies through graduate school to the M.Sc. and Ph.D. level are advised to take one of the Honours programs. The Major programs may also provide entry to the professions or to graduate school and are suitable for teaching at the secondary school level. The Department also offers a concentration in Biochemistry and Microbiology as part of the B.Sc. and B.A. degree General programs.

## BIOCHEMISTRY AND MICROBIOLOGY PROGRAMS

| General   | Major   | Honours   |
|---|---|---|
| <b>First Year</b>                                 |   |   |
|   | ENGL 121 (or 115) (1½)                            | ENGL 121 (or 115) (1½)                            |
|   | ENGL 122 (or 116) (1½)                            | ENGL 122 (or 116) (1½)                            |
| MATH 100/101 (3)                                  | MATH 100/101 (3)                                  | MATH 100/101 (3)                                  |
| CHEM 100/102 or 101/102 or 140/145 or 102.140 (3) | CHEM 100/102 or 101/102 or 140/145 or 102.140 (3) | CHEM 100/102 or 101/102 or 140/145 or 102/140 (3) |
| Two of PHYS 110 (or 125)/120/220 (3)              | Two of PHYS 110 (or 125)/120/220 (3)              | Two of PHYS 110 (or 125)/120/220 (3)              |
| Other courses (6)                                 | Other courses (3)                                 | Other courses (3)                                 |
| <b>Second Year</b>                                |   |   |
| STAT 250/251† (3)                                 | STAT 250/251† (3)                                 | STAT 250/251† (3)                                 |
| CHEM 231 (1½)                                     | CHEM 231 (1½)                                     | CHEM 231 (1½)                                     |
| CHEM 213 (1½)                                     | CHEM 213 (1½)                                     | CHEM 213 (1½)                                     |
| CHEM 235 (1½)                                     | CHEM 235 (1½)                                     | CHEM 235 (1½)                                     |
| BIOC 200 (1½)                                     | BIOC 200 (1½)                                     | BIOC 200 (1½)                                     |
| BIOL 200 (1½)                                     | BIOL 200 (1½)                                     | BIOL 200 (1½)                                     |
| MICR 200 (3)                                      | MICR 200 (3)                                      | MICR 200 (3)                                      |
| Other courses (3)                                 | Other courses (3)                                 | Other courses (3)                                 |

### Second Year

|                   |                   |                   |
|-------------------|-------------------|-------------------|
| STAT 250/251† (3) | STAT 250/251† (3) | STAT 250/251† (3) |
| CHEM 231 (1½)     | CHEM 231 (1½)     | CHEM 231 (1½)     |
| CHEM 213 (1½)     | CHEM 213 (1½)     | CHEM 213 (1½)     |
| CHEM 235 (1½)     | CHEM 235 (1½)     | CHEM 235 (1½)     |
| BIOC 200 (1½)     | BIOC 200 (1½)     | BIOC 200 (1½)     |
| BIOL 200 (1½)     | BIOL 200 (1½)     | BIOL 200 (1½)     |
| MICR 200 (3)      | MICR 200 (3)      | MICR 200 (3)      |
| Other courses (3) | Other courses (3) | Other courses (3) |

\* recommended

† See Note 4, in right column

### Third and Fourth Years

|   | Third Year   | Third Year  |
|---|--|---|
| Nine additional units of Biochemistry and Microbiology numbered 300 and above (9) | CHEM 222 (1½)<br>CHEM 245 (1½)<br>BIOC 300 (3)<br>MICRO 301 (1½)<br>MICR 302 (1½)<br>BIOC 380 or MICR 380 (0)<br>Other courses (6) | CHEM 222 (1½)<br>CHEM 245 (1½)<br>BIOC 300 (3)<br>MICR 301 (1½)<br>MICR 302 (1½)<br>BIOC 380 or MICR 380 (0)<br>Other courses (9) |
| Nine units in a second area of concentration (9)                                  |  |   |
| Other courses (12)  |  |   |

### Fourth Year

|                             |  |
|-----------------------------|--|
| CHEM 335/338 or 345/346 (3) | CHEM 335/338 or 345/346 (3)                    |
| BIOC 401 (1½)               | BIOC 401 (1½)                                  |
| BIOC 402 (1½)               | BIOC 402 (1½)                                  |
| MICR 400 (3)                | MICR 400 (3)                                   |
| BIOC 480 or MICR 480 (1½)   | BIOC 480 or MICR 480 (1½)                      |
| Other courses (4½)          | BIOC 499 or MICR 499 (3)<br>Other courses \$9½ |

### Fourth Year

|                             |  |
|-----------------------------|--|
| CHEM 335/338 or 345/346 (3) | CHEM 335/338 or 345/346 (3)                    |
| BIOC 401 (1½)               | BIOC 401 (1½)                                  |
| BIOC 402 (1½)               | BIOC 402 (1½)                                  |
| MICR 400 (3)                | MICR 400 (3)                                   |
| BIOC 480 or MICR 480 (1½)   | BIOC 480 or MICR 480 (1½)                      |
| Other courses (4½)          | BIOC 499 or MICR 499 (3)<br>Other courses \$9½ |

### Other courses suggested:

ENGL 200 or higher level courses  
 Language 100 or higher level courses  
 MATH 110, 210  
 STAT 250/251  
 C 110, 115  
 CHEM 316, 317, 324, 325, 335, 338, 345, or 346, or 400 level courses  
 BIOL 203, 204, 206, 207, 300, 302, 304, 305, or 400 level courses  
 PHYS 214, 215, 216, 217, 316, 317, or 325  
 BIOC 201

### Notes

- (1) Proficiency examinations in one or two modern languages are often required in graduate studies, and students planning graduate work are advised to elect one or two courses in French, German, Russian, or another modern language on Departmental recommendation.
- (2) Courses may be taken in different sequences and in different years than indicated provided that the co- and prerequisite requirements are satisfied; the Department should be consulted.
- (3) Directed studies courses are not available to be taken more than once and are normally only available to students with an overall grade point average of at least 3.50.
- (4) Those students who wish to take CHEM 345 and 346 in the fourth year should take MATH 200/201 rather than STAT 250/251 in the second year.

## BIOCHEMISTRY OR MICROBIOLOGY AND CHEMISTRY COMBINED MAJOR

Students wishing to obtain a combined major in Biochemistry or Microbiology and Chemistry should take the following program.

| First Year  | Second Year             |
|---|-------------------------|
| ENGL 121/122                                      | MICR 200 (3)            |
| or ENGL 115/116 (3)                               | BIOC 200 (1½)           |
| MATH 100/101 (3)                                  | BIOL 200 (1½)           |
| CHEM 100/102 or 101/102 or 140/145 or 102/140 (3) | MATH 200 (1½)           |
| Two of PHYS 110 (or 125)/120/220 (3)              | CHEM 231 (1½)           |
| Other courses (3)                                 | CHEM 213 (1½)           |
|   | CHEM 235 (1½)           |
|   | CHEM 222 (1½)           |
|   | CHEM 245 (1½)           |
|   | Other courses (0 or 1½) |

### Third Year

|                            |                                 |
|----------------------------|---------------------------------|
| BIOL 300 (3)               | Fourth Year                     |
| MICR 302 (1½)              | BIOC 401 (1½)                   |
| CHEM 335 (1½)              | BIOC 402 (1½)                   |
| CHEM 338 (1½)              | MICR 400 (3)                    |
| CHEM 345 (1½)              | CHEM 422 (1½)                   |
| CHEM 346 (1½)              | CHEM 433 (1½)                   |
| CHEM 324 (1½)              | BIOL 305 (3)                    |
| CHEM 325 (1½)              | BIOC 480 (or MICR 480) (1½)     |
| BIOL 380 (or MICR 380) (0) | CHEM 312 or one of 316/317 (1½) |
| MICR 301 (1½)              |                                 |

## HONOURS

Students who wish to be admitted to one of the Honours programs should apply to the Chairman of the Department on completion of their second year. The general requirements for admission to the third year of the Honours program are specified above. Normally admission to the Honours program requires at least a second class average in each of the first two undergraduate years. The minimum requirement for admission to the fourth year is a second class average overall in the work of the third year.

A student in the Biochemistry or Microbiology Honours program is required to meet the general regulations of the University on pages 14 to 19 of this Calendar. If a student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the Department may recommend the appropriate class of Major degree.

## DOUBLE HONOURS

University regulations also apply to students in a Double Honours Program which includes Biochemistry or Microbiology; however as more than 30 units of upper level courses may be taken, the Department requires that, of the upper level courses in Biochemistry and Microbiology, 15 units must be included in the 30 units used to calculate the graduating average and these 15 units must include BIOC or MICR 380, 480, 499.

## UNDERGRADUATE COURSES BIOCHEMISTRY

### BIOC 200 (1½) INTRODUCTORY BIOCHEMISTRY

An introduction to the principles of Biochemistry. Properties of biomolecules, basic enzymology and metabolism. Bioenergetics, nucleic acid structure and synthesis. Protein synthesis. Structure and properties of membranes. (Corequisite: BIOL 200 which should be taken in the second term; see BIOL 200 Calendar entry. Pre- or corequisite: CHEM 213 and 231, or 230)

W.W. Kay, J.L. Nichols

September-December (3-2)

### BIOC 201 (1½) INTRODUCTION TO NUTRITIONAL BIOCHEMISTRY

This course will be oriented to students interested in a general understanding of man's nutritional needs and the food supplies and procedures available to meet them. Requirements for protein, carbohydrate, fat, vitamins and minerals will be discussed and related to cellular biochemical mechanisms. Energy balance, dieting and world food problems will also be considered.

J.T. Buckley

January-April (3-0)

### BIOC 300 (3) GENERAL BIOCHEMISTRY

An intermediate course in Biochemistry. Protein structure, enzyme kinetics, bioenergetics and metabolism. Membrane structure and transport. Metabolic control systems. Synthesis of DNA and RNA, protein synthesis and morphogenesis. (Prerequisites: 200; BIOL 200)

R.W. Olafson, W.W. Kay, A.T. Matheson September-April (3-3; 303)

### BIOC 380 (0) SEMINAR

Attendance and participation in either BIOC 380 or MICR 380 is required for students in the third year of the Major and Honours programs. Credit for attendance will not be given for both BIOC 380 and MICR 380. Attendance is recommended for students in their first and second years who plan to enter Major and Honours programs. (Grading: COM, N, or F)

September-April (2-0; 2-0)

### BIOC 401 (formerly half of 400) (1½) MACROMOLECULES: I

An advanced study of the structures and function of RNA and DNA.

Topics will include protein synthesis in prokaryotes and eukaryotes and the supramolecular organization of chromatin, ribosomes and viruses. (Prerequisite: 300, or permission of the Department) Texts: Selected reading from the literature; Biochemistry 401 Laboratory Manual  
P.J. Romaniuk, A.T. Matheson September-December (2-4)

### BIOC 402 (formerly half of 400) (1½) MACROMOLECULES: II

An advanced study of the structure and function of proteins and lipids. Topics will include the supramolecular organization and function of biological membranes. (Prerequisite: 300, or permission of the Department) Texts: Selected reading from the literature; Biochemistry 402 Laboratory Manual

R.W. Olafson, J.T. Buckley

January-April (2-4)

### BIOC 470 (1½ or 3) DIRECTED STUDIES IN BIOCHEMISTRY

### BIOC 480 (1½) SEMINAR

Seminars are presented weekly by invited speakers, Department members and all students in the fourth year of the Major and Honours programs. Students are required to submit a literature research paper of up to 3,000 words as well as a condensed abstract and to deliver an oral presentation. Attendance and participation in either BIOC 480 or MICR 480 is required of all students. (Credit will not be given for both BIOC 480 and MICR 480.)

September-April (2-0; 2-0)

### BIOC 499 (3) UNDERGRADUATE THESIS

Research under the direction of a faculty member. Open to Honours students only. (Credit will not be given for both BIOC 499 and MICR 499.)

## MICROBIOLOGY

### MICR 101 (1½) ESSENTIALS OF MICROBIOLOGY AND IMMUNOLOGY

The basic concepts of microbiology and immunology with particular reference to human disease. Properties of infectious agents and methods used in their control will be considered. The course will be oriented towards the needs of students of nursing. (Degree credit will not normally be counted for both 101 and 200.) Texts: Buffaloe and Ferguson, *Microbiology*; Microbiology 101 Laboratory Manual

E.E. Ishiguro

September-December (2-2)

### MICR 200 (3) INTRODUCTORY MICROBIOLOGY

This course is designed to provide a broad introduction to the field of microbiology. Basic principles in the following areas will be covered: prokaryotic cell structure and function; physiology and growth of microorganisms with an emphasis on diversity; virology; microbial genetics; immunology; medical microbiology; applied microbiology; microbial ecology. (Degree credit will not normally be counted for both 101 and 200.) Texts: Brock, *Biology of Microorganisms*, 3rd ed.; Microbiology 100 Laboratory Manual

T.J. Trust, E.E. Ishiguro

September-April (2-2; 2-2)

### MICR 301 (1½) INFECTION AND IMMUNITY

Consideration of pathogenic bacteria and viruses; mechanisms of pathogenicity; detailed examination of the major infectious diseases: the immune and allergic response. (Not open to students with credit in MICR 300 or BACT 300.) (Prerequisites: 200 or permission of the Department) Texts: Mims, *Pathogenesis of Infectious Disease*, 2nd ed.; Microbiology 301 Laboratory Manual

T.J. Trust

September-December (2-3)

### MICR 302 (1½) MICROBIAL GENETICS

Principles of genetics in bacteria and bacteriophages. Topics to be covered include mutagens and mutations; genetic exchange in microorganisms; genetic recombination; gene expression; and genetic analyses. (Not open to students with credit in MICR 300 or BACT 300.) (Prerequisites: 300 or BIOC 200; or permission of the Department) Texts: Selected readings from the literature; Microbiology 302 Laboratory Manual

E.E. Ishiguro

January-April (2-3)

**MICR 380 (0) SEMINAR**

Attendance and participation in either MICR 380 or BIOC 380 is required of students in the third year of the Major and Honours programs. Credit for attendance will not be given for both MICR 380 and BIOC 380. Attendance is recommended for students in their first and second years who plan to enter Major and Honours programs. (Grading: COM, N, or F) (2-0; 2-0)

**MICR 400 (3) ADVANCED MICROBIOLOGY/IMMUNOLOGY**

An advanced consideration of molecular aspects of bacteria and viruses and an introduction to cellular and molecular immunology. Consideration will be given to: the expression and control of genetic information with emphasis on metabolic effects, the molecular biology of plant, animal and bacterial viruses with emphasis on structure morphogenesis and gene expression, the generation of antibody diversity; immune effector mechanisms and their regulation as well as immunological principles as applied to research and medicine. (Prerequisites: BIOC 300 and MICR 302, or permission of the Department) Texts: Selected readings from the literature; Benacerraf and Unanue, *Textbook of Immunology*; Microbiology 400 Lab Manual

J.L. Nichols, W.W. Kay

September-April (2-4; 2-4)

**MICR 470 (1½ or 3) DIRECTED STUDIES IN MICROBIOLOGY****MICR 480 (½) SEMINAR**

Seminars are presented weekly by invited speakers, Department members and all students in the fourth year of the Major and Honours programs. Students are required to submit a literature research paper of up to 3,000 words as well as a condensed abstract and to deliver an oral presentation. Attendance and participation in either BIOC 480 or MICR 480 is required of all students. (Credit will not be given for both BIOC 480 and MICR 480.)

September-April (2-0; 2-0)

**MICR 499 (3) UNDERGRADUATE THESIS**

Research under the direction of a faculty member. Open to Honours students only. (Credit will not be given for both BIOC 499 and MICR 499.)

**GRADUATE COURSES**

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

**BIOCHEMISTRY****BIOC 500 (3) BIOCHEMISTRY**

An advanced consideration of biological macromolecules. The detailed chemistry of nucleic acids and proteins as well as their contributions to supramolecular biological systems and their organization and interrelationships will be emphasized.

P.J. Romaniuk, A.T. Matheson, R.W. Olafson, J.T. Buckley

**BIOC 510 (1-3) TOPICS IN BIOCHEMISTRY**

An intensive consideration of recent advances in the discipline

510A Protein synthesis

510B Structure of nucleic acids

510C Cellular evolution

510D Experimental techniques in protein chemistry

510E Environmental biochemistry and toxicology

510F Biological membranes

510G Molecular immunology

510H Molecular Genetics

**BIOC 570 (1-3) DIRECTED STUDIES IN BIOCHEMISTRY**

A wide range of biochemical topics will be available for assignments. Topics will be restricted to recent advances. The student's graduate adviser will not normally participate in directed studies taken for more than one unit of credit.

**BIOC 580 (1) SEMINAR**

Attendance and participation are required. Formal presentation of a major research topic in Biochemistry other than the student's own research will be required.

**BIOC 599 (credit to be determined) M.SC. THESIS: BIOCHEMISTRY****BIOC 699 (credit to be determined) PH.D. DISSERTATION: BIOCHEMISTRY****MICROBIOLOGY****MICR 500 (3) ADVANCED MICROBIOLOGY**

Molecular biology of the structure and metabolism of bacteria and viruses. Emphasis will be placed on integrative genetic and enzymological control mechanisms as they effect the morphogenesis, structure and metabolism of a wide variety of microorganisms.

J.L. Nichols, W.W. Kay, T.J. Trust, E.E. Ishiguro

**MICR 510 (1-3) TOPICS IN MICROBIOLOGY**

An intensive consideration of recent advances in the discipline.

510A Metabolic regulation

510B Cell structure and function

510C Microbial pathogenicity

510D Bacterial membranes

510E Cellular immunology

510F Advanced Microbial Genetics

510G Biochemistry of Antigens

**MICR 570 (1-3) DIRECTED STUDIES IN MICROBIOLOGY**

A wide range of microbiological topics will be available for assignment. Topics will be restricted to an analysis of recent advances. The student's graduate adviser will not normally participate in directed studies taken for more than one unit credit.

**MICR 580 (1) SEMINAR**

Attendance and participation are required. Formal presentation of a major research topic Microbiology other than the student's own research will be required.

**MICR 599 (credit to be determined) M.SC. THESIS- MICROBIOLOGY****MICR 699 (credit to be determined) PH.D. DISSERTATION: MICROBIOLOGY****DEPARTMENT OF BIOLOGY**

John E. McInerney, B.Sc. (Ottawa), M.Sc., Ph.D. (Brit. Col.), Associate Professor and Chairman of the Department

Michael J. Ashwood-Smith, B.Sc., M.Sc. (Durham), Ph.D. (London), Professor

Ralph O. Brinkhurst, B.Sc., Ph.D., D.Sc. (London), Part time Adjunct Professor

Arthur T. Bergerud, B.Sc. (Ore. St.), M.Sc. (Wis.), Ph.D. (Brit. Col.), F.R.S.C., Part time Adjunct Professor

Derek V. Ellis, B.Sc. (Edin.), M.Sc., Ph.D. (McGill), Professor

Arthur R. Fontaine, B.Sc. (McGill), D.Phil. (Oxon.), Professor

John S. Hayward, B.Sc., Ph.D. (Brit. Col.), Professor

George O. Mackie, B.A., M.A., D.Phil. (Oxon.), F.R.S.C., Professor

Ian McTaggart Cowan, O.C., B.A., D.Sc. (Brit. Col.), Ph.D. (Calif.), LL.D. (Alta.) (S. Fraser), D.Env.St. (Waterloo), F.R.S.C., Part time Adjunct Professor (1984-85)

- John N. Owens, B.S. (Portland St.), M.Sc., Ph.D. (Ore. St.), Professor  
 Robert G.B. Reid, B.Sc., Ph.D. (Glasgow), Professor  
 Alan P. Austin, B.Sc., Ph.D. (Wales), Associate Professor  
 David J. Ballantyne, B.Com. (Brit. Col.), M.S. (Wash. St.), Ph.D. (Maryland), Associate Professor  
 Marcus A.M. Bell, B.S.F. (Brit. Col.), M.F. (Yale), Ph.D. (Brit. Col.), R.I.F., Associate Professor  
 Kenneth L. Denman, B.Sc. (Calgary), Ph.D. (Brit. Col.), Part time Adjunct Associate Professor (1984-85)  
 Patrick T. Gregory, B.Sc. (Tor.), M.Sc., Ph.D. (Man.), Associate Professor  
 Edwin M. Hagmeier, B.A. (Queen's), M.A., Ph.D. (Brit. Col.), Associate Professor  
 Louis A. Hobson, B.S. (Humboldt St. Coll.), M.S., Ph.D. (Wash.), Associate Professor  
 Jack L. Littlepage, B.A. (San Diego St. Coll.), Ph.D. (Stanford), Associate Professor  
 David L. Mackas, B.S. (Wash.), Ph.D. (Dalhousie), Part time Adjunct Associate Professor  
 Edward H. Miller, B.Sc. (Alta.), M.Sc. (Cantab.), Ph.D. (Dalhousie), Part time Adjunct Associate Professor  
 Robert T. Ogilvie, B.A., M.A. (Brit. Col.), Ph.D. (Wash. State), Part time Adjunct Associate Professor (1984-85)  
 John W. Paden, B.S. (Calif.), M.S., Ph.D. (Idaho), Associate Professor  
 Dorothy H. Paul, B.A. (Radcliffe), Ph.D. (Stanford), Adjunct Associate Professor  
 Miles Paul, A.B. (Harvard), Dip. in Educ. (Makerere), Ph.D. (Stanford), Associate Professor  
 Richard A. Ring, B.Sc., Ph.D. (Glasgow), Associate Professor  
 E. Derek Styles, B.S.A. (Brit. Col.), Ph.D. (Wisc.), Associate Professor  
 Geraldine Allen, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Ore. St.), Assistant Professor and Curator of the Herbarium  
 Robert D. Burke, B.Sc., Ph.D. (Alta.), Adjunct Assistant Professor  
 Richard J. Hebda, B.Sc. (McMaster), Ph.D. (Brit. Col.), Part time Adjunct Assistant Professor (1984-85)  
 George S. Puritch, B.Sc. (U. of Vic.), M.S. (Mass.), Ph.D. (Aberdeen), Part time Adjunct Assistant Professor (1984-85)  
 Nancy M. Sherwood, B.S. (Oregon), M.A., Ph.D. (U. of Calif. — Berkeley), Part time Adjunct Assistant Professor (1984-85)  
 Verena J. Tunnicliffe, B.Sc. (McMaster), M.Phil., Ph.D. (Yale), Assistant Professor  
 Johannes P. Van Netten, B.Sc., Ph.D. (U. of Vic.), Part time Adjunct Assistant Professor (1984-86)  
 Hamish D.W. Bridgman, C.D., B.Sc. (U. of Vic.), B.A., M.A. (Cantab.), Administrative Officer  
 Cynthia Campbell, B.Sc., M.Sc. (Bristol), Senior Laboratory Instructor  
 A. Cathryn Corbett, B.Sc. (U. of Vic.), M.Sc. (Ore.), Cooperative Education Coordinator  
 Mary Dennis, M.S.A. (Brit. Col.), Senior Laboratory Instructor  
 Hans (Jack) F. Dietrich, Senior Scientific Assistant  
 Yousuf A. Ebrahim, M.Sc. (York), Senior Laboratory Instructor  
 Ralph B. Scheurle, B.Sc. (U. of Vic.), Senior Scientific Assistant  
 G. Beth Stevenson, B.A., M.A. (Brit. Col.), Senior Laboratory Instructor  
 Ian G. Thornton, B.Sc. (U. of Vic.), Senior Laboratory Instructor

## GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 203; for graduate courses, see page 48.

## GENERAL, MAJOR AND HONOURS PROGRAMS

*In all cases, students planning a program in Biology should consult with the Department Office for advice.*

*Honours and Major programs in Biology consist of (a) a Core of required Biology courses, (b) Corequisites in the physical sciences, and (c) additional courses to complete a minimum number of biology units. The core and science corequisites for Honours and Major programs are outlined on this page. A number of programs are suggested below for students interested in particular areas of biology.*

*B.Sc. General and B.A. General programs should be chosen to meet the requirements as set out in the Program outline on this page.*

## COOPERATIVE EDUCATION PROGRAM

The general concept and requirements of the Cooperative Education Program are given on page 27 and specifics for the Faculty of Arts and Science are described on page 31.

Entry to the Biology Cooperative Program is restricted to students enrolled in an Honours or Major program in Biology and attending the University on a full time basis. To qualify for entry and continuation in the Cooperative Program a student must normally maintain a second class average in Biology courses and overall. In addition to academic grades, acceptance will also be based upon individual interest, abilities and aptitudes, and a formal interview. A student is required to complete satisfactorily at least four Work Terms, each of which will be recorded on the student's record and transcript. The first Work Term (following first year) is optional, but student are required to complete four of the following five scheduled Work Terms. A student may at any time transfer from the Biology Cooperative Program to a regular Biology Program.

Students transferring from other postsecondary institutions may apply to enter the Coop Program when applying for admission to the University of Victoria. Coop students interrupting their academic or Work Term program may apply for reinstatement in the Coop Program upon return to the University. Readmission is not guaranteed.

Applications and further information concerning the Cooperative Program in Biology may be obtained from the Department.

**NOTES:** (These refer to the Biology Programs chart below.)

1) BIOL 150 or equivalent is prerequisite to all other courses in the Department unless otherwise stated in course descriptions. The 150 requirement may be considered fulfilled by any one of: Biology 105, Botany 105, Zoology 105, Grade XIII Biology, Botany or Zoology. Students who have passed Biology 11 and 12 may enroll in courses for which 150 is prerequisite while students having credit only in Biology 11 should take 150. Students having only Biology 11 may, under special circumstances, bypass 150 with permission from the Biology Department. Counselling on this matter may be obtained from the Biology Department preceding and during registration.

2) The minimum Physics requirement can be satisfied by completion of two of PHYS 100, 110, 120, 220, for which MATH 100/101 (or 130) are corequisite. This is the preferred option for Biology majors and honours students (especially those whose interests include the quantitative aspects of ecology, functional or marine biology) and for those intending to proceed to graduate studies or professional schools. Other students may satisfy the Physics requirement by taking PHYS 102.

3) Students considering going on to professional schools, e.g. Medicine, Dentistry, etc. and any other students requiring a second year course in physical chemistry should choose CHEM 140/145 or 101/102, 245 or 100/102/245 as prerequisite for CHEM 222.

4) MATH 100/101 or equivalent must be taken if a student intends to take advanced courses in Mathematics, Chemistry or Physics; otherwise MATH 102 and 151 are advised.

5) Students may take with the approval of the Department courses offered by other departments on topics of related interest in lieu of courses in biology as part of the required number of Biology electives.

6) Students taking the BIOC 200 (1½) and BIOL 200 (1½) sequence of courses may count 1½ units for BIOC 200 towards the minimum of 6 units of 200 level Biology required for a B.Sc. General or B.A. General degree.

7) Students should note that CHEM 213 is a pre- or corequisite for CHEM 235.

8) STAT 250 may be substituted for BIOL 250. Biology Honours and Majors students are strongly advised to complete BIOL 304 not later than their 3rd year.

9) Students considering teaching as a profession are advised to include both BIOL 305A and B and 331A and B in their degree programs.

Students planning to become professional biologists should be prepared to continue their studies into graduate school and, in preparation for this, are advised to take either an Honours or a Major B.Sc. program, the Honours Program being preferable.

Proficiency examinations in one or two modern languages are usually required in graduate studies, and students planning graduate work are advised to elect one or two courses in French, German, Russian or other modern languages on recommendation of the Department.

Students are advised of the usefulness of Biometrics in most biological work and of the increasing use of computers in many areas of biology. The Department should be consulted regarding areas for which computer training or extra Mathematics courses are advisable.

The provision exists (see page 32), Fourth Year Credit for Medicine, etc. for students who have taken their first three years at the University of Victoria to be granted a B.A. or B.Sc. from the University of Victoria after at least one year of a medical program. Biology students contemplating entry into medicine after the third year should consult with the Department about their choice of undergraduate courses as soon as possible to ensure the necessary provisions outlined on page 32 can be met.

Students may be required to meet part of the expenses involved in required field trips or the supplying of course manuals.

Students wishing electives in environmental topics should see the electives offered under the Environmental Studies Program, page 73.

## BIOLOGY PROGRAMS

| B.Sc. HONOURS  |             | B.Sc. MAJOR  |             |
|--|-------------|--|-------------|
| <b>Core</b>  |             | <b>Core</b>  |             |
| BIOL 150 <sup>1</sup>  | (3)         | BIOL 150 <sup>1</sup>  | (3)         |
| BIOL 200   | (1½)        | BIOL 200   | (1½)        |
| BIOL 203/204   | (3)         | BIOL 203/204   | (3)         |
| BIOL 206/207   | (3)         | BIOL 206/207   | (3)         |
| BIOL 300/306   | (3)         | BIOL 300/306   | (3)         |
| One of BIOL 305A/B or 331A/B   | (3)         | One of BIOL 305A/B or 331A/B   | (3)         |
| BIOL 250 (or STAT 250) <sup>8</sup>  | (1½)        |  |             |
| BIOL 304   | (1½)        |  |             |
| BIOL 460   | (1)         |  |             |
| BIOL 499   | (3)         |  |             |
| Minimum of 10½ upper level Biology units chosen to complete program <sup>5</sup> | (12)        | Minimum of 9 upper level Biology units chosen to complete program <sup>5</sup> | (9)         |
| Minimum No. of Biology units   | (35½)       | Minimum No. of Biology units   | (25½)       |
| <b>Corequisites</b>  |             | <b>Corequisites</b>  |             |
| BIOC 200   | (1½)        | BIOC 200   | (1½)        |
| Two of PHYS 100, 110, 120; 220; or 102 <sup>2</sup>                              | (3)         | Two of PHYS 100, 110, 120; 220; or 102 <sup>2</sup>                            | (3)         |
| CHEM 100/102, or 101/102, or 140/145 <sup>3</sup>                                | (3)         | CHEM 100/102, or 101/102, or 140/145 <sup>3</sup>                              | (3)         |
| MATH 100/101 (or 130) or 102/151 or equivalent <sup>4</sup>                      | (3)         | MATH 100/101 (or 130) or 102/151 or equivalent <sup>4</sup>                    | (3)         |
| CHEM 231/232, or 231/235 <sup>7</sup>  | (3)         | CHEM 231/232, or 231/235 <sup>7</sup>  | (3)         |
| Electives  | (12)        | Electives  | (21)        |
| <b>TOTAL UNITS</b>   | <b>(61)</b> | <b>TOTAL UNITS</b>   | <b>(60)</b> |

Note: all courses counting towards the 25½ units for the Major or 35½ units for the Honours program must be passed with a grade C or better.

## B.Sc. GENERAL

|   |      |
|---|------|
| BIOL 150 <sup>1</sup>   | (3)  |
| 6 units of 200 level Biology courses <sup>6</sup>                         | (6)  |
| 9 units of acceptable Biology courses numbered 300 and above <sup>3</sup> | (9)  |
| BIOL units  | (18) |

### Corequisites

|  |     |
|--|-----|
| Two of PHYS 100/110/120/220, or 102 <sup>2</sup>   | (3) |
| CHEM 120; or 100/102, 101/102 or 140/145           | (3) |
| MATH 100/101 or 102/151 or equivalent <sup>4</sup> | (3) |

<sup>1</sup> See note 1), on page 39.

<sup>2</sup> See note 2), on page 39.

<sup>3</sup> See note 3), on page 39.

<sup>4</sup> See note 4), on page 39.

## B.A. GENERAL

|   |      |
|---|------|
| BIOL 150 <sup>1</sup>   | (3)  |
| 6 units of 200 level Biology courses <sup>6</sup>                         | (6)  |
| 9 units of acceptable Biology courses numbered 300 and above <sup>3</sup> | (9)  |
| BIOL units  | (18) |

### Corequisites

|  |     |
|--|-----|
| CHEM 120; or 100/102, 101/102 or 140/145 | (3) |
|--|-----|

<sup>5</sup> See note 5), page 39.

<sup>6</sup> See note 6), page 39.

<sup>7</sup> See note 7), on left.

<sup>8</sup> See note 8), on left.

## RECOMMENDED PROGRAMS FOR MAJORS AND HONOURS

The five suggested programs listed on the following page are examples of programs commonly chosen *but they are not intended to be the only options available*. Programs designed to fit the specific needs of a student may be made with the approval of the Department as long as they fulfill the requirements listed in the Biology Programs chart above.

### MAJOR

#### Suggested Program in Botany

| First Year  | Second Year                                     | Third Year              | Fourth Year                                      |
|---|---|-------------------------|--|
| BIOL 150 <sup>1</sup> (3)                           | BIOC 200/<br>BIOL 200 (3)                       | BIOL 300/<br>306 (3)    | BIOL 318/<br>418A<br>and B (4½)                  |
| CHEM 100/102,<br>or 101/102,<br>or 140/145 (3)      | BIOL 203/<br>204 (3)                            | BIOL 331A<br>and B (3)  | Biology<br>Group I<br>Electives <sup>4</sup> (3) |
| Two of PHYS 100/110/<br>120/220,<br>or 102 (3)      | BIOL 206/<br>207 (3)                            | BIOL 343<br>and 344 (3) |  |
| MATH 102/<br>151 or<br>100/101 or<br>equivalent (3) | CHEM 231/<br>232 or<br>231/235 <sup>5</sup> (3) |                         |  |
| Electives <sup>2</sup> (3)<br>(15)                  | Electives <sup>2</sup> (3)                      | Electives (6)           | Electives <sup>2</sup> (7½)                      |

#### Biology Group I Electives:

BIOL 317 (1½), 411A and B (3), 415A and B (3), 420 (1½), 421 (1½), 422 (1½), 423 (1½), 443 (1½), 453 (1½).

**Departmental Advisers in Botany:** Drs. Allen (Plant Taxonomy), Austin (Phycology), Ballantyne (Physiology), Bell (Ecology and Taxonomy), Owens (Morphology) and Paden (Mycology).  
Freshwater, Ring (Entomology), Tunnicliffe (Marine Benthic Community Ecology).

Suggested Program in Ecology

| First Year                                | Second Year                                      | Third Year                         | Fourth Year                              |
|---|--|------------------------------------|--|
| BIOL 150 <sup>1</sup> (3)                 | BIOC 200/<br>BIOL 200 (3)                        | BIOL 300/<br>306 (3)               | BIOL 427 (1½)                            |
| CHEM 100/102, or 101/102, or 140/145 (3)  | BIOL 203/<br>204 (3)                             | BIOL 305A and B, or 331A and B (3) | BIOL 440 (1½)                            |
| Two of PHYS 100/110/120/220, or 102 (3)   | BIOL 206/<br>207 (3)                             | BIOL 318 and 418A and B (4½)       | BIOL Group II Electives <sup>4</sup> (3) |
| MATH 102/151 or 100/101 or equivalent (3) | CHEM 231/<br>232 or 231/<br>235 <sup>5</sup> (3) |                                    |  |
| Electives <sup>2</sup> (3) (15)           | Electives <sup>2</sup> (3) (15)                  | Electives <sup>2</sup> (4½) (15)   | Electives <sup>2</sup> (9) (15)          |

**Biology Group II Electives:**

BIOL 312 (1½), 313 (1½), 408 (1½), 411A and B (3), 412 (1½), 421 (1½), 425 (3), 426A and B (3), 427 (1½), 428 (1½), 432 (1½), 453 (1½), 454 (1½), 455 (1½), 407 (1½), 434 (1½).

**Departmental Advisers in Ecology:** Drs. Allen (Plant Taxonomy), Austin (Marine and Freshwater Plant), Bell (Terrestrial Plants), Ellis (Marine), Gregory (Terrestrial and Population), Hagmeier (Terrestrial and

Suggested Program in Marine Biology

| First Year                                | Second Year                                      | Third Year                         | Fourth Year                              |
|---|--|------------------------------------|--|
| BIOL 150 <sup>1</sup> (3)                 | BIOC 200/<br>BIOL 200 (3)                        | BIOL 300/<br>306 (3)               | BIOL 450 or 454 <sup>6</sup> (3)         |
| CHEM 100/102, or 101/102, or 140/145 (3)  | BIOL 203/<br>204 (3)                             | BIOL 305A and B, or 331A and B (3) | BIOL Group IV Electives <sup>4</sup> (3) |
| Two of PHYS 100/110/120/220, or 102 (3)   | BIOL 206/<br>207 (3)                             | BIOL 311A and B (3)                |  |
| MATH 102/151 or 100/101 or equivalent (3) | CHEM 231/<br>232 or 231/<br>235 <sup>5</sup> (3) |                                    |  |
| Electives <sup>2</sup> (3) (15)           | Electives <sup>2</sup> (3) (15)                  | Electives <sup>3</sup> (6) (15)    | Electives <sup>3</sup> (9) (15)          |

**Biology Group IV Electives:**

BIOL 301 (3), 314A and B (3), 403 (1½), 411A and B (3), 414 (3), 425 (3), 431A and B (3), 450 (3), 454 (1½), 455 (1½), 434 (1½).

**Departmental Advisers in Marine Biology:** Drs. Austin (Marine Algae), Burke (Invertebrate Embryology), Ellis (Benthos: Intertidal Biology), Fontaine (Marine Invertebrates: Functional Morphology), Hobson (Oceanography: Phytoplankton), Littlepage (Oceanography: Zooplankton), Mackie (Marine Invertebrates: Behavioural Physiology and Ultrastructure), Melnerney (Fish: Physiology and Behaviour), Paul (Marine Embryology), Reid (Marine Invertebrates: Physiology), Tunnicliffe (Marine Benthic Community Ecology).

Suggested Program in Functional Biology

| First Year                                | Second Year                       | Third Year   | Fourth Year                               |
|---|-----------------------------------|--|---|
| BIOL 150 <sup>1</sup> (3)                 | BIOC 200/<br>BIOL 200 (3)         | BIOL 300/<br>306 (3)                               | BIOL Group III Electives <sup>4</sup> (6) |
| CHEM 100/102, or 101/102, or 140/145 (3)  | BIOL 203/<br>204 (3)              | BIOL 305A and B or 331A and B (3)                  | BIOL 440 (1½)                             |
| Two of PHYS 100/110/120/220, or 102 (3)   | BIOL 206/<br>207 (3)              | BIOL 309 or 343 (1½) BIOL Group III Electives (1½) | BIOL Group II Electives <sup>4</sup> (3)  |
| MATH 102/151 or 100/101 or equivalent (3) | CHEM 231/<br>235 <sup>5</sup> (3) |  |   |
| Electives <sup>2</sup> (3) (15)           | Electives <sup>2</sup> (3) (15)   | Electives <sup>3</sup> (6) (15)                    | Electives <sup>3</sup> (9) (15)           |

**Biology Group III Electives:**

BIOL 301 (3), 308 (1½), 309 (1½), 343 (1½), 401A and B (3), 403 (1½), 405 (3), 409A and B (3), 412 (1½), 344 (1½) or 417 (1½), 419 (1½), 424 (1½), 425 (3), 433 (3), 455 (1½).

**Departmental Advisers in Functional Biology:** Drs. Ashwood-Smith (Cell Physiology), Ballantyne (Plant Physiology), Fontaine (Invertebrate Functional Morphology and Ultrastructure), Hayward (Whole Animal Physiology), Mackie (Behavioural Physiology), Melnerney (Environmental and Fish Physiology), Owens (Plant Morphogenesis), Paul (Developmental Zoology), Styles (Genetics).

Suggested Program in Zoology

| First Year                                | Second Year                                      | Third Year                                | Fourth Year                             |
|---|--|---|---|
| BIOL 150 <sup>1</sup> (3)                 | BIOC 200/<br>BIOL 200 (3)                        | BIOL 300/<br>306 (3)                      | BIOL Group V Electives <sup>4</sup> (6) |
| CHEM 100/102, or 101/102, or 140/145 (3)  | BIOL 203/<br>204 (3)                             | BIOL 305A and B (3)                       |   |
| Two of PHYS 100/110/120/220, or 102 (3)   | BIOL 206/<br>207 (3)                             | BIOL 309 (1½) BIOL Group V Electives (1½) |   |
| MATH 102/151 or 100/101 or equivalent (3) | CHEM 231/<br>232 or 231/<br>235 <sup>5</sup> (3) |   |   |
| Electives <sup>2</sup> (3) (15)           | Electives <sup>2</sup> (3) (15)                  | Electives <sup>3</sup> (6) (15)           | Electives <sup>3</sup> (9) (15)         |

<sup>1</sup> See Note 1, page 42.  
<sup>2</sup> See Note 2, page 42.  
<sup>3</sup> See Note 3, page 42.

<sup>4</sup> See Note 4, page 42.  
<sup>5</sup> See Note 5, page 42.  
<sup>6</sup> See Note 6, page 42.

**Biology Group V Electives:**

BIOL 301 (3), 308 (1½), 312/313 (3), 314A and B (3), 345 (1½), 403 (1½), 412 (1½), 417/419 (3), 425 (3), 427/428 (3), 431A and B (3), 432 (1½), 444/445 (3), 455 (1½).

**Departmental Advisers in Zoology:** Drs. Gregory (Herpetology), Hayward (Mammalian Physiology), Mackie (Invertebrates), McInerney (Ichthyology), Paul (Developmental Zoology), Ring (Entomology).

**NOTES:** These refer to Suggested Program charts on pages 40 and 41.)

1) Students who bypassed BIOL 150 should take three units selected from 203, 204, 206, and 207 in their first year and 300 and 306 in their second year. They must choose an additional three units of course work to be taken in their third year or fourth year, either from the appropriate Suggested Program electives, or in consultation with the Department.

2) Students planning on continuing to graduate studies should consult the Department regarding the advisability of taking one or more modern language courses as electives.

3) Students are urged to consult a departmental adviser regarding the desirable choice of electives for any particular area of interest within this option. BIOL 250 and 304 are strongly recommended for all Biology Majors.

4) See note 5) on page 39.

5) See note 7) on page 40.

6) If only BIOL 454 is taken, another 1½ units should be selected from Group IV electives.

## HONOURS

Honours students should complete the program of required courses and Biology electives as described for the Major, and in addition should take 304 (1½) preferably in their third year, 460 (1) and 499 (3) in their fourth year. Of the remaining 8 units to complete the 60 unit degree requirement, at least 3 units must be from an additional course(s) in Biology chosen in consultation with the Department.

Intending Honours students should first discuss their proposed thesis research or tutorial with a Department faculty member and obtain the member's consent to serve as their thesis supervisor. They should then apply in writing to the Chairman of the Department for admission to the Honours program. This should be completed by May 1 in the third year of studies. However, under special circumstances applications will be accepted up to the end of fall registration the fourth year of studies. The completed thesis will be examined by a small committee which includes the supervisor. Applicants should have and maintain a grade point average of at least 6.00 in all Department courses.

First Class Honours will be awarded to students obtaining a first class average in 300 and 400 level courses, and must include first class standing in 499. Second Class Honours will be awarded to students obtaining a second class average in 300 and 400 level courses, and must include at least second class standing in 499. A student who obtains a first class average in the 300 and 400 level courses but second class standing in 499 will have the option of receiving a B.Sc. with a First Class Major in Biology or Second Class Honours. A student who achieves lower than second class standing in 499 will graduate under the Major program provided the student satisfies other requirements for the degree.

The submission date for the thesis is the last day of lectures.

## UNDERGRADUATE COURSES

### BIOLOGY

Students should consult the Department concerning courses offered in a particular year.

**NOTE:** 150 or equivalent is normally prerequisite to all other courses in the Department except where otherwise stated. For information concerning acceptable equivalents see Note 1, page 39.

#### BIOL 150 (3) PRINCIPLES OF MODERN BIOLOGY

A broad introduction to biological science emphasizing the principles of cell biology, bioenergetics, physiology, genetics, evolution and ecology. The major plant and animal groups are surveyed, stressing diversity through adaptation. Since many students taking this course do not proceed to other courses in Biology a particular attempt is made to relate biological principles to matters of human concern. The course, therefore,

is designed for those with little biological background and those wishing to consolidate their understanding of basic biological science. (See Note 1, page 39)

D.J. Ballantync and members of the Department

September-April (3-3; 3-3)

#### BIOL 200 (1½) INTRODUCTION TO CELL STRUCTURE AND FUNCTION

Basic cellular and subcellular structure and function. Origin of cells; evolution of eucaryotes. Cellular homeostasis and control mechanisms. Chromosome structure and function. Gene action. Specialized cells and their function including cells of the immune system. (See BIOC 200 Calendar entry.) (Pre- or corequisite: CHEM 230 or 233 or 231/232 or 231/235. *Prerequisite:* BIOC 200)

January-April (3-2)

#### BIOL 203 (1½) ALGAE AND FUNGI

The biology of the algae and the fungi, including discussions of their origins and evolution, ecology, physiology, and use by man. Laboratories will include examination of the cytology and the morphology of marine and freshwater algae, and isolation, pure culture, and identification of fungi.

L.A. Hobson, J.W. Paden

September-December (3-3)

#### BIOL 204 (1½) METAPHYTA

Survey of the bryophytes and vascular plants. Cell structure and tissues of vascular plants will be discussed as they relate to plant function. The origin and evolution of plant structures and groups making up the metaphyta will be emphasized. Text: Raven, Evert and Curtis, *Biology of Plants*

G.A. Allen and members of the Department

January-April (3-3)

#### BIOL 206 (1½) INVERTEBRATE ZOOLOGY

Survey of invertebrate animals, including taxonomy, morphology, life histories and phylogeny. Text: Barnes, *Invertebrate Zoology*, 4th ed.

A.R. Fontaine

September-December (3-3)

#### BIOL 207 (1½) CHORDATE ZOOLOGY

A survey of chordate diversity in an evolutionary perspective. Emphasis is on the comparative morphology of organ systems. Laboratory work involves dissections of representative specimens, and a term report is required.

J.S. Hayward

January-April (3-3)

#### BIOL 250 (formerly half of 304)(1½) BIOMETRICS:I

Elementary statistics for biology students. Topics include variables and frequency distributions, probability, sample statistics and confidence limits, hypothesis testing, two sample tests, introduction to chi-square tests. Weekly exercises in laboratory classes; take home problem sets also assigned. (NOTE: Credit cannot be obtained for both STAT 250 and BIOL 250)

(not offered)

September-December (2-3)

#### BIOL 260 (3) BIOLOGY OF MARINE INTERTIDAL ORGANISMS (Field and Laboratory Studies)

A descriptive course surveying the flora and fauna of local marine intertidal habitats. Studies to include general aspects of marine intertidal ecology, together with morphology, life history and natural history of plants and both invertebrate and vertebrate animals. Field trips and laboratory studies of live organisms form an integral part of this course. (Credit for this course will not be counted toward degree programs in Biology.) (*Prerequisite:* Grade 12 Biology or permission of instructor)

Y. Ebrahim

(Offered in Summer Session Only)

#### BIOL 300 (1½) GENETICS

Nature and function of the genetic material. Reproduction and heredity in eukaryotes and prokaryotes. Classical concept of the gene. Genetic control of biochemical reactions, differentiation and development. Population genetics and evolutionary mechanisms. (Students are strongly advised to delay taking 300 until after they have successfully completed 200, Cell Biology.) (Pre-or corequisite: 200.)

E.D. Styles

January-April (3-2)

#### BIOL 301 (3) INVERTEBRATE FUNCTIONAL MORPHOLOGY

A course for the student who wants an in-depth treatment of invertebrates. Emphasis is placed on concepts and principles of functional

morphology; supplementary reading, including recent journals, is encouraged. (*Prerequisite*: 206; *corequisite*: 303 or 305) Texts: Barnes, *Invertebrate Zoology*, 4th Ed.

A.R. Fontaine and Members of the Department  
September-April (2-3; 2-3)

### BIOL 304 (1½, formerly 3) BIOMETRICS:II

Introduction to experimental design, sampling, and data analysis for biologists. Topics include chi-square analyses, analysis of variance designs, regression and correlation, and nonparametric tests; the course deals mainly with univariate statistics, but multivariate methods are discussed briefly. Laboratory classes include tutorials and projects involving planning and carrying out surveys or experiments designed to test specific hypothesis; take home problem sets are also assigned. (*Prerequisite*: BIOL 250 or STAT 250)

P.T. Gregory January-April (2-3)

### BIOL 305A (1½) (formerly half of 305) ANIMAL PHYSIOLOGY:I

An evolutionary survey of animal functions. The following systems will be examined comparatively: energetic and thermoregulatory, neuromuscular, endocrinal, and circulatory. (Pre-or corequisites: 200 or equivalent, BIOC 200; CHEM 230 or 233 or 231/232 or 231/235. These are strongly advised as prerequisites. Not normally open to second year students) Texts: Hoar, W.C., *General and Comparative Physiology*

J.S. Hayward September-December (2-3)

### BIOL 305B (1½) (Formerly half of 305) ANIMAL PHYSIOLOGY:II

An evolutionary survey of animal function. The following systems will be examined comparatively: nutritional, digestive, respiratory, osmoregulatory and excretory. (Pre-or corequisites: 200 or equivalent, BIOC 200; CHEM 230 or 233 or 231/232 or 231/235. These are strongly advised as prerequisites. Not normally open to second year students) Texts: Hoar, W.C., *General and Comparative Physiology*

R.G.B. Reid January-April (2-3)

### BIOL 306 (1½) ECOLOGY

A survey of populations, communities, ecosystems, and the general principles of ecology. Laboratories will deal with both field and experimental aspects of ecology (Biology honours and major students should take this course in conjunction with 300.)

E.M. Hagmeier and Members of the Department  
September-December (2-3)

### BIOL 308 (1½) ANIMAL HISTOLOGY

Lectures and laboratories will explore the fundamentals of animal tissues and cell structure. Tissue specializations of major vertebrate organ systems will be examined and comparisons made throughout the animal kingdom. Students will gain experience in recognizing and describing various tissues and be exposed to the analysis of structure/function relationships (Major and Honours students are advised to take this course together with 309, 305A and/or 305B. Credit will not be given for this course and 302.)

R.D. Burke January-April (2-3)

### BIOL 309 (1½) DEVELOPMENTAL ZOOLOGY

Animal development and the mechanisms that control it. Introductory embryology of vertebrates and invertebrates will be coordinated with the analysis of developmental processes. Topics considered will include gametogenesis, fertilization, cleavage, embryogenesis, organogenesis, cellular differentiation, growth, metamorphosis, regeneration. (*Prerequisites*: 200, 206 and 207 or permission of the instructor) Text: Karp and Berril, *Development*

September-December (2-3)

### BIOL 310 (3) ELEMENTS OF OCEANOGRAPHY

A nontechnical course designed to give the general student a broad background in oceanography. Lectures will cover origin and extent of the oceans, nature of the sea bottom, causes and effects of tides, waves and currents, animal and plant life in the sea, pollution and utilization of the oceans by man. (Open to all students in second, third and fourth year. 150 is not required for this course. Credit for this course will not be counted toward degree programs in Biology. Students planning to proceed to other courses in Oceanography must take 311A and 311B. Credit will not be given for both 310 and 311A or 311B.)

J.L. Littlepage September-April (3-0; 3-0)

### BIOL 311A (1½) (formerly half of 311) AN INTRODUCTION TO PHYSICAL AND GEOLOGICAL OCEANOGRAPHY

This course provides an introduction to atmospheric and oceanic heat budgets, distributions of temperature, salinity and density in the oceans,

ocean circulation, ocean waves, interactions between waves and coastal margins and the structure and evolution of sea floors. (Lectures will be supplemented by laboratory experience. Participation in two single-day cruises is expected.) (Credit will not be given for both 310 and 311A.) (*Prerequisites*: Third year or higher standing; two of PHYS 100, 110, 120, and 220; MATH 100/101 or 102/151) Text: Duxbury, A.C., *The Earth and Its Oceans*

L.A. Hobson September-December (2-3)

### BIOL 311B (1½) (formerly half of 311) AN INTRODUCTION TO CHEMICAL AND BIOLOGICAL OCEANOGRAPHY

This course provides an introduction to the effects of geological and biological processes on the chemical composition of seawater and to the dynamics of phytoplankton and zooplankton populations in the sea based on their ecological, physiological and behavioural characteristics. (Lectures will be supplemented by laboratory experience. Participation in two single-day cruises is expected.) (Credit will not be given for both 310 and 311B.) (*Prerequisites*: third year or higher standing; 311A, 203 and 206; CHEM 100/102 or 101/102 or 140/145)

L.A. Hobson January-April (2-3)

### BIOL 312 (1½) INTRODUCTORY ENTOMOLOGY

An introduction to the morphology, physiology, taxonomy and biology of insects, and some consideration of their economic importance. A term essay and a representative collection of 75 species of insects will be required before completion of the course. The specimens should be mounted, identified and presented as a museum collection. Obtain instructions before the summer preceding the course. Field collecting trips will be arranged wherever possible. (Students proceeding in Entomology are advised to take this course in conjunction with 313.) (*Pre-or corequisite*: 206) Text: Borror and DeLong, *An Introduction to the Study of Insects*. (5th ed.)

R.A. Ring September-December (2-3)

### BIOL 313 (1½) ECONOMIC ENTOMOLOGY

A study of man's greatest competitors for food and resources. Insects and arachnids of medical, household, stored products, horticultural, agricultural and forestry importance will be discussed. The course will deal to a great extent with the variety of measures available for pest control. (*Prerequisite*: 150 or written permission of instructor) Texts: Assigned readings

R.A. Ring September-December (2-2)

### BIOL 314A (1½) (formerly half of 314) MARINE FIELD BIOLOGY:I

Introduction to methods and concepts of marine biological investigation. Description and comparison of species associations, spatial and temporal distribution patterns, food networks, species life strategies and assessment of environmental impact. Field emphasis will be on rocky shore and algal forest ecosystems. In the laboratory there will be an emphasis on accuracy in species identification. (*Prerequisite*: 206. Pre-or corequisites: 304, 306, 203) Text: Carefoot, T., *Pacific Seashores*

D.V. Ellis September-December (2-3)

### BIOL 314B (1½) (formerly half of 314) MARINE FIELD BIOLOGY:II

Introduction to methods and concepts of marine biological investigation. Description and comparison of species associations, spatial and temporal distribution patterns, food networks, species life strategies and assessment of environmental impact. Field emphasis will be on beach and infaunal ecosystems. In the laboratory there will be an emphasis on sampling design and analysis. (*Prerequisite*: 206. Pre-or corequisites: 304, 306)

D.V. Ellis January-April (2-3)

### BIOL 317 (1½) INTRODUCTION TO PLANT PATHOLOGY

An intensive survey of current principles and practice of plant and forest pathology; diseases incited by bacteria, fungi, viruses, nematodes, and physiological factors will be presented and discussed. Mechanisms of infection, disease development, host-parasite relations; and disease spread will be considered. Control practices including chemical and biological control, exclusion, and host resistance will be discussed. Laboratories to consist of isolation and identification of pathogens, inoculation and observation of disease development. Field trips to Federal and Provincial laboratories and selected field sites. (*Prerequisites*: 200, 203/204, CHEM 231, and 232 or 235; 331 recommended)

J.W. Paden January-April (2-3)

### BIOL 318 (1½) SYSTEMATICS OF FLOWERING PLANTS

An introduction to systematics of angiosperms; classification; identification; rules of nomenclature; the major groups of flowering plants; species

concepts and speciation; experimental approaches to systematics, with examples from selected groups. (NOTE: A well prepared collection of 25 properly identified plants must be submitted for completion of the course. Students are urged to make their collections during the preceding summer. Contact the instructor for details and collecting equipment as early as possible.) (Prerequisite: 204 or written permission of the instructor; 300 recommended) Texts: Jones and Luchsinger, *Plant Systematics* G.A. Allen  
January-April (2-3)

**BIOL 320 (1½) GENETICS AND EVOLUTION**

Concepts of evolution and genetics that are of particular interest to present day society. The origin of life; evolutionary forces; genetic systems; gene environment interactions; the genetics of man; genetics and man. Demonstration lessons will be arranged. (Open to non-Biology and general program Biology students, Biology honours and major students should register for 300. Credit will not be given for both 300 and 320.) (Prerequisites: second, third and fourth year standing with 150 or equivalent, or written permission of instructor)  
E.D. Styles  
September-December (3-0)

**BIOL 329 (1½) BIOLOGY OF THE VERTEBRATES**

An introduction to the systematics, zoogeography, and ecology of vertebrates, with particular emphasis on the vertebrates of British Columbia. Laboratories will stress vertebrate systematics, identification of native species, and techniques of specimen collection and preparation; a field trip must also be completed. Field trips will be planned when possible. (Prerequisites: 207 or written permission of Department) Texts: Robbins, et al, *Field Guide to Birds of North America*; Cowan and Guiguet, *The Mammals of British Columbia*; Stebbins, *A Field Guide to Western Reptiles and Amphibians*.  
P.T. Gregory  
January-April (2-3)

**BIOL 331A (1½) (formerly half of 331) PLANT PHYSIOLOGY:I**

The following topics will be discussed: photosynthesis, water relations, mineral nutrition and ion uptake, translocation, stress physiology. (Pre- or corequisites: 200, 203, and 204; CHEM 230 or 233 or 231/232 or 231/235; or written permission of the instructor) Text: Ting, *Plant Physiology*  
D.J. Ballantyne  
September-December (2-3)

**BIOL 331B (1½) (formerly half of 311) PLANT PHYSIOLOGY:II**

The following topics will be discussed: enzymes, carbohydrates, respiration, nitrogen metabolism, lipids, lignins, pigments, phytohormones, tropisms, dormancy, senescence, flowering. (Pre- or corequisites: 200, 203, and 204; CHEM 230 or 233 or 231/232 or 231/235; or written permission of the instructor) Text: Ting, *Plant Physiology*  
D.J. Ballantyne  
January-April (2-3)

**BIOL 334 (1½) PLANTS AND MAN**

An introduction to economically important plants and their products, especially as sources of food, shelter, clothing, drugs and industrial raw materials. Aspects of plant growth and development, physiology, breeding and disease will be discussed for important agricultural and forest plants. Demonstrations will be arranged. (Open to all students in second, third and fourth years. BIOL 150 is not required for this course. Normally credit for this course will not be counted toward degree programs in Biology, but Biology students may take this course as a free elective.) Texts: Assigned Readings; General Reference: Janick, Schery, Woods and Ruttan, *Plant Science*  
D.J. Ballantyne and Members of the Department  
September-December (3-0)

**BIOL 338 (1½) APPLIED PLANT PHYSIOLOGY**

Application of principles of plant physiology to problems in agriculture, forestry, and air pollution. (Normally, credit for this course will not be counted toward degree programs in Biology, but Biology students may take this course as a free elective.) (Prerequisites: One of 150, 200, 204, or 334 or permission of instructor) Text: Bleasdale, *Plant Physiology in Relation to Horticulture*  
D.J. Ballantyne  
January-April (3-0)

**BIOL 343 (1½) DEVELOPMENTAL PLANT ANATOMY**

A study of the origin and development of cells, tissues and organs in vascular plants with special emphasis given to seed plants. The mature structures are discussed as they relate to function. Recent studies of plant ultra-structure are considered in view of development and function. (Not open to students who have 3 units credit for 342.) (Prerequisite: 204) Texts: Esau, *Anatomy of Seed Plants*  
J.N. Owens  
September-December (2-3)

**BIOL 344 (1½) PLANT MICROTÉCHNIQUE**

A study of the techniques used to investigate structural aspects of plant growth, development and function. Techniques covered include paraffin methods, wood sectioning, maceration, clearing, chromosome preparations, photomicrography, histochemistry and autoradiography. (Not open to students who have 3 units credit for 324) (Prerequisite: 204) Text: Berlyn and Miksche, *Botanical Microtechnique and Cytochemistry*  
January-April (2-3)

**BIOL 345 (1½, formerly 444) ANIMAL BEHAVIOUR**

An introduction to animal behaviour emphasizing the range of functional patterns and critically assessing analogies with human behaviour. Practical studies to develop observational and descriptive skills are assigned, and there will be a number of class field trips. Text: Ellis, *Animal Behaviour, and its Applications*  
D.V. Ellis  
September-December (3-3)

**BIOL 350 (1½) PALEOBIOLOGY**

A biological perspective on the origins and development of life designed to give an historical basis to modern processes. Includes study of major events in plant and animal evolution, patterns in the fossil record, paleoecology and the paleobiology of British Columbia. (Prerequisites: 203, 204, 206, and 207)  
V. Tunnicliffe  
January-April (3-0)

**BIOL 400 (1½) HISTORY OF BIOLOGY**

A study of the historical development of the major techniques and ideas of biology. The significance of the important historical contributors to biology will also be considered. Open to third and fourth year students. (Prerequisite: 150 or permission of the Department) Texts: Assigned readings  
September-December (3-0)

**BIOL 401A (1½) (formerly half of 401) APPLICATION OF GENETIC PRINCIPLES:I**

An examination of factors affecting the direction of genetic research: politics, social pressures, funding, serendipity. Today's version of 'genetic engineering': techniques, uses and limitations for medicine and agriculture. Animal and plant breeding: manipulating reproduction. Laboratories will allow for some selection in the organisms used for cytological, photographic and breeding experiments. (Prerequisites: 300 or permission of the instructor)  
E.D. Styles  
September-December (2-3)

**BIOL 401B (1½) (formerly half of 401) APPLICATION OF GENETIC PRINCIPLES:II**

Genetics of disease and pest resistance. Genetics and aging. Genetic dissection of behaviour. Eugenic and dysgenic effects of genetic screening, counselling, prenatal diagnosis and the treatment or prevention of genetic diseases. Laboratories will allow for some selection in the organisms used for cytological, photographic and breeding experiments. (Prerequisite: 300 or permission of the instructor)  
E.D. Styles  
January-April (2-3)

**BIOL 403 (1½, formerly 3) EMBRYOLOGY OF MARINE INVERTEBRATES**

Examination of the developmental process at the cellular and molecular level will be coordinated with the descriptive and experimental embryology of the marine invertebrate groups. The laboratory work will emphasize experimentation with marine invertebrate eggs and embryos. (Prerequisite: 309 or permission of the instructor) (Credit will not be given for both BIOL 403 and MRNE 411.) Text: Assigned readings  
(Not offered)  
January-April (2-3)

**BIOL 405 (3) CELLULAR PHYSIOLOGY**

Lectures and seminars on recent advances in cellular physiology. Laboratory modules in:  
(a) Cell and tissue culture  
(b) Application of radioisotopes to biology  
(c) Fractionation of subcellular components, electron microscopy. (Prerequisites: 200 and BIOC 200. Pre- or corequisite: BIOC 300, or permission of Department. Restrictions on equipment limit enrollment to a maximum of 10 students. Consultation with instructor suggested prior to registration)  
M.J. Ashwood-Smith  
September-April (2-3; 2-3)

**BIOL 407 (1½) AQUACULTURE**

An introduction to ecologically based management strategies for the cultivation or enhancement of aquatic plants and animals; traditional

and current practices will be considered together with the potential for future development and the environmental impacts of aquaculture. (Prerequisites: Fourth year standing or permission of the instructor)

September-December (3-3)

### BIOL 408 (1½) THE BIOLOGY OF POLLUTION

Biological concepts and methods applied to the recognition, definition and measurement of excessive environmental alteration directly or indirectly affecting world biota including man; exploration of contributions of bioscience to human perception of, and response to, the stimulus of environmental perturbation. Field and laboratory observation on organisms stressed by various levels of environmental change; one project report and attendance at seminars by visiting speakers. (Pre-or corequisite: 206 or 203, or written permission of instructor) Texts: Current Literature  
January-April (2-3)

### BIOL 409A (formerly part of 409) (1½) NEUROBIOLOGY

Cellular and developmental aspects of the nervous system, regeneration, trophic effects, connectional specificity, the nerve impulse, essentials of sensory physiology and motor control, junctional transmission, pattern generation, principles of higher receptor organization and central nervous circuitry. Course consists of lectures with oral and written presentations by the students on selected topics. (Prerequisite: 305) Text: G.M. Shepherd, 1983, *Neurobiology*  
G.O. Mackie  
September-December (3-0)

### BIOL 409B (formerly part of 409) (1½) NEUROBIOLOGY LAB

Lab exercises and individual projects in dissection and staining of nerves, use of intracellular markers, and extra- and intracellular electrophysiological recording techniques. (Prerequisite: 409A. Enrollment limited to 16 because of space and equipment.)  
January-April (1-3)

### BIOL 410 (1½) HERPETOLOGY

The biology of amphibians and reptiles, particularly their systematics, ecology, and physiology. This course will deal both with unique features of the two groups and comparisons with other classes of vertebrates, including evolutionary relationships. Special emphasis will be given to adaptation of ectotherms to seasonally cold environments such as those in Canada. Students will be expected to present seminars on special topics and do considerable outside reading. Laboratory classes will consist of taxonomic identifications, field exercises, and experimental investigations. (Prerequisite: 207; 304 and 306 recommended) Text: Goin et al, *Introduction to Herpetology*  
P.T. Gregory  
January-April (2-3)

### BIOL 411A (1½) (formerly half of 411) MARINE AND FRESHWATER ALGAE (PHYCOLOGY):I

A comprehensive exploration of both marine and freshwater algae (macro and micro forms) emphasizing ecological, ecophysiological, morphological, environmental impact and aquacultural economic aspects. Field work centres upon live materials from local aquatic communities with emphasis on Cyanobiota, Rhodobiota, and Phaeophyta and includes shipboard work in coastal and freshwater environments. Laboratory work includes necessary microtechnique, photomicrography and taxonomic identification and some ecological or cultural projects. (Prerequisite: 203 or permission of instructor) Text: Bold & Wynne, *Introduction to Algae*  
A.P. Austin  
September-December (2-3)

### BIOL 411B (1½) (formerly half of 411) MARINE AND FRESHWATER ALGAE (PHYCOLOGY):II

A continuation of 411A. Field work centres upon live materials from local aquatic communities with emphasis on Chlorobiota, diatoms, dinoflagellates, and the phytoplankton. Use will be made of the Simpson Cowichan Lake Field Station and work will be done on open Pacific coastal biota. (Prerequisite: 411A or permission of the instructor) Text: Bold & Wynne, *Introduction to Algae*  
A.P. Austin  
January-April (2-3)

### BIOL 412 (1½) ADVANCED ENTOMOLOGY

A study of recent advances in the field of entomology with special emphasis on insect physiology. Students will set up and conduct many of their own experiments, and will be expected to become familiar with the recent literature from leading journals of insect physiology. Both a seminar presentation and laboratory term projects will be required. (Prerequisite: 312) (Not open to students who have 3 units credit for 412) Text: Wigglesworth, *Principles of Insect Physiology* and selected readings. (Not offered)  
January-April (2-3)

### BIOL 414 (3) MARINE INVERTEBRATE ZOOLOGY

The emphasis is on recent research in fields chosen for their broader zoological significance. Considerable library work is required. Practical work is assigned on an individual basis. (Prerequisite: 301 or 314) Texts: Assigned Readings. Students should possess a general textbook of Invertebrate Zoology for reference.  
September-April (3-2; 3-2)

### BIOL 415A (1½) (formerly half of 415; 315) MYCOLOGY:I

Morphology and biology of the fungi. Basidiomycetes, zoospore fungi and Gymnomyces will be treated. A collection of at least 15 genera representing these fungi, and a research project will be required for the completion of the course. (Prerequisite: 203 or permission of the instructor. Not normally open to second year students) Text: Alexopoulos, C.J., *Introductory Mycology*, Ed. 3  
J.W. Paden  
September-December (2-3)

### BIOL 415B (1½) (formerly half of 415; 315) MYCOLOGY:II

Morphology and biology of the fungi. Zygomycetes, Ascomycetes and Deuteromycetes will be treated. A collection of at least 15 genera representing these fungi, and a research project, will be required for completion of the course. (Prerequisite: 203 or permission of the instructor. Not normally open to second year students) Text: Alexopoulos, C.J., *Introductory Mycology*, Ed. 3  
J.W. Paden  
January-April (2-3)

### BIOL 417 (1½) ZOOLOGICAL MICROTECHNIQUE

Lectures and laboratories introducing the principles and methods of microtechnique commonly used by zoologists. Topics include: paraffin embedding, sectioning and staining, plastic embedding and semithin histochemistry; optical microscopy; microscopic measuring; photomicrography. Students will submit their microscopic presentations and photomicrographs for evaluation. (Pre-or corequisites: CHEM 230 or 233 or 231/232 or 232/235, BIOC 200, BIOL 200; or permission of the instructor) Text: Humason, *Animal Tissue Techniques*  
A.R. Fontaine  
September-December (1-4)

### BIOL 418A (1½) (formerly half of 418) VEGETATION ECOLOGY:I

A consideration of the structure, composition and dynamics of terrestrial plant communities, with emphasis on vegetation sampling, description, classification and ordination. (Considerable field work is involved including a weekend field trip in September, costs for which are borne largely by the class.) (Prerequisite: 306; 318 recommended)  
M.A.M. Bell  
September-December (2-4)

### BIOL 418B (1½) (formerly half of 418) VEGETATION ECOLOGY:II

A study of the relationship between terrestrial vegetation and its environment, emphasizing soils, climate, and other organisms including man, with relevance to vegetation management. A major research project on local communities will comprise most of the lab requirement. (Costs of one weekend field trip in January will be borne by the class.) (Prerequisite: 418A; 318 recommended)  
M.A.M. Bell  
January-April (2-4)

### BIOL 419 (1½) COMPARATIVE HISTOLOGY

Lectures and laboratories designed to show the progressive elaboration of cellular and tissue structure in animal phylogeny. Students will prepare their own microscope material. A research type project is assigned involving substantial readings of original material. (Prerequisite: 417; 302 advised as a pre-or corequisite)  
January-April (2-3)

### BIOL 420 (1½) APPLIED VEGETATION SCIENCE

The applications of vegetation study to land planning and management, to environmental impact assessment, to landscape rehabilitation and soil stabilization; ecology of vegetation on disturbed landscapes; human influences on vegetation pattern; use of living plants in civil engineering works. Examples will be studied in forestry, park and water management, regional planning, mining and quarrying reclamation, highway construction, hydroelectric development, harbour and shoreline development. The course will be field trip, project and discussion oriented with guest speakers from government and private agencies. (Pre-or corequisites: 306 and 418, or written permission of the instructor) (Not offered)  
January-April (2-3)

### BIOL 421 (1½) PLANT MORPHOGENESIS

A study of the inception and development of form and structure in plants with emphasis given to the experimental study of meristems, leaves, buds, flowering and differentiation. The laboratory will emphasize techniques used to study morphogenesis including developmental anatomy, tissue culture, autoradiography, histochemistry and various experimen-

tal methods. (Prerequisites: 343 and 344; prerequisite or corequisite: 311) Text: Stevens and Sussex, *Patterns in Plant Development*, and selected references  
(Not offered) September-December (2-3)

#### **BIOL 423 (1½) PLANT METABOLISM**

An advanced discussion on biochemical pathways for carbon, nitrogen, and phosphorus metabolism and mechanisms for regulation of these pathways. Students will be responsible for either one essay or one seminar based on library research of a problem of current interest in plant physiology and biochemistry. (Prerequisite: 331 or permission of instructor; BIOC 300 is recommended) Text: Assigned readings  
L.A. Hobson January-April (2-3)

#### **BIOL 424 (1½) BIOLOGICAL ULTRASTRUCTURE**

Selected topics from the current literature on cell structure as revealed by the electron microscope. Processes such as motility, transport, intercellular communication, protein synthesis, absorption, secretion, etc. which lend themselves to analysis in structural terms are stressed. Lectures, reading assignments and at least one seminar presentation per student may be expected. (Prerequisites: 200 and BIOC 200; 302 or 343 recommended) Texts: Assigned Readings January-April (3-0)

#### **BIOL 425 (3) ENVIRONMENTAL PHYSIOLOGY OF ANIMALS**

The adaptation of animals to temperature, light, ionizing radiations, gases, pressure, the chemical environment, etc. The aim of the course is to develop a comprehensive picture of the biokinetic zone and the spectrum of physiological mechanisms by means of which life is possible within this zone. Laboratory work consists of three or four directed research projects, reports written in scientific format and seminar presentation of reports. (Pre-or corequisite: 303 or 305A and B)

M.J. Ashwood-Smith, J.S. Hayward September-April (2-3; 2-3)

#### **BIOL 426A (1½) (formerly half of 426) LIMNOLOGY:I**

Study of freshwater systems, particularly lakes, with emphasis on their physical and chemical aspects. (Prerequisite: 306; 206, 411A, 411B, and 427 are recommended)

E.M. Hagmeier September-December (2-3)

#### **BIOL 426B (1½) (formerly half of 426) LIMNOLOGY:II**

Study of freshwater systems, particularly lakes, with emphasis on biological aspects. (Prerequisite: 306; 206, 411A, 411B, 426A, and 427 are recommended)

E.M. Hagmeier January-April (2-3)

#### **BIOL 427 (1½) POPULATION ECOLOGY**

A survey of theories of population growth and regulation, life history strategies, and population interactions. Requirements include considerable outside reading and presentation of a class seminar. Laboratories consist of experiments designed to demonstrate basic principles of population ecology and the use of relevant quantitative techniques. Quantitative aspects of population ecology are stressed. (Prerequisite: 306; pre-or corequisite: 304 or equivalent) Text: Begon and Mortimer, *Population Ecology*

P.T. Gregory September-December (2-3)

#### **BIOL 428 (1½) ZOOGEOGRAPHY**

The patterns of animal distributions with particular emphasis on the mechanisms and causes underlying observed distributions. Those registered will be expected to do considerable outside reading, and to participate in seminars. (Prerequisite: 306)

E.M. Hagmeier September-December(2-3)

#### **BIOL 430 (1½) IDENTIFICATION AND TAXONOMY**

Study of classical and contemporary concepts and procedures in biological taxonomy with emphasis on zoology, but utilizing a comparative approach to the taxonomy of plants and microorganisms. The present needs, problems and the resolutions will be explored theoretically and in practice. Students will be required to undertake a taxonomic study of a genus of their choice, and to make and identify a collection of organisms. The lectures will be presented in one evening 2-hour sessions weekly, and arrangements for practical assignments can be adjusted to the needs of employed biologists. Text: Jeffrey, C., *Biological Nomenclature* and assigned readings

D.V. Ellis January-April (2-3)

#### **BIOL 431A (1½) (formerly half of 431) ICHTHYOLOGY:I**

Selected topics on the morphological, physiological and behavioural adaptations and evolution of primitive fishes including cyclostomes,

cartilaginous fishes and related fossil forms. Laboratory work includes a research project with a written report and seminar. At least one field trip is required. (Credit will not be given for both 431A and MRNE 412.) (Prerequisite: 207 or equivalent) Text: Bone and Marshall, *The Biology of Fish*

J.E. McInerney September-December (2-3)

#### **BIOL 431B (1½) (formerly half of 431) ICHTHYOLOGY:II**

Selected topics on the adaptations and evolution of bony fishes. Laboratory work will include a research project with a written report and seminar. Participation in at least one field trip is required. (Credit will not be given for both 431B and MRNE 412.) (Prerequisite: 207 or equivalent) Text: Bone and Marshall, *The Biology of Fish*

J.E. McInerney January-April (2-3)

#### **BIOL 432 (1½) PARASITOLOGY**

Study of the biology and taxonomy of parasitic organisms. (Prerequisite: 206)

(Not offered) January-April (2-3)

#### **BIOL 433 (3) EXPERIMENTAL MORPHOGENESIS**

Seminars, directed reading, discussion and lectures in the analysis of embryonic development by experimental methods, including differentiation of cells and tissues and their integration during morphogenesis. Outside reading, collation of relevant literature and synthesis of information for presentation in seminars is mandatory. (Pre-or corequisites: 302; 303 or 305. Students should consult with the instructor before registration.) Texts: Assigned Readings

September-April (1-4; 1-4)

#### **BIOL 434 (1½) BIOMECHANICS OF ORGANISMS**

A study of elemental principles of structural engineering and fluid dynamics applied to the biological world; the course addresses functional aspects of organisms in two contexts: i) biomechanical design including material characteristics and structural forms; and ii) responses in design and behaviour to moving fluids. The anticipated result is an appreciation for the abilities of animals and plants as design engineers. (Prerequisite: None; 301 recommended) Text: Vogel, *Life in Moving Fluids*

V. Tunnicliffe September-December (3-3)

#### **BIOL 440 (1½) QUANTITATIVE ECOLOGY**

An introduction to the use of simulation and multivariate models in ecology. (Prerequisites: 306 and a modest level of ability in computer programming; students are encouraged to discuss their programming abilities with the instructor.) Text: Poole, *Introduction to Quantitative Ecology*

E.M. Hagmeier January-April (2-3)

#### **BIOL 443 (1½) BIOLOGY OF CONIFERS**

A study of the biology of conifers with special emphasis given to the taxonomy, distribution, economic importance, reproduction, growth and development of native species. Certain aspects of tree improvement and reforestation of some of the more important species will be considered. Several field trips will be made, some involving collection and identification of specimens. A term paper is required. (Prerequisite: 204) Text: Selected references

J.N. Owens September-December (3-3)

#### **BIOL 450 (3, formerly 1½) MARINE PLANKTON BIOLOGY**

A comprehensive study of the physiological and ecological aspects of plankton biology for students with an introductory course in oceanography. A basic understanding of physical and chemical oceanography is assumed. Effects of light, temperature, currents, depth, nutrients and other physical and chemical parameters on distribution and abundance of bacteria, protozoa, phytoplankton and zooplankton will be considered. Primary and secondary production, food chain dynamics, zooplankton ecology and the effects of marine pollution will be covered. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research program. Participation in research cruises is expected. (Not open to students with credit in 451) (Prerequisites: 311; 305 or 331)

J.L. Littlepage September-April (2-3; 2-3)

#### **BIOL 453 (1½) STRESS PHYSIOLOGY OF PLANTS**

An advanced study of the physiological responses of plants to temperature extremes, drought, salinity, radiation stress and air pollution. (Prerequisites: 331A and B or permission of instructor) Text: Fitter and Hay,

*Environmental Physiology of Plants*  
(Not offered)

January-April (3-0)

**BIOL 454 (1½) MARINE BENTHOS BIOLOGY**

The physical, chemical and geological structure and processes of the benthos-sea water interface will be explored with emphasis on nutrient chemistry and transport processes. The ecology of hard and soft substrate communities will be explored in intertidal, shelf and deep sea habitats. The trophic-dynamic structure of these communities will be described. The evolution of benthic organisms will be studied through adaptations: genetic, physiological, demographic, behavioural and morphological. (Pre-or corequisite: 311B)

V.J. Tunnicliffe

January-April (2-3)

**BIOL 455 (1½) EVOLUTION THEORY**

Historical and contemporary views of evolutionary processes and the spatial and temporal patterns they produce; topics will include genetic variation, natural selection, speciation, macroevolutionary processes and the origin of life. (Prerequisites: 200, 203, 204, 206, 207, 300) Text: Futuyma, *Evolutionary Biology*

G.A. Allen and members of the Department September-December (3-0)

**BIOL 460 (1) HONOURS SEMINAR**

Participation in seminars as arranged by the Department and the Honours Coordinator. Required of all Honours students in their fourth year of studies, as an addition to the normal 15 units. (Grading: COM, N, or F)

**BIOL 490 (1½) DIRECTED STUDIES IN BIOLOGY**

In special circumstances the Department may give permission for supervised individual studies or directed readings to fourth year students. BIOL 490 may be repeated; normally to a maximum of 3 units. (Grading: INC, Letter Grade)

490A Directed studies in botany

490B Directed studies in ecology

490C Directed studies in functional biology

490D Directed studies in marine biology

490E Directed studies in zoology

**BIOL 499 (3) THESIS OR TUTORIAL**

Research under the direction of faculty. Open to Honours students only. (Grading: INC; Letter Grade)

**MARINE SCIENCE**

The following courses in Marine Science are offered at the Bamfield Marine Station only during Summer Studies. These courses may supplement or substitute for courses listed above in the normal biology programs. Students should obtain the permission of the Department before taking one of the Marine Science courses.

**MRNE 400 (3) DIRECTED STUDIES**

A course of directed studies under the supervision of a member of faculty. The study will involve a research project approved by the supervisor in the field of interest of the student, and will be designed to take maximum advantage of the laboratory and/or field opportunities offered by the Bamfield Marine Station. (May be repeated with permission of the Department)

**MRNE 401 (3) SPECIAL TOPICS IN MARINE BIOLOGY**

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station. It is expected that the course will generally be of a specialized nature and be at a level appropriate to graduate or senior undergraduate students. (May be repeated with permission of Department)

**MRNE 402 (1½) SPECIAL TOPICS IN MARINE BIOLOGY**

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station and are prepared to offer a course extending over a three week period. This course will be of a specialized nature. (May be repeated with permission of Department)

**MRNE 410 (3) MARINE INVERTEBRATE ZOOLOGY**

A survey of marine phyla, with emphasis on the benthic fauna in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.

**MRNE 411 (3) COMPARATIVE INVERTEBRATE EMBRYOLOGY**

A comprehensive study of development of marine invertebrates available at the Bamfield Marine Station, including all major phyla and most of the minor phyla. A total of 25 or 30 lectures, covering gametogenesis, fertilization, larval development and metamorphosis of different groups will be given. Laboratory work will include methods and techniques of obtaining and handling of gametes, preparation and maintenance of larval cultures, and observations up to metamorphosis if possible. Some selected and clearly defined experiments will be performed. Efforts will be made also to study various pelagic larvae collected from the plankton. It is hoped that such a broad approach, as outlined above, will provide the student with fundamental frameworks and insights for analytical studies on the one hand, and for reproductive ecology on the other. (Credit will not be given for both 411 and BIOL 403.)

**MRNE 412 (3) BIOLOGY OF FISHES**

Classification, physiology, ecology, behaviour and zoogeography of fishes with particular emphasis on those in the marine environment of the British Columbia coast. This course will involve some field projects. (Credit will not be given for both 412 and BIOL 431.)

**MRNE 413 (3) BIOLOGY OF MARINE MOLLUSCS**

An advanced course of selected topics emphasizing functional morphology, ecology and evolution of this diverse phylum; field trips will be undertaken to survey the representative molluscs of the Bamfield region. Students will be expected to complete an independent field or laboratory study of selected molluscs. (Prerequisite: 410 or equivalent)

**MRNE 420 (3) MARINE PHYCOLOGY**

A survey of the marine algae, with emphasis on the benthic forms in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.

**MRNE 430 (3) MARINE ECOLOGY**

An analytical approach to biotic associations in the marine environment. Opportunities will be provided for study of the intertidal realm in exposed and protected areas and of beaches and estuaries in the vicinity of the Bamfield Marine Station; plankton studies and investigations of the subtidal and benthic environments by diving and dredging are envisaged. (Credit will not be given for both 430 and BIOL 406.)

**MRNE 435 (3) INTRODUCTION TO BIOLOGICAL OCEANOGRAPHY**

An introduction to the biology of the oceans, with supporting coverage of relevant physics and chemistry. Emphasis will be placed on plankton biology, community structure and life histories, and influencing environmental factors. Collections will be made from sheltered inlets, through Barkley Sound to offshore waters. The course will involve both field and laboratory studies of plankton organisms.

**MRNE 440 (3) BIOLOGY OF MARINE BIRDS**

A study of the interrelationship of birds and the marine environment; the systematics and ecological relationships, behaviour, life histories, movement and conservation of marine birds; census techniques and methods of studying marine birds in the field will be treated utilizing seabirds and marine-associated birds in the Barkley Sound region. Seabird identification, classification, morphology, plumages and molt will be examined in the laboratory. (Prerequisites: A course in Vertebrate Zoology or permission of the instructor)

**MRNE 445 (3) BIOLOGY OF MARINE MAMMALS**

A survey course covering systematics and distribution of marine mammals, their sensory capabilities and physiology, with special emphasis on the Cetacea; the course includes lectures, laboratory periods and numerous field trips in the Barkley Sound region. The course will involve an independent field study. (Prerequisite: A course in Vertebrate Zoology)

**MRNE 446 (3) COMPARATIVE ETHOLOGY**

A comparative study of marine animals (vertebrate and invertebrate) emphasizing behavioural description, underlying physiological mechanisms, the biological significance of behaviour and behavioural evolution; the course will include independent laboratory and field studies. (Credit will not be given for both 446 and BIOL 345. Prerequisites: Courses in each of Invertebrate Zoology, Vertebrate Zoology, Ecology and Physiology)

**GRADUATE COURSES****BIOLOGY**

Biology 551 and 527 will be offered every year. Students should consult the Department concerning which other courses will be offered in any particular year. All students are expected to register for 560 (seminar).

Admission to any graduate course requires prior permission of the instructor. Unless otherwise indicated, graduate courses may not be offered every year.

**BIOL 500 (1½) SELECTED TOPICS IN THE HISTORY AND PHILOSOPHY OF BIOLOGY**

Required once of all graduate students, but may be repeated more than once, as topics vary. If possible, to be taken in first winter session of graduate registration.

R.G.B. Reid

September-December

**BIOL 501T (3) CONCEPTS IN MODERN BIOLOGY FOR SCIENCE TEACHERS**

Students wishing to take this course should consult with the Department of Biology in March of the previous academic year. (Not offered)

**BIOL 509 (1-3) TOPICS IN NEUROBIOLOGY**

Neurobiology seminar. Offered as 509A (1 unit), 509B (1½ units), 509C (3 units).

G.O. Mackie

**BIOL 510 (3) ADVANCED TOPICS IN ICHTHYOLOGY**

J.E. McInerney

**BIOL 511 (1) MARINE SCIENCE SEMINAR**

Selected topics in marine biology will be dealt with in depth. (May be repeated more than once) (Grading: INC, COM)

G.O. Mackie, Coordinator

**BIOL 512 (1½) ADVANCED BENTHOS ECOLOGY**

(May be repeated once)

**BIOL 513 (3) TOPICS IN VERTEBRATE ANATOMY AND EMBRYOLOGY****BIOL 514 (1½) ADVANCED ZOOPLANKTON ECOLOGY**

(May be repeated once)

J.L. Littlepage

**BIOL 515 (1½) ECOLOGY SEMINAR**

Selected topics in ecology will be explored in depth. (May be repeated more than once) (Grading: INC, COM)

M.A.M. Bell

**BIOL 517 (1½) ADVANCED PHYTOPLANKTON ECOLOGY**

(May be repeated once)

L.A. Hobson

**BIOL 518 (1½) ELECTRON MICROSCOPY**

An introduction to the principles and basic techniques of electron microscopy emphasizing common preparative methods for transmission and scanning electron microscopy. A final report illustrating by the student's electron photomicrographs is required. (Grading: INC, COM) (Prerequisite: 344 or 417 or equivalent, and permission of the Electron Microscopy Supervisor. Enrollment is restricted to 3 students per term.)

A.R. Fontaine

**BIOL 519 (1½) ADVANCED ELECTRON MICROSCOPY**

Individual studies in advanced methods. (Grading: INC, COM) (Prerequisite: 518 or equivalent, and permission of the Electron Microscope Supervisor)

A.R. Fontaine

**BIOL 521 (1½) ADVANCED TOPICS IN MARINE AND/OR FRESHWATER ALGAE**

(May be repeated once)

A.P. Austin

**BIOL 526 (1½) TOPICS IN BIOLOGICAL ULTRASTRUCTURE**

G.O. Mackie, A.R. Fontaine

**BIOL 527 (1-3) ADVANCED TOPICS IN CELL BIOLOGY**

Seminars, discussions and laboratory work associated with recent advances in cell biology.

M.J. Ashwood-Smith or M. Paul

**BIOL 533 (3) ADVANCED TOPICS IN EMBRYOLOGY OF MARINE INVERTEBRATES**

M. Paul

**BIOL 534 (1½) PROBLEMS IN ENVIRONMENTAL MANAGEMENT**

(May be repeated once.)

**BIOL 542 (1½) SELECTED TOPICS IN CONIFER BIOLOGY**

(May be repeated once)

(Grading: INC, COM)

**BIOL 549 (1-6) INDIVIDUAL STUDY**

(May be taken in any of the following areas under the appropriate faculty member)

- 549A Advanced Mycology
- 549B Topics in Ecology
- 549C Advanced Plant Ecology
- 549D Advanced Plant physiology
- 549E Recent Advances in Insect Physiology
- 549F Recent advances in Genetics
- 549G Advanced Vertebrate Physiology
- 549H Advanced Parasitology
- 549J Plant Anatomy and Morphology
- 549K Topics in Advanced Invertebrate Zoology
- 549L Physiology of Marine Animals
- 549M Advanced Quantitative Ecology
- 549N Advanced Population Ecology

**BIOL 550 (1-6) DIRECTED STUDIES****BIOL 580 (1) SEMINAR**

Participation in a program of seminars. Required of all graduate students every year of their degree program as an addition to the normal 15 units except by Departmental permission. Shall be treated, in its grading, as the thesis or the dissertation and shall be given one unit of credit upon completion. (Grading: INC or COM)

**BIOL 570 (1½) PRINCIPLES OF ENVIRONMENTAL TOXICOLOGY**

Lectures and seminars on the fundamental biochemical physiological and genetic effects of the major environmental contaminants such as heavy metals, biocides and their metabolites and naturally occurring toxins.

M.J. Ashwood-Smith

**BIOL 571 (1½) ENVIRONMENTAL TOXICOLOGICAL HAZARD ASSESSMENT**

An intensive laboratory workshop to be given in the course of 8-10 days during May-June. Techniques for the evaluation of genetic hazards associated with environmental contaminants will be demonstrated and will include: (i) Bacterial mutation systems for carcinogen testing (Ames' Test); (ii) Quantitative mammalian cell tissue culture for toxicity testing and for the evaluation of chromosome damage (Sister Chromatid Exchange Analysis); (iii) Micronuclei and sperm abnormality assays; (iv) Preparation and use of P448/P450 microsomal enzymes; (v) Endocrine assays for "oestrogen like" compounds (e.g. DES).

M.J. Ashwood-Smith

**BIOL 599 (credit to be determined) THESIS****BIOL 699 (Credit to be determined) PH.D. DISSERTATION  
MARINE SCIENCE****MRNE 500 (1-6) DIRECTED STUDIES****MRNE 501 (3) SPECIAL TOPICS****MRNE 502 (1½) SPECIAL TOPICS**

## DEPARTMENT OF CHEMISTRY

Gerald A. Poulton, B.A., Ph.D. (Sask.), Associate Professor and Chairman of the Department

Walter J. Balfour, B.Sc. (Aberdeen), Ph.D. (McMaster), Professor

Keith R. Dixon, B.A. (Cantab.), Ph.D. (Strathclyde), Professor

Allred Fischer, B.Sc., M.Sc., Ph.D. (N.Z.), Professor

Alexander D. Kirk, B.Sc., Ph.D. (Edin.), Professor

Alexander McAuley, B.Sc., Ph.D., D.Sc. (Glasgow), C.Chem., A.R.I.C., Professor

Reginald H. Mitchell, B.A., M.A., Ph.D. (Cantab.), F.C.I.C., Professor

Robert N. O'Brien, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (Manchester), P.Eng., Professor

Stephen R. Stobart, B.Sc., Ph.D. (Nott.), Professor

Graham R. Branton, B.Sc., Ph.D. (Southampton), Associate Professor

Gordon W. Bushnell, M.A., B.Sc. (Oxon.), Ph.D. (W. Indies), Associate Professor

Thomas W. Dingle, B.Sc., Ph.D. (Alta.), Associate Professor

Wilma E. Elias, B.A., M.A. (Sask.), Ph.D. (Brit. Col.), Associate Professor

Thomas M. Fyles, B.Sc. (U. of Vic.), Ph.D. (York), Associate Professor

Sidney G. Gibbins, B.S. (Cal. Tech.), Ph.D. (Wash.), Associate Professor

Martin B. Hocking, B.Sc. (Alta.), Ph.D. (Southampton), C.Chem., F.R.S.C., Associate Professor

Wesley M. Johnson, B.Sc. (Brit. Col.), Ph.D. (Wash.), Part-time Adjunct Associate Professor (1984-85)

Kenneth J. Reimer, B.Sc., M.Sc. (Calgary), Ph.D. (W. Ont.), Part time Adjunct Associate Professor (1983-85)

Frank P. Robinson, A.B. (Fisk), Ph.D. (Alta.), Associate Professor

Paul R. West, B.Sc., Ph.D. (McMaster), Associate Professor

Peter C.F. Wan, B.Sc., Ph.D. (Tor.), Adjunct Assistant Professor (1984-87)

David E. Berry, Ph.D. (Bristol), Senior Laboratory Instructor

Terrance K. Davies, B.Sc. (U. of Vic.), Senior Scientific Assistant

Karel Hartman, L.I.R.I., B.Sc. (U. of Vic.), Senior Laboratory Instructor

Richmond H. Kirby, Administrative Officer

Nancy Lamb, B.Sc. (Hong Kong), Ph.D. (Brit. Col.), Senior Laboratory Instructor

David L. McGillivray, B.Sc. (Edin.), Ph.D. (Ottawa), Senior Scientific Assistant

Richard S. Reeve, B.Sc. (U. of Vic.), Ph.D. (Queen's), Coordinator, Cooperative Education Program

### GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 204, for graduate courses, see page 53.

### GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Chemistry offers a wide variety of programs leading to the B.Sc. degree. These are intended to provide students with the opportunity of undertaking highly specialized studies in Chemistry, or of doing a broader program with Chemistry as a focal point supplemented by other disciplines. Graduates are thus suited for a wide range of career opportunities based on a background of Chemistry.

The Honours and Major Programs are designed for those students wishing to embark on careers as professional chemists. In the Honours degree, a student undertakes an in-depth study of Chemistry with other supporting physical sciences. A feature of the Program is that the student participates in a short research project in the final year of study. The Honours Program requires 35½ units of Chemistry courses within a total of 61 units for the degree. Six units of mathematics, 3 units of physics and 3 units of another science are required corequisites. On graduation as a professional chemist the candidate may either enter employment in a variety of industries or proceed to graduate school and the higher qualifications of M.Sc. and Ph.D. The Major Program is fundamentally similar to the Honours, but provides the student with somewhat more flexibility in the choice of courses. Twenty-five and one half units of Chemistry are required, together with 6 units of mathematics, 3 units of physics and 3 units of another science as corequisites. The degree is sufficiently specialized to present an attractive chemical background to a prospective employer and to provide the opportunity for students maintaining high averages to continue to graduate school. Both these programs are suitable for students intending to enter a career in teaching at the secondary level.

The Department also offers considerable scope for students wishing to include Chemistry as part of a B.Sc. or B.A. General program. Students with this training will frequently find career opportunities in industry, both at the technical and managerial levels, in business, teaching and many other occupations. The influence of Chemistry in modern society is also considered in Chemistry 300, a course intended for nonscientists who have successfully completed at least 15 units of university credit.

### COOPERATIVE EDUCATION PROGRAMS

The Cooperative Education Program in the Faculty of Arts and Science is described on page 31.

Entry to the Chemistry Cooperative Program is restricted to students who are enrolled in an Honours or Major program in Chemistry. To enter and remain in the Chemistry Cooperative Program, students must normally maintain a B average (4.50) in Chemistry courses and overall. Students are also required to complete satisfactorily at least five work terms. Their first work term normally will be in the summer at the end of their first academic year and thereafter the year-round sequence is one of alternating four month terms of academic study and work experience. A student may at any time transfer from the Chemistry Cooperative Program to a regular Chemistry program.

#### Work Term Transcript Entries

When a Work Term is satisfactorily completed, the notation COM (Complete) will be entered on the student's academic record and transcript, together with one of the following as appropriate:

CHEM 001 (0) Coop Work Term: I

CHEM 002 (0) Coop Work Term: II

CHEM 003 (0) Coop Work Term: III

CHEM 004 (0) Coop Work Term: IV

CHEM 005 (0) Coop Work Term: V

CHEM 006 (0) Coop Work Term: VI

### COURSE REQUIREMENTS OF CHEMISTRY UNDERGRADUATE PROGRAMS

| GENERAL              | MAJOR                | HONOURS              |
|----------------------|----------------------|----------------------|
| <b>First Year</b>    |                      |                      |
| CHEM 124 or          | CHEM 124 or          | CHEM 124 or          |
| A CHEM 100/102 or    | A CHEM 100/102 or    | A CHEM 100/102 or    |
| B CHEM 101/102 or    | B CHEM 101/102 or    | B CHEM 101/102 or    |
| C CHEM 140/145 or    | C CHEM 140/145 or    | C CHEM 140/145 or    |
| D CHEM 140/102 (3)   | D CHEM 140/102 (3)   | D CHEM 140/102 (3)   |
| MATH 100/101 (3)     | MATH 100/101 (3)     | MATH 100/101 (3)     |
| Two of PHYS 110      | Two of PHYS 110      | Two of PHYS 110      |
| (or 125)/120/220 (3) | (or 125)/120/220 (3) | (or 125)/120/220 (3) |
| Other courses (6)    | Other courses (6)    | Other courses (6)    |
| (Electives; may      | (Electives; may      | (Electives; may      |
| include CHEM 231)    | include CHEM 231)    | include CHEM 231)    |
| <b>Second Year</b>   |                      |                      |
| CHEM 213 (1½)        | CHEM 213 (1½)        | CHEM 213 (1½)        |
| CHEM 224 or          | CHEM 224 or          | CHEM 224 or          |
| CHEM 245*/222        | CHEM 245*/222        | CHEM 245*/222        |
| (3 or 1½)            | (3 or 1½)            | (3 or 1½)            |
| CHEM 233 or          | CHEM 233 or          | CHEM 233 or          |
| CHEM 231/235 (3)     | CHEM 231/235 (3)     | CHEM 231/235 (3)     |
| MATH 200/201 (3)     | MATH 200/201 (3)     | MATH 200/201 (3)     |
| Other courses (4½-6) | Two of PHYS          | Two of PHYS          |
| (Electives)          | 214, 215, 216, 217   | 214, 215, 216, 217   |
|                      | (recommended)        | (recommended)        |
|                      | or three units of    | or three units of    |
|                      | 200 level or         | 200 level or         |
|                      | above science        | above science        |
|                      | courses              | courses              |
|                      | chosen from BIOC     | chosen from BIOC     |
|                      | 200, BIOL 200        | 200, BIOL 200        |
|                      | MATH 233A,           | MATH 233A,           |
|                      | MATH 233B            | MATH 233B            |
|                      | MATH 233C or         | MATH 233C or         |
|                      | other Biochemistry,  | other Biochemistry,  |
|                      | Physics, or          | Physics, or          |

|   |   |
|---|---|
| Mathematics courses with permission of department (3) | Mathematics courses with permission of department (3) |
| Other courses (3 or 1½)                               | Other courses (3 or 1½)                               |
| (Electives may include options not used above)        | (Electives may include options not used above)        |

<sup>A</sup>For students with Grade XI Chemistry and Algebra 12 or Mathematics 12 or equivalents

<sup>B</sup>For students with Grade XII Chemistry and Algebra 12 or Mathematics 12 or equivalents

<sup>C</sup>For students with at least "B" standing in Chemistry 12 and Algebra 12; these two courses satisfy the same requirements as CHEM 101/102/245

<sup>D</sup>For students with less than B- in CHEM 140

\* Omit if CHEM 145 is taken in first year.

### Third and Fourth Years

|   |   |                                  |
|---|---|----------------------------------|
| Nine additional units of chemistry in courses numbered above 300 for which the required prerequisites have been taken (9) | CHEM 316/317 or CHEM 312/318 (3)                                | CHEM 316/317 or CHEM 312/318 (3) |
| Nine units in a second area of concentration (9)  | CHEM 324/325 (or 323) (3)                                       | CHEM 324/325 (or 323) (3)        |
| Other courses (12)  | CHEM 335/338 (3)  | CHEM 335/338 (3)                 |
|   | CHEM 345/346 (3)  | CHEM 345/346 (3)                 |
|   | Any two of CHEM 411, 422, 423, (or 323), 433, 434, 444, 446 (3) | CHEM 399 (1)                     |
|   | Other courses (15)  | Other courses (3)                |

### Third Year

|   |
|---|
| Any 6 of CHEM 411, 422, 423, 433, 434, 444, 446 (9) |
| CHEM 499 (3)  |
| Other courses (3)                                   |

### Fourth Year

|   |
|---|
| Any 6 of CHEM 411, 422, 423, 433, 434, 444, 446 (9) |
| CHEM 499 (3)  |
| Other courses (3)                                   |

NOTES: 1. Courses may be taken in different sequences and in different years than those indicated provided that the co- and prerequisite requirements are satisfied. However, students must be extremely careful in planning programs that differ from the normal sequence.

2. Students considering graduate work in chemistry are advised to acquire a reading knowledge of at least one of French, German or Russian.

3. Students may not register for a course in Chemistry if they have a D grade in the prerequisite Chemistry course unless they receive written permission of the Department.

4. Glasses or face shields must be worn by all students in laboratories. These are available in the Department. Chemistry Department laboratory notebooks may be purchased in the University Bookstore.

## HONOURS

The general requirements for admission to the Third Year of an Honours Program are specified in the table above. Permission of the Department is required for admission into each of the Third and Fourth Years of the Chemistry Honours program. For this, the Department is to be consulted, by interview or by letter, no later than one month before the last day for submission of applications for admission or readmission to the University. The minimum requirement for admission to the Fourth Year is a second class average in all the work of the Third Year and also in the required courses of the Third Year Chemistry Honours Program. Honours students are advised to include an additional mathematics course among their electives. Suitable courses are Computer Science 110, 115, and Mathematics 323A/B, 330A/B.

A student in the Chemistry Honours Program is required to attain a 6.50 graduating average in order to obtain a First Class Honours degree. A first class Honours student is also normally expected to obtain at least a grade of A- in Chemistry 499 (Honours Thesis), and at least a grade point average of 6.50 in all required third and fourth year chemistry courses. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average. Failure to obtain at least a grade of B in Chemistry 499 will result in the awarding of a Major degree. A D grade in any of the required fourth year chemistry courses will normally result in the awarding of a Major degree.

## DOUBLE HONOURS

In order to qualify for First Class Honours in Chemistry, a student in a double Honours degree program which includes Chemistry as one of the areas must achieve a grade point average of at least 6.50 in all of the third and fourth year courses required for Honours Chemistry, and a grade point average of at least 6.50 in all of the third and fourth year chemistry courses, together with at least a grade of A- in Chemistry 499 (Honours Thesis). To obtain Second Class Honours in Chemistry, a student must obtain a grade point average of at least 4.00 in all of the third and fourth year courses required for Honours Chemistry and at least a grade of B in Chemistry 499. A D grade in any of the required fourth year Chemistry courses will normally result in the awarding of a Major degree in Chemistry.

## BIOCHEMISTRY OR MICROBIOLOGY and CHEMISTRY COMBINED MAJOR

Students wishing to obtain a combined major in Biochemistry or Microbiology and Chemistry should take the following program.

### First Year

|   |     |
|---|-----|
| ENGL 121/122                                    |     |
| or ENGL 115/116                                 | (3) |
| MATH 100/101                                    | (3) |
| CHEM 124 or                                     |     |
| <sup>A</sup> CHEM 100/102 or                    |     |
| <sup>B</sup> CHEM 101/102 or                    |     |
| <sup>C</sup> CHEM 140/145 or                    |     |
| <sup>D</sup> CHEM 140/102                       | (3) |
| Two of PHYS 110 (or 125)/120/220                | (3) |
| Other courses (Electives; may include CHEM 231) | (3) |

### Second Year

|                           |           |
|---------------------------|-----------|
| MICR 200                  | (3)       |
| BIOC 200                  | (1½)      |
| BIOL 200                  | (1½)      |
| MATH 200                  | (1½)      |
| CHEM 213                  | (1½)      |
| CHEM 224 or               |           |
| CHEM 245*/222             | (3 or 1½) |
| CHEM 233 or               |           |
| CHEM 231/235              | (3)       |
| Other courses (Electives) | (0 or 1½) |

### Third Year

|             |      |
|-------------|------|
| BIOC 300    | (3)  |
| MICR 302    | (1½) |
| CHEM 335    | (1½) |
| CHEM 338    | (1½) |
| CHEM 345    | (1½) |
| CHEM 346    | (1½) |
| CHEM 324    | (1½) |
| CHEM 325    | (1½) |
| BIOC 380 or |      |
| MICR 380    | (0)  |
| MICR 301    | (1½) |

### Fourth Year

|                |      |
|----------------|------|
| BIOC 401       | (1½) |
| BIOC 402       | (1½) |
| MICR 400       | (3)  |
| CHEM 422       | (1½) |
| CHEM 433       | (1½) |
| BIOL 305       | (3)  |
| BIOC 480 or    |      |
| MICR 480       | (1½) |
| CHEM 312 or    |      |
| one of 316/317 | (1½) |

<sup>A</sup>For students with Grade XI Chemistry and Algebra 12 or Mathematics 12 or equivalents

<sup>B</sup>For students with Grade XII Chemistry and Algebra 12 or Mathematics 12 or equivalents

<sup>C</sup>For students with at least B standing in Chemistry 12 and Algebra 12; these two courses satisfy the same requirements as CHEM 101/102/245

<sup>D</sup>For students with less than B- in CHEM 140

\* Omit if CHEM 145 is taken in first year.

## COMBINED PROGRAMS IN CHEMISTRY AND MATHEMATICS

For a B.Sc. degree in the Combined Chemistry and Mathematics Program students may take a Major or Honours program. These programs are not joint degrees in Chemistry and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Chemistry and Mathematics Departments and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult with their adviser prior to making their final choice of courses.

A student graduating in the combined Honours program will be recommended for a First Class degree if the student achieves a graduating average of at least 6.50 and at least a grade of B- in Chemistry 499 (Honours Thesis). A student will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 4.00 and at least a grade of B- in Chemistry 499. A student with a first class graduating average but with at least a grade of B- in Chemistry 499 will be given the option of receiving a First Class Major or a Second Class Honours degree.

### FIRST AND SECOND YEAR (Major or Honours)

|                                  |           |
|----------------------------------|-----------|
| CHEM 124 or                      |           |
| <sup>X</sup> CHEM 100/102 or     |           |
| <sup>B</sup> CHEM 101/102 or     |           |
| <sup>C</sup> CHEM 140/145 or     |           |
| <sup>D</sup> CHEM 140/102        | (3)       |
| CHEM 213                         | (1½)      |
| CHEM 224 or                      |           |
| CHEM 245* and 222                | (3 or 1½) |
| CHEM 233 or                      |           |
| CHEM 231 and 235                 | (3)       |
| Two of PHYS 110 (or 125)/120/220 | (3)       |
| C SC 110 (170) and 115 (171)     | (3)       |
| MATH 100 and 101                 | (3)       |
| MATH 110 and 210 or              |           |
| MATH 233A and 233C               | (3)       |
| MATH 200 and 201                 | (3)       |
| Other courses (Electives)        | (4½-6)    |

<sup>X</sup>For students with Grade XI Chemistry and Algebra 12 or Mathematics 12 or equivalents

<sup>B</sup>For students with Grade XII Chemistry and Algebra 12 or Mathematics 12 or equivalents

<sup>C</sup>For students with at least B standing in Chemistry 12 and Algebra 12; these two courses satisfy the same requirements as CHEM 101/102/245

<sup>D</sup>For students with less than B- in CHEM 140

\* Omit if CHEM 145 is taken in first year

### THIRD AND FOURTH YEAR (Major)

|  |      |
|--|------|
| (All courses listed below must be 300 level or above)                              |      |
| CHEM 324   | (1½) |
| CHEM 325   | (1½) |
| CHEM 345   | (1½) |
| CHEM 346   | (1½) |
| CHEM 312 (or 316 or 317)   | (1½) |
| CHEM 446   | (1½) |
| CHEM 444 (or 422)  | (1½) |
| MATH 330A and 330B   | (3)  |
| MATH 333A  | (1½) |
| One of MATH 333B or 333C, 422 or 423   | (1½) |
| MATH 325 and 326   | (3)  |
| Course chosen from the Mathematics Department in consultation with that Department | (1½) |
| Course(s) chosen in consultation with the Chemistry and Mathematics Departments    | (3)  |

### THIRD AND FOURTH YEAR (Honours)

|  |       |
|--|-------|
| (All courses listed below must be 300 level or above)  |       |
| All Chemistry courses listed under Major program plus  | (10½) |
| CHEM 399   | (1)   |
| CHEM 499   | (3)   |
| MATH 334 and 336   | (3)   |
| MATH 338   | (1½)  |
| MATH 333A and 333B or 333C   | (3)   |
| MATH 445A/B  | (3)   |
| Course(s) chosen from the Mathematics Department in consultation with the Mathematics Department | (3)   |

Some possible courses which might be used to fulfill the chosen units in the above programs are:

CHEM 306; 318; 335; 338; 422 or 444; 423; C SC 349A; 349B; MATH 352, 368A, 368B (for Honours, 325 and 326); STAT 353\*; 354\*

\* These courses have STAT 250 and 251 as prerequisites, which would have to be included in the student's program as options.

## UNDERGRADUATE COURSES

The names of faculty instructing courses, together with the required and recommended texts for each course, may be obtained from the Department.

For students whose major field lies outside the physical and biological sciences the chemistry course which is particularly suitable as an elective is Chemistry 120 (General Chemistry). Students should also note the availability of Liberal Arts 306/307 (Page 95).

*Students formerly enrolled in Chemistry who have taken courses no longer listed in the Calendar should consult the Department to determine which of the courses taken may count as prerequisites for those currently listed.*

### CHEM 100 (1½) INTRODUCTION TO CHEMISTRY

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter, aqueous ionic equilibrium; introduction to organic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 101, 103, 120, 124, or 140.) (Prerequisites: Algebra 12 (or Mathematics 12) and Chemistry 11 or their equivalents) (NOTE: The workload in this course is very heavy and it is strongly recommended that students enrolling in it take a reduced course load.) September-December (4-3)

### CHEM 101 (1½) FUNDAMENTALS OF CHEMISTRY: I

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter; introduction to organic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 100, 103, 120, 124, or 140.) (Prerequisites: Algebra 12 (or Mathematics 12) and Chemistry 12 or their equivalents. Note that 100 is available to students without Chemistry 12.)

September-December. Also January-April (3-3)

### CHEM 102 (1½) FUNDAMENTALS OF CHEMISTRY: II

Basic physical chemistry including thermodynamics, electrochemistry, and equilibrium in chemical systems; introduction to inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 103, 120, 124, or 145. Students with 100 must register in special sections of 102 which have 4 lectures a week.) (Prerequisite: 100 or 101 or 140, or 120 with permission of the Department) January-April (3-3)

### CHEM 103 (1½) CHEMISTRY FOR NURSING

The course covers general, physical and organic chemistry, with an emphasis on applications to biochemistry, and includes a laboratory illustrating the above topics. The course is specifically for students in the Nursing Program (B.S.N.), and is not for students intending to take further courses in Chemistry. (Credit will not be given for both this course and 100, 101, 102, 140 or 145.) (Prerequisite: Chemistry 11) (Not offered) September-December (3-3)

### CHEM 120 (3) GENERAL CHEMISTRY

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, and states of matter. Basic physical chemistry. Periodic, organic, surface and nuclear chemistry. This course includes a laboratory illustrating the properties of chemical systems. (Credit will not be given for both 120 and 100, 101, 140 or 145.) (Prerequisites: Chemistry 11; Algebra 12 (or Mathematics 12) is also strongly recommended. Students desiring to register in 120 but who do not have the chemistry prerequisite should consult the Department prior to registration.) September-April (3-3; 3-3)

NOTE: 120 provides a comprehensive source in General Chemistry at the first year university level and is suitable for some fields and programs at this University. However, some programs and certain preprofessional programs require 100/102 or 101/102 or 120/102 (the latter with permission of the Department).

**CHEM 140 (1½) PRINCIPLES OF CHEMISTRY**

Introduction to modern atomic structure and molecular orbital theory and their relation to chemical bonding, molecules, and states of matter; introduction to inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Designed for students with a good preparation in Chemistry and Mathematics who wish to take a challenging course in Chemistry and who feel confident in proceeding at an accelerated pace; Chemistry 140/145 satisfies the same requirements as 101/102/245.) (Credit will not be given for both this course and any of 100, 101, 103, 120, or 124.) (Prerequisites: At least a B standing in Chemistry 12 and Algebra 12 or their equivalents. If there is any uncertainty, a placement examination may be given. Pre- or Corequisite: MATH 100) September-December (3-3)

**CHEM 145 (1½) PRINCIPLES OF PHYSICAL AND INORGANIC CHEMISTRY**

Basic physical chemistry including thermodynamics, electrochemistry, properties of solutions, phase equilibria and chemical kinetics; emphasis will be on the application of these principles and those in 140 to inorganic chemistry. The laboratory portion of this course emphasizes physical measurement applied to chemical systems. (140/145 satisfy the same requirements as 101/102/245.) (Prerequisites: 140 with a grade of B- or better; students with a grade less than B- in 140 should enroll in 102. Pre- or corequisite: MATH 101.) January-April (3-3)

**CHEM 213 (1½) PRACTICAL SPECTROSCOPY**

Elementary theory and applications of infrared, UV-visible, mass, and nuclear magnetic resonance spectroscopy to inorganic and organic compounds. (Credit will not be given for both this course and 233 or 314 or 316.) (Pre- or corequisite: 231) September-December (3-3)

**CHEM 222 (formerly half of 224) (1½) INTRODUCTION TO INORGANIC CHEMISTRY**

Fundamental concepts of inorganic chemistry, with emphasis on periodicity, structure, bonding and reactivity; principles will be illustrated using the chemistry of selected groups of elements. (Prerequisite: 102 or 145) January-April. Also May-August (3-4)

**CHEM 231 (formerly half of 230/233) (1½) INTRODUCTORY ORGANIC CHEMISTRY**

Functional group survey; acyclic stereochemistry; mechanism of substitution reactions; synthesis and reactions of alcohols, halides, and others; carbonyl addition reactions; carboxylic acids and their derivatives; overview of synthesis. This course is a prerequisite for all other courses in organic chemistry. (Credit will not be given for both this course and either 230 or 233.) (Prerequisite: 100 or 101 or 140, or 120 with permission of the Department) September-December. Also January-April (3-0)

**CHEM 232 (formerly half of 230) (1½) ORGANIC CHEMISTRY FOR HEALTH AND BIOLOGICAL SCIENCES**

Conformations of cyclic systems; natural products; carbohydrates, amino acids, proteins, terpenoids, steroids; alkenes, dienes and benzenes; aldol condensations, parallels in biological systems; fatty acid biosynthesis; introduction to spectroscopy; the course is intended for students in biology and those preparing to enter professional schools such as Medicine, Pharmacy, Dentistry, Forestry (see page 26) and Nursing. (Credit will not be given for both this course and any of 230 or 233 or 235.) (Prerequisite: 231. Pre- or corequisite: 102 or 145) January-April (3-4)

**CHEM 235 (formerly half of 233) (1½) ORGANIC CHEMISTRY**

Stereochemistry of cyclic compounds; synthesis and reactions of cyclic ethers (sugars), epoxides, alkenes and alkanes; dienes; benzenes, electrophilic aromatic substitution, arenes; phenols, amines, amino acids; a continuation of 231 intended for Honours and Major Chemistry students. CHEM 235 is part of a sequence incorporating 335 and 338 and should be taken by any student contemplating further courses in organic chemistry. (Credit will not be given for both this course and any of 230 or 232 or 233.) (Prerequisite: 231. Pre- or corequisite: 213) January-April. Also May-August (3-4)

**CHEM 245 (formerly half of 224) (1½) INTRODUCTORY PHYSICAL CHEMISTRY**

Basic physical chemistry including thermodynamics, electrochemistry, properties of solutions, phase equilibria, and chemical kinetics; emphasis will be placed on the extension and application of the theory and principles introduced in Chemistry 100, 101, 102 and 140; the laboratory

portion of the course emphasizes physical measurement applied to chemical systems. (Credit will not be given for both this course and 145.) (Prerequisites: 102; MATH 100 and 101, or 102 with at least a B grade) September-December (3-4)

**CHEM 300 (3) CHEMISTRY IN MODERN SOCIETY**

This course is intended for *nonscientists*, and will consist of lectures, demonstrations, class experiments and discussions. This course is designed to show the relevance of chemistry to modern life by examination of such topics as drugs, agricultural and military chemicals, energy and petroleum, plastics, soaps and detergents, food, air and water pollution. Students will be encouraged to keep abreast of controversial chemical issues by discussions which will place emphasis on the correct application of the scientific facts as opposed to misleading applications or speculations. A detailed syllabus is available from the Department. (Prerequisite: Successful completion of at least 15 units of university credit. This course may be appropriate for students who have taken a first year chemistry course, but who do not plan on taking further courses in chemistry. Credit may not be obtained for both 300 and any other Chemistry course numbered 200 and above.) September-April (3-0;3-0)

**CHEM 302 (1½) INDUSTRIAL CHEMISTRY WITH SPECIAL REFERENCE TO AIR POLLUTION**

Chemical principles used in the manufacture of commodity chemicals, fertilizers, explosives, and in the mining and smelting industries. Problems and methods of emission control, by-product utilization and waste disposal, with particular reference to gaseous discharges. Elements of gaseous dispersal procedures and limitations, air pollution chemistry. (NOTE: This course is primarily designed for students who are not majoring in Chemistry. Credit will not be given for both 302 and 306.) (Prerequisite: 102 or 145) September-December (3-0)

**CHEM 303 (1½) INDUSTRIAL CHEMISTRY WITH SPECIAL REFERENCE TO WATER POLLUTION**

Chemical principles used in the petroleum production and refining, petrochemical, pulp and paper, and fermentation industries. Emission problems and their control, by-product utilization and waste disposal into soil, water and air. Assimilatory capacities, eutrophication, and natural and manmade control and recovery procedures for water pollutants. (NOTE: This course is primarily designed for students who are not majoring in Chemistry. Credit will not be given for both 303 and 306.) (Prerequisite: 231. Pre- or corequisite: 232 or 235) January-April (3-0)

**CHEM 306 (1½) INTRODUCTION TO THE CHEMICAL PROCESS INDUSTRIES**

A comparative discussion of a number of chemical industries and the details of their processes. To include unit operations, unit processes and economics. (NOTE: This course is primarily designed for students taking a Chemistry program. Credit will not be given for both 306 and 203 or 303.) (Prerequisites: 231 and 245. Pre- or corequisites: 222 and 232 or 235) January-April (3-0)

**CHEM 312 (1½) INTRODUCTORY QUANTITATIVE ANALYSIS**

An introduction to the basis of quantitative analytical chemistry, treatment of data and chemical equilibrium. Solution equilibria will be used as the chemical basis for some of the most commonly used chemical instrumental methods, namely potentiometry, chromatography, ultraviolet/visible and atomic absorption spectrometry. (Normally, credit cannot be obtained for 312 and 316 or 317.) (Prerequisite: 145 or 245, or 232 or 235 with permission of Department) September-December. Also May-August (3-3)

**CHEM 318 (1½) INSTRUMENTAL TECHNIQUES OF ANALYSIS**

Theory and applications of the most generally applied methods of chemical analysis such as infrared, raman and emission spectroscopy, polarography, high performance liquid chromatography, radiochemical analysis etc. (Normally, credit cannot be obtained for 318 and 316 or 317.) (Prerequisite: 213 and 312) January-April (3-3)

**CHEM 323 (1½) INTRODUCTION TO ORGANOMETALLIC CHEMISTRY**

Structure and reactivity of organometallic compounds of the *s* and *p* block metals. Transition metal carbonyl chemistry. Hydrocarbon complexes of the transition metals: M.O. description of bonding, reactivity of coordinated polycycloolefins. Transition metal alkyls and allyls, insertion and oxidative addition reactions, organotransition metal complexes in catalysis. (Prerequisite: Chemistry 222) January-April (2-3-2)

**CHEM 324 (1½) TRANSITION METAL CHEMISTRY:A**

Basic symmetry considerations and group theory in transition metal chemistry. Detailed chemistry of the later transition elements (Fe-Zn groups). Thermodynamic considerations in inorganic reactions. (CHEM 324 and 325 may be taken in either order.) (Prerequisite: One of the following combinations: 213, 222 and 245; 213, 222 and 145; or 224) September-December (3-3)

**CHEM 325 (1½) TRANSITION METAL CHEMISTRY:B**

Magnetic properties and crystal field and molecular orbital theories of transition metal compounds. Detailed chemistry of the early transition metals (Ti-Mn groups). Kinetics and mechanisms in reactions of complex ions. Electronic spectra of transition metal compounds. (CHEM 325 and 324 may be taken in either order.) (Prerequisite: One of the following combinations: 213, 222 and 245; 213, 222 and 145; or 224) January-April (3-3)

**CHEM 335 (1½) SYNTHETIC METHODS IN ORGANIC CHEMISTRY**

Spectroscopy, design of syntheses in aliphatic, aromatic and some biomolecules. Aliphatic systems: carbanions, conjugated carbonyl compounds, amines in syntheses, functional group modifications. Aromatic systems; aromatic substitution processes, reactive substrates (phenols, amines), polynuclear aromatics. Biomolecules: synthesis and modification of heterocycles and carbohydrates (CHEM 335 and 338 may be taken in either order.) (Prerequisite: 213 and 235, or 232 with permission of the Department) January-April (3-3)

**CHEM 336 (1½) INTRODUCTORY POLYMER CHEMISTRY**

Principles and practice of polymerization, copolymerization and basic polymer kinetics. Structure property relationships for typical organic polymer groups. Polymer technology. The laboratory is designed to acquaint students with procedures for polymer identification, polymerization/depolymerization process, determination of physical properties, and simple fabrication. (Prerequisite: 232 or 235) September-December (3-3)

**CHEM 338 (1½) SELECTED TOPICS IN ORGANIC STRUCTURE AND REACTIVITY**

Methods of studying mechanisms, reactive intermediates, rearrangements and neighbouring group effects, dissociative and associative pathways, organic photochemistry, electrocyclic reactions. (CHEM 338 and 335 may be taken in either order.) (Prerequisite: 235) September-December (3-3)

**CHEM 345 (1½) THERMODYNAMICS, SOLUTIONS AND ELECTROCHEMISTRY**

Chemical thermodynamics. Properties of solutions. Electrochemistry. (CHEM 345 and 346 may be taken in either order.) (Prerequisites: 245 and MATH 200) January-April (3-3)

**CHEM 346 (1½) GASES, LIQUIDS AND CHEMICAL KINETICS**

Properties of gases and liquids. Kinetic molecular theory. Phase equilibria. Chemical kinetics. (CHEM 345 and 346 may be taken in either order.) (Prerequisites: 245 and MATH 200) September-December. Also May-August (3-3)

**CHEM 399 (1) RESEARCH PARTICIPATION AND SEMINAR**

Introduction to Departmental research. Seminar report. For Chemistry Honours students only. (Grading: COM, N, or F) September-December (3-0)

**CHEM 411 (1½) ADVANCED INSTRUMENTAL ANALYSIS**

Advanced topics in instrumental analysis which will include some of the following: mass spectrometry, x-ray spectroscopy, advanced electrochemical methods, EPR, etc. Included will be a discussion of electronic data acquisition and manipulation as used in modern chemical instrumentation. (Prerequisite: 318, or 316 and 317) January-April (3-3)

**CHEM 422 (1½) PHYSICAL METHODS IN INORGANIC SYSTEMS — BIO-INORGANIC CHEMISTRY**

A general survey of the chemistry of the solid state. Crystallographic methods. Description of the major structural types. Metal ions in biological systems: copper, cobalt, zinc, and iron in electron transport, peptidase and group transfer reactions. Model systems, mechanisms. (Prerequisites: 324 and 325) January-April (3-3)

**CHEM 423 (1½) ORGANOMETALLIC CHEMISTRY**

Organometallic Chemistry and transition metal carbonyl chemistry. Chemistry of ionic, Sigma and Pi, and electron deficient bonds between

organic groups and metals or metalloids. (Prerequisites: 324 and 325) September-December. Also May-August (3-3)

**CHEM 433 (1½) ORGANIC STRUCTURE DETERMINATION: THE CHEMISTRY OF NATURAL PRODUCTS**

Elucidation of the structures of organic compounds from spectral information. The chemistry of several classes of natural products, including examples demonstrating structural elucidation, synthesis, and biogenesis. (Prerequisites: 335 and 338) September-December. Also May-August (3-3)

**CHEM 434 (1½) PHYSICAL ORGANIC CHEMISTRY**

Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity. (Prerequisites: 335 and 338) January-April (3-3)

**CHEM 444 (1½) ADVANCED PHYSICAL CHEMISTRY**

Mathematical treatment of chemical processes; statistical thermodynamics, theories of reaction and their application to solution and gas phase reactions. Theory of electrolyte solutions. Electrode kinetics. Thermodynamics and phenomenology of surfaces. Heterogeneous catalysis. Colloidal systems. (Prerequisites: 345 and 346 and MATH 200) January-April (3-3)

**CHEM 446 (1½) QUANTUM CHEMISTRY**

The basic principles of quantum mechanics and their application to simple physical models and to chemical systems, including the use of semiempirical methods. Molecular spectroscopy and symmetry. (Prerequisites: 213 and 245, and MATH 201) September-December (3-3)

**CHEM 490 (1½) DIRECTED STUDIES**

In special cases the Department of Chemistry may give permission for individual studies and directed readings to be taken as 490. CHEM 490 may be taken more than twice only in different areas of chemistry.

|      |                                   |
|------|-----------------------------------|
| 490A | Readings in Analytical Chemistry  |
| 490B | Studies in Analytical Chemistry   |
| 490C | Readings in Inorganic Chemistry   |
| 490D | Studies in Inorganic Chemistry    |
| 490E | Readings in Organic Chemistry     |
| 490F | Studies in Organic Chemistry      |
| 490G | Readings in Physical Chemistry    |
| 490H | Studies in Physical Chemistry     |
| 490J | Readings in Theoretical Chemistry |
| 490K | Studies in Theoretical Chemistry  |

**CHEM 499 (3) THESIS**

Experimental research under the direction of faculty. This course is designed primarily for Chemistry Honours students, but Chemistry Major students may be granted permission by the Department to take the course as an elective. (Grading: Letter grade; INP) (0-6;0-6)

**GRADUATE COURSES**

*Students should consult the Department to determine the graduate courses offered in any particular year.*

**CHEM 509 (1) SEMINAR****CHEM 510 (1½) INSTRUMENTAL TECHNIQUES**

**CHEM 522 (1½-3) CURRENT TOPICS IN INORGANIC CHEMISTRY**  
(Offered as 522A, 522B, 522C, 522D)

**CHEM 523 (3) ORGANOMETALLIC CHEMISTRY****CHEM 525 (3) THEORETICAL INORGANIC CHEMISTRY****CHEM 526 (1½-3) TOPICS IN ADVANCED INORGANIC CHEMISTRY****CHEM 533 (3) ORGANIC SYNTHESIS****CHEM 536 (3) CARBOHYDRATE CHEMISTRY****CHEM 538 (3) BIOGENESIS OF NATURAL PRODUCTS****CHEM 545 (1½) REACTION KINETICS AND REACTION RATE THEORY****CHEM 546 (1½) SPECTROSCOPY AND THE CHEMISTRY OF EXCITED STATES****CHEM 550 (1½) ELEMENTARY APPLICATIONS OF GROUP THEORY****CHEM 554 (1½) APPLIED QUANTUM MECHANICS****CHEM 555 (1½) STATISTICAL MECHANICS****CHEM 556 (1½-3) TOPICS IN ADVANCED PHYSICAL CHEMISTRY**

**CHEM 565 (3) THEORY AND APPLICATION OF NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY**

**CHEM 566 (3) CHEMICAL CRYSTALLOGRAPHY**

**CHEM 577 (3) NUCLEAR AND RADIO CHEMISTRY**

**CHEM 590 (1-3) DIRECTED STUDIES**

**CHEM 599 (Credit to be determined but normally 9 units in this Department). M.SC THESIS**

**CHEM 630 (1½-3) CURRENT TOPICS IN ORGANIC CHEMISTRY**  
(Offered as 630A, 630B, 630C, 630D)

**CHEM 633 (1½) TOPICS IN ADVANCED ORGANIC CHEMISTRY**

**CHEM 634 (3) ADVANCED PHYSICAL ORGANIC CHEMISTRY**

**CHEM 636 (3) CHEMISTRY OF HETEROCYCLIC COMPOUNDS**

**CHEM 638 (3) CHEMISTRY OF NATURAL PRODUCTS**

**CHEM 644 (1½-3) CURRENT TOPICS IN PHYSICAL CHEMISTRY**  
(Offered as 644A, 644B, 644C, 644D)

**CHEM 645 (1½) ADVANCED ELECTROCHEMISTRY**

**CHEM 699 (Credit to be determined, but normally 27 units) PH.D. DISSERTATION**

## DEPARTMENT OF CLASSICS

John P. Oleson, B.A., M.A., Ph.D. (Harvard), Professor and Chairman of the Department

David A. Campbell, M.A. (Glasgow), M.A. (Oxon.), Professor

Peter L. Smith, B.A. (Brit. Col.), M.A., Ph.D. (Yale), Professor

Keith R. Bradley, B.A., M.A. (Sheffield), B.Litt. (Oxon.), Associate Professor

John G. Fitch, B.A., M.A. (Cantab.), Cert. Ed. (Leeds), Ph.D. (Cornell), Associate Professor

Samuel E. Scully, B.A., M.Litt. (Bristol), Ph.D. (Tor.), Associate Professor

Gordon S. Shrimpton, B.A., M.A. (Brit. Col.), Ph.D. (Stanford), Associate Professor

J. Donald O'Brien, B.Sc. (Loyola), Ph.D. (Michigan), B.A. (McGill), M.A., (Tor.), Visiting Assistant Professor (1984-85)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. degree, see page 205, for graduate courses, see page 57.

### GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Classics offers the student an opportunity to study Classics at any of three levels of concentration: General, Major and Honours Programs.

The General Program does not necessarily involve language study. The Major and Honours Programs do include the study of classical languages. For the Major and Honours Programs, the Department accommodates three kinds of emphasis in the study of classical languages: ancient Greek, Latin and Classics (study of both Latin and Greek). It is supposed that students following the General or Major Program will be taking advanced courses in other departments. Students following an Honours Program with the Classics Department should note that it may be possible for them to complete an honours program in another field, if they have the joint consent of that department and the Department of Classics.

Students are welcome at any time to discuss their programs with members of the Department and are encouraged to do so as early as possible in the course of their studies at the University. The planning of one's program is important, since failure to complete prerequisites for advanced courses may seriously limit the type of degree open to a student.

#### General:

- (a) 3 units of Departmental offerings normally at the 100 or 200 level.
- (b) 9 units of Departmental offerings numbered 300 or above.

#### Major in Classical Studies:

- (a) 6 units of Greek and/or Latin language at the 100 or 200 level.
  - (b) 3 units of Classical Studies normally at the 100 or 200 level.
  - (c) 9 units of Classical Studies at or above the 300 level.
  - (d) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
- 24 Total

#### Major in Classical Studies: Ancient History Emphasis

- (a) 6 units of Greek and/or Latin language at the 100 or 200 level.
- (b) 3 units of Classical Studies normally at the 100 or 200 level.
- (c) 12 units of Ancient History as follows:  
CLAS 330, 480A and 490;  
CLAS 340, 480C and 490.

- (d) 3 units of Departmental offerings at or above the 300 level.
- 24 Total

N.B. Students interested in majoring in Classical Studies: Ancient History Emphasis are urged to consult the Majors adviser in their first year if possible. Majors must obtain the Adviser's approval for their third and fourth year programs.

#### Major in Classics:

##### 1. Greek Emphasis:

- (a) GREE 100
  - (b) GREE 200
  - (c) GREE 300 (corequisite or prerequisite for other advanced Greek courses).
  - (d) 3 units of Departmental offerings normally at the 100 or 200 level.
  - (e) 6 units of Greek or 3 of Latin and 3 of Greek at or above the 300 level.
  - (f) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
- 24 Total

##### 2. Latin Emphasis:

- (a) LATI 100
  - (b) LATI 200
  - (c) LATI 300 (corequisite or prerequisite for other advanced Latin courses).
  - (d) 3 units of Departmental offerings normally at the 100 or 200 level.
  - (e) 6 units of Latin or 3 units of Latin and 3 of Greek at or above the 300 level.
  - (f) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
- 24 Total

#### Honours:

Students who are of good general standing, and who have achieved a first class or high second class standing in Latin and/or Greek at the 100 and 200 level, may be admitted, with Departmental permission, into an intensified Honours program. The Honours program features the core courses LATI/GREE 300 and 400. These courses combine reading with advanced study of grammar and syntax. Translation at sight will be done regularly, and some composition may be undertaken.

#### First and Second Years:

- (a) GREE 100
- (b) LATI 100
- (c) LATI and/or GREE 200

NOTE: CLAS 100 is strongly recommended; ENGL 121, 122 and any English course at 200 level are recommended.

#### Third and Fourth Years:

Required courses in the Third and Fourth years will normally not exceed 24 units out of the total program of 30-36 units. Requirements listed below may be completed in any year by a student who has the prerequisites.

#### Greek Honours:

- (a) GREE 300
- (b) GREE 400
- (c) 9 additional units in Greek numbered above 300
- (d) LATI 300
- (e) CLAS 330 or 3 units of History chosen from GREE 390, 490 and CLAS 480A.

**Latin Honours:**

- (a) LATI 300
- (b) LATI 400
- (c) 9 additional units in Latin numbered above 300
- (d) GREE 300
- (e) CLAS 340 or 3 units of History chosen from LATI 390, 490 and CLAS 480C.

**Classics Honours:**

- (a) GREE 300
- (b) GREE 400
- (c) LATI 300
- (d) LATI 400
- (e) 9 additional units in Greek and/or Latin at or above the 300 level.
- (f) CLAS 330 or 3 units of Greek History chosen from GREE 390, 490 and CLAS 480A.
- (g) CLAS 340 or 3 units of Roman History chosen from LATI 390, 490, and CLAS 480C.

NOTE: It is recommended that all graduating Honours students acquire a reading knowledge of German, French, or Italian.

*Recommended* as an elective to Third and Fourth Year General. Major and Honours students: Liberal Arts 306/307.

To obtain a First Class Honours Degree a student must achieve (1) a graduating average of at least 6.50, (2) a grade point average of at least 6.50 in those Departmental courses at the 300 and 400 level that are required for the degree program, and (3) a grade of at least B+ in any required 400 level language course.

To obtain a Second Class Honours Degree a student must achieve (1) a graduating average of at least 3.50, (2) a grade point average of at least 3.50 in those Departmental courses at the 300 and 400 level that are required for the degree program, and (3) a grade of at least C+ in any required 400 level language course.

A student who fails to meet Departmental requirements for first class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major Degree. A student who fails to meet Departmental requirements for second class standing but has a second class graduating average will be offered a Second Class Major Degree.

**Directed Reading/Study Courses**

Subject to the availability of faculty and in consideration of student demand, the above courses will be offered from time to time under the designated headings A, B, C, etc. in the regular winter session. Outstanding students who may wish to undertake these courses as Summer Studies courses should apply to the Department for permission. Each subdivision of Greek and Latin 390 and 490 is considered a distinct course and cannot be taken twice for credit. Students who wish to explore an area of ancient literature in some depth should choose carefully from Departmental offerings.

**UNDERGRADUATE COURSES****CLASSICAL STUDIES**

**A knowledge of the Greek and Latin languages is not required for the following courses.**

CLAS 100 is designed primarily as an elective for students in all fields. Any student in Second Year who has successfully completed 100 should take either a course in Latin or Greek or a Classical Studies course at the 200 or 300 level. *Any student in Second Year may register for courses in Classical Studies at the 300 level. CLAS 100 may not be taken by students who have already received credit for any courses in Classical Studies at the 300 level.*

Appropriate credit in the Department of History may be given for CLAS 330 or 340 or 480A or 480C. PHIL 421 and 422 are acceptable for credit in all programs in the Department of Classics in lieu of any 400 level course in Classical Studies.

**CLAS 100 (3) GREEK AND ROMAN CIVILIZATION**

An approach to the civilization of Greece and Rome through the evidence of literature, history, and archaeology. Attention will be focused upon those aspects of ancient cultural and intellectual growth that are of significance in the western tradition. Emphasis will be placed upon the Minoan and Mycenaean civilizations, 5th century Athens, and Augustan Rome. Essays will be required and there will be a written examination. Readings will include Homer's *Iliad* and *Odyssey*, selections from Herodotus and Thucydides, Sophocles' *Oedipus The King* and other representative Greek dramas, *Phaedo* of Plato, Livy, *The Early History of Rome*, Vergil's *Aeneid* and part of Ovid's *Metamorphoses*, and other representative texts.

P.L. Smith

September-April (3-0;3-0)

**CLAS 200 (1½) MYTHOLOGY OF GREECE AND ROME**

A study of the origins of classical myth, its expression in the literature and art of ancient Greece, and its further development in the Roman experience. Topics will include cosmic and divine myth; heroic saga; the influence of classical myth on later European culture. Consideration will be given to various modern systems of analysis and interpretation. Texts: Hesiod, *Theogony*; Euripides, *Bacchae*; Ovid, *Metamorphoses*; Morford and Lenardon, *Classical Mythology*

J.G. Fitch

September-December (3-0)

**CLAS 250 (1½) THE CONTRIBUTION OF GREEK AND LATIN TO THE ENGLISH LANGUAGE**

Out of 20,000 common words in English, 10,000 came from Latin directly or through French. The Greek element is also impressive, particularly in the ever-expanding vocabulary of science. Among topics studied will be the Greek script, principles of transliteration, the formation of nouns, adjectives and verbs, hybrid words, neologisms and semantic changes.

P.L. Smith

January-April (3-0)

**CLAS 300 (1½) CLASSICAL EPIC**

A study of Greek and Roman epic poetry. Particular attention will be paid to Homer's *Iliad* and Vergil's *Aeneid* and their place within the epic tradition. Students will be expected to read Homer's *Odyssey*. Selections of some of the following authors will also be studied: Apollonius of Rhodes and Valerius Flaccus (for the Golden Fleece legend), Statius (for the "Seven Against Thebes"), Lucan (for the epic on Caesar and Pompey), Claudian (for the Rape of Persephone) and Quintus of Smyrna (for the continuation of Homer's *Iliad*). (Prerequisite: 100 or permission of the Department) Texts: Homer's *Iliad* and *Odyssey* (Lattimore's translation preferred); Vergil's *Aeneid* (Copley's translation preferred); others to be announced.

September-December (3-0)

**CLAS 301 (formerly 201) (1½) TRADITION AND ORIGINALITY IN CLASSICAL LITERATURE**

A comparative study of the content and form of major works by Greek and Roman writers. The course will concentrate on the important genre of didactic poetry, together with one or more genres to be chosen from the following: biography, philosophy, lyric poetry, tragedy, pastoral poetry, oratory. The following will be among the topics discussed: What part does imitation or the adaptation of traditional material play in classical literature? How can a creative writer be original while working within a strong tradition? Texts for didactic: Hesiod, *Works and Days*; Lucretius, *The Ways Things Are*; Vergil, *Georgics*; Ovid, *The Art of Love*. Texts for other genres: to be announced.

J.G. Fitch

January-April (3-0)

**CLAS 320 (1½) GREEK TRAGEDY**

The origins and developments of tragic drama in ancient Greece. The study, in English translation, of representative plays of Aeschylus, Sophocles and Euripides. (Prerequisite: None; 100 or 200 or 301 recommended)

(Not offered)

(3-0)

**CLAS 322 (formerly part of 321) (1½) GREEK AND ROMAN DRAMA**

Special attention will be given to the various forms of Greek comic and nontragic drama and their development in the Roman world. Major emphasis will be on Aristophanes, Euripides, Menander, Plautus and Terence. Study of Roman drama may include analysis of representative plays of Seneca. (Prerequisites: None; 100 or 200 or 301 or 320 recommended)

(Not offered)

(3-0)

**CLAS 330 (3) GREEK HISTORY**

Early Aegean civilizations; the rise of the Greek city-state, with special emphasis on the political, economic, and cultural achievements of the 5th and 4th centuries B.C.; the Hellenistic world. (Outside reading includes selected works listed on the biographical sheets distributed at the beginning of lectures. One essay is required in the first term and one in the second term.) Texts: Bury-Meiggs, *A History of Greece*; Plutarch, ed. Edmund Fuller, *Lives of the Noble Greeks*; Herodotus, *The Histories*; Thucydides, *The History of the Peloponnesian War*

G.S. Shrimpton

September-April (3-0; 3-0)

**CLAS 335 (1½) WOMEN AND THE FAMILY IN CLASSICAL ANTIQUITY**

A survey of Greek and Roman attitudes towards the place of women and

the family in ancient society, and comparison of traditional ideas with historical reality; particular topics studied will depend on the interests of the instructor, but may include the following: the role of women in law, religion, and the economy; family structure and concepts of love and affection; marriage and childbearing practices. (Prerequisite: None; 100 or 300 or 340 recommended) Texts: Readings from Greek and Roman authors in translation, and secondary sources recommended by the instructor

K.R. Bradley September-December (3-0)

#### **CLAS 340 (3) ROMAN HISTORY**

A survey of Roman history from earliest historical times until the age of Constantine. Emphasis falls on the creation of Rome's empire, the transition from government by senate to rule by emperor, and the nature of Roman imperialism.

(Not offered) September-April (3-0; 3-0)

#### **CLAS 345 (1½) SLAVERY IN THE ROMAN WORLD**

Introduction to the fundamental importance of slavery as a component part of Roman society from c.250 B.C. to c.A.D. 300, a period in which Rome was a true slave society. Representative texts from classical authors will be examined in order to ascertain the main characteristics of Roman slavery; and students will be expected to conduct their own research topics. Some comparison of ancient (Greek and Rome) with modern slavery will be encouraged.

(Not offered) (3-0)

#### **CLAS 371 (1½) ART AND ARCHITECTURE OF ANCIENT GREECE AND THE AEGEAN**

An introduction to art and architecture in Greece and the Aegean from the Early Bronze Age through the Hellenistic period. Architecture, sculpture, and the minor arts are examined as evidence for cultural attitudes towards man, the gods, the physical world, and the exploration of form, color, and movement. Emphasis is placed on the careful discussion of selected monuments illustrated through slides, casts, and photographs. (No prerequisite) (Credit will not be given for both 371 and HA 316.)

G.S. Shrimpton September-December (3-0)

#### **CLAS 372 (1½) ART AND ARCHITECTURE OF THE ROMAN WORLD**

A survey of Roman art and architecture relating the political and social development of the Roman people to their artistic expression. After an examination of Etruscan art and architecture for its formative influence on Roman attitudes, Republican and Imperial Roman art are discussed in the context of historical events. Topics include the special character of Roman art, Hellenized and Italic modes of expression, portraiture, historical reliefs, function in art, architectural space and city planning. (No prerequisite) (Credit will not be given for both 372 and HA 317.)

J.P. Oleson January-April (3-0)

#### **CLAS 375 (1½) CITIES AND SANCTUARIES OF THE ANCIENT WORLD**

An examination of selected Greek, Etruscan and Roman city and sanctuary sites in an evaluation of ancient achievements in sacred and secular architecture, urban planning, and sanctuary development. Emphasis will be placed on the changing response to man's needs for an artificial framework for living, along with the natural resources of the environment in antiquity. Each site will be examined by means of illustrated lectures, and careful consideration will be given to both the archaeological record and the ancient literary sources. (Offered alternately with 376)

(Not offered) (3-0)

#### **CLAS 376 (1½) ANCIENT SCIENCE AND TECHNOLOGY**

An introduction to the scientific thought of the Greek and Roman world with special reference to applied technology. Evidence will be drawn from both ancient authors and archaeological remains from the Archaic period through the late Empire, with emphasis on the growth and capabilities of Roman Technology. Special topics will include machinery and gadgets, mass production, engineering, nautical technology, labour, medicine, and geography. (Offered alternately with 375)

J.P. Oleson January-April (3-0)

#### **CLAS 379 (PHIL 379) (formerly one-half of 207) (1½) EARLY GREEK HISTORICAL AND PHILOSOPHICAL THOUGHT**

A study of the transition from the prescientific, mythical world view to the more "scientific" ways of explaining the nature of the cosmos, man's place in it, and the course of human history. An attempt will be made to assess the intellectual and social significance of this development by placing in their historical context the writings of the philosophers and

historians from the early 6th Century to the time of Socrates and the Sophists. Some attention will also be given to the literature and art of the period. Taught jointly by members of the Classics and Philosophy Departments.

(Not offered) (3-0)

#### **CLAS 380 (1½) THE LIFE AND TIMES OF SOCRATES**

An examination of a critical moment in Greek intellectual and political life, as seen from various points of view. Topics include: the teaching methods of Socrates and the Sophists, the political background of his trial, the religious and social questions involved, and types of Socratic literature. The approach to the course will not be primarily philosophical; rather, an attempt will be made to see why his challenge to conventional Athenian morality so deeply influenced his fellow citizens, and to explain why he appears as one of the most fascinating personalities of world history. Texts: Aristophanes *Clouds*, Plato *Euthyphro*, *Apology*, *Crito*, *Protagoras*, Xenophon *Memoirs of Socrates* and selections from other authors.

(Not offered) (3-0)

#### **CLAS 381 (1½) ANCIENT RELIGIONS**

An introduction to religious thought and practice with particular reference to the Roman world. Some consideration will be given to religion in major Latin writers such as Cicero, Lucretius, Catullus, Tibullus, Propertius, Vergil, Horace and Ovid. There will be a brief review of Judaism and Christianity in the early Empire. Exotic religions — Mithraism, the mysteries of Cybele, the rites of the Druids, the cult of Isis and Osiris — will be studied.

September-December (3-0)

#### **CLAS 480 (1½) SEMINAR IN ANCIENT HISTORY AND ARCHAEOLOGY**

The Department will offer no more than two of the following each year: 480A Seminar in Greek History; 480B Topics in Greek Art and Archaeology; 480C Seminar in the History of the Roman World; 480D Topics in Roman Art and Archaeology. (Prerequisite or corequisite: for 480A, 330; for 480B, 371; for 480C, 340; for 480D, 372; or, in each case, permission of the Department)

480C K.R. Bradley September-December (2-0)

#### **CLAS 490 (1½) DIRECTED STUDY IN GREEK HISTORY**

Intensive study of certain problems in Greek history. Students will be expected to prepare an extended research paper, drawing on both primary and secondary sources. Introduction to epigraphy, numismatics, and papyrology where appropriate.

#### **CLAS 491 (1½) DIRECTED STUDY IN ROMAN HISTORY**

Intensive study of certain problems in Roman history. Students will be expected to prepare an extended research paper, drawing on both primary and secondary sources. Introduction to epigraphy, numismatics and papyrology where appropriate.

#### **CLAS 495 (3) ARCHAEOLOGY FIELD WORK SEMINAR**

An introduction to the methods and techniques of Classical Archaeology through participation in an excavation; introductory lectures will be arranged. (Prerequisite: Permission of the Department. Interested students should contact the department during the Winter Session.) Texts: Texts and requirements to be determined by the instructor according to circumstances of the excavation and student preparation

(Not offered) Summer Studies only (3-3)

### **GREEK**

#### **GREE 100 (3) BEGINNERS' GREEK**

A basic introduction to the Greek language, including the following: the three declensions of the noun; the regular, irregular and contracted verbs; a survey of verbs in *mi*; the main constructions; practice in translating sentences into Greek; sight translation. Tests and examinations will be given during the course of the year. Texts: *Reading Greek: Text and Grammar, Vocabulary and Exercises*

D.A. Campbell September-April (4-0; 4-0)

#### **GREE 160 (3) MODERN GREEK**

An introduction to Modern Greek, intended to provide an elementary knowledge of the written and spoken language.

(Not offered) September-April (3-1; 3-1)

#### **GREE 200 (3) GREEK LANGUAGE AND LITERATURE: I**

The emphasis will be on increased understanding of the language

through a reading of selected authors. Example: Homer, Herodotus and Euripides. (Prerequisite: 100 or its equivalent) Texts: *Reading Greek: Text and Grammar, Vocabulary and Exercises; A World of Heroes*; Liddell and Scott, *Intermediate Greek-English Lexicon*; Goodwin and Gulick, *Greek Grammar*  
G.S. Shrimpton September-April (4-0; 4-0)

### GREE 250 (1½) NEW TESTAMENT GREEK

A study of the language of the New Testament. Selections from the Gospels and from *Acts of the Apostles* will be read. (Prerequisite: 100) Text: *The Greek New Testament*, ed. Aland, Black, et al. (United Bible Societies)  
(Not offered) September-April (1-0; 2-0)

### GREE 300 (3) GREEK LANGUAGE AND LITERATURE: II

The basic third year course for Major and Honours students; advanced Greek students may take the course in their second year. Selected texts (to be varied to some extent from year to year) will be studied from prose and verse authors. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Greek into English. Unprepared translation will be included in the final examination. (Prerequisite: 200) Texts: The readings alternate on a two year cycle. In year A, readings are taken from the advanced volumes of the Cambridge reading program; in year B, there will be selections from: Sophocles, *Oedipus Tyrannus*, Euripides, *Medea*, Thucydides, *History*, Plato, *Dialogues*  
S.E. Scully September-April (3-0; 3-0)  
NOTE: 300 will be taught together with 400.

### GREE 390 (1½) GREEK AUTHORS

Extensive reading and analysis of major Greek texts. The Department will offer no more than two of the following each year; 390A Homer; 390B Greek Tragedy; 390C Herodotus; 390D Xenophon. (Prerequisite: 200)  
390A: September-December (3-0)  
390C: G.S. Shrimpton January-April (3-0)

### GREE 400 (3) GREEK LANGUAGE AND LITERATURE: III

The basic fourth year course for Honours students. Sight translation will be regularly practised, and unprepared translation will be included in the final examination. (Prerequisite: 300) Texts: see 300 (NOTE: Although this course will be taught together with Greek 300, there will be separate evaluative procedures.)  
S.E. Scully September-April (3-0; 3-0)

### GREE 490 (1½) DIRECTED STUDIES IN GREEK

Depending on the students' interests and on the availability of a supervising instructor, one or more of the following topics may be offered: 490A Homeric Corpus and Hesiod; 490B Greek Lyric Poetry; 490C Greek Tragedy; 490D Greek Comedy; 490E Greek Historians and Rhetoricians; 490F Greek Philosophical Prose. (May be taken more than once for credit in different topics) (Prerequisite: Completion of at least 3 units of Greek at the 300 level or above, and Department permission)  
(2-0)

## LATIN

Students with no previous study of Latin or one year of high school Latin will register for LATI 100. Students with two or three years of high school Latin will normally register for LATI 200. All students who have taken high school Latin should consult the Department before enrolling in any Latin course.

### LATI 100 (3) BEGINNERS' LATIN

No previous knowledge of Latin is required. An introduction to the Latin language with easy readings from Roman authors. Texts: To be announced  
J.G. Fitch September-April (4-0; 4-0)

All work at the 200 level or beyond will require a *Cassell's New Latin Dictionary* and *Allen and Greenough, New Latin Grammar*.

### LATI 200 (3) LATIN LANGUAGE AND LITERATURE: I

The emphasis will be on an increased understanding of the language through a reading of the authors. (Prerequisite: 100 or equivalent; not open to students who have completed 140.) Texts: Selected readings from Latin authors: *Cassell's New Latin Dictionary*; *Allen and Greenough, New Latin Grammar*  
P.L. Smith September-April (4-0; 4-0)

### LATI 300 (3) LATIN LANGUAGE AND LITERATURE: II

The basic third year course for Major and Honours students; advanced Latin students may take the course in their second year. The aims will include the development of critical judgement and the appreciation of literary style, through the study of major writers in Latin poetry and prose. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Latin into English. Students will be expected to practise reading aloud from the authors selected, and may be examined on their competence. Unprepared translation will be included in the final examination. (Prerequisite: 200) Texts: The readings alternate on a two year cycle. Year A, Cicero, *Pro Caelio*, Horace, *Odes*, Tacitus (selections), Juvenal, *Satires* 1, 3 and 10. Year B, selections from Cicero's *Letters*, Lucretius, *De Rerum Natura*, Ovid, and Seneca  
J.G. Fitch September-April (3-0; 3-0)  
(NOTE: 300 will be taught together with 400.)

### LATI 390 (1½) LATIN AUTHORS

Extensive reading and analysis of major Latin texts. The Department will offer no more than two of the following each year: 390A Vergil, *Eclogues and Georgics*; 390B Vergil, *Aeneid*; 390C Horace; 390D Roman Historians. (Prerequisite: 200)  
390A: September-December (3-0)  
390C: January-April (3-0)

### LATI 400 (3) LATIN LANGUAGE AND LITERATURE: III

The basic fourth year course for Honours students. The aims will be similar to those of LATI 300, on a more advanced level. There will be examinations of syntax, metre and stylistics. Sight translation from more difficult authors will be regularly practised, and unprepared translation will be included in the final examination. (Prerequisite: 300) Texts: see 300 (NOTE: Although this course will be taught together with 300, there will be separate evaluative procedures.)  
J.G. Fitch September-April (3-0; 3-0)

### LATI 490 (1½) DIRECTED STUDIES IN LATIN

Depending on the student's interests and on the availability of a supervising instructor, one or more of the following topics may be offered: 490A Roman Comedy and Satire; 490B Roman Philosophical Literature; 490C Prose Authors of the Late Republic; 490D Late Republican and Augustan Poetry; 490E Post-Augustan Poetry; 490F Roman Historians; 490G Post-Augustan Prose. (May be taken more than once for credit in different topics) (Prerequisite: Completion of at least 3 units of Latin at the 300 level or above, and permission of the Department) (2-0)

## GRADUATE COURSES

Three of the following courses will be offered each academic year, and offerings will rotate according to availability of faculty and student needs. Students shall make their choices in consultation with the Graduate Adviser.

- CLAS 511 (2) EARLY GREEK LITERATURE
- CLAS 512 (2) GREEK DRAMA
- CLAS 513 (2) CLASSICAL GREEK PROSE
- CLAS 521 (2) ROMAN COMEDY AND SATIRE
- CLAS 522 (2) ROMAN PROSE OF THE LATE REPUBLIC
- CLAS 523 (2) LATE REPUBLICAN AND AUGUSTAN POETRY
- CLAS 524 (2) POST-AUGUSTAN POETRY
- CLAS 525 (2) POST-AUGUSTAN PROSE
- CLAS 541 (2) GREEK HISTORY
- CLAS 542 (2) ROMAN HISTORY
- CLAS 543 (2) CLASSICAL ARCHAEOLOGY
- CLAS 590 (2) DIRECTED INDIVIDUAL STUDY
- CLAS 599 (6-9) M.A. THESIS

The unit value of the thesis shall be 6. In exceptional cases more than 6 units may be awarded. Before beginning the thesis the candidate must arrange with his committee and the Graduate Adviser the number of units to be assigned.

## DEPARTMENT OF COMPUTER SCIENCE

Jon C. Muzio, B.Sc., Ph.D. (Nott.), Professor and Chairman of the Department  
 Ian Barrodale, B.Sc. (Wales), M.A. (Brit. Col.), Ph.D. (Liverpool), Part time Adjunct Professor  
 Maurice Danard, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Chicago), Part time Adjunct Professor  
 David A. Parnas, B.Sc., M.Sc., Ph.D. (Carnegie), Professor  
 Byron L. Ehle, A.B. (Whitman), M.S. (Stanford), Ph.D. (Waterloo), Associate Professor  
 R. Nigel Horspool, B.A. (Cantab.), M.Sc., Ph.D. (Tor.), Associate Professor  
 D. Dale Olesky, B.Sc., M.Sc. (Alta.), Ph.D. (Tor.), Associate Professor  
 Frank D.K. Roberts, M.A. (Cantab.), M.Sc., Ph.D. (Liverpool), Associate Professor  
 Frank Ruskey, B.A., M.A., Ph.D. (Calif., San Diego), Associate Professor  
 William W. Wadge, B.A. (Brit. Col.), Ph.D. (Calif.-Berkeley), Associate Professor  
 Ernest Jen-Hao Chang, B.Sc. (Manitoba), M.D. (Brit. Col.), M.Math. (Waterloo), Ph.D. (Tor.), Assistant Professor  
 John A. Ellis, B.Sc., M.Sc. (London), M.S. (Illinois Inst. of Tech.), Ph.D. (Northwestern), Assistant Professor  
 Michael R. Levy, B.Sc., M.Sc., (Witwatersrand), Ph.D. (Waterloo), Assistant Professor  
 Alan Rosselet, B.Sc. (N. Carolina State), M.Sc., Ph.D. (Tor.), Assistant Professor  
 Gholamali C. Shoja, B.S.E.E. (Kansas St.), M.S.E.E. (Northwestern), D. Phil. (Sussex), Assistant Professor  
 Marilee V. Garrett, B.A. (Brown Univ.), M.Sc. (U. of Vic.), Visiting Lecturer (1984-85)  
 Barry W. Brooks, B.Sc., M.Sc. (Calg.), Cooperative Education Coordinator (Computer Science and Mathematics)  
 John Hart, B.Sc., Ph.D. (London), Administrative Officer (to June 30, 1985)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.Sc. degrees see page 205, and for graduate courses see page 61.

### LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff it may be necessary to limit enrollment in certain Computer Science courses. Enrollment in Computer Science 100, 110 and 200 will be on a first come, first served basis. Enrollment limits in all other courses will be imposed on the basis of facilities available and academic standing. Students are warned that achieving the minimum academic standing outlined in the course descriptions does not guarantee entry into the courses.

### MAJOR AND HONOURS PROGRAMS

#### Computer Science Undergraduate Programs

The Department offers both a B.Sc. Major and a B.Sc. Honours degree in Computer Science. Students who wish to be admitted to the Honours program should apply in writing to the Chairman of the Department on completion of their second year. Normally a student will be admitted to the Honours program only if the student meets the following conditions: completion of 110, 115, 230 and 275; completion of at least 10.5 units of the Mathematics and Statistics courses required for the degree; attainment of an overall grade point average in second year of at least 6.50; and attainment of a grade of B+ or higher in each 200 level Computer Science course completed. Students may be admitted to the Honours Program upon completion of their third year providing

- (i) they have completed all of the 100 level and 200 level courses required for the Honours degree with a grade point average of at least 6.00 in these courses, and
- (ii) they have completed at least 9 units of 300 level courses in Computer Science (including 320, 325 and 360) and have obtained a grade point average of at least 6.50 over all 300 level Computer Science courses taken.

Honours students who do not obtain a grade point average of at least 6.00 in the six required 300 level Computer Science courses must withdraw from the Program.

A student graduating in the Honours Program will be recommended for a First Class Honours degree if the student has achieved a First Class graduating average and an average of at least 6.50 in courses numbered 300 or higher taken in the Department. A student who completes the Honours degree requirements without attaining first class standing but with a departmental and graduating average of at least 5.00 will be recommended for a Second Class Honours degree.

#### Computer Science Programs

| Year  | B.Sc. Major            |       | B.Sc. Honours                          |            |
|---|------------------------|-------|--|------------|
| I   | C SC 110/115           | (3)   | C SC 110/115                           | (3)        |
|   | MATH 100/101           | (3)   | MATH 100/101                           | (3)        |
|   | Electives              | (9)   | Electives                              | (9)        |
| II  | C SC 230/250/275       | (4½)  | C SC 230/250/275                       | (4½)       |
|   | MATH 201/222/233A      | (4½)  | MATH 200/201/222                       | (4½)       |
|   | STAT 250*/251          | (3)   | MATH 233A/233C                         | (3)        |
|   | Electives              | (3)   | STAT 250*/251                          | (3)        |
| * Statistics 250 may be taken in the second term of first year. |                        |       |  |            |
| III   | C SC 320/325           | (3)   | C SC 320/325                           | (3)        |
|   | C SC 360/365           | (3)   | C SC 330/349A                          | (3)        |
|   | C SC 240 or 349A       | (1½)  | C SC 360/365                           | (3)        |
|   | Electives <sup>1</sup> | (7½)  | Electives <sup>2</sup>                 | (6)        |
| IV  | C SC 450/470/471       | (4½)  | C SC 420/471                           | (3)        |
|   | Electives <sup>1</sup> | (10½) | C SC 450/470<br>Electives <sup>2</sup> | (3)<br>(9) |

<sup>1</sup> These electives must include at least 4½ units of Computer Science at the 300 level or above (only 3 units if C SC 349A is taken).

<sup>2</sup> These electives must include at least 1½ units of Computer Science at the 300 level or above, 4½ units of Computer Science at the 400 level, and 4½ units from the Department of Mathematics at the 300 level or above.

### COMBINED PROGRAMS IN COMPUTER SCIENCE AND MATHEMATICS

For a B.Sc. degree in Combined Computer Science and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Computer Science and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Computer Science and Mathematics Departments and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Computer Science or Mathematics must consult with their advisers prior to making their final choice of courses.

A student graduating in the combined Honours program will be recommended for a First Class Honours degree if the student achieves a first class graduating average. A student will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 5.00.

#### Combined Programs in Computer Science and Mathematics

| Year  | B.Sc. Major                  |      | B.Sc. Honours   |             |
|---|------------------------------|------|---|-------------|
| I   | C SC 110/115                 | (3)  | C SC 110/115  | (3)         |
|   | MATH 100/101                 | (3)  | MATH 100/101  | (3)         |
|   | Electives                    | (9)  | Electives   | (9)         |
| II  | C SC 230/275                 | (3)  | C SC 230/275  | (3)         |
|   | MATH 200/201/222             | (4½) | MATH 200/201/222  | (4½)        |
|   | MATH 233A/233C               | (3)  | MATH 233A/233C  | (3)         |
|   | STAT 250*/251                | (3)  | STAT 250*/251   | (3)         |
|   | Electives                    | (1½) | Electives   | (1½)        |
| * Statistics 250 may be taken in the second term of first year. |                              |      |   |             |
| III   | C SC 320/325                 | (3)  | C SC 320/325  | (3)         |
|   | C SC 349A/349B               | (3)  | C SC 349A/349B  | (3)         |
|   | MATH 330A/330B               | (3)  | MATH 334/336/338  | (4½)        |
|   | MATH 333A                    | (1½) | MATH 333A/333C  | (3)         |
|   | One of MATH 333C/<br>422/423 | (1½) | Electives <sup>4</sup>                                  | (1½)        |
|   | Electives <sup>3</sup>       | (3)  |   |             |
| IV  | Electives <sup>3</sup>       | (15) | Two of C SC 420/<br>449A/449B<br>Electives <sup>4</sup> | (3)<br>(12) |

- <sup>1</sup> These electives must include at least 12 units from the Departments of Computer Science and Mathematics at the 300 level or above, with at least 6 of these units at the 400 level. In selecting these courses, students are urged to take at least 3 of these units in each of the two departments.
- <sup>4</sup> These electives must include at least 4½ units at the 300 level or above and 6 units at the 400 level from the Departments of Computer Science and Mathematics (to include at least 3 units from the Department of Mathematics at the 400 level).

**NOTES:**

- (1) All students taking a Major or Honours degree in Computer Science are strongly advised to take some University courses outside the Computer Science and Mathematics Departments.
- (2) Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.
- (3) Students from outside British Columbia, students transferring from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Computer Science course.
- (4) In each line below students may obtain credit for only one Computer Science course.

- 110 or 170
- 115 or 171
- 230 or 272
- 250 or 372
- 320 or 472
- 325 or 374
- 330, 370 or 273
- 335 or 471
- 360 or 371
- 372 or 373
- 455 or 475

**COMPUTER SCIENCE COOPERATIVE EDUCATION PROGRAM**

The Cooperative Education Program in the Faculty of Arts and Science is described on page 31.

Full time students interested in the Cooperative Education Program participate in a combined Computer Science and Mathematics Cooperative Education Program during their first two years. In their third year they may opt to complete a degree program in either Computer Science or Mathematics, and will enter the Coop program in that department. Students who opt for a combined degree in Computer Science and Mathematics, or for a Double Major in Computer Science and Mathematics will remain in the combined Computer Science/Mathematics Coop.

The minimum academic requirements for entering the Computer Science and Mathematics Program are a grade point average of 4.50, a minimum grade point average of 5.50 in courses completed in the Departments of Computer Science and Mathematics, and a grade of at least B- in each course completed in the Departments of Computer Science and Mathematics. Students are normally admitted to the Program during May after the first year on campus, and application for admission should be made during the first academic year on campus.

In order to proceed to third year in the Computer Science Cooperative Program, or the combined Computer Science and Mathematics Cooperative Program, students must successfully complete the thirteen lower level courses specified in the following table:

| Year | First Term  | Second Term   | Summer Studies  |
|------|---|---|---|
| I    | C SC 110<br>MATH 100<br>Electives                 | (1½) C SC 115<br>(1½) MATH 101<br>(4½) STAT 250<br>Electives<br>(3) | (1½)<br>(1½)<br>(1½)  |
| II   | C SC 275<br>MATH 200/233A<br>STAT 251<br>Elective | (1½) WORK<br>(3) TERM I<br>(1½)<br>(1½)                             | C SC 230<br>MATH 201/222/<br>233C<br>Elective<br>(1½)<br>(4½)<br>(1½) |

In addition, in order to graduate in the Computer Science or combined Computer Science and Mathematics Cooperative Program, students must successfully complete four Work Terms and satisfy the course requirements of any of the Major or Honours degree programs offered by the Department of Computer Science.

Students registered in the Coop Program must be enrolled in at least 6 units of course work during each Campus Term. The performance of

students will be reviewed after each Campus Term and each Work Term. Students whose performance is deemed to be unsatisfactory by the Computer Science and Mathematics Coop Committee may be required to withdraw from the Program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

Further information concerning the Cooperative Education Program in Computer Science may be obtained from the Department.

**UNDERGRADUATE COURSES**

**C SC 100 (1½) ELEMENTARY COMPUTING**

This course will provide an introduction to computing for the non-specialist. Topics covered include applications of computers in the home, office, and industrial community, implications of computers in society, and elements of programming. (Prerequisite: Algebra 11) (NOTE: This course is designed for a general university audience; students intending to Major in Computer Science should enroll in 110 rather than 100.) (Not open to students with credit in 110 or equivalent)

September-December. Also January-April (2-2)

**C SC 110 (formerly 170) (1½) COMPUTER PROGRAMMING: I**

This course will introduce problem solving methods and algorithm development and teach a widely used high level programming language. The student will learn how to design, code and document programs using techniques of good programming style. Topics will include computer organization, stepwise refinement, and various algorithms. (Prerequisite: Algebra 12) (NOTES: (1) Students intending to take a Major or Honours in Computer Science should take 110 in the first term. (2) Students with Computer Science 11 or 12 may wish to consult with a Departmental Adviser concerning the possibility of advanced placement.)

September-December. Also January-April (2-2)

**C SC 115 (formerly 171) (1½) COMPUTER PROGRAMMING: II**

This course will continue the disciplined development of program design, style and expression begun in 110. Topics will include analysis of algorithms, basic data structures, string processing and recursion. Applications will be taken from computer systems, numerical problems and business data processing. Some knowledge of calculus (e.g., MATH 100 or 102) is desirable. (Prerequisite: 110)

September-December. Also January-April (2-1)

**C SC 160 (1½) INTRODUCTION TO DATA STRUCTURES**

This course will continue the disciplined development of program design, style and expression begun in Computer Science 110. Topics will include representations and applications of data structures; stacks, lists and trees; floating point and complex arithmetic and scientific applications. (Credit will not be given for both 115 and 160.) (Prerequisites: 110 and MATH 100)

January-April (2-1)

**C SC 200 (1½) COMPUTERS IN STATISTICAL APPLICATIONS**

This course will provide the nonspecialist computer user with the tools needed for scientific data analysis, statistical correlations, graphical displays and simulation. FORTRAN will be the language of instruction, and the use of packages such as SPSS and IMSL will be introduced. The student will learn the use of plotting routines such as SASGRAPH and PLOT-10. (Prerequisites: One of BIOL 250, ECON 240, GEOG 321, STAT 250, PSYC 300, SOCI 371) (NOTE: Not open to students with credit in 110 or equivalent)

September-December (2-2)

**C SC 230 (formerly 272) (1½) INTRODUCTION TO COMPUTER SYSTEMS**

This course will introduce computer architecture, the basic structure of computer systems, and integrate these concepts through teaching an assembler language and the operations of assemblers, linkers and loaders. Topics covered include register structure, instruction types, symbolic addressing, literals, macros, conditional assembly, subroutines, coroutines, one and two pass relocatable assemblers and loaders. (Prerequisite: A grade of B or higher in 115 or 160, or written permission of the Department)

September-December. Also January-April (3-1)

**C SC 240 (1½) NUMERICAL METHODS**

The study of computational methods for solving problems in linear algebra, nonlinear equations, approximation, and ordinary differential equations. The student will write programs in a suitable high level language to solve problems in some of the areas listed above but the

course will also teach the student how to use mathematical subroutine packages currently available in computer libraries. (Prerequisite: A grade of B or higher in 115 or 160; MATH 233A or 110 and 201; or written permission of the Department) (NOTE: Not open to students with credit in 349A or equivalent)

September-December. Also January-April (3-0)

**C SC 250 (formerly 372) (1½) INTRODUCTION TO COMPUTER ORGANIZATION**

This course will introduce the organization and structure of major hardware components of computers, the fundamentals of logic design, and the mechanics of information transfer and control within a digital computer system. Topics will include combinatorial and sequential circuits, flip flops, data and address buses, memory control, number representation, instruction fetch and execution, microprogram control, interrupts. (Prerequisite: A grade of B or higher in 115 or 160, or written permission of the Department. Pre- or corequisite 230)

September-December. Also January-April (3-2)

**C SC 275 (1½) FILE STRUCTURES FOR DATA PROCESSING**

This course will introduce concepts and techniques of structuring data on bulk storage devices, especially as applied to business data processing. The course will present the foundation for application of data structures and file processing techniques. Topics will include record and file definition, external sort/merge, sequential file processing, random access organizations such as inverted lists, indexed sequential methods and B-trees as well as data management concepts. (Prerequisite: A grade of B or higher in 115 or 160, or written permission of the Department)

September-December. Also January-April (3-1)

**C SC 320 (formerly 472) (1½) FOUNDATIONS OF COMPUTER SCIENCE**

A survey of formal models and results that form the theoretical foundations of computer science; typical topics include finite automata, Turing machines, simple undecidable problems, context free languages and elementary computational complexity. (Prerequisites: A grade of B or higher in 115 or 160, and MATH 222, or written permission of the Department)

September-December (3-0)

**C SC 322 (1½) LOGIC AND PROGRAMMING**

This course concentrates on the practical applications of logic in computer science and its relevance in such areas as software engineering, artificial intelligence and circuit design theory. Topics discussed will include the following: propositional expressions and circuits, reading and writing first order logic, predicate logic as a relational query language, knowledge representation, PROLOG, and other related topics. (Prerequisite: A grade of B or higher in 115 or 160, and MATH 222 or PHIL 203 or 304A; or written permission of the Department)

September-December (3-0)

**C SC 325 (formerly 374) (1½) DATA STRUCTURES**

The objective of this course is to apply analysis and design techniques to nonnumerical algorithms which act on data structures held in memory or on external devices. Topics include: basic data structures and algorithms for manipulating stacks, queues, lists and trees; Graphs: definition, terminology, and properties; Memory management: hashing, storage allocation, garbage collection and compaction; sorting, merging and searching. (Prerequisites: A grade of B- or higher in 275 and MATH 222, or written permission of the Department)

September-December. Also January-April (3-0)

**C SC 330 (formerly 273, 370) (1½) PROGRAMMING LANGUAGES**

A theoretical investigation of imperative and applicative programming languages; fundamental aspects of programming languages are covered. Topics include the description of data types, variables and imperatives (such as assignment); iteration and recursion; parameter passing mechanisms; type checking; and relevant implementation issues. Complete familiarity with a block structured imperative programming language, such as Pascal, is essential. (Prerequisites: Third Year standing and a grade of B- or higher in 230 and 275, or written permission of the Department)

January-April (3-0)

**C SC 349A (formerly half of 349) (1½) NUMERICAL METHODS: I**

An introduction to selected topics in Numerical Analysis. Typical areas covered: error analysis, roots of equations, systems of linear equations, linear programming, interpolation, numerical integration, and ordinary differential equations. (Prerequisites: 115 or 160, and MATH 200, 201 and 233A; or written permission of the Department)

September-December. Also January-April (3-0)

**C SC 349B (formerly half of 349) (1½) NUMERICAL METHODS: II**

An introduction to selected topics in Numerical Analysis. Typical areas covered: ordinary differential equations, numerical differentiation, approximation of functions, iterative methods for linear equations, eigenvalues and eigenvectors, systems of nonlinear equations, boundary-value problems and partial differential equations. (Prerequisites: 349A or a grade of B or higher in 240, and MATH 200; or a grade of B+ or higher in each of 115 or 160, MATH 200, 201 and 233A)

January-April (3-0)

**C SC 350 (1½) COMPUTER ARCHITECTURE**

This course will introduce the basic building blocks of a general purpose computer with emphasis on techniques for speed and performance enhancement. Topics will include: central processor organization, arithmetic algorithms, lookahead and parallelism, memory hierarchy, control unit and microprogramming, input output devices, case studies of some recent micro, mini, and mainframe computers. (Prerequisite: A grade of B- or higher in 230 and 250, or written permission of the Department)

January-April (3-0)

**C SC 360 (formerly 371) (1½) INTRODUCTION TO OPERATING SYSTEMS**

This course will introduce the major concepts of operating systems and study the interrelationships between the operating system and the architecture of computer systems. In particular, it will develop an understanding of the organization and architecture of computer systems at the programming level. Topics included are dynamic activation procedures, monitors and kernels, memory and process management, file structures. (Prerequisite: A grade of B- or higher in 230, or written permission of the Department)

September-December. Also January-April (3-0)

**C SC 365 (1½) SOFTWARE ENGINEERING**

Techniques for the development and maintenance of software systems are described. The life cycle approach to software and the characteristics of life cycle products are included. The course covers material in requirements definition, specification, design, program testing and verification and validation. Contemporary and future software development environments are studied. (Prerequisite: A grade of B- or higher in 275, or written permission of the Department)

September-December. Also January-April (3-0)

**C SC 375 (1½) INTRODUCTION TO SYSTEMS ANALYSIS**

This course introduces the student to many of the techniques used in analyzing a business data processing system. Topics discussed will include the following: project definition, preliminary design, man-machine interface, data gathering and analysis, data base design, system controls, hardware selection, and system testing, implementation and operation. Students will be assigned to a project team involved in a system study as part of the course. (Prerequisite: A grade of B- or higher in 275, or written permission of the Department)

September-December. Also January-April (3-0)

**C SC 420 (1½) ANALYSIS OF ALGORITHMS**

General techniques for designing and analyzing algorithms; an in depth examination of several problems and algorithms with respect to their time and space requirements; advanced data structures: sorting and searching; graph algorithms; backtracking; NP-complete problems; approximation algorithms. (Prerequisites: A grade of B- or higher in 320 and 325, or written permission of the Department)

January-April (3-0)

**C SC 448A (1½) OPERATIONS RESEARCH: I**

This course is primarily concerned with linear programming and its applications. Topics discussed will include the following: the simplex method, the revised simplex method, computer implementation of linear programming, duality, dual simplex and primal dual algorithms, parametric analysis and postoptimality analysis. Applications will include the transportation problem, the assignment problem, blending problems, inventory problems, activity analysis, game theory and network analysis. (Prerequisite: 349A; or fourth year standing and a grade of B or higher in 240)

September-December (3-0)

**C SC 448B (1½) OPERATIONS RESEARCH: II**

This course provides an introduction to model design using queuing theory and simulation techniques. Topics covered include a brief introduction to queuing theory, basic ideas in simulation, random number generators, sampling, critical event and time slice methods, organization of a simulation study, and basic concepts of GPSS programming. (Prerequisite: 115 or 160, STAT 251 and any 300 level mathematics or computer science course)

January-April (3-0)

**C SC 449A (1½) NUMERICAL ANALYSIS: I**

A thorough discussion of a topic selected from one of the following areas: numerical linear algebra; approximation theory; or the numerical solution of differential equations. (Prerequisite: 349A and 349B, or written permission of the Department) September-December (3-0)

**C SC 449B (1½) NUMERICAL ANALYSIS: II**

A thorough discussion of a topic selected from one of the following areas: numerical linear algebra; approximation theory; the numerical solution of differential equations. (Prerequisite: 349A and 349B, or written permission of the Department) January-April (3-0)

**C SC 450 (1½) DIGITAL SYSTEMS**

This course will introduce concepts in computer architectures and operating systems involving concurrency, parallel processing and computer communications. Topics covered include synchronization, deadlock, name management, resource allocation, pipelining, multiprocessors, packet switching networks, protocol design and verification, distributed systems. (Prerequisites: A grade of B- or higher in 360, or written permission of the Department) September-December. Also January-April (3-3)

**C SC 455 (formerly 475) (1½) DESIGN AND ANALYSIS OF REAL-TIME SYSTEMS**

This course will present the principles of interrupt-driven systems, combining a detailed knowledge of computer architecture with a good understanding of operating systems. The student will have the opportunity to explore the techniques involved by constructing software components of real-time operating systems, using either a minicomputer or a microcomputer. Small projects in real-time control of devices will also be included. (Prerequisites: A grade of B- or higher in 360, or written permission of the Department) January-April (3-3)

**C SC 470 (1½) DATA BASE SYSTEMS**

This is an introductory course on data base systems. Topics to be covered include: the nature of information systems; the justifications for implementing data bases; basic concepts of data entities, attributes and relationships; the need for flexibility and data independence; simple data modelling; hierarchical, network and relational models; query languages and data dictionaries. (Prerequisite: A grade of B- or higher in 325, or written permission of the Department) September-December. Also January-April (3-0)

**C SC 471 (formerly 335) (1½) COMPILER CONSTRUCTION**

This course includes the following aspects of compilation: lexical analysis, syntax analysis, semantic routines, code optimization, block structured languages and interpreters. Students will implement a compiler-interpreter for a simple language. (Prerequisites: A grade of B- or higher in 320 and 325, or written permission of the Department) September-December. Also January-April (3-0)

**C SC 480 (formerly 473) (1½) THEORETICAL AND MATHEMATICAL TOPICS IN COMPUTER SCIENCE**

Offered as C SC 480A, 480B, 480C, 480D.  
The topics in the course depend primarily on the interests of the instructor. The course may include, for example, one or more of the following

topics: automata theory, analysis of algorithms, numerical analysis, and complexity theory. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with the permission of the Chairman of the Department

September-December. Also January-April (3-0)

**C SC 481 (formerly 474) (1½) TOPICS IN COMPUTER SCIENCE: SOFTWARE, HARDWARE, AND APPLICATIONS**

Offered as C SC 481A, 481B, 481C, 481D.

The topics in the course depend primarily on the interests of the instructor. The course may include, for example, one or more of the following topics: software engineering, data bases, computer graphics, and computer aided instruction. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chairman of the Department.

September-December. Also January-April (3-0)

**C SC 490 (1½ or 3) DIRECTED STUDIES**

Students must consult the Department before registering. This course may be taken more than once in different fields with permission of the Chairman of the Department.

**GRADUATE COURSES**

Students should consult the Department concerning courses to be offered in a particular year.

**C SC 570 (2-4) TOPICS IN NUMERICAL ANALYSIS**

(Offered as C SC 570A, 570B, 570C, 570D, etc.)

**C SC 571 (2-4) TOPICS IN SOFTWARE**

(Offered as C SC 571A, 571B, 571C, 571D, etc.)

**C SC 572 (2-4) TOPICS IN THEORETICAL COMPUTER SCIENCE**

(Offered as C SC 572A, 572B, 572C, 572D, etc.)

**C SC 573 (2-4) TOPICS IN COMPUTER SYSTEMS AND COMPUTER ARCHITECTURE**

(Offered as C SC 573A, 573B, 573C, 573D, etc.)

**C SC 574 (2-4) TOPICS IN NONNUMERICAL COMPUTING**

(Offered as C SC 574A, 574B, 574C, 574D, etc.)

**C SC 580 (no credit) APPLICATIONS OF COMPUTERS IN RESEARCH**

(1½ fee units)

This course provides the introduction to computing that is necessary for some thesis projects. It is not open to students registered in a graduate program in the Department of Computer Science.

**C SC 581 (2-4) DIRECTED STUDIES****C SC 585 (1) SEMINAR****C SC 599 (4-6) MASTER'S THESIS****DEPARTMENT OF ECONOMICS**

Kenneth L. Avio, B.Sc. (Ore.), M.S., Ph.D. (Purdue), Associate Professor and Chairman of the Department

Leo I. Bakony, B.A. (Brit. Col.), Ph.D. (Wash.), Professor

Robert L. Bish, A.B. (S. Calif.), A.M., Ph.D. (Indiana), Adjunct Professor

James Cutt, M.A. (Edin.), M.A., Ph.D. (Tor.), Adjunct Professor

A.R. Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T.), Part-time Adjunct Professor

J. Colin H. Jones, B.A. (Wales), M.A. (Montana St.), Ph.D. (Queen's), Professor

Leonard Laudadio, B.A. (Puget Sound), M.A., Ph.D. (Wash.), Professor

Thomas K. Shoyama, B.A., B.Com. (Brit. Col.), Part-time Adjunct Professor (1984-85)

Gerald R. Walter, B.A., M.A., Ph.D. (Calif.), Professor

Robert V. Cherneff, B.A. (U. of Vic.), M.A., Ph.D. (Wash.), Associate Professor

James J. McRae, B.A. (U. of Vic.), M.A., Ph.D. (W. Ont.), Adjunct Associate Professor (1984-86)

Izzud-Din Pal, B.A., M.A. (Panjab), M.Sc.Econ. (London), Ph.D. (McGill), Associate Professor

Joseph Schaaafsma, B.A., M.A. (McMaster), Ph.D. (Tor.), Associate Professor

John A. Schofield, B.A. (Durham), M.B.A. (Indiana), M.A., Ph.D. (S. Fraser), Associate Professor

William D. Walsh, B.Com. (Brit. Col.), M.A., Ph.D. (Yale), Associate Professor

Donald G. Ferguson, B.A., M.A., Ph.D. (Tor.), Assistant Professor

Malcolm Rutherford, B.A. (Heriot-Watt), M.A. (S. Fraser), Ph.D. (Durham), Assistant Professor

Anne-Marie Drosso, B.A. (American Univ.), M.A. (S. Fraser), Visiting Lecturer (January-June 1985)

Kenneth G. Stewart, B.A. (Dalhousie), M.Sc. (London), M.A., M.A. (Michigan), Visiting Lecturer (1984-85)

Peter R. Tracey, B.A. (Loyola), M.A. (Queen's), Visiting Lecturer (1984-85)

## GRADUATE PROGRAM

For further information on studies leading to the M.A. Degree, see page 205, for graduate courses, see page 65.

### LIMITATION OF ENROLLMENT

Students are advised that because of limited staff and facilities, it may be necessary to limit enrollment in certain courses. Course enrollment limits will be listed during registration. Students will be admitted on a first come, first served basis.

## GENERAL, MAJOR AND HONOURS B.A. PROGRAMS

### Requirements:

#### General

- (a) 201 and 202 (formerly 200)
- (b) 302 and 303
- (c) 6 additional units of Economics courses numbered 300 and above

#### Major

- (a) A grade point average of at least 4.00 in 201 and 202 and not less than a C+ in either course, or permission of the Department
- (b) Math 100 and 101 or 151 and 102, or 151 and 100, or permission of the Department (See Note 1)
- (c) At least a B- in 240
- (d) A total of 15 units of Economics courses numbered 300 and above, including:
  - One of 300 or 302
  - One of 301 or 303
  - 321
  - 340 (See Note 2)

#### Honours

- (a) A grade point average of at least 5.50 in 201 and 202, with not less than a B in either course, or permission of the Department
- (b) Mathematics requirement as for Major
- (c) At least a B in 240
- (d) 300 and 301 with a grade point average of at least 5.50 and not less than a B- in any one of these courses
- (e) At least a B- in 340 (See Note 2)
- (f) 321 and 470
- (g) In addition to the 12 upper level units specified in (d), (c), and (f), 12 additional units of Economics courses numbered above 300
- (h) Three upper level units in another subject or subjects chosen with the approval of the Department. The Department may permit lower level Computer Science or Mathematics courses as substitutes for all or part of these three units.
- (i) Three units of electives, any level

Suggested electives for all students in the B.A. in Economics program; COMM 120, 251 (formerly 151) and 253; CSC 200; 3 units of Mathematics in addition to 100 and 101 or 151 and 102; POLI 100.

## MAJOR AND HONOURS B.Sc. PROGRAMS

#### Major

- (a) A grade point average of at least 4.00 in 201 and 202 and not less than a C+ in either course, or permission of the Department
- (b) MATH 151 and 102 (or 100), or MATH 100 and 101; or MATH 101 and 101; MATH 233A; MATH 200 and 201; MATH 152, or permission of the Department (See Note 1)
- (c) At least a B- in 240
- (d) CSC 110 and 115
- (e) A total of 15 units of Economics courses numbered 300 and above, including:
  - 300 or 302 and 301 or 303
  - 350
  - 440 and 445
  - 340 or STAT 250 and 251 (See Note 2)

#### Honours

- (a) A grade point average of at least 5.50 in 201 and 202, with not less than a B in either course, or permission of the Department
- (b) Mathematics requirements as for Major
- (c) CSC 110 and 115
- (d) At least a B in 240
- (e) 300 and 301 with a grade point average of at least 5.50 and not less than a B- in any one of these courses

- (f) At least a B- in 340 (or STAT 250 and 251) (See Note 2)
- (g) 350, 440, 445 and 470
- (h) In addition to the 18 upper level units specified in (e), (f), and (g), 7½ additional units of Economics courses numbered 300 and above
- (i) Three upper level units in another subject or subjects chosen with the approval of the Department. The Department may permit lower level Computer Science or Mathematics courses as substitutes for all or part of these three units.
- (j) One and a half units of electives, any level

Suggested electives for students in the B.Sc. in Economics program are: MATH 233A, CSC 230 and 275, COMM 251, PHIL 222A and 222B.

#### Notes:

1. Mathematics:
  - (a) Mathematics requirements for Major and Honours programs should normally be completed by the end of the Second Year.
  - (b) In order to satisfy the prerequisites of required courses in the B.Sc. program, MATH 240 must be completed in the Second Year.
2. Statistics:
  - (a) ECON 240 should normally be completed by the end of the Second Year and must be completed by the end of the Third Year.
  - (b) ECON 340 should normally be completed by the end of the Third Year.
  - (c) Students with credit in STAT 250 are not permitted to take ECON 340 for credit, but must take STAT 251 to complete the statistics requirement.
  - (d) Students with credit in STAT 250/251 or 253 are required to take a 1½ unit upper level course in Economics instead of ECON 340.
  - (e) ECON 340 is not open to students with credit in STAT 250/251 or 253.
  - (f) STAT 250/251 or 253 are not accepted as substitutes for ECON 240.
3. In the Honours B.Sc. program, a maximum of 6 units of upper level courses in Mathematics, Computer Science or Statistics may be substituted for upper level Economics courses with permission of the Department.
4. Students wishing to proceed to graduate studies in Economics are advised to include 440 and 445 in their undergraduate program.

#### Additional information:

1. Admission to an Honours program, which should be sought at the end of the Second Year, requires permission of the Department. Interested students should consult the Honours Adviser or the Department as early as possible in the first two years. Honours students will be required to maintain at least a second class average in courses taken within the Department in the Third and Fourth Years. ECON 470 is required for all Fourth Year Honours students. Third Year Honours students may be required to attend the seminars.
2. To obtain a First Class Honours degree the requirements will be: a graduating average of at least 6.50; a grade point average of at least 6.50 computed on the basis of all upper level courses taken within the Department, except 470; and at least a second class grade in 470.
3. To obtain a Second Class Honours degree, the requirements will be a graduating average of at least 3.50; a grade point average of at least 3.50 computed on the basis of all upper level courses taken within the Department, except 470; and at least a C in 470.
4. A student who fails to meet Departmental requirements for a first class standing in an Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet Departmental requirements for second class standing in an Honours program but has a second class graduating average will be granted a Second Class Major degree.

## UNDERGRADUATE COURSES

### ECONOMICS

#### INTRODUCTORY AND INDIVIDUAL COURSES

Students who wish to take only one course in Economics should consider 100. Upper level courses may also be taken subject to the following regulations governing the prerequisite courses.

201 and 202 are prerequisites for all Third Year courses, but in special cases, 201 and 202 may be taken concurrently with Economics courses numbered 305 and above with the permission of the Department. With permission of the Department, 280 (ENGR 280) may be substituted for 201 as a prerequisite for Third Year courses. 300 or 302 and 301 or 303 are prerequisites for all courses numbered 400 and above unless permission is granted by the Department or unless otherwise stated below.

Students should consult the Department concerning courses offered in a particular year.

### **ECON 100 (1½, formerly 3) THE CANADIAN ECONOMY — PROBLEMS AND POLICIES**

A discussion of some of the important issues in economic decision making in both private and public sectors of the Canadian economy with an introduction to the basic concepts of economic analysis. (NOTE: Students wishing to proceed into the Commerce program at the University of British Columbia are advised to take 201 and 202 in their first year.) (Prerequisite: None; credit cannot be obtained by those who have previous credit in Economics; 100 and 201/202 cannot be taken concurrently.) September-December. Also January-April (3-0)

### **ECON 201 (1½) PRINCIPLES OF MICROECONOMICS**

The principles of microeconomic analysis with special reference to the theory of demand, the theory of the firm and the theory of distribution. (Not open to students with credit in 280 or ENGR 280) (Prerequisite: Algebra 12 or permission of the Department; 100 and 201 cannot be taken concurrently.) September-December. Also January-April (3-0-1)

### **ECON 202 (1½) PRINCIPLES OF MACROECONOMICS**

The principles of macroeconomic analysis with special reference to fluctuations in income and prices, monetary and fiscal policies for economic stabilization. (Prerequisite: Algebra 12 or permission of the Department; 100 and 202 cannot be taken concurrently.) September-December. Also January-April (3-0-1)

### **ECON 240 (1½) DESCRIPTIVE STATISTICS**

Methods of sampling, frequency distributions, frequency charts, measures of central tendency, measures of dispersion, measures of shape, index numbers, trend analysis, regression and correlation as a descriptive technique, seasonality, introductory probability theory. (Prerequisites: MATH 151 and 102, or 151 and 100, or 180, or permission of the Department; ECON 100; or this course may be taken concurrently with 201 and 202.) L.I. Bakony September-December. Also January-April (3-0)

### **ECON 280 (ENGR 280) (1½) PRINCIPLES OF ECONOMICS FOR ENGINEERS AND SCIENTISTS**

The purpose of this course is to develop in students an understanding of economics as a social science through formal lectures, exercises, and tutorial discussions. Topics covered include decision making and choice, the price system, production costs, market structure, capital and project evaluation, efficiency in resource allocation, externalities and public goods. Examples will be drawn from engineering and science. (Prerequisites: Math 133 and 200, Stat 254 and admission to the Faculty of Engineering or permission of the Department). (Not open to students with credit in 201.) D.G. Ferguson May-August (3-0-1)

### **ECON 300 (3) MICROECONOMICS**

Theories of demand and production; pricing of factors of production; general equilibrium theory; welfare economics; some applications of price theory. (Not open to students with credit in 302 or 304A) L. Laudadio September-April (3-0; 3-0)

### **ECON 301 (3) MACROECONOMIC THEORY**

Theories of income and employment with special reference to the classical and the Keynesian models; the dynamics of aggregate supply and demand; theory of inflation; economic growth. (Not open to students with credit in 303 or 304B) R.V. Chernenf September-April (3-0; 3-0)

### **ECON 302 (1½) INTERMEDIATE MICROECONOMIC THEORY**

The allocation of resources under competitive and noncompetitive market conditions. Analytical significance of prices, wages, and rents in understanding the market exchange economy. Problems of private and public choice in a decentralized and centrally planned economic environment. Implications of tax, ration, and licensing schemes for economic management. (Not open to students with credit in 300 or 304A) M. Rutherford September-December. Also January-April (3-0)

### **ECON 303 (1½) INTERMEDIATE MACROECONOMIC THEORY**

Theories of aggregate economic behaviour; the determination of national income and employment, consumption, investment, inflation, growth and fluctuations, economic policy. (Not open to students with credit in 301 or 304B) W.D. Walsh September-December. Also January-April (3-0)

### **ECON 305 (1½) INTRODUCTION TO MONEY AND BANKING**

The principles of money, credit creation and banking; organization, operation and control of the banking system; and the relationship between the quantity of money and the level of economic activity. R.V. Chernenf September-December (3-0)

### **ECON 310 (3) INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

Problems of competition and monopoly; relevant public policy, with special reference to Canada. J.C.H. Jones September-April (3-0; 3-0)

### **ECON 312 (formerly 412) (1½) URBAN LAND ECONOMICS**

Application of economic principles to the form and structure of urban areas; land use, external effects and public policy in the urban context. Topics include: intraurban location, economic function and specialization within the city, the economics of urban transport, housing and public services. G.R. Walter September-December (3-0)

### **ECON 315 (3) LABOUR ECONOMICS AND INSTITUTIONS**

An examination of labour as a factor of production; the development of national labour markets and their contemporary structure; functions and performance. Amongst other areas, consideration will be given to the following: industrial relations systems, labour history, the nature of organized labour, the collective bargaining process, contemporary labour problems and public policy. W.D. Walsh September-April (3-0; 3-0)

### **ECON 320 (1½) ECONOMIC DEVELOPMENT**

An examination of the economics of development with reference to Third World countries. Main emphasis will be on problems and policies, both domestic and international. Topics will include the relevance of the historical growth experience; poverty and income distribution; agriculture, technology, industrialization, and education; population and migration; international trade and foreign investment. I.-D. Pal September-December (3-0)

### **ECON 321 (1½, formerly 3) THE ECONOMIC HISTORY OF CANADA**

The story of long-run economic growth and welfare in the Canadian economy, with the aid of economic analysis, quantitative data and other historical materials. Emphasis on the development of the Canadian economy from a resource based economy to a developed industrial economy within an international setting. Consideration of the sources of Canadian economic growth and the reasons for Canadian income differentials with other nations. A.-M. Drosso September-December. Also January-April (3-0)

### **ECON 323A (formerly half of 323) (1½) COMPARATIVE ECONOMIC SYSTEMS**

A study of modern economic systems with reference to Capitalist, Socialist, and third world economics; emphasis will be given to the organization, operation, and performance of economic systems. D.G. Ferguson January-April (3-0)

### **ECON 323B (formerly half of 323) (1½) THE SOCIALIST ECONOMIES**

A study of the history, institutions, principles of operation, performance and prospects of the Soviet and other east European economies. D.G. Ferguson January-April (3-0)

### **ECON 324 (PACI 324) (1½) ECONOMIC DEVELOPMENT IN SOUTHEAST ASIA**

Economic performance and economic institutions of countries in Southeast Asia with special reference to Indonesia, Malaysia, the Philippines, and Thailand; focus will be mainly on current issues and on international economic relations of the region with the rest of Asia and with North America. (Prerequisite: Either 100 or 201, or permission of the Department; PACI 200) I.-D. Pal September-December (3-0)

### **ECON 325 (1½) PUBLIC FINANCE**

A discussion of taxation and expenditure policies with an emphasis on Canada. Microeconomic effects of these policies will be examined in detail. J. Schaafsma January-April (3-0)

### **ECON 326 (1½) FISCAL POLICY AND RELATED ISSUES**

A discussion of the principles of fiscal policy in the context of

macroeconomic theory. This course will also examine the recent historical record of Canadian fiscal policy and focus on policy options for the present and future.

J. Schaafsma

January-April (3-0)

### **ECON 330 (1½) ENVIRONMENTAL ECONOMICS**

Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of man's use and conservation of the environment, particularly regarding energy, forestry, fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources. (Prerequisite: 201 or permission of the Department) (Not open to those students having credit for 430, 430A or 430B)

L. Laudadio

January-April (3-0)

### **ECON 340 (1½) STATISTICAL INFERENCE**

Probability Theory, Sampling Theory, Confidence Limits, Tests of Hypotheses, Regression and Correlation. (Not open to students who have credit for STAT 250/251 or 253) (Prerequisite: 240 and MATH 100 and 101, or 151 and 102, or 151 and 100, or permission of the Department)

K.G. Stewart

September-December. Also January-April (3-0)

### **ECON 350 (formerly part of 304A and 304B) (1½) AN INTRODUCTION TO MATHEMATICAL ECONOMICS**

An introduction to the application of calculus and linear algebra to selected problems in microeconomic and macro-economic theory. (Prerequisite: MATH 240 or permission of the Department. Pre- or corequisite: 300 or 302 and 301 or 303)

G.R. Walter

January-April (3-0)

### **ECON 402 (1½) HISTORY OF ECONOMIC THOUGHT**

A survey of economic thought from pre-Smith to Keynes. This course is designed to provide an overview of the ideas of major thinkers in this period.

M. Rutherford

September-December (3-0)

### **ECON 405A (formerly half of 405) (1½) INTERNATIONAL TRADE THEORY AND POLICY**

A study of international trade theory and its applications; topics include: The determinants of patterns of trade and investment; trade, growth and welfare; the political economy of tariffs; the regional impact of tariffs. The approach is both theoretical and empirical.

September-December (3-0)

### **ECON 405B (formerly half of 405) (1½) INTERNATIONAL MONETARY THEORY AND POLICY**

A study of international monetary economics, including such topics as foreign exchange markets, Keynesian and monetarist mechanisms of adjustment, forward exchange markets, alternate exchange rate systems, capital mobility and open economy macro policies.

R.V. Cherneff

January-April (3-0)

### **ECON 406 (1½) MONETARY THEORY AND POLICY**

The nature of a monetary economy; money supply models; money demand models and empirical evidence; neo-Keynesian and Monetarist theories contrasted; the instruments, indicators, and objectives of monetary policy; recent Canadian monetary policy. Some familiarity with partial differentiation is required. (Prerequisite: 303 or 301 or 304B, or permission of the Department; 305 recommended)

K.L. Avio

January-April (3-0)

### **ECON 410A (formerly half of 410) (1½) PROBLEMS OF CANADIAN MICROECONOMIC POLICY**

Selected topics involving the application of microeconomic analysis to Canadian problems and policies; topics vary but generally include education, health care, regulation and competition policy. (Prerequisite: 300 or 302 or 304A)

J.C.H. Jones

January-April (3-0)

### **ECON 410B (formerly half of 410) (1½) PROBLEMS OF CANADIAN MACROECONOMIC POLICY**

Selected topics involving the application of macroeconomic analysis to Canadian problems and policies, in the areas of unemployment, inflation and economic growth. (Prerequisite: 301 or 303 or 304B)

L. Laudadio

September-December (3-0)

### **ECON 414 (1½) REGIONAL ECONOMICS**

Consideration of the problem of regional economic disparities. Theories of migration, location and regional economic growth. Techniques for analyzing aspects of the regional problem, including cost benefit analysis, regional accounting, shift share analysis, multiplier analysis. Policy issues relating to the problem.

J. Schofield

January-April (3-0)

### **ECON 416 (1½) COST BENEFIT ANALYSIS: PRINCIPLES AND APPLICATION**

Principles of cost benefit analysis including consideration of welfare economics, the treatment of intangibles, nonefficiency considerations, time discounting, evaluation criteria, uncertainty and risk; selected applications in such areas as human resource economics, natural resource and recreation economics, economic development and urban planning.

J. Schofield

September-December (3-0)

### **ECON 420 (1½) THEORY OF ECONOMIC DEVELOPMENT**

Theories of economic development; domestic policies for development; investment criteria; planning and financing economic development; the role of foreign trade and aid in economic development.

I.-D. Pal

January-April (3-0)

### **ECON 421 (1½) EUROPEAN AND INTERNATIONAL ECONOMIC HISTORY**

The rise of capitalism and the Industrial Revolution especially in Western Europe. The British experience and comparative rates of growth in European countries, with some attention to the transference of industrialization techniques to non-European countries.

A.-M. Drosso

January-April (3-0)

### **ECON 427 (1½) PUBLIC CHOICE THEORY**

The use of concepts from economic theory to analyze the structure and performance of the public sector. Topics include the nature of public and packageable goods, demand articulation, political organization, bureaucratic supply and public service industry structure. (Prerequisites: 300 or 302 or 304A, or permission of the Department)

R.L. Bish

January-April (3-0)

### **ECON 430A (formerly half of 430) (1½) NATURAL RESOURCE ECONOMICS**

An examination of the economic principles governing the use of natural resources, social and private cost and the regulation of natural resource use. The economics of various resource sectors, including fisheries, forests, recreation and mining. (Prerequisite: 300 or 302 or 304A or permission of the Department)

G.R. Walter

September-December (3-0)

### **ECON 430B (formerly half of 430) (1½) TOPICS IN NATURAL RESOURCE ECONOMICS**

Seminar on selected issues in natural resource economics; rents and their appropriation, taxation, user's cost, ecology and economics, depletion of energy and other reserves, transportation economics and resource exploitation, and applications of cost benefit analysis are indicative topics. (Prerequisites: 300 or 302 or 304A; 430A, or permission of the Department)

G.R. Walter

January-April (3-0)

### **ECON 440 (3) ADVANCED ECONOMIC THEORY: A MATHEMATIC APPROACH**

Selected topics in advanced economic theory including general equilibrium theory, welfare economics, theories of capital and interest, the theory of economic growth. Extensive use of mathematics. (Prerequisite: 350, or 304A and 304B or permission of the Department)

D.G. Ferguson

September-April (3-0; 3-0)

### **ECON 445 (3) ECONOMETRICS**

The application of statistical methods in economics illustrated by representative empirical studies. Problem assignments will be devoted to data preparation and the use of the computer. (Prerequisites: 340 and either MATH 240 or MATH 100, 101 and 233A)

L.I. Bakony

September-April (3-0; 3-0)

### **ECON 470 (3) HONOURS SEMINAR**

(NOTE: For Honours Students only)

### **ECON 495 (1½ or 3) DIRECTED STUDIES**

Directed reading and/or research for major and honours students with

first class standing in Economics under the supervision of a faculty member willing to supervise such a course. Students may take this course for a total of up to three units. (Prerequisite: Permission of the Department)

## COMMERCE

### COMM 120 (1½) PRINCIPLES OF ORGANIZATIONAL BEHAVIOUR

An introductory examination of work organizations and the behaviour of individuals within them. Phenomena to be studied include organizational structure, organizational environments, group processes, individual motivation, perception, communication, power processes, leadership and learning. (Prerequisite: Second year standing) (Not normally open to students with credit in PSYC 334A or SOCI 324)

September-December. Also January-April (3-0)

### COMM 251 (formerly 151) (1½, formerly 3) FUNDAMENTALS OF FINANCIAL ACCOUNTING: I

The analysis and communication of financial events and an examination of the accounting postulates underlying the preparation and presentation of the financial statements. (Prerequisite: Second year standing or permission of the Department)

September-December. Also January-April (3-0)

### COMM 253 (1½) FINANCIAL ACCOUNTING

The review and extension of financial accounting concepts and their application to the financial statements studied in COMM 251 and to additional areas, including income tax. The impact on financial statements of income determination, valuation, and classification alternatives. The use of financial statements for decisions through ratio analysis. (Prerequisite: 251)

January-April (3-0)

## GRADUATE COURSES

Students should consult the Department for courses offered in any given year.

### ECON 500 (1½) MICROECONOMICS

Analysis of methods used to derive testable hypotheses concerning the behaviour of consumers, firms, and markets. Discussion of theoretical foundations of concepts widely used in applied economics (e.g., consumer surplus analysis, the behaviour of firms under regulatory constraint, production economics). Readings in selected areas of the applications of microeconomic theory. (Corequisite: 504 or equivalent)

### ECON 501 (1½) MACROECONOMICS

Review of the Keynesian and classical models. An examination of the component sectors of these models. Topics may also include uncertainty, the role of lags in determining time paths and policy effects, adjustment processes. Where possible, illustrations and exercises are based on estimated macroeconomic models.

### ECON 502 (1½) HISTORY AND METHOD OF ECONOMICS

Seminar in selected issues in the history and methodology of economics. Topics may range over the work of particular authors or schools, the problems of theory selection, and the philosophy of science as applied to Economics.

### ECON 504A (formerly half of 504) (4/5) MATHEMATICAL METHODS FOR ECONOMISTS

A survey of the mathematical methods most frequently used in Economics. The topics covered include: the calculus of functions of several variables, the properties of homogeneous functions, the implicit function theorem, matrices, systems of equations, constrained and unconstrained optimization, the envelope theorem, the general method of comparative statics. (Grading: INC or COM)

### ECON 504B (formerly half of 504) (4/5) STATISTICAL METHODS FOR ECONOMISTS

A survey of the statistical techniques most frequently used in economics. Topics covered include probability theory, sampling theory, confidence intervals, hypothesis testing, regression and correlation.

(Grading: INC or COM)

### ECON 505A (formerly half of 505) (1½) THE THEORY OF INTERNATIONAL TRADE

A study of international production and exchange. The topics covered include: the nature and source of the gains from trade; the determinants

of international production and comparative advantage; international factor mobility and transnational production; the implications of market imperfections; trade and growth. Particular attention is given to the generality of theoretical propositions and their empirical applications. (Prerequisite: 500 or 405A or equivalent)

### ECON 505B (formerly half of 505) (1½) THEORY OF TRADE POLICY

An examination of selected contributions to the theory of tariffs and other trade restrictions, and an analysis of trade policy for the developed and developing countries. (Prerequisite: 500 or 405A or equivalent)

### ECON 506 (1½) MONETARY THEORY AND POLICY

The examination of selected contributions to contemporary monetary theory and policy. Topics to be considered include the integration of value and monetary theory, the theory of demand and supply of money, interest rate and monetary policy.

### ECON 510 (1½) INDUSTRIAL ORGANIZATION AND PUBLIC POLICY

Seminar in the structure and performance of industrial markets with special emphasis on the problems of maintaining effective competition in Canada.

### ECON 512 (1½) URBAN ECONOMICS

Theory and policy of the urban economy. Topics include the macroeconomics of urban growth, stagnation and decline; the neoclassical theory of the urban economy; the economics of housing, land use, intraurban location and urban environmental quality.

### ECON 513 (1½) REGIONAL ECONOMIC DEVELOPMENT

Selected analytical approaches to regional economic development. Topics include theories of location and growth, techniques of analysis and assessment of policy alternatives.

### ECON 515 (1½) LABOUR ECONOMICS

Seminar in labour economics and collective bargaining, including wage and employment theory, collective bargaining systems, theory of labour movement, and public policy in collective bargaining.

### ECON 516 (1½) COST BENEFIT ANALYSIS

Theoretical issues in project and program analysis. Selected applications in such areas as human resource economics, natural resource and recreation economics, economic development subnational planning.

### ECON 517 (1½) THE ECONOMICS OF HEALTH

Analysis of the structure, function and performance of the medical market with emphasis on physician and hospital services.

### ECON 518 (1½) ECONOMICS OF CRIME

Seminar in theoretical and applied methods used in economics models of criminal activity. Topics include the economic model of criminal behaviour, efficiency aspects of the branches of the criminal justice system, and econometric research relevant to the field.

### ECON 519 (1½) THE ECONOMICS OF EDUCATION

A discussion of theoretical and empirical issues in the demand for and supply of education. Topics to be examined will include the consumption and investment aspects of the demand for education, the optimal supply and pricing of education, and the relationship between factor input and output in the educational process.

### ECON 520 (1½) ECONOMIC DEVELOPMENT

Seminar to examine selected issues in the theoretical models of economic development, factors in economic development, strategy of economic planning, and financing of economic development.

### ECON 521 (1½) ECONOMIC HISTORY

Seminar in selected topics in economic history including the approach and contributions of "the new economic history", theories of long-run economic growth, history and analysis of long-run economic growth in selected countries, and new work in the literature.

### ECON 525 (1½) PUBLIC FINANCE AND FISCAL POLICY

Seminar in selected topics in fiscal policy and public finance including the incidence and effects of taxation, government expenditure programs and public debt operations.

**ECON 530 (1½) ECONOMICS OF NATURAL RESOURCES**

Seminar in the economics of natural resources including a survey of relevant theoretical literature and selected topics covering problems of resource industries.

**ECON 531 (1½) ENVIRONMENTAL ECONOMICS**

Seminar in selected issues in environmental economics. Topics to be covered may include problems of externalities, liability rules, various models of the interaction between economic and environmental processes, measurement of consumers' surplus in the case of environmental goods and the debate concerning the limits to growth.

**ECON 540 (1½) MATHEMATICAL ECONOMICS**

Selected topics in the application of mathematics to economic theory. The topics include the theory of general economic equilibrium and the theory of economic growth.

**ECON 545 (1½) ECONOMETRICS**

The general linear regression model applied to problems of heteroskedasticity, autocorrelation, pooled data and equation systems. Topics include methods of dealing with multicollinearity and prior information as well as distributed lag models. Emphasis is on practical methods and their application to specific cases.

**ECON 546 (1½) ADVANCED TOPICS IN ECONOMETRICS**

Further study of selected topics including Bayesian inference, varying

parameter models, nonlinear estimation and time series analysis. Emphasis is on econometric theory.

**ECON 550 (1½) SOVIET ECONOMICS**

The structure and functioning of Soviet and Eastern European economies. Theory and practice of socialist pricing; planning; economic development; problems of measurement and comparisons with Western economies.

**ECON 555 (1½) METHODS OF APPLIED ECONOMICS**

An intensive investigation of certain empirical methods widely used in applied economics. Topics will be chosen from the areas of forecasting, simulation, linear and nonlinear programming, input output analysis, data access, survey techniques and other applied methods. (Prerequisite: 500)

**ECON 570 (no credit) SEMINAR IN APPLIED ECONOMICS**

Attendance and participation in a program of seminars. The presentation of a paper on a research topic is required. Normally the topic will be related to the student's thesis and will be prepared under the supervision of the student's thesis advisory committee. (Grading: INC or COM)

**ECON 595 (1½) DIRECTED STUDIES IN ECONOMICS**

Individual titles will be assigned to each lettered section (A-Z)

**ECON 599 (4½) THESIS**

## DEPARTMENT OF ENGLISH

Thomas R. Cleary, B.A. (Queen's Coll.), M.A., Ph.D. (Princeton), Associate Professor and Chairman of the Department

Charles Doyle, B.A., M.A. (N.Z.), Ph.D. (Auckland), Professor

Mel D. Faber, B.A. (Chicago), M.A., Ph.D. (Calif., Los Angeles), Professor

Patrick J. Grant, B.A. (Queen's, Belfast), D.Phil. (Sussex), Professor

Roy F. Leslie, B.A., M.A., Ph.D. (Manchester), Professor

Samuel L. Macey, B.A. (Brit. Col.), Ph.D. (Wash.), F.W.S.O.M., Professor

Stephen A.C. Scobie, M.A. (St. Andrews), Ph.D. (Brit. Col.), Professor

Herbert E. Smith, A.B., A.M. (Boston), Ph.D. (Rutgers), Professor

Henry E. Summerfield, B.A., M.A. (Oxon.), M.Litt. (Durham), Professor

David S. Thatcher, B.A. (Cantab.), M.A. (McMaster), Ph.D. (Alta.), Professor

Lionel Adey, B.A., M.A. (Birm.), Ph.D. (Leicester), Cert. Ed. (London), Associate Professor

William Benzie, M.A., M.Ed., Ph.D. (Aberdeen), Associate Professor

Edward I. Berry, A.B. (Wesleyan), M.A., Ph.D. (Calif., Berkeley), Associate Professor

Michael R. Best, B.A., Ph.D. (Adelaide), Associate Professor

Anthony S.G. Edwards, B.A. (Reading), M.A. (McMaster), Ph.D. (London), Associate Professor

Anthony B. England, B.A., M.A. (Manchester), Ph.D. (Yale), Associate Professor

Bryan N.S. Gooch, B.A., M.A. (Brit. Col.), Ph.D. (London), A.R.C.T. (Tor.), L.T.C.L., F.T.C.L. (London), Associate Professor

John G. Hayman, B.A., M.A. (Oxon.), M.A. (Cornell), Ph.D. (Northwestern), Associate Professor and Director of Graduate Programs

Anthony W. Jenkins, M.A. (Cantab.) Ph.D. (Calif., Berkeley), Associate Professor

Carol V. Johnson, B.A. (Coll. of St. Catherine), M.A. (Marquette), M.F.A. (Iowa), Ph.D. (Bristol), Associate Professor

Patricia J. Koster, B.A. (Brit. Col.), M.A. (Calif., Berkeley), Ph.D. (London), Associate Professor

Burton O. Kurth, B.A. (Brit. Col.), Ph.D. (Calif., Berkeley), Associate Professor

Robert G. Lawrence, M.A. (U.N.B.), Ph.D. (Wisc.), Associate Professor

G. Grant McOrmond, C.D., M.A. (Sask.), Associate Professor

Victor A. Neufeldt, B.A. (Brit. Col.), Ph.D. (Ill.), Associate Professor

Colin J. Partridge, B.A. (Nott.), Cert. Ed. (London), Ph.D. (Nott.), Associate Professor

Constance M. Rooke, B.A. (Smith Coll.), M.A. (Tulane), Ph.D. (N. Carolina), Associate Professor

Robert M. Schuler, B.A. (Bellarmine), M.A., Ph.D. (Colo.), Associate Professor

Terry G. Sherwood, B.A. (Ore.), M.A., Ph.D. (Calif., Berkeley), Associate Professor

Nelson C. Smith, B.A. (Princeton), M.A.T. (Oberlin), Ph.D. (Wash.), Associate Professor and Director, Language Program and First Year English

Reginald C. Terry, B.A. (Leicester), M.A. (Bristol), Ph.D. (London), Associate Professor

Bruce E. Wallis, B.A. (Rutgers), M.A. (Harvard), Ph.D. (Princeton), Associate Professor

Trevor L. Williams, B.A., M.A. (Manchester), Ph.D. (Wales), Associate Professor

Edward R. Zietlow, B.A. (Dakota Wesleyan), M.A. (Boston), Ph.D. (Wash.), Associate Professor

Hetty Clews, B.A. (London), B.A., Dip. Ed. (Birmingham), M.A., Ph.D. (Sask.), Visiting Assistant Professor (1984-85)

Evelyn M. Cobby, B.A. (Brigham Young), M.A., Ph.D. (Brit. Col.), Assistant Professor

Diane Edwards, B.A. (Rochester), M.A., Ph.D. (Princeton), Assistant Professor

George H. Forbes, B.A. (Brit. Col.), M.A., Phil.M. (Tor.), Assistant Professor

Douglas Loney, B.A. (Brock), M.A., Ph.D. (McMaster), Visiting Assistant Professor (1984-85)

Judith I. Mitchell, B.A., M.A., (Sask.), Ph.D. (Alta.), Assistant Professor

Paul M. St. Pierre, B.A. (Brit. Col.), M.A. (Queen's), Ph.D. (Sydney), Visiting Assistant Professor 1984-85

John J. Tucker, B.A., M.A. (Tor.), B.Lit. (Oxon.), Ph.D. (Tor.), Assistant Professor

Jean A. Butler, B.A., M.A. (U. of Vic.), Administrative Officer and Part time Lecturer.

## GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 208, for graduate courses, see page 72.

## GENERAL, MAJOR AND HONOURS PROGRAMS

### Prerequisites

Students are referred to the University's regulations concerning the English Requirement on page 12, and to the remarks about First Year English on the next page.

The prerequisite for all English courses numbered 200 and above is 3 units of first year English. This prerequisite may be satisfied by two courses taken from 115, 116, 121, 122; or by three units of appropriate transfer credit in English. However, with permission of the Department, some students may take 200 level courses in their first year. Second year students may take courses numbered 300 and above, but will be required

to meet the normal standards of senior courses.

Every student is required to own a good dictionary, e.g., *The Concise Oxford Dictionary*, *The American College Dictionary*, *Webster's Collegiate Dictionary*, *Dictionary of Canadian English*, *The Senior Dictionary*, *The Random House Dictionary of the English Language* (College Edition).

### General

Students wishing to take English as one of the fields of concentration in their General program should take in their First Year: 3 units from 115, 116, 121, or 122; Second Year: 200, 201, 202, or 203; Third and Fourth Years: a total of 9 units in English courses numbered 350 and above. Students desiring advice about their choice of courses are invited to see the secretary of the Department, who will arrange consultation with Departmental advisers.

### Major

Majors are required to take a total of 15 units in English at the senior level, of which 9 units are to be chosen from the Course Structure, and an additional 6 units from courses numbered 350 and above. Normally at least 12 of these 15 units should be completed at the University of Victoria, and no more than 6 units should be from variable content courses (see listing below).

Course Structure for English Major:

- (a) At least one course (3 units) from: 200, 201, 202, 203. Students planning to major in English are strongly recommended to take 200.
- (b) At least 3 units from 351, 352, 366, 369.
- (c) At least 1/2 units in addition to (b) requirements, from courses in literature before 1700: 351, 352, 353, 354, 355, 356, 359, 360, 361, 362, 363, 364, 366, 369, 410, 442, 443.
- (d) At least 1/2 units from courses in literature covering the period 1700-1800: 372, 373, 374, 375, 376.
- (e) At least 1/2 units from literature 1800-1900: 382, 383, 384, 385, 386, 387, 427, 428.
- (f) At least 1/2 units from 20th century Canadian, American, British or Commonwealth literature: 388, 429, 431, 432, 433, 434, 436, 437, 439, 450, 451, 452, 453, 457.

NOTE: Students who have credit for courses in English not now included in the Calendar should see the Director of the Major Program for advice in following the course structure.

The Department strongly recommends that students majoring in English have a reading knowledge of a second language and/or that they take courses in literature in translation of another culture. Students planning any postgraduate work are reminded that graduate schools generally require competence in at least one language other than English.

### Honours

The Honours Program allows students of proven ability to study English language and literature more intensively than is possible in the Major or General Programs. While enjoying a comprehensive course structure, Honours students also participate in special seminars and receive the guidance of individual tutors in connection with English 490/491 and 499. Students who take a special interest in English language or literature, or who are contemplating postgraduate study in English, are strongly advised to enroll in Honours rather than in the General or Major Program. An English Honours degree is valuable for any career demanding clear thinking and writing.

Normally Honours students will follow this pattern:

*First Year:* 121, 122 (200 may also be taken in the first year with permission of the Department).

*Second Year:* 200, 345, plus some electives (e.g. Classics, History, Philosophy) and/or some upper level English courses, with reference to the course structure below. Students may take 345 in their third year, but this option tends to limit one's flexibility in choosing elective courses in the third and fourth years. For the same reason, it is also to a student's advantage to begin work on the second language requirement by the beginning of the second year.

*Third and Fourth Years:* Prerequisites for admission to Third Year Honours include a first or high second class grade in 200 or 345 and the approval of the Department. Honours students must present at least 24 units of English courses numbered 345 and above, to be distributed according to the following course structure:

- (a) 440, 445 (Third Year Honours courses, 1/2 units each);
- (b) 446, 499 (Fourth Year Honours courses, 1/2 units each); in some circumstances, 447 may be substituted for 446 with permission of the Director of Honours;
- (c) 351 (*The Canterbury Tales*);
- (d) Either 366 (Shakespeare Survey, 3 units) or 360 (Special Studies in

Shakespeare, 1/2 units);

- (e) At least 1/2 additional units from the period before 1600: 352, 353, 354, 355, 356, 359, 360, 361, 362, 363, 364, 369, 410, 442, 443;
- (f) At least 1/2 units from the period 1660-1800: 372, 373, 374, 375, 376;
- (g) At least 1/2 units of British literature from the period from 1800-1900: 382, 383, 384, 385, 386, 387;
- \* (h) At least 1/2 units from 20th century British or Commonwealth literature: 388, 433, 434, 436, 437;
- \* (i) At least 1/2 units from American literature: 425, 426, 427, 428, 429, 431, 432, 437;
- \* (j) At least 1/2 units from Canadian literature: 448, 450, 451, 452, 453, 457;
- (k) Electives: at least 4 1/2 units (or 6 units, if English 360 has been taken instead of 366) from English Department courses numbered 345 and above.

\* These area requirements will be waived if a student has completed 201 (h), 202 (j), or 203 (i). Students may then apply the freed units to senior electives in English.

At the end of the Fourth Year, there will be an interview at which students will defend their projects undertaken for 499.

### Counselling

The programs of Honours students are subject to the approval of the Director of Honours Programs, and the choice of electives is subject to modification in light of the student's entire program. Special counselling for students entering the Honours Program, as well as for those already enrolled in it, is available from the Director, who should be consulted as soon as a student develops an interest in the Program.

### Second Language Requirement

English Honours students must demonstrate knowledge of a language other than English. Normally the language will be one that has an important literary or historical bearing on the study of English, such as Greek, Latin, French, Italian, German, Russian or Spanish; a student may petition, however, to substitute another language such as Chinese or Japanese. Students may fulfill the requirement in two ways:

- (a) by completing successfully six units of university credit in the study of the language (this method is recommended for all students, particularly those intending to pursue postgraduate study);
- (b) by passing a translation examination set and marked by the appropriate language department (normally these examinations are available only to students who have completed one year of university work in the language).

### Standing at Graduation

An Honours degree is either First or Second Class. A First Class degree requires a first class graduating average (6.5 and above) and at least a B+ in 499 (the Graduating Essay). If an Honours student has a first class graduating average but has scored lower than B+ in 499, the student will be given the option of receiving Second Class Honours or a First Class Major. A Second Class Honours degree requires a second class graduating average (3.50 to 6.49) with at least B- in English 499.

### Directed Reading

490 and 491 (Directed Reading) are tutorials of 1/2 units each which are set up by students and individual instructors and approved by the Director of Major Programs or the Director of Honours Programs and by the Chairman of the Department. Only students with Honours standing or a G.P.A. of 6.00 or better may be allowed to pursue studies in Directed Reading.

### Variable Content Courses

The English Department offers a number of variable content courses, with topics advertised annually (353, 360, 362, 372, 385, 388, 391, 392, 393, 394, 395, 400, 405, 425, 426, 447, 448, 449). Where content differs, such courses may be taken more than once for credit, to a maximum of 3 units.

### Course Challenge

The English Department does not permit students to gain credit by course challenge; students may, however, apply to the appropriate Director (First Year, Majors, or Honours) for waiver of prerequisites in special cases.

### Suggested Electives

The Department encourages its students to take elective courses supportive to their General, Major or Honours programs. In making their choice of electives, students may wish to give special consideration to

relevant courses in Anthropology (e.g. 200); Classics (e.g. 100, 200); Creative Writing; History (e.g. 220, 230); History in Art (e.g. 120, 221); Linguistics; Music (e.g. 110); Philosophy (e.g. 100, 102, 238); Political Science; Psychology; Sociology; Theatre (e.g. 100); and courses in the literature of other languages.

## UNDERGRADUATE COURSES

### FIRST YEAR

All students registering for an English course must satisfy the University English Requirement, usually by taking the English Placement Test (E.P.T.) — see English Requirement for Undergraduates, page 13. For students with satisfactory standing on the E.P.T. the Department offers two sequences of one-term courses — 115/116 and 121/122. The development of skills in critical reading, composition, and library use are among the primary objectives of *all* first year courses. 115 stresses expository writing and nonfiction prose, with considerable emphasis on the preparation of a research paper; 116 continues the composition work and provides an introduction to the critical reading of imaginative literature. 121 focuses on the analysis of prose fiction, developing composition skills through the writing of critical essays on novels and short stories; 122 deals with poetry and drama and offers additional practice in the writing of critical essays. Any departure from the normal sequence of 115/116 and 121/122, except as described below, must be authorized by the Director of First Year English.

Those students who, on the basis of their score on the English Placement Test, are required to take English 099 must register in 099 for the First Term and in English 115 for the Second Term and may not take any other English course until the satisfactory completion of 099. Those who fail 099 in the First Term must repeat the course in the Second Term; any who fail a second time must take and pass the course during the following Summer Studies or they will normally be denied permission to return to the University until they have demonstrated the required level of competence in English. For further information, see English Requirement for Undergraduates, page 13.

Normally, only one English course may be taken in First Term. In special circumstances, however, three units of First Year English may be taken in Second Term, with the permission of the Director of First Year English. Three units of credit in First Year English are prerequisite to all other courses in the Department. No supplemental examinations are permitted in any First Year course.

#### ENGL 099 (0) REMEDIAL ENGLISH COMPOSITION (3 fee units)

A remedial course in writing required of those whose score on the English Placement Test indicates serious deficiencies in composition skills; a workshop approach provides instruction and drill in the fundamentals of reading comprehension and composition, including vocabulary, grammar, mechanics, sentence structure, and paragraphing. Space in the course may be available for other students with writing difficulties who may be advised to take it. For further information, see note above.

(Grading: COM, N or F)

September-December. Also January-April (3-0)

#### ENGL 115 (1½) COLLEGE COMPOSITION

A study of expository composition and English prose; readings consist mainly of essays for the analysis of ideas and style. Written assignments are designed to improve the student's ability to write clearly and correctly, to organize material, and to carry out basic library research. Students will write a minimum of six essays, including a substantial research paper. (Prerequisite: Satisfactory standing on the English Placement Test or successful completion of 099)

September-December. Also January-April (3-0)

#### ENGL 116 (1½) INTRODUCTION TO LITERATURE

A study of prose fiction, poetry, and drama, with practice in the writing of critical essays; students will be assigned a minimum of four essays.

Not open to students with credit in 121 or 122 (Prerequisite: Satisfactory standing on the English Placement Test) January-April (3-0)

#### ENGL 121 (1½) LITERATURE: PROSE FICTION

An introduction to prose fiction; class discussions and essays focus on the analysis and interpretation of short stories and novels. Considerable time will be spent on the writing of critical essays, with special attention to organization, argument, evidence, style, and, as necessary, to grammar; students will be assigned a minimum of four essays.

Not open to students with credit in 116 (Prerequisite: Satisfactory standing on the English Placement Test) September-December (3-0)

#### ENGL 122 (1½) LITERATURE: POETRY AND DRAMA

An introduction to the interpretation of poetry and drama, with continued attention to the writing of critical essays; students will be assigned a minimum of four essays.

Not open to students with credit in 116 (Prerequisite: Satisfactory standing on the English Placement Test) January-April (3-0)

### SECOND YEAR

At least 3 units of credit in First Year English are prerequisite to future work in the Department.

#### ENGL 200 (3) BRITISH LITERATURE FROM THE AGE OF CHAUCER TO THE ROMANTIC PERIOD

Special emphasis will be placed on works by Chaucer, Spenser, Marlowe, Shakespeare, Donne, Milton, Dryden, Swift, Pope, Fielding, Johnson, Blake, Wordsworth, Coleridge, Keats and Austen. (Open to all students who do not have credit in 204 or 205, but strongly recommended to those who wish to major or honour in English) Texts: *The Norton Anthology of English Literature* (2 vols.); other texts to be announced.

September-April (3-0; 3-0)

#### ENGL 201 (3) STUDIES IN MODERN LITERATURE

The emphasis will be upon themes important in 20th century literature. Authors to be studied may include Shakespeare, Joyce, Forster, Fitzgerald, Hardy, Hemingway, Camus, Cary, Beckett, Lawrence, Conrad, Tolkien, Bellow, T.S. Eliot.

September-April (3-0; 3-0)

#### ENGL 202 (formerly 238) (3) AN INTRODUCTION TO CANADIAN LITERATURE

Major authors and themes in Canadian literature; the course will deal primarily with 20th century writers.

C.M. Rooke, R.G. Lawrence

September-April (3-0)

#### ENGL 203 (3) AN INTRODUCTION TO AMERICAN LITERATURE

A survey designed for both those who will continue in American studies and those who will not. Emphasis is on the continuity of the American literary tradition. Readings from the set text will be chosen by the instructor and supplemented by additional readings in the major writers such as Whitman, Hawthorne, Twain, Henry James, Faulkner.

N.C. Smith

September-April (3-0; 3-0)

#### ENGL 215 (1½, formerly 3) THE WRITING OF EXPOSITORY PROSE

This course pays attention to the styles and methods of nonfiction prose writing. It focuses on the development and critical analysis of the student's own writing through numerous and extensive written assignments and through the study of the techniques employed by other writers. The course is open to all students, but of special relevance to those going into the teaching profession. (Classes will be limited to 20 students. Not open to students with credit for 300)

September-December. Also January-April (3-0)

#### ENGL 225 (1½) TECHNICAL COMMUNICATIONS: WRITTEN AND VERBAL

Intended to assist students who plan careers in business, government, public service and research institutions, the course is designed to improve written and oral communication skills in a work environment. Its practical basis, which requires the preparation of business letters, internal memoranda and reports, is supplemented by a theoretical outline of basic communication within an organizational structure. The course offers experience of both individual and group problem-solving. (Prerequisite: 3 units of first year English or permission of Department) (Classes limited to 16)

September-December. Also January-April (3-0)

#### ENGL 250 (1½) CONTEXTS OF LITERATURE

This course is an introduction to the relationships between literature and other aspects of our culture. Students may take 250 for a maximum of 3 units of credit. (Prerequisite: 3 units of first year English) (NOTE: This course is primarily designed as an elective for students not intending to major in English.)

This Year:

Section A: Some Versions of Utopia

The course will look at the obvious historical precedent for Utopian works, More's *Utopia*. It will then take up chronologically a selection of twentieth-century works in English. Emphasis will be placed upon the concepts of man that underlie the various works and upon the strengths and weaknesses of the resulting Utopian visions. The question of why Utopias become Dystopias will be raised.

E.R. Zietlow

September-December (3-0)

## Section B: Politics and Literature

An exploration of the ways in which politics have been treated in imaginative literature, with particular attention to the correlations of political engagement and artistic detachment, and the problem of art and propaganda.

C.D. Doyle January-April (3-0)

**THIRD AND FOURTH YEARS**

1½ unit courses are numbered 350 and above for convenience, and are at the same level as upper level courses numbered 400 and above.

**ENGL 301 (3) CHILDREN'S LITERATURE**

Oral and written works that form part of children's imaginative experience; folk tales, picture books, poems, stories, and novels are discussed in their social, psychological, political, and moral contexts. The approach may be historical critical or cross cultural. (This course and EDUC 341 offer interchangeable credit in the Intermediate Language Arts area of the Faculty of Education. ENGL 301 offers credit in the Faculty of Arts and Science only as a free elective, under the conditions specified on page 31, Other Courses Outside the Faculty of Arts and Science.) Texts: List available on application to the Department of English.

(Not offered) September-April (3-0; 3-0)

**ENGL 302 (1½ formerly 3) LITERARY APPROACHES TO CHILDHOOD AND ADOLESCENCE**

The course explores literary works, mainly of the 20th century, that dramatize adult attitudes to children and the behaviour of young persons during childhood and adolescence, in the context of relevant theories concerning child development. The approach is cross-cultural. Supplementary film or other material will be used as available.

(Not offered) (3-0)

**ENGL 345 (3) PRACTICAL CRITICISM**

A seminar designed to sharpen reactions to a writer's style, and to examine how the design of his thoughts creates his meaning. Discussions centre upon the way a particular poem, novel or play works in its details and in its overall patterning. Prospective Honours students are strongly advised to take this course in their Second Year. Students will be allowed to select this course only if they have the approval of the Director of Honours.

September-April (3-0; 3-0)

**ENGL 351 (1½) THE CANTERBURY TALES**

An introductory study of Chaucer's poetry focusing specifically on *The Canterbury Tales*.

A.S.G. Edwards, R.F. Leslie September-December (3-0)

**ENGL 352 (1½) CHAUCER STUDIES**

A survey of Chaucer's poetry exclusive of *The Canterbury Tales*, notably *Troilus and Criseyde*, *The Book of the Duchess*, *The House of Fame*, *The Parliament of Fowles*, and the short poems. (Prerequisite: 351)

(Not offered) (3-0)

**ENGL 353 (1½) STUDIES IN MEDIEVAL ENGLISH LITERATURE**

A study of the major literary works and genres of the medieval period (excluding Chaucer). The course will centre on specific genres (romance, drama, lyric, etc.), at the discretion of the instructor, with annual advertisement.

This Year: The Middle English Narrative

An examination of narrative structure in various Middle English works, including Malory's *Morte Darthur* and Chaucer's *Troilus and Criseyde*.

A.S.G. Edwards January-April (3-0)

**ENGL 354 (1½) OLD AND MIDDLE ENGLISH LITERATURE IN TRANSLATION**

A survey of English literary texts of the Middle Ages; selections will range from *Beowulf* to medieval lyrics, morality plays, and romances, as well as major works by the *Gawain* poet, Langland, and the Scots poets. The survey does not include Chaucer.

(Not offered) (3-0)

**ENGL 355 (1½) AN INTRODUCTION TO OLD ICELANDIC**

An introduction to the Old Icelandic language and to the poems and stories — the Eddas and the Sagas — that it preserves.

(Not offered) (3-0)

**ENGL 356 (1½) OLD ICELANDIC LITERATURE**

A study of *Hrafnkel Saga*, *Bandmanna Saga*, *Hervarar Saga* and *Heidreks*, and selected Eddic poems. (Prerequisite: 355 or permission of

the instructor)

(Not offered) (3-0)

**ENGL 359 (formerly part of 419) (1½) RENAISSANCE LITERATURE**

Major nondramatic literature of the 16th Century. (Not open for credit to students in 419) Texts: Sidney's *Defence of Poesy*; More's *Utopia* and Bacon's *New Atlantis*; lyrics by Sidney and other Elizabethans; and a substantial selection from *The Faerie Queene* (editions to be announced)

B.O. Kurth January-April (3-0)

**ENGL 360 (1½) SPECIAL STUDIES IN SHAKESPEARE**

Intensive study of a few plays, with emphasis on related critical issues. Students intending to take this course must have a good knowledge of Shakespeare's work.

(Not offered) (3-0)

**ENGL 361 (1½) THE METAPHYSICAL POETS**

Major emphasis will be on Donne, Herbert, Marvell, Vaughn and Traherne. Special attention will be given to the secular love lyric, as well as to the influence of Christian theology and related philosophical traditions.

P.J. Grant September-December (3-0)

**ENGL 362 (1½) SPECIAL STUDIES IN RENAISSANCE LITERATURE**

A study of major literary works, genres, or themes of the English Renaissance chosen by the instructor, with annual advertisement. Emphasis will be on nondramatic works.

This Year: Sir Philip Sidney

As poet, literary theorist, romance writer, courtier, and warrior, Philip Sidney has become a symbol of the Elizabethan age. His life and works, however, are filled with frustration and conflict, symptomatic not only of personal problems but of severe tensions within Elizabethan aristocratic culture. Works to be studied, among others, are *Astrophel and Stella*, the *Apology for Poetry*, and the *Arcadia*. These works will be related to Sidney's life, to the works of contemporaries such as Spenser, Shakespeare, and Jonson, and to the life of the Elizabethan aristocracy.

E.I. Berry January-April (3-0)

**ENGL 363 (1½) MAGIC, SCIENCE AND RELIGION IN RENAISSANCE LITERATURE**

A study of late 16th and 17th century literature in light of the interrelationships between contemporary magic, science, and theology. A good deal of attention will be paid to this background, but the ultimate purpose of the course is the fuller understanding of the literary texts themselves. Authors to be studied include Marlowe, Shakespeare, Jonson, Donne, Bacon, and Browne.

P.J. Grant January-April (3-0)

**ENGL 364 (1½) ELIZABETHAN AND JACOBAN DRAMA**

Main emphasis is on such major Elizabethan and Jacobean dramatists as Marlowe, Webster, Jonson, Middleton and Ford.

B.O. Kurth September-December (3-0)

**ENGL 366 (formerly 413) (3) SHAKESPEARE SURVEY**

Lectures on the development of Shakespeare's art in the histories, comedies and tragedies.

M.R. Best, M.D. Faber September-April (3-0; 3-0)

**ENGL 369 (formerly part of 419) (1½) MILTON: MAJOR POETRY AND SELECTED PROSE**

(Not open for credit to students with credit in 419)

T.G. Sherwood January-April (3-0)

**ENGL 372 (1½) SPECIAL STUDIES IN 18TH CENTURY LITERATURE**

A study of a major aspect of literature in the century. The specific focus of the course will be determined by the instructor and advertised annually. This Year: The Influence of Science and Technology on Restoration and 18th Century Literature

Scientists like Bacon, Boyle, and Newton, organizations like the Royal Society, and movements like the "moderns" have profoundly affected literature and language. The new science, together with connected developments in technology, industry, commerce, finance and politics, motivated the reaction of Augustan Satirists. Yet Western technology with its related materialism was produced in this crucible and has reoriented the modern world. Since virtually every field of human endeavor has been affected by what occurred, students whose disciplines lie outside English literature are encouraged to relate these to the course.

S.L. Macey September-December (3-0)

**ENGL 373 (1½) ENGLISH LITERATURE OF THE RESTORATION PERIOD: 1660-1700**

Poetry, prose and drama (excluding Milton's) produced between the Restoration of Charles II in 1660 and the close of the 17th century; particular emphasis will be placed upon Dryden and Restoration Comedy. (Not open to students with credit for 371)

P.J. Koster September-December (3-0)

**ENGL 374 (1½) SWIFT, POPE, AND THE LITERATURE OF THE AUGUSTAN AGE: 1701-1745**

An intensive study of the great age of English satire, with particular emphasis on Swift, Pope and the other satirists of the reigns of Queen Anne and the first two Georges. (Not open to students with credit for 420)

S.L. Macey January-April (3-0)

**ENGL 375 (1½) JOHNSON, BLAKE AND THE LATER 18TH CENTURY**

Literature of the later 18th century, with particular emphasis on Samuel Johnson and his circle, William Blake, and the poetry of "sensibility". (Not open to students with credit for 370)

H.E. Summerfield September-December (3-0)

**ENGL 376 (formerly 423) (3) THE BEGINNING OF THE BRITISH NOVEL IN THE 17TH AND 18TH CENTURIES**

Main emphasis is placed on the 18th century novel — with some attention to the social and intellectual background of the period, when this appears to illuminate the novels.

T.R. Cleary September-April (3-0; 3-0)

**ENGL 382 (formerly half of 430) (1½) THE ROMANTIC PERIOD: I**

Studies in Wordsworth and Coleridge.

A.B. England September-December (3-0)

**ENGL 383 (formerly half of 430) (1½) THE ROMANTIC PERIOD: II**

Studies in Keats, Shelley, and Byron.

A.B. England January-April (3-0)

**ENGL 384 (formerly 424) (3) THE BRITISH NOVEL IN THE 19TH CENTURY**

Authors to be studied may include Mary Shelley, Austen, Scott, Brönte, Disraeli, Collins, Dickens, Thackeray, Eliot, Trollope, Meredith, Hardy, Butler, and Stevenson.

N.C. Smith September-April (3-0; 3-0)

**ENGL 385 (1½) SPECIAL STUDIES IN 19TH CENTURY ENGLISH LITERATURE**

A study of a specific theme, problem or author of the 19th century. The specific topic will be determined by the instructor and advertised annually.

This Year: The Brönte Sisters

One part of the prevailing Brönte myth is that the sisters lived and wrote in isolation, cut off from the intellectual, cultural, and social currents of their time. In fact, they were very much aware of some of the central conflicts of the 19th century — of the clash between the Romantic desire for individual freedom and the Victorian emphasis on duty and social responsibility; of the clash between the need for personal fulfillment and the demands of social decorum and convention. Through a study of their poetry and prose, the course will examine the ways in which each of the sisters tried to come to terms with these conflicts.

V.A. Neufeldt September-December (3-0)

**ENGL 386 (1½) VICTORIAN POETRY AND THOUGHT: I**

Studies in Tennyson and Arnold, with additional readings from such prose writers as Mill, Carlyle, and Newman.

J.G. Hayman January-April (3-0)

**ENGL 387 (1½) VICTORIAN POETRY AND THOUGHT: II**

Studies in Browning, Hopkins and the pre-Raphaelite poets, with additional readings from such prose writers as Carlyle, Ruskin, Pater, and Morris.

(Not offered) (3-0)

**ENGL 388 (1½) SPECIAL STUDIES IN 20TH CENTURY BRITISH LITERATURE**

A study of a specific theme, problem or author of the period. The specific topic will be determined by the instructor and advertised annually.

(Not offered) (3-0)

**ENGL 391 (1½) STUDIES IN LITERARY GENRE**

(Not offered) (3-0)

**ENGL 392 (1½) STUDIES IN A MAJOR FIGURE**

This course is intended to provide opportunities for occasional offerings of single authors who do not justify permanent representation as do Chaucer, Shakespeare, Spenser, and Milton.

This Year: Thomas Hardy

This course, through a study of the major novels as well as selected poetry, will examine Hardy in relation to his age. Various critical issues will be discussed, such as the apparent disparity between Hardy the craftsman and Hardy the genius; his particular treatment of the "Woman Question"; his temperament and his reaction to reviews and the censorship of the lending libraries; his celebrated "pessimism" and his treatment of love, faith and determinism; and the ways in which he was both representative of and rebellious against the Victorian tradition. The course will discuss how the themes in Hardy's novels are reflected in his poetry, and trace in Hardy's work the development of the Victorian novel from its middle period through its late period to the roots of modernism.

J.I. Mitchell September-December (3-0)

**ENGL 393 (1½) MYTH AND LITERATURE**

(Not offered) (3-0)

**ENGL 394 (1½) THEMATIC APPROACHES TO LITERATURE: I**

This Year: The Literature of Old Age

Emphasis will be placed upon close textual analysis and upon the treatment of such themes as the relationship of eros and thanatos, rejuvenation, *contemptus mundi*, the life review, and generational conflicts. Some background in the history, psychology, and sociology of old age will be supplied.

C.M. Rooke September-December (3-0)

**ENGL 395 (1½) THEMATIC APPROACHES TO LITERATURE: II**

(3-0)

**ENGL 400 (1½, formerly 3) ADVANCED WORKSHOP IN COMPOSITION**

The course will offer workshops in general and specialized kinds of writing. Different sections will concentrate on such problems as stylistics, modern theories of grammar, technical writing, business writing, preparation of briefs and reports. The topic for each section will be announced annually. Classes will be limited to 20 students. The course may be taken for a maximum of 3 units with departmental permission, but only 1½ units may be used to complete the requirements for a general, major or honours program in English.

This Year: Workshop in Expository Prose

The course will offer students practice in the writing and criticism of expository prose. (Competence in the English language is a prerequisite)

W. Benzie January-April (3-0)

**ENGL 405 (1½) STUDIES IN LITERATURE AND FILM**

A study of various relationships between the art of film and relevant literary works. Topics will vary and will be announced annually. English major and honours students may take this course as an elective only. Can be taken more than once for credit, to a maximum of 3 units.

This Year: Narrative Theory in Literature and Film

A study of narrative theory in relation to literature and film. Particular attention will be paid to recent developments in semiotics and feminist criticism.

S.A. Scobie January-April (3-0)

**ENGL 409 (formerly 365) (1½) THE BIBLE IN ENGLISH**

A course in the Bible as Literature, surveying basic books of the Old and New Testaments, such as Genesis, Deuteronomy, Job, Song of Songs, Psalms, selected Wisdom Literature, Isaiah, selected minor prophets, Matthew, John, Acts, selected Pauline epistles, Hebrews and Revelation. Attention will be paid to the historical influence of the English Bible on the style and structure of English literature, as well as to the intrinsic literary features of the Biblical books themselves. (Not applicable as Renaissance credit for Major and Honours students.)

D.T. Edwards January-April (3-0)

**ENGL 410 (formerly 210) (3) BACKGROUNDS TO ENGLISH LITERARY TRADITION**

A study of the main currents of thought contributing to late Medieval and Renaissance Literature. The development of literary vocabulary in

the Judaeo-Christian tradition.  
(Not offered)

September-April (3-0; 3-0)

**ENGL 425 (formerly 380) (1½) SPECIAL STUDIES IN THE LITERATURE OF THE UNITED STATES**

A study of American literature which will focus attention on a specific theme, problem, genre or author at the discretion of the instructor, advertised annually.

This Year: Ernest Hemingway

A study of the major works of Ernest Hemingway. The course will examine influences on Hemingway's style and thought, the social milieu in which Hemingway wrote, and the public personality he developed in connection with his literary career.

E.R. Zietlow

January-April (3-0)

**ENGL 426 (formerly 398) (1½, formerly 3) COMPARATIVE STUDIES IN NORTH AMERICAN LITERATURE**

A variable-content course which focuses on comparisons and contrasts between the literatures of Canada and the United States. The specific topic or theme will be determined by the instructor and advertised annually.

(Not offered)

(3-0)

**ENGL 427 (1½) THE AMERICAN RENAISSANCE**

A study of the period 1840-1860 which saw the rise to full maturity of a distinctively American literature. Emphasis will be placed on the major figures — Poe, Emerson, Thoreau, Hawthorne, Dickinson, Melville, and Whitman — and on the literary developments and movements in prose and poetry.

(Not offered)

(3-0)

**ENGL 428 (3) AMERICAN FICTION TO 1900**

A survey of major American fiction in the 19th century. The first term will be a survey of the period from Brockden Brown, Cooper and Hawthorne to Crane, Norris and Dreiser; the second term will be an intensive study of the development and achievement of three major figures: Melville, Twain and James.

C.V. Johnson

September-April (3-0; 3-0)

**ENGL 429 (3) 20TH CENTURY AMERICAN FICTION**

The primary aim of the course is critical study of major texts. The secondary aim is to relate them to the social and intellectual background of the period. Authors will include: Stein, Anderson, Hemingway, Fitzgerald, Faulkner, Steinbeck, Penn Warren, Mailer, Ellison, Baldwin, Bellow, Malamud, Barth, Styron and Vonnegut.

C.J. Partridge

September-April (3-0; 3-0)

**ENGL 431 (formerly 435) (1½, formerly 3) MODERN AMERICAN POETRY: I**

Readings in American poetry of the period 1910-50. The main poets studied will be Robert Frost, Ezra Pound, Wallace Stevens, William Carlos Williams, and Hart Crane. Contextual reference will be made to other poets such as Marianne Moore, E.E. Cummings, T.S. Eliot, and the Fugitives.

C.D. Doyle

September-December (3-0)

**ENGL 432 (1½) MODERN AMERICAN POETRY: II**

Detailed study of poets and poetry movements since 1950 such as the following: John Crowe Ransom, Allen Tate and the Fugitive Group; Charles Olson and the Black Mountain Movement; Allen Ginsberg, Gary Snyder and the Beat Generation; Robert Bly and "deep image" poetry; Robert Lowell, Sylvia Plath, and the confessional poets; John Berryman, Theodore Roethke, John Ashbery.

(Not offered)

(3-0)

**ENGL 433 (formerly 389) (1½, formerly 3) MODERN ANGLO-IRISH LITERATURE**

Focuses primarily but not exclusively on the Irish Renaissance; emphasis will be placed on Wilde, Yeats, and Joyce, and other authors to be studied may include Shaw, Synge, Stephens, O'Casey, Clarke, O'Connor, and Beckett. The background of ideas and social forces in the period will receive some attention.

D.S. Thatcher

September-December (3-0)

**ENGL 434 (1½, formerly 3) BRITISH POETRY FROM 1914 TO THE PRESENT DAY**

This course will include discussion of the main poetic movements of the period, together with explanations of the work of individual poets, such

as Wilfred Owen, T.S. Eliot, David Jones, Dylan Thomas, W.H. Auden, W.B. Yeats, D.H. Lawrence, Hugh MacDiarmid, and others.

C.D. Doyle

January-April (3-0)

**ENGL 436 (3) 20TH CENTURY BRITISH FICTION**

Close study of one or more of the works of the prominent writers, Conrad, James Joyce and D.H. Lawrence, and some of their contemporaries and successors. Emphasis is critical rather than historical. Essays are required and students are urged to form their own judgements with little reference to works of critics. The majority of the texts are to be announced and will include some of the following authors: E.M. Forster, Virginia Woolf, Aldous Huxley, Evelyn Waugh, Graham Greene, Joyce Cary, Samuel Beckett, Angus Wilson, Alan Sillitoe, Kingsley Amis, William Golding.

T.L. Williams, D.S. Thatcher

September-April (3-0; 3-0)

**ENGL 437 (3) BRITISH AND AMERICAN DRAMA SINCE WORLD WAR I**

A study of the play as a literary form and an examination of styles, techniques, themes and moods which have been explored in 20th century drama, including a brief historical survey of the 19th century theatre. Some attention will be paid to the techniques of acting and direction, theatre design, and audience requirements which have influenced the playwright; however, this is not a practical theatre course. Essay topics will encourage development of the student's own critical ability. Throughout, concentration will be on the text rather than on the works of critics.

R.C. Terry

September-April (3-0; 3-0)

**ENGL 439 (3) COMMONWEALTH LITERATURE**

The course offers an introduction to the literature of new and emergent countries. It will discuss problems of regionalism, immigration, native rights and national myths as processes of self-definition. Works from Australia, New Zealand, the Caribbean and sub-Saharan Africa will be studied; comparisons will be made with aspects of Canadian cultural development.

(Not offered)

September-April (3-0; 3-0)

**ENGL 440 (1½) THE HISTORY OF THE ENGLISH LANGUAGE**

A survey of the development of the English Language from its Germanic origins to the 19th century, with particular reference to semantic, etymological, phonetic, morphological and syntactic modifications of primary importance to an understanding of English literature. (Prerequisites: Honours standing in Third or Fourth Year)

(Not offered)

(3-0)

**ENGL 442 (formerly part of 441) (1½) AN INTRODUCTION TO OLD ENGLISH**

An introduction to the language, culture, and literature of Anglo-Saxon England, including the study of prose texts and poetry.

J.J. Tucker

September-December (3-0)

**ENGL 443 (formerly part of 441) (1½) OLD ENGLISH LITERATURE**

A study of *Beowulf* and other Old English texts. (Prerequisite: 442)

J.J. Tucker

January-April (3-0)

**ENGL 445 (1½) THIRD YEAR HONOURS SEMINAR, THE HISTORY OF ENGLISH PROSE STYLE**

A historical and critical survey up to the present day. This course illustrates, through the study of representative prose passages, the interplay between the mind of the writer and the age he lives in. (Not open to students with 3 units credit for 446)

W. Benzie

January-April (3-0)

**ENGL 446 (1½) FOURTH YEAR HONOURS SEMINAR**

A seminar in the history of critical theory, with a study of its relation in practice to specific genres and styles.

H.F. Smith

September-December (3-0)

**ENGL 447 (1½) STUDIES IN MODERN LITERARY THEORY AND CRITICISM**

A study of selected topics in modern literary theory and criticism. The specific topic will be determined by the instructor and advertised annually.

This Year: Introduction to Contemporary Literary Theory

Literary theory is a rich new field in literary studies whose methodological innovations have exercised a marked influence on critical practice. This course will introduce students with no previous knowledge of the

topic to contemporary thoughts about literature and the criticism of literature. It will specifically focus on beliefs about the codes of meaning, the act of reading, and the implications of interpreting. Students will learn to apply theoretical concepts to specific literary texts. The course will touch on New Criticism, Structuralism, Hermeneutics, Deconstruction, and Marxist Criticism.  
E.M. Cobley January-April (3-0)

**ENGL 448 (1½) SPECIAL STUDIES IN CANADIAN LITERATURE**  
A study of a major theme, problem, genre or author in Canadian Literature, determined by the instructor and advertised annually.  
(Not offered) (3-0)

**ENGL 449 (1½) SPECIAL STUDIES IN CONTEMPORARY LITERATURE**  
A study of significant literary works published during the past 15 years. The course will focus on themes and issues engaged by authors from throughout the English-speaking world. (Sample authors: Patrick White, John Fowles, Robertson Davies, Chinua Achebe, John Ashbery, Ian McEwen)  
(Not offered) (3-0)

**ENGL 450 (formerly 396) (1½) MODERN CANADIAN FICTION: I**  
A study of important Canadian authors who came to prominence in the two decades following World War II; major figures considered may include Hugh MacLennan, Mordecai Richler, Ernest Buckler, Robertson Davies, and Margaret Laurence. Some attention will also be paid to the development of the short story in these years.  
R.G. Lawrence September-December (3-0)

**ENGL 451 (1½) MODERN CANADIAN FICTION: II**  
A study of Canadian novelists and short story writers who have achieved recognition in recent years; major figures considered may include Margaret Atwood, Alice Munro, Robert Kroetsch, Rudy Wiebe, and Jack Hodgins.  
C.M. Rooke January-April (3-0)

**ENGL 452 (formerly part of 397) (1½) MODERN CANADIAN POETRY: I**  
A study of important Canadian poets who came to prominence in the two decades following World War II; major figures considered may include F.R. Scott, Dorothy Livesay, Earle Birney, Irving Layton, Leonard Cohen, and P.K. Page.  
S.A. Scobie September-December (3-0)

**ENGL 453 (formerly part of 397) (1½) MODERN CANADIAN POETRY: II**  
A study of Canadian poets who have achieved recognition in recent years; major figures considered may include Phyllis Webb, Al Purdy, Margaret Atwood, and Michael Ondaatje.  
S.A. Scobie January-April (3-0)

**ENGL 457 (formerly 438) (3) TRADITIONS IN CANADIAN LITERATURE**  
Important figures in Canada's literary development, with substantial consideration of historical, geographical, social, literary, and aesthetic influences in English and French-Canadian literature during the 19th and 20th centuries; amongst the authors to be included: Moodie, Hemon, Leacock, Grove, Pratt, MacLennan, Blais, Laurence, Davies, Ryga, Reaney, Hebert, Atwood, Layton, Birney, Avison, and selected contemporary writers.  
(Not offered) September-April (3-0; 3-0)

**ENGL 490 (1½) DIRECTED READING IN ENGLISH**  
A specified reading project in some area of English literature to be determined by the student and the instructor; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Majors or Honours, and the Chairman of the Department (NOTE: Please consult Department policy on "Directed Reading" in the General Information section.)  
(3-0)

**ENGL 491 (1½) DIRECTED READING IN ENGLISH**  
Further supervised study in some area of English literature; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Major Programs or the Director of Honours Programs, and the Chairman of the Department. (Persons who have received three units of credit

for 490 prior to 1976-77 will not be allowed to take 491.) (NOTE: Please consult Department policy on "Directed Reading" in the General Information section.) (3-0)

### **ENGL 499 (1½) GRADUATING ESSAY OR DIRECTED READING PROJECT IN HONOURS**

The graduating essay or directed reading project will be done under the guidance of an individual tutor assigned in Third and Fourth years.  
(Prerequisite: Honours standing in Fourth year) (0-0-2; 0-0-2)

## **GRADUATE COURSES AND SEMINARS**

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

All courses except 500 and 501 are variable content.

**ENGL 500 (1½) INTRODUCTION TO BIBLIOGRAPHY AND METHODS OF RESEARCH**  
Use of standard reference works and bibliographies; compilation of bibliographies on given topics; theory of book production; bibliographical descriptions; exercises in editorial theory and practice. Exercises will be required.  
A.S.G. Edwards September-December (3-0)

**ENGL 501 (1½) INTRODUCTION TO RESEARCH AND CRITICISM**  
History of bibliographical criticism; problems in textual criticism and the treatment of bibliographical evidence. Some exercises required in both parts. The main project will be preparing a critical edition of a short text, with critical and textual introductions, variants and other apparatus. (Some preliminary work towards the editing project may be done through exercises for 500.) (3-0)

**ENGL 503 (1½) SPECIAL STUDIES: I**  
(This course will be offered subject to the approval of the Department.) (3-0)

**ENGL 504 (1½) SPECIAL STUDIES: II** (3-0)

**ENGL 505 (1½) STUDIES IN LITERARY THEORY: I**  
This year: Introduction to Contemporary Literary Theory  
E.M. Cobley September-December (3-0)

**ENGL 506 (1½) STUDIES IN LITERARY THEORY: II** (3-0)

**ENGL 510 (1½) STUDIES IN OLD ENGLISH LITERATURE: I** (3-0)

**ENGL 511 (1½) STUDIES IN OLD ENGLISH LITERATURE: II** (3-0)

**ENGL 515 (1½) STUDIES IN MIDDLE ENGLISH LITERATURE: I**  
This year: Medieval Poetry  
R.F. Leslic January-April (3-0)

**ENGL 516 (1½) STUDIES IN MIDDLE ENGLISH LITERATURE: II** (3-0)

**ENGL 520 (1½) STUDIES IN RENAISSANCE LITERATURE: I**  
This year: Critical Approaches to Shakespearean Tragedy  
R.M. Schuler September-December (3-0)

**ENGL 521 (1½) STUDIES IN RENAISSANCE LITERATURE: II** (3-0)

**ENGL 530 (1½) STUDIES IN THE LITERATURE OF THE 17TH CENTURY: I** (3-0)

**ENGL 531 (1½) STUDIES IN THE LITERATURE OF THE 17TH CENTURY: II**

**ENGL 540 (1½) STUDIES IN THE LITERATURE OF THE 18TH CENTURY: I**  
This year: William Blake  
H.E. Summerfield January-April (3-0)

**ENGL 541 (1½) STUDIES IN THE LITERATURE OF THE 18TH CENTURY: II**

**ENGL 550 (1½) STUDIES IN THE LITERATURE OF THE 19TH CENTURY: I**  
This year: Love as Religion in the Victorian Novel  
V.A. Neufeldt January-April (3-0)

**ENGL 551 (1½) STUDIES IN THE LITERATURE OF THE 19TH CENTURY: II** (3-0)

**ENGL 560 (1½) STUDIES IN THE LITERATURE OF THE 20TH CENTURY: I**  
This year: The Boomsbury Group  
J.G. Hayman January-April (3-0)

|   |       |
|---|-------|
| ENGL 561 (1½) STUDIES IN THE LITERATURE OF THE 20TH CENTURY: II | (3-0) |
| ENGL 570 (1½) STUDIES IN AMERICAN LITERATURE: I                 |       |
| ENGL 571 (1½) STUDIES IN AMERICAN LITERATURE: II                | (3-0) |
| ENGL 580 (1½) STUDIES IN COMMONWEALTH LITERATURE: I             | (3-0) |
| ENGL 581 (1½) STUDIES IN COMMONWEALTH LITERATURE: II            | (3-0) |

|  |       |
|--|-------|
| ENGL 585 (1½) STUDIES IN CANADIAN LITERATURE: I  |       |
| This year: The Novels of Robertson Davies and Hugh McLennan<br>B.N.S. Gooch September-December (3-0) |       |
| ENGL 586 (1½) STUDIES IN CANADIAN LITERATURE: II   | (3-0) |
| ENGL 590 (1½) DIRECTED READING: I  | (3-0) |
| ENGL 591 (1½) DIRECTED READING: II   | (3-0) |
| ENGL 598 (3) COMPREHENSIVE EXAMINATION   |       |
| ENGL 599 (7½) M.A. THESIS  |       |
| ENGL 699 (Credit to be determined) Ph.D. DISSERTATION  |       |

## ENVIRONMENTAL STUDIES PROGRAM

### Director

Marcus A.M. Bell, B.S.F. (Brit. Col.), M.F. (Yale), Ph.D. (Brit. Col.), R.P.F., Associate Professor (Biology)

### Advisory Committee:

- J. Anthony Burke, A.B., A.M., Ph.D. (Harvard), Associate Professor, Physics. Term expires July 1, 1986  
 George Corwin, B.C. (Ithaca), M.A., D.M.A. (Rochester), Professor, Music. Term expires July 1, 1987  
 Philip Dearden, B.A. (Birm.), M.Sc. (Nfld.), Ph.D. (U. of Vic.), Assistant Professor, Geography. Term expires July 1, 1986  
 Charles Doyle, B.A., M.A. (N.Z.), Ph.D. (JAuckland), Professor, English. Term expires July 1, 1987  
 Thomas M. Fyles, B.Sc. (U. ov Vic.), Ph.D. (York), Associate Professor, Chemistry. Term expires July 1, 1987  
 Leonard Laudadio, B.A. (Puget Sound), M.A., Ph.D. (Wash.), Professor, Economics. Term expires July 1, 1986  
 T. Murray Rankin, B.A. (Queen's), LL.B. (Tor.), LL.M. (Harvard), Associate Professor, Law. Term expires July 1, 1987  
 Gordon S. Shrimpton, B.A., M.A. (Brit. Col.) Ph.D. (Stan.), Associate Professor, Classics. Term expires July 1, 1986  
 Paul F. Thomas, B.A., B.Sc. (Tor.), M.A. (Waterloo), M.Ed., Ph.D. (Tor.), Associate Professor, Education. Term expires July 1, 1987  
 Jan W. Walls, B.A., M.A., Ph.D. (Indiana), Associate Professor, Centre for Pacific and Oriental Studies. Term expires July 1, 1986  
 Paul R. West, B.Sc., Ph.D. (McMaster), Associate Professor, Chemistry. Term expires July 1, 1986  
 R. Jeremy Wilson, B.A., M.A. (Alta.), Ph.D. (Brit. Col.), Assistant Professor, Political Science. Term expires July 1, 1987

### Student Representatives:

- Cathy Carr. Term expires 1986  
 Gayle Nelson. Term expires 1986  
 Lois Goodwin. Term expires 1986

The Environmental Studies Program is designed to provide students with a broad perspective on their environment to supplement their studies in a single, traditional discipline. Although a number of departments have developed curricula which provide their students with in-depth preparation for addressing environmental issues from their disciplinary perspectives, the Environmental Studies Program's role is to bridge the gaps. Environmental problems by nature encompass more than a single discipline; hence the need for an interdisciplinary program.

The Program is structured to serve those students with a general academic interest in environmental topics as well as those with a professional interest in the environment. It aims to solve complex environmental problems through a broad understanding of what each of the disciplines can contribute to this process. There are four options: two topical options which focus on an interdisciplinary selection of courses covering a particular problem area; a conceptual option, which introduces students to environment-related areas over a range of disciplines; and a contract option which allows students, in collaboration with faculty, to develop personalized study programs where the other options are inappropriate. All options require that a student be registered in a Major or Honours program in the Faculty of Arts and Science and register with the Environmental Studies Program Office as soon as possible.

To obtain a notation on the student's permanent record indicating completion of the Program the student must meet the requirements for one of these options as described below.

Students considering the Environmental Studies Program are strongly advised to contact a member of the Environmental Studies Committee for counselling. The following courses are recommended in first year: GEOG 101A and B; BIOL 150 and/or PHYS 103 and/or BIOC 201 (the

latter may be taken in first year only with permission of the Department). Since these courses consider natural, human and cultural phenomena in the context of technology and environmental management, they provide a useful base for the interdisciplinary study of environmental issues.

Although entry into the Program is possible at any time during undergraduate studies, many courses in the Environmental Studies Program are 300 and 400 level courses with prerequisites, so students should also plan early to incorporate these prerequisites into their schedule.

Students are also encouraged to include the following as electives:

- (1) Courses in French
- (2) One or more of ENG 115; 215; 225; CW (Creative Writing) 100
- (3) Other electives chosen from areas other than the one in which the student is majoring; i.e. if the student is majoring in science, electives should be chosen from the social sciences of humanities.

### CORE COURSES:

At least 15 units, not forming part of the major requirement, must be selected from the option lists below. These must include the following core:

- BIOL 306 (1½) Ecology  
 PHIL 333 (1½) Philosophy and the Environment

Should one of these courses form part of a student's major, then GEOG 350A (1½) Geography of Resource Management, must be taken in addition.

## TOPICAL OPTIONS

### URBAN ENVIRONMENT

Requirements: Core Courses, plus appropriate selection of courses from the list below to make up 15 units, and not forming part of the major requirement.

### Social Sciences Emphasis

- ANTH 401 (1½) Cultural Ecology  
 BIOL 427 (1½) Population Ecology  
 ECON 412 (1½) Urban Land Economics  
 ECON 414 (1½) Regional Economics  
 ED-E 373 (1½) Environmental and Outdoor Education: An Introduction  
 E S 400 (1½) Topics in Environmental Studies  
 E S 490 (1-3) Directed Studies  
 GEOG 323 (1½) Introductory Cartography  
 GEOG 325 (1½) Field Survey Techniques  
 GEOG 330 (1½) Understanding Cities  
 GEOG 349 (1½) Internal Structure of Cities  
 GEOG 444 (1½) Urban Transportation and Land Use Planning  
 GEOG 446 (1½) Development and Planning of the Urban Region  
 GEOG 448 (1½) Urban Social Geography and Planning  
 GEOG 459A (1½) Recreational Resource Analysis: Concepts  
 GEOG 459B (1½) Recreational Resource Analysis: Evaluation, Planning and Management  
 HIST 346A (1½) Canadian Urban History  
 HIST 346B (1½) Seminar in Canadian History  
 HA 381 (3) History of Architecture in North America  
 HA 487 (3) Introduction to the Conservation of Cultural Property  
 LA 306 (1½) or 307 (1½) Ideas and Perspectives in Western Civilization: I and II  
 POLI 360 (1½) Canadian Federalism and Public Policy  
 POLI 450 (3) Local Government and Administration  
 POLI 457 (1½) The Politics of Environmental and Natural Resource Policy  
 POLI 465 (3) British Columbia Government and Politics

PSYC 350 (3) Environmental Psychology  
 SOCI 340 (1½) Demography  
 SOCI 341 (1½) Human Ecology  
 SOCI 441 (1½) Urban Sociology

#### Science Emphasis

BIOL (1½) Economic Entomology  
 BIOL (1½) Biology of Pollution  
 CHEM 300 (3) Chemistry in Modern Society  
 CHEM 312 (1½) Introductory Quantitative Analysis  
 ECON 416 (1½) Cost Benefit Analysis: Principles and Application  
 E S 400 (1½) Topics in Environmental Studies  
 E S 490 (1-3) Directed Studies  
 GEOG 323 (1½) Introductory Cartography  
 GEOG 330 (1½) Understanding Cities  
 GEOG 341 (1½) Industrial Geography  
 GEOG 349 (1½) Internal Structure of Cities  
 GEOG 359A (1½) Recreational Resource Analysis: Concepts  
 GEOG 359B (1½) Recreational Resource Analysis: Evaluation, Planning  
 LA 306 (1½) or 307 (1½) Ideas and Perspectives in Western Civilization: I and II  
 PHYS 301A (1½) Physics and Technology of Energy

#### NATURAL RESOURCE MANAGEMENT

Requirements:

1. Core Courses
2. Three units in quantitative concepts and methods, preferably through SCS 110 and STAT 250, but this requirement may also be met by any of the following: ANTH 416/417, BIOL 250/304, ECON 240/340, GEOG 321/425 or 425/426, PSYC 300, SOCI 371/471, STAT 250/251. This requirement may form a part of the Major program.
3. An appropriate selection of courses from the lists below to make up 15 units, and not forming part of the major requirement. At least one course must be selected from each of the four sections below.
  - (i) *Environmental Aspects of Regional Development*  
 ECON 414 (1½) Regional Economics  
 GEOG 343 (1½) Regional Analysis  
 GEOG 443 (1½) Geography of Regional Development  
 POLI 453 (3) Local Government and Administration
  - (ii) *Goal Conflict*  
 ECON 416 (1½) Cost-Benefit Analysis: Principles and Application  
 ECON 430A (1½) Natural Resource Economics  
 GEOG 450A (1½) Decision Making in Resource Management: Practical Application  
 POLI 457 (1½) The Politics of Environmental and Natural Resource Policy
  - (iii) *Philosophical Aspects*  
 LA 306 (1½) or 307 (1½) Ideas and Perspectives in Western Civilization: I and II  
 PHIL 329 (1½) Social and Political Philosophy: III – Contemporary Writers
  - (iv) *Natural Science Aspects of Environmental Impact*  
 BIOL 408 (1½) The Biology of Pollution  
 BIOL 420 (1½) Applied Vegetation Science  
 CHEM 302 (formerly half of 301) (1½) Industrial Chemistry with special reference to Air Pollution  
 CHEM 303 (formerly half of 301) (1½) Industrial Chemistry with special reference to Water Pollution  
 GEOG 323 (1½) Introductory Cartography  
 GEOG 325 (1½) Field Survey Techniques  
 GEOG 350B (1½) Applied Resource Geography  
 GEOG 377 (1½) Applied Geomorphology  
 GEOG 452 (1½) Coastal Resource Analysis  
 GEOG 453 (1½) Marine Resource Analysis  
 GEOG 459A (1½) Recreational Resource Analysis: Concepts  
 GEOG 459B (1½) Recreational Resource Analysis: Evaluation, Planning and Management  
 PHYS 310A (1½) Physics and Technology of Energy

#### CONCEPTUAL OPTION

Requirements:

1. Core Courses.
2. Three units of quantitative concepts and methods, preferably through CSC 110 and STAT 250, but this requirement may also be met by any of the following: ANTH 416/417, BIOL 304, ECON 240/340, GEOG 321/425 or 425/426, PSYC 300, SOCI 371/471/ STAT 250/251. This

requirement may form a part of the Major requirements.

3. An appropriate selection of courses from the list below to make up 15 units, and not forming part of the Major requirements.

#### Social Science Emphasis

ANTH 401 (1½) Cultural Ecology  
 ANTH (Sociology) 418 (1½) Social Change  
 ECON 412 (1½) Urban Economics  
 ECON 416 (1½) Cost Benefit Analysis: Principles and Application  
 ED-E 373 (1½) Environmental and Outdoor Education: An Introduction  
 E S 400 (1½) Topics in Environmental Studies  
 E S 490 (1-3) Directed Studies  
 GEOG 350A (1½) Applied Resource Geography  
 GEOG 378 (1½) Environmental Aesthetics  
 GEOG 454 (1½) Geographical Dimensions of Energy Policy  
 GEOG 459A (1½) Recreational Resource Analysis: Concepts  
 GEOG 459B (1½) Recreational Resource Analysis: Evaluation, Planning and Management  
 LA 306 (1½) or 307 (1½) Ideas and Perspectives in Western Civilization: I and II  
 POLI 360 (1½) Canadian Federalism and Public Policy  
 POLI 457 (1½) The Politics of Environmental and Natural Resource Policy  
 POLI 465 (3<sup>o</sup>) British Columbia Government and Politics

#### Science Emphasis

BIOL 334 (1½) Plants and Man  
 CHEM 300 (3) Chemistry in Modern Society  
 CHEM 302 (formerly half of 301) (1½) Industrial Chemistry with special reference to Air Pollution  
 ECON 416 (1½) Cost Benefit Analysis: Principles and Application  
 E S 400 (1½) Topics in Environmental Studies  
 E S 490 (1-3) Directed Studies  
 GEOG 325 (1½) Field Survey Techniques  
 GEOG 350A (1½) Geography of Resource Management  
 GEOG 350B (1½) Applied Resource Geography  
 GEOG 378 (1½) Environmental Aesthetics  
 GEOG 454 (1½) Geographical Dimensions of Energy Policy  
 GEOG 459A (1½) Recreational Resource Analysis: Concepts  
 GEOG 459B (1½) Recreational Resource Analysis: Evaluation, Planning and Management  
 LA 306 (1½) or 307 (1½) Ideas and Perspectives in Western Civilization: I and II  
 PHYS 310A (1½) Physics and Technology of Energy

#### CONTRACT OPTION

Students of whom the other options are inappropriate may propose a combination of courses which would satisfactorily complement their major and meet their personal education or professional goals. Proposals should take into account the interdisciplinary character of the Program and its goal of fostering integrated problem solving of environmental issues. Proposals should be developed in consultation with the Director or Environmental Studies Advisers. The requirements of the Contract Option are as follows:

1. Core courses.
2. Nine units of work chosen in consultation with the Director. These courses would normally be chosen from the courses listed under the other options but are not restricted to them. None of these courses may form part of the student's major. Selection of courses from Departments other than that in which the student is majoring is strongly recommended.
3. A brief written statement outlining the student's educational and/or vocational goals, and how the student's major and proposed course program in Environmental Studies will contribute to attaining these goals.

NOTE: Students interested in the Contract Option are encouraged to discuss this informally with the Director and/or members of the Advisory Committee before developing formal proposals.

#### COURSES

##### E S 300 (1½) ENVIRONMENTAL ISSUES

An interdisciplinary course which examines environmental issues, viewpoints and values in environmental problem solving, emphasis is on topics of class interest through a combination of group discussions, guest speakers, field trips (some mandatory), projects, interviews with

professional environmental managers, workshops on communication, data handling and team decision making skills. Active participation in discussion is expected. (May be repeated once for credit) (Prerequisite: Third year standing and written permission of the Environmental Studies Program. GEOG 101A is strongly recommended.) (3-0)

#### **E S 400 (1½) TOPICS IN ENVIRONMENTAL STUDIES**

(Each year one or more topics are explored in depth.) (May be repeated in different topics to a maximum of 4½ units) (Prerequisite: A grade of B or better in 300 and permission of the instructor) (0-0-3)  
400A Environmental Impact Assessment

400B-D Variable Topics (contact the Environmental Studies Office)

#### **E S 490 (1-3) DIRECTED STUDIES**

This will normally involve individual or team studies on approved environmental topics proposed by students in consultation with faculty members. Students must design and justify their study proposals, including evaluations, in terms of their personal and professional educational goals. Projects will be supervised by one or more faculty members designated by the Director. (Restricted to Environmental Studies students.) (Prerequisite: 300 or BIOL 316; third year standing with a grade point average of at least 4.50, and permission)

## DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

John C.E. Grece, B.A., M.A. (Alta.), D. de l'Univ. (Grenoble), Associate Professor and Chairman of the Department  
Olivier M. Abrioux, L. ès L., D.E.S. (Paris), Ph.D. (Aberdeen), Professor  
David A. Griffiths, B.A., M.A. (Brit. Col.), D. de l'Univ. (Paris), Lauréat de l'Académie française, Professor  
Jennifer R. Waelti-Walters, B.A. (London), L. ès L. (Lille), Ph.D. (London), Professor  
Barrington F. Beardsmore, B.A. (Liverpool), M.A. (McMaster), Ph.D. (Brit. Col.), Associate Professor  
Elaine Limbrick, B.A. (London), D. de IIIe cycle (Poitiers), Associate Professor  
Gerald E. Moreau, B.A. (Man.), M.A. (Laval), D. de l'Univ. (Poitiers), Associate Professor  
Jeanne E. Adam, L. ès L. (Toulouse), D. de IIIe cycle (Bordeaux), Assistant Professor  
Jo-Ann E. McEachern, B.A., M.A., Ph.D. (Tor.), Assistant Professor  
Jean-Pierre Mentha, L. ès Sc. Soc. (Geneva), M.Ed. (Brit. Col.), Assistant Professor  
Danielle Thaler, B.A. (Montréal), M.A., Ph.D. (Tor.), Assistant Professor  
Derck J. Turton, B.A. (Leeds), Cert. Ed. (Nott.), M. Phil. (Leeds), Assistant Professor  
Thuong Vuong-Riddick, D.E.S., D. de IIIe cycle (Paris-Sorbonne), Assistant Professor  
Emmanuel Hérique, B.A., M.A., D.E.A. (Nancy), Visiting Lecturer (1984-85)

### GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 209, for graduate courses, see page 78.

### GENERAL, MAJOR AND HONOURS PROGRAMS

Students specializing in French (including Honours), will find that they have sufficient electives to enable them to concentrate in a second field — for example, another language, Classics, English, History, Linguistics. A wise selection of courses is particularly important to those who may wish to enter graduate school, teaching, library work, government service, etc. The student adviser will be happy to assist students with their selection of courses.

**General** — First Year: 180; Second Year: 285 and 290; Third and Fourth Years: 302 and six units of French courses at the 300 and 400 levels (excluding 300).

**Major** — First Year: 180; Second Year: 285 and 290; Third and Fourth Years: 302 and at least twelve additional units of French courses at the 300 and 400 levels (excluding 300).

**Honours** — First Year: 180 and one year of Latin (if Latin 12 has not been passed in secondary school); Second Year: 285 and 290; Third and Fourth Years: 302, 390, 402 and 499 and twelve additional units (French courses numbered above 400), selected from at least four areas (see below), with the approval of the Honours Adviser.

An Honours program in French normally requires a total of 63 units over a four-year period, including a graduating essay of 7,500 to 10,000 words (see 499). An oral examination in French covering the topic of the essay is also required. Prerequisites for admission to the Third Year Honours program include a first or high second class grade in French 285 and 290, and the approval of the Chairman of the Department. The programs of Honours students are subject to the approval of the Honours Adviser and must include 302 and 402, 390 and 499, and a

minimum of 12 additional units of courses selected from at least 4 of the 5 following groups of courses: a) 425, 426; b) 440, 446, 448; c) 449, 451, 452, 455A, 455B; d) 460A, 460B, 462, 466, 470; e) 480, 483, 484, 482. Admission to the Fourth Year Honours Tutorial (499) is conditional upon satisfactory performance in 390.

First and Second Class Honours degrees may be awarded. To obtain a First Class Honours degree a student must achieve: (1) a graduating average of at least 6.50; (2) a grade point average of at least 6.50 in those departmental courses at the 300 and 400 level that are required for the degree program; and (3) a grade point average of at least 5.50 in French 390 and 499. To obtain a Second Class Honours degree, a student must achieve: (1) a graduating average of at least 3.50; (2) a grade point average of at least 3.50 in those departmental courses at the 300 and 400 level that are required for the degree program; and (3) a grade point average of at least 2.50 in French 390 and 499.

A student who fails to meet departmental requirements for first class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet departmental requirements for second class standing but has a second class graduating average will be offered a Second Class Major degree.

Students wishing to pursue a Double Honours degree which includes Honours in French are reminded that they will have to satisfy the above-mentioned Honours degree class requirements in French.

### UNDERGRADUATE COURSES

The full sequence of basic language courses in French is: 100, 160, 180, 290, 302, 402. See course listings for other language courses. (N.B. 180 is the prerequisite for 200 level language and literature courses.)

Courses marked with an asterisk (\*) are not offered owing to financial exigency. The Department intends to offer them as soon as funding is available.

#### **Advice to students registering in their first university courses in French**

Students who have no French at all should register in 100. Students with French 11 or its equivalent should register in 160. Students with French 12 or its equivalent should register in 180.

In the first week of classes, all students who have registered in their first university French course — with the exception of students registered in 100 — will take a placement test and the results of this test will be used to advise those who may have found themselves enrolled in a course that is above or below their ability. Some students may then be given permission to transfer to a different course at a more appropriate level. If the level is higher, students may challenge the lower level course from which they have transferred during the first two weeks of classes, and if the challenge is successful, they will be granted three units of credit. If the level is lower, credit may be obtained for the lower course when it has been completed successfully. For example, for students who first registered in 180, the higher level course would normally be 290 and the lower level course would normally be 160. For students who first register in French 160, the higher level course would be 180 and the lower level course would be 100.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours program, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level (usually 285 and 290). Normally the courses numbered 302 and 350 must be taken in the Third Year.

*Students wishing to take as electives those Fourth Year courses without*

specified prerequisites must satisfy the Department that they have an adequate knowledge of French.

Students wishing to take French 425 are advised that some knowledge of Latin is recommended, although not required.

#### Advice to Francophone students

Francophone students may not obtain credit for 100, 160, 180, 280, 300, 320 or 350. They will normally begin French studies with 285 and/or 302. They may take 290 only with special permission. A Francophone is defined in this context as a person who has spoken French since childhood and who has received sufficient instruction in French to be literate in French.

### FIRST YEAR

#### FREN 100 (3) BEGINNERS' FRENCH

An intensive introduction to spoken and written French with emphasis on oral work. Students from this course who are interested in further studies in French will proceed to 160. (Prerequisite: None. Not normally open to students having credit in French 11 or its equivalent)

September-April (3-1; 3-1)

#### \* FREN 101 (3) BEGINNERS' FRENCH (Accelerated)

French 100 offered in one term. This course is offered in sequence with 161 in second term. Students not making satisfactory progress will be advised to transfer to 100.

(Not offered)

(5-3)

#### FREN 160 (3) ELEMENTARY FRENCH LANGUAGE

Instruction in written and oral use of the French language based on a language manual and numerous short readings. Regular oral practice and short written assignments will be required. (NOTE: Not normally open to those who have completed French 12) (Prerequisite: French 11)

September-April (3-1; 3-1)

#### \* FREN 161 (3) ELEMENTARY FRENCH LANGUAGE (Accelerated)

French 160 in one term. (Offered in sequence with 101, this course is normally open only to students who have completed 101.)

(Not offered)

(5-3)

#### \* FREN 162 (3) ELEMENTARY FRENCH LANGUAGE

(Continuation of FREN 100)

A special section of 160 offered as a continuation of 100, using the same text. (Normally open only to students who have completed 100)

(Not offered)

(3-1; 3-1)

#### FREN 180 (3) FRENCH LANGUAGE AND LITERATURE

A study of French texts, grammar, composition, and pronunciation. (Prerequisite: French 12) Texts: Barson, *La Grammaire à l'oeuvre*, and *A l'Oeuvre*, *Cahier d'exercices*, 3rd ed. 1981; literature texts to be announced.

September-April (3-1; 3-1)

### SECOND YEAR

#### FREN 255 (3) AN ORAL COURSE IN FRENCH CIVILIZATION

This course is given in French, and is intended to develop oral expression while giving the student basic cultural references. A survey of French civilization, with particular attention to the 19th and 20th centuries. Frequent oral presentations and discussions; occasional written assignments; periodic assignments in the laboratory hours. (Enrollment limited. Not open to students who have previously completed 285 or 290, but may be taken concurrently with either or both of these courses) (Prerequisite: 180 or equivalent) Texts: Hester, Parker, and Grigaut, *Initiation à la culture française*, fourth (or latest) edition: F.F. de Haan, A.E. van de Ven, adapted by P.M. Sewell, *Le mot juste*, Longman Group Ltd., Third impression (1980)

(Not offered; intend to offer 1986-87)

(3-1; 3-1)

#### FREN 256 (3) AN ORAL COURSE IN FRENCH-CANADIAN CIVILIZATION

This course is given in French, and the emphasis is oral. A survey of French-Canadian civilization from 1867 to the present. Students are required to prepare oral and written presentations on a variety of subjects related to old and particularly to modern French Canada. Periodic assignments in the laboratory hour. (Enrollment limited. Not open to students who have previously completed 285 or 290, but may be taken concurrently with either or both of these courses) (Prerequisite: 180 or equivalent)

G. Moreau

September-April (3-1; 3-1)

#### FREN 285 (3) A SURVEY OF FRENCH LITERATURE

This course, given in French, deals with aspects of the principal periods of French Literature. There will be frequent written work based on the literary texts. (Prerequisite: 180) Texts: Molière, *Le Malade imaginaire*; Racine, *Andromaque*; Voltaire, *Micromégas*, *L'Ingénu*; Camus, *La Peste*; selection of poetry and others to be announced

September-April (3-1; 3-1)

#### FREN 290 (3) FRENCH ORAL AND WRITTEN PRACTICE

A course in composition and translation, based on French texts and given in French, which continues the study of grammatical points presented in 180. Both written and oral proficiency are stressed through weekly assignments and discussions. (Prerequisite: 180) Texts: Dictionary (Collins-Robert or Larousse) Anglais-Français/Français-Anglais; Whitmarsh and Jukes, *New Advanced French Course*. Other texts to be announced. Students are advised to keep their 180 grammar text for reference.

September-April (4-0; 4-0)

### THIRD AND FOURTH YEARS

#### LANGUAGE COURSES

#### \* FREN 300 (3) FRENCH READING COURSE

Presentation of basic sentence structures, reading of general and scientific articles designed to meet the needs of students who have little or no knowledge of French, but who wish to gain reading comprehension in a special field. (Students registered in first or second year who have already completed French 11 (or the equivalent) or a higher course may not take 300 for credit. Students registered in third year or a higher year may take 300 for credit provided that they have not completed any French course higher than French 11. Students registered in 300 may not take 160 for credit.)

(Not offered)

September-April (3-0; 3-0)

#### FREN 302 (3) COMPOSITION, TRANSLATION AND STYLISTICS

This course, conducted entirely in French, will require frequent written exercises, involving vocabulary and grammar; translation, stylistic commentaries; compositions. (Prerequisite: 290 or equivalent) Texts: Dictionary (Collins-Robert or Larousse) Anglais-Français/Français-Anglais; *Société du nouveau Littérature*, *Micro Robert*; J. Darbelnet, *Pensée et structure*, text and *Cahier d'exercices*

September-April (3-0; 3-0)

#### FREN 320 (1½) FRENCH PHONETICS

The theory and practice of French pronunciation, corrective phonetics, phonetic transcription, intonation, accentuation, syllabification, elision and liaison; training in reading aloud. (Prerequisite: 290 or equivalent) Text: Monique Léon, *Improving French Pronunciation*

B.F. Beardsmore

September-December (2-1)

E. Limbrick

January-April (2-1)

#### FREN 350 (3) AN ADVANCED COURSE IN FRENCH WITH CONCENTRATION ON ORAL WORK

This course is designed to increase oral proficiency in French and to develop comprehension of spoken and written French both for advanced students of French and for teachers in training or for secondary school teachers of French. (Prerequisites: normally 285 and 290, or permission of the Chairman of the Department) (Enrollment limited) (Credit will be given as part of a teaching area in the Faculty of Education or as an elective. Credit will also be given as part of a General or Major program in French from July 1979, but may not be used in fulfillment of the requirements for the Honours program. It may also be taken as an elective in the Faculty of Arts and Science.)

G. Moreau

September-April (5-1; 5-1)

#### FREN 402 (3) AN ADVANCED LANGUAGE COURSE IN MODERN FRENCH USAGE

A continuation of 302. Written and oral expression through composition, textual analysis, translation and oral presentations, with attention paid to both literary and informal usage. (Prerequisite: 302 or equivalent)

J.-P. Mentha, O. Abrioux

September-April (3-0; 3-0)

#### FREN 425 (3) HISTORY OF THE LANGUAGE

A study of the development of the language from earliest to modern times. Some knowledge of Latin is recommended, although not required. Texts: W. von Wartburg, *Evolution et structure de la langue française*

B.F. Beardsmore

September-April (3-0; 3-0)

**FREN 426 (3) TRANSLATION**

A comparative study of the characteristics of French and English expression and how they pertain to the problems of translation; practice in translation from English to French and from French to English. (Not open to students with credit in LING 426 before 1979-80) (Prerequisites: 302 or equivalent, with a grade of B or better, and ENGL 115 or equivalent) Texts: J.-P. Vinay and J. Darbelnet, *Cahier d'exercices No. 2*; Société du Nouveau Littre, Paris, *Collins-Robert French-English/English-French Dictionary*  
D. Thaler September-April (3-0; 3-0)

**LITERATURE COURSES**

Students who have taken literature courses in the Department prior to 1979-80 must consult the Department before registering in 400 level literature courses.

**FREN 390 (1½) CRITICAL METHODS**

Intended for Honours students but may be taken as an elective by other students. A practical introduction to both traditional and recent methods of analyzing literary texts. Texts: Bourneuf and Ouellet, *L'Univers du roman*. Recommended: M. Grammont, *Petit traité de versification française*  
E. Limbrick September-December (3-0)

**FREN 440 (formerly 422) (1½ or 3) MEDIEVAL LITERATURE**

Study of a number of medieval literary works in the original. Students will learn to read medieval French and acquire some knowledge of the principal literary genres of the period. Texts: *Aucassin et Nicolette*, ed. F.W. Bourdillon (Manchester U.P., 1970); *La Chanson de Roland*, ed. P. Jonin (Gallimard, 1979); *Le Mystère d'Adam*, ed. P. Studer (Manchester U.P. rpt. 1967) and other texts to be announced  
B.F. Beardsmore January-April (3-0)

**FREN 446 (1½) FRENCH POETRY**

Normally, only one course in French poetry will be offered each year. (3-0)

**446A Renaissance**

Late Medieval and Renaissance poetry, with particular emphasis on the Pléiade Group. Major writers studied include Villon and Ronsard. (Not open to students with credit in 445)  
(Not offered; intend to offer 1986-87)

**446B 17th Century**

Poetry in the 17th century, including Malherbe, La Fontaine and Boileau. Some 18th century poetry may be included. (Not open to students with credit in 445)  
(Not offered)

**446C Romantism**

Poetry of the late 18th and early 19th centuries, with particular emphasis on the Romantic movement. Major writers studied include Hugo, Lamartine, Vigny and Musset. (Not open to students who have credit for 465)  
(Not offered)

**446D Late 19th Century**

Baudelaire, Verlaine, Mallarmé, Rimbaud and the Symbolist poets of France and Belgium. (Not open to students who have credit for 468)  
(Not offered)

**446E 20th Century**

Valéry, Claudel, Apollinaire and other poets of the early 20th century; the Surrealist movement; important writers and trends in recent poetry. (Not open to students who have credit for 468) Texts: Selections from Apollinaire, Cendrars, Claudel, Péguy, Eluard, Supervielle, Char, Prévert, Michaux, Perse, Aragon, and several others.  
J.C.E. Greene September-December (3-0)

**FREN 448 (formerly half of 421) (1½) RENAISSANCE PROSE**

Magic, laughter and the pursuit of wisdom in selected works of the French Renaissance. An introduction to major themes in Rabelais and Montaigne. Texts: Rabelais, *Oeuvres complètes*, Paris: L'Intégrale, Editions du Seuil, 1973; Montaigne, *Oeuvres complètes*, Paris: L'Intégrale, Editions du Seuil, 1967.  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 449 (formerly part of 409) (1½) THE AGE OF PASCAL**

Principal literary works of the moralists of the classical period. Texts: Pascal, *Pensées et Opuscules*, petite édition Brunshvieg, Hachette; La Fontaine, *Fables*, éd. Georges Couton, Classiques Garnier; La Rochefoucauld, *Maximes*, Classiques Garnier; Bossuet, *Oraison*

*Funèbre d'Henriette d'Angleterre*; Madame de Lafayette, *La Princesse de Clèves*.

(Not offered; intend to offer 1986-87) (3-0)

**FREN 451 (formerly part of 410) (1½) THE ENLIGHTENMENT**

Principal literary works of the *philosophes* of the 18th century. Texts: Montesquieu, *Lettres persanes*; Voltaire, *Lettres philosophiques*, *Candide*; Rousseau, *La Nouvelle Héloïse*; Diderot, *Le Neveu de Rameau*, *Le Rêve de d'Alembert*  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 452 (formerly parts of 409 and 410) (1½) THE NOVEL IN THE 17TH AND 18TH CENTURIES**

The development of the novel through a study of major texts, with emphasis on the 18th century. Texts: Scarron, *Le Roman comique*; Lafayette, *La Princesse de Clèves*; Prévost, *Manon Lescaut*; Diderot, *Jacques le fataliste*; Laclot, *Les Liaisons dangereuses*.  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 455A (formerly half of 455, previously parts of 409 and 410) (1½) TRAGEDY IN THE 17TH AND 18TH CENTURIES**

A literary study of tragedy in France in the classical period, with special emphasis on the works of Corneille and Racine.  
O. Abrioux September-December (3-0)

**FREN 455B (formerly half of 455, previously parts of 409 and 410) (1½) COMEDY IN THE 17TH AND 18TH CENTURIES**

A literary study of comedy in France in the classical period, with special emphasis on the works of Molière, Marivaux and Beaumarchais. Texts: Principal plays of Corneille, Molière, Marivaux and Beaumarchais, titles to be announced.  
O. Abrioux January-April (3-0)

**FREN 460A (formerly parts of 460 and of 411) (1½) THE NOVEL IN THE 19TH CENTURY: PART I**

The development of the novel in the first half of the 19th century. Texts: Constant, *Adolphe*; Stendhal, *Le Rouge et le noir*; Balzac, *Le Père Goriot*; Hugo, *Notre-Dame de Paris*  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 460B (formerly parts of 460 and 412) (1½) THE NOVEL IN THE 19TH CENTURY: PART II**

The development of the novel in the second half of the 19th century. Texts: Flaubert, *Madame Bovary*; Zola, *Germinal*; Huysmans, *A Rebours*; Hugo, *Quatrevingt-treize*  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 462 (formerly 416) (3) THE NOVEL IN THE 20TH CENTURY**

The changing face of the novel from Marcel Proust to the *nouveau Nouveau Roman*.  
J.R. Waelti-Walters September-April (3-0; 3-0)

**FREN 466 (formerly part of 465) (1½) 19TH CENTURY THEATRE**

Melodrama, the Romantic theatre, *vaudeville* and the Naturalist movement in theatre. Writers studied include Hugo, Musset, Dumas *fils*, Labiche and Beeque.  
D. Thaler January-April (3-0)

**FREN 470 (formerly 415) (1½, formerly 3) MODERN FRENCH THEATRE**

A survey of modern French drama, principally of the 20th century. Texts: Representative plays by Anouilh, Beckett, Camus, Cocteau, Genet, Gide, Giraudoux, Ionesco, Montherlant, Sartre  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 480 (formerly part of 418) (1½) THE FRENCH-CANADIAN NOVEL FROM THE ORIGINS TO THE MODERN PERIOD**

A survey of the French-Canadian novel with special emphasis on the first half of the 20th century.  
(Not offered; intend to offer 1986-87) (3-0)

**FREN 482 (1½) CONTEMPORARY FRENCH-CANADIAN NOVEL**

The French-Canadian novel in the second half of the 20th century, in particular *la nouvelle écriture* since 1960. Texts: Claire Martin, *Doux-Amer*; Hubert Aquin, *Prochain épisode*; Anne Hébert, *Kamouraska*; Marie-Claire Blais, *Visions d'Anna*; Jacques Godbout, *Les Têtes à Papineau*; Yves Beauchemin, *Le Matou*.  
T. Vuong-Riddick September-December (3-0)

**FREN 483 (formerly part of 481) (1½) CONTEMPORARY FRENCH-CANADIAN POETRY AND CINEMA**

A study of French-Canadian poetry and cinema in relation to transformations in contemporary Quebec society. (Not open to students with credit in 418)

(Not offered; intend to offer 1986-87) (3-0)

**FREN 484 (formerly half of 481) (1½) CONTEMPORARY FRENCH-CANADIAN THEATRE**

French-Canadian theatre since 1950, with emphasis on the search for identity in the works studied. (Not open to students with credit in 418)

Texts: Gratien Gélinas, *Tit-Coq*; Marcel Dubé, *La Cellule*; Françoise Loranger, *Double Jeu*; Anne Hébert, *La Mercière assassinée*; Michel Tremblay, *En pièces détachées*; Jean Barbeau, *Joualez-moi d'amour*.

T. Vuong-Riddick January-April (3-0)

**FREN 488 (formerly 430, 431, 432) (1½) SPECIAL TOPICS**

Designed for Major and Honours students, this course may be offered as a reading course, a tutorial, or a seminar as circumstances warrant.

Students wishing to register for this course must consult the Department. Topics may be selected in one or more of the following up to a maximum of 3 units with permission of the Chairman of the Department. (3-0)

**488A Modern Prose**

Major prose writers of the 19th and 20th centuries.

(Not offered)

**488C Utopias and Science Fiction**

Utopian, anti-Utopian and science fiction writing from the 17th century to the present.

(Not offered)

**488D Special Topics in French-Canadian Literature**

Some important texts not dealt with in French 480, 481 or 482.

(Not offered)

**488E African Literature**

A survey of African French language writing, with special emphasis on North Africa.

(Not offered)

**488F Women Writers**

A look at the way Francophone women have described the world.

(Not offered)

**488G Studies in a Major Author or Movement**

Intensive study of an important writer or literary movement. When offered, topic will be announced.

(Not offered)

**488H Children's Literature**

Examination of the development and diversification of children's literature since the 17th century, in both France and Quebec. (Not open to students with credit in FREN 488B)

(Not offered; intend to offer 1986-87)

**FREN 499 (formerly 490) (1½) HONOURS GRADUATING ESSAY**

During the final year of the Honours program, students will write a graduating essay in French of 7,500 to 10,000 words under the direction of a member of the Department, the topic to be approved by the Honours Committee. The essay must conform to acceptable standards of style and format and be submitted before the end of second term classes. An oral examination in French covering the topic of the essay will be held.

**GRADUATE COURSES**

(Not offered 1985-86)

NOTE: A selection of these courses will be given depending upon the availability of members of faculty. Students should consult the Graduate Adviser before making choices. In addition students should read carefully the entry under Faculty of Graduate Studies, French.

**FREN 501 (1½) FRENCH LITERARY CRITICISM SINCE SALETTE-BEUVE****FREN 506 (1½) PASCAL IN HIS TIME****FREN 514 (1½ or 3) BAUDELAIRE IN HIS TIME****FREN 516 (1½ or 3) LE NOUVEAU ROMAN IN FRANCE****FREN 517 (1½ or 3) MARCEL PROUST A LA RECHERCHE DU TEMPS PERDU****FREN 518 (1½ or 3) LIFE AND WORKS OF ROMAIN ROLLAND****FREN 521 (1½ or 3) MONTAIGNE'S ESSAIS AND THEIR LITERARY AND PHILOSOPHICAL INFLUENCE****FREN 540 (1½ or 3) STUDIES IN MEDIEVAL LITERATURE****FREN 562 (1½ or 3) EXISTENTIALISM IN LITERATURE****FREN 565 (1½ or 3) SOCIAL ROMANTICISM 1830-1848****FREN 590 (1½ or 3) DIRECTED STUDIES****FREN 599 (6) THESIS****DEPARTMENT OF GEOGRAPHY**

Colin J. B. Wood, B.A. (Wales), M.A., Ph.D. (McMaster), Associate Professor and Chairman of the Department

Charles N. Forward, B.A., M.A. (Brit. Col.), Ph.D. (Clark), Professor

Harold D. Foster, B.Sc., Ph.D. (London), Professor

J. Douglas Porteous, B.A., M.A. (Oxon.), Ph.D. (Hull), Professor

W.R. Derrick Sewell, B.Sc. Econ. (London), M.A., Ph.D. (Wash.), Professor

Rudolph W.A. Wikkramatilleke, B.A. (Ceylon), M.A. (Clark), Ph.D. (London), Professor

Gerald M. Barber, B.A., M.A., Ph.D. (Tor.), Associate Professor

Michael C.R. Edgell, B.A. (Birm.), Conservation Dip. (London), Ph.D. (Birm.), Associate Professor

Charles H. Howaston, B.A., M.A. (Brit. Col.), Part time Visiting Associate Professor (1984-85)

David Chuen-Yan Lai, B.A., M.A. (Hong Kong), Ph.D. (London), Associate Professor

Malcolm A. Micklewright, B.A., Ph.D. (Wash.), Associate Professor

Peter E. Murphy, B.Sc. Econ., Teachers Dip. (London), M.A., Ph.D. (Ohio St.), Associate Professor

William M. Ross, B.Ed. (Brit. Col.), M.A. (Tor.), Ph.D. (Wash.), Associate Professor

Stanton E. Tuller, B.A. (Ore.), M.A. Ph.D. (Calif., Los Angeles), Associate Professor

Philip Dearden, B.A. (Birm.), M.Sc. (Memorial), Ph.D. (U. of Vic.), Assistant Professor

Sally A. Rudd, B.A. (Queen's), Visiting Lecturer (1984-85)

Gillian D. McDadc, B.A. (Witwatersrand), Senior Laboratory Instructor

Elizabeth H. McDougall, B.A. (Brit. Col.), Administrative Officer  
Ian H. Norie, B.A. (U. of Vic.), Senior Academic Assistant

**GRADUATE PROGRAMS**

For information on studies leading to the M.A. and Ph.D. degrees, see page 209, for graduate courses, see page 84.

**LIMITATION OF ENROLLMENT**

Students are advised that because of limited facilities and staff it may be necessary to limit enrollment in certain Geography courses. Enrollment limits will be imposed primarily on the basis of facilities available and academic standing.

**GENERAL, MAJOR AND HONOURS PROGRAMS**

The Geography Department offers courses leading to the B.A., B.Sc., M.A. and Ph.D. degrees, with a choice of General, Major, and Honours programs for both bachelor degrees. Information about course combinations suited to specific professional objectives and about graduate programs is available from the Department. In general, the Department recommends appropriate first year mathematics or computer science courses, especially Computer Science 110 and 115, for the B.A. Major and Honours programs, and considers a second year mathematics course desirable for B.Sc. candidates. Second year Geography Major and

Honours students may take the required Geography 321 and one of 322, 323 or 325 in their second year, if they wish.

Students who seek academic counselling are asked to come to the Department before or during the registration period.

In certain courses, students may be required to meet part of the expenses involved in required field trips, course supplies or the provision of course manuals. Students will be advised of such expenses during the first week of classes.

**Departmental Requirements for the B.A. General and Major in Geography:**

**General** — 15 units: 101A and 101B; 3 units chosen from 201A, 201B, 203A, 203B, 205A, 205B; and 9 units of courses numbered 300 or above, 3 units of which selection must be a regional course.

**Major** — 24 units: 101A and 101B; 6 units of second year courses, which must include 201A or 201B, 203A or 203B, and 205A or 205B; 15 units of courses numbered above 300 which must include 321, at least one of 322, 323, or 325; and 3 units of regional courses.

**Departmental Requirements for the B.Sc. General and Major in Geography:**

**General** — 15 units: 101A and 101B; 3 units chosen from 201A, 201B, 203A, 203B, 205A, 205B; 321, and one of 322, 323 or 325; 1½ units chosen from 370, 372, 374, 376; 4½ units chosen from other 300 or 400 level geography courses; and 3 units of mathematics or computer science.

NOTE: 3 units of regional geography courses are strongly recommended for both General and Major B.Sc. degrees.

**Major** — 24 units: 101A and 101B; 203A and 203B; 3 units chosen from 201A, 201B, 205A, 205B; 321; 3 units chosen from 322, 323, 325, 423, 427; 3 units chosen from 370, 372, 374, 376, 471; 1½ units chosen from 425, 426, 428; 6 units chosen from any other 300 or 400 level geography courses.

NOTE: 3 units of regional geography courses are strongly recommended as electives for both General and Major B.Sc. degrees.

All B.Sc. Major students are required to obtain:

- (a) Three units of credit from Mathematics 100, 101, 102, 151
- (b) One and one-half units of computer science other than Computer Science 100.
- (c) An additional seven and one half units from the following list or from 300 or 400 level courses that count toward B.Sc. major degrees in the outside disciplines listed below:

- ASTR 120, 200A, 200B
- BIOC 200, Microbiology 200
- BIOL 150, 200, 203, 204, 206, 207
- CHEM 100/102 or 101/102 or 140/145 or 140/102, 213, 222, 231, 232, 235, 245
- C SC 100, 110, 115, 200, 230, 240, 250, 275
- ECON 201, 202
- GEOL 100, 201, 202, 203, 204
- MATH 100, 101, 102, 151, 200, 222, 233A, 233B, 233C, 240
- STAT 250, 251
- PHYS 100, 102, 110, 120, 210, 214, 215, 216, 217, 220

**Departmental Requirements for the B.A. and B.Sc. Honours in Geography:**

33 units minimum: all of the 24 units of course requirements for the B.A. Major or the B.Sc. Major; 324, 499 and 4½ additional units in Geography or in other approved courses numbered above 300 chosen in consultation with the Department. At the end of the fourth year, the candidate will take an oral examination and submit an Honours Essay.

Students normally enter the Honours Program in their third year, having applied at the end of their second year. Requirements for entry into the Honours Program are: completion of two successful years at university (see "Faculty of Arts and Science — Honours Program" entry in this calendar) and a grade point average of at least 5.00 in all work for the second year (with 5.50 in Geography courses). A student wishing to enter the program in the fourth year (at the end of the third year) must have a grade point average of at least 5.50 (with 6.00 in Geography courses) for work completed in the third year.

A grade point average of 5.50 (with 6.00 in Geography courses) must be achieved by an honours student to progress from third to fourth year in the Honours Program. Students who do not maintain this average will be required to transfer to a Major Program.

A First Class Honours degree requires a graduating average of at least

6.50; a grade point average of at least 7.00 in 300 and 400 level courses taken in the Department and at least B+ in 499.

A Second Class Honours degree requires a graduating average of at least 3.50; and a grade point average of at least 4.00 in 300 and 400 level courses taken in the Department and at least a B- in 499.

Honours students who do not meet the above requirements, but complete those for a Major in Geography, may opt to receive a Major degree. A student who opts for this and who has a graduating average of 6.50 or higher would receive a Major in Geography with First Class standing, while a student with a graduating average between 3.50 and 6.49 would receive a Major degree with Second Class standing.

Students should note the availability of Liberal Arts 306/307 (page 95) and Pacific Studies 200 (page 107) as electives in their senior years.

**GEOGRAPHY COOPERATIVE EDUCATION PROGRAM**

The Cooperative Education Program in the Faculty of Arts and Science is described on page 31. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 27.

Entry into the Geography Cooperative Program is restricted to students who are enrolled in an Honours or Major program in Geography. Students will be admitted either at the end of their first year, or at the beginning or end of their second year. Deadlines for receipt of applications are September 15 or January 15. To enter and remain in the Geography Cooperative Program, students must maintain a B+ average in Geography and a B average overall. Students are also required to complete satisfactorily at least four work terms. A student may withdraw from the program and graduate with the normal Geography B.A. or B.Sc. degree.

Each work term is recorded on the student's official transcript of academic record (as COM, N, or F). Details of work terms are recorded on the Record of Work Terms which is attached to the Academic Record.

Further information concerning the Geography Cooperative Program may be obtained from the Department.

**UNDERGRADUATE COURSE INDEX**

**First Year** 101A (1½), 101B (1½), 102 (1½)

**Second Year** 201A (1½), 201B (1½) Economic; 203A (1½), 203B (1½) Physical; 205A (1½), 205B (1½) Cultural

**Third and Fourth Years**

**Techniques and Methods**

|               |   |           |   |
|---------------|---|-----------|---|
| 321 (1½)      | Introduction to Quantitative Methods in Geography | 450B (1½) | Resources Management: Theory                                    |
| 322 (1½)      | Air Photo Interpretation                          |           | Decision Making in Resources Management: Practical Applications |
| 323 (1½)      | Introductory Cartography                          |           | Advanced Water Resources Management                             |
| 324 (1½)      | Directions in Geography                           | 451 (1½)  | Coastal Resource Analysis                                       |
| 325 (1½)      | Field Survey Techniques                           |           | Marine Resource Analysis  |
| 423 (1½)      | Advanced Cartography                              | 452 (1½)  | Geographical Dimensions of Energy Policy                        |
| 425 (1½)      | Survey Methods and Analysis                       | 453 (1½)  | Recreation Resource Analysis: Concepts                          |
|               |   | 454 (1½)  | Recreation Resource Analysis: Evaluation                        |
| 426 (1½)      | Advanced Quantitative Methods                     | 459A (1½) | Planning and Management Seminar in Physical Geography           |
| 427 (1½)      | Cartographic Production                           |           |   |
| 428 (1½)      | Automated Cartography                             | 459B (1½) |   |
| 490 (1½ or 3) | Directed Studies                                  |           |   |
| 499 (3)       | Honours Seminar and Essay                         | 471 (1½)  |   |

**Resources and Physical**

|           |                                  |          |   |
|-----------|----------------------------------|----------|---|
| 350A (1½) | Geography of Resource Management |          | <b>Urban, Economic and Cultural</b>       |
| 350B (1½) | Applied Resource Geography       | 330 (1½) | Understanding Cities                      |
|           |                                  | 341 (1½) | Industrial Geography                      |
| 370 (1½)  | Hydrology                        | 342 (1½) | Urban Historical Geography                |
| 371 (1½)  | Water Resources Management       | 343 (1½) | Regional Analysis                         |
| 372 (1½)  | Climatology                      | 344 (1½) | Urban Systems Simulation                  |
| 373 (1½)  | Applied Climatology              |          | Geography and Planning of Tourism         |
| 374 (1½)  | Biogeography                     | 345 (1½) | Geography of Economic and Cultural Change |
| 375 (1½)  | Forest Resource Management       | 347 (3)  | Internal                                  |
| 376 (1½)  | Geomorphology                    |          |   |
| 377 (1½)  | Applied Geomorphology            |          |   |
| 450A (1½) | Decision Making in               | 349 (1½) |   |

|          |  |                 |  |
|----------|--|-----------------|--|
|          | Structure of Cities                                |                 |  |
| 378 (1½) | Environmental Aesthetics                           | <b>Regional</b> |  |
| 440 (1½) | Urban Geography of Canada                          | 361A (1½)       | Geography of Canada: Systematic Approach |
| 442 (1½) | Geography of China-towns and Chinese Migration     | 361B (1½)       | Geography of Canada: Regional Approach   |
| 443 (1½) | Geography of Regional Development                  | 364 (1½)        | Traditional China                        |
| 444 (1½) | Urban Transportation and Land Use Planning         | 365 (1½)        | Modern China                             |
| 445 (1½) | Community Development and Planning in Canada       | 463 (3)         | S.E. Asia                                |
| 446 (1½) | Development and Planning of the Urban Region       | 465 (3)         | Japan                                    |
| 447 (1½) | Urban Problems of Pacific Rim Developing Countries | <b>Geology</b>  |  |
| 448 (1½) | Urban Social Geography and Planning                | 100 (3)         | General                                  |
|          |  | 201 (1½)        | Stratigraphy                             |
|          |  | 202 (1½)        | Structural                               |
|          |  | 203 (1½)        | Introduction to Mineralogy               |
|          |  | 204 (1½)        | Introduction to Petrology                |

## UNDERGRADUATE COURSES

### GEOGRAPHY

101A and 101B are prerequisites to all other geography courses, except 102 and 330. These prerequisites may be waived by the Department in certain circumstances. Students should also note that 101A and 101B can be taken in any sequence or concurrently. In the event that a student who has had 101A/101B waived proceeds to a General, Major or Honours program in Geography, the student may be required to substitute 3 units of Geography courses as recommended by the Department.

Students should consult the Department concerning courses offered in any particular year.

For courses carrying A or B designations, A is not a prerequisite of B unless indicated under the course description.

#### **GEOG 101A (formerly half of 101) (1½) MAN AND THE PHYSICAL ENVIRONMENT**

An integrated introductory description and analysis of the characteristics and interactions of the atmosphere, hydrosphere, lithosphere and biosphere. An introduction to the study of natural resources and contemporary problems in resource management. (2-2)

#### **GEOG 101B (formerly half of 101) (1½) THE HUMAN ENVIRONMENT**

The processes of cultural change, migration and acculturation and their roles as determinants of changing cultural landscapes and regions. The origins of cities, the historical growth of cities, and the form and structure of the contemporary city. (2-2)

#### **GEOG 102 (1½) CONTEMPORARY ISSUES IN CANADIAN REGIONS**

A comprehensive geographic study of the macroregions of Canada, the Atlantic Provinces, Quebec, Ontario, and Prairie Provinces, British Columbia, and the Territories, will establish the background for a more detailed consideration of specific regional problems. These may include such problems as the drive for industrial diversification in the West, the development of energy sources in the Atlantic Provinces, the French-English conflicts in and around Quebec, and the native land claims in the Northwest Territories. Some issues may be local, such as the preservation of fruit-growing land on the Niagara Peninsula of Ontario. (Open to students from any department. 101A and 101B are not prerequisites to this course. Not for credit toward major or honours degree programs in Geography, but may be taken for credit as an elective.) (3-0)

#### **GEOG 201A (formerly half of 201) (1½) LOCATION OF ECONOMIC ACTIVITIES**

A systematic geographical analysis of the characteristics and areal distribution of urban centres with emphasis on population, industrial structure, location and the sectoral distribution of activity within the urban region. Special attention will be directed to the underlying factors associated with differential urban growth, and the determinants of locational change. (2-2)

#### **GEOG 201B (formerly half of 201) (1½) ECONOMIC GEOGRAPHY – PRIMARY ACTIVITY AND DIFFERENTIAL GROWTH**

An examination of the role of primary industry in the world economy.

Particular attention will be paid to the role of resource endowment as a determinant of standard of living. Strategies for growth and the impact of the energy sectors on national planning goals will be investigated. Agriculture, mining, transportation, and forestry will be discussed. (2-2)

#### **GEOG 203A (formerly half of 203) (1½) PHYSICAL GEOGRAPHY I: HYDROSPHERE AND LITHOSPHERE**

An introduction to the hydrosphere and lithosphere, including the processes involved in the development of landforms and that part of the hydrologic cycle involving surface and underground water. (2-2)

#### **GEOG 203B (formerly half of 203) (1½) PHYSICAL GEOGRAPHY II: ATMOSPHERE AND BIOSPHERE**

An introduction to the basic processes which determine the distribution patterns of climate, soil and living organisms. Included will be a discussion of radiation budgets, atmospheric moisture and circulation, soil forming processes and factors, and vegetation development and distribution. (2-2)

#### **GEOG 205A (formerly half of 205) (1½) AN INTRODUCTION TO CULTURAL GEOGRAPHY**

This course attempts to develop an awareness of cultural diversity throughout the world, emphasizing factors that cause this diversity and to develop an understanding of the impact that culture has upon human societies and the natural environment. (2-2)

#### **GEOG 205B (formerly half of 205) (1½) SELECTED THEMES IN CULTURAL GEOGRAPHY**

This course examines the implications of cultural attributes on land occupation and patterns of living in selected regional settings. (2-2)

### TECHNIQUES AND METHODS

#### **GEOG 321 (1½) INTRODUCTION TO QUANTITATIVE METHODS IN GEOGRAPHY**

An introduction to statistical procedures and their application to geographical problems. The course will focus upon the basic statistical techniques, beginning with descriptive methods and concluding with correlation analysis. Students will have the opportunity to use this knowledge in empirical analysis of assigned class topics. (Open only to students pursuing a program in Geography or Environmental Studies). (3-2)

#### **GEOG 322 (1½) AIR PHOTO INTERPRETATION**

An introduction to photogrammetry and interpretation of aerial photographs. Attention is focused on training in the use of air photos as source materials in map compilation and as tools for research in physical and social sciences. Among the topics studied are: principles and techniques of photo interpretation; inductive and deductive evaluation of air photo patterns; and remote sensing techniques. Laboratory assignments and field work will be emphasized. (2-2)

#### **GEOG 323 (1½) INTRODUCTORY CARTOGRAPHY**

An introductory course in cartography and cartographic techniques; including spatial reference systems, map projections, techniques of terrain representation, cartographic symbolization of statistical data, and elementary data handling problems. Students will gain practical experience in designing and drafting maps. (2-2)

#### **GEOG 324 (1½) DIRECTIONS IN GEOGRAPHY**

The course will briefly outline and discuss the historical development of geographical thinking and knowledge, but will concentrate mainly upon trends and controversies in geography in the 20th century. The course will enable students to relate their other courses to the multitude of facets that constitute the present discipline of geography. Areas covered will include: geography's relationships to other disciplines; the scope of geography; man's relationships to nature as a geographical theme; the ideographic versus nomothetic content of geography; practical application of geography; recent 'revolutions' in the discipline. (Prerequisites: six units of second year Geography courses, or permission of instructor). (Not open to students with credit in 429 or 445. Enrolment limited to 20). (3-0)

#### **GEOG 325 (1½) FIELD SURVEY TECHNIQUES**

An introduction to fundamental concepts of surveying and field work including the use of transits, stadia level, plane table, chain and compass survey, and other techniques; activities include application of survey and sampling techniques to actual problems of measuring landform,

hydrologic, or vegetation features, together with methods of analysis and evaluation. (Students will be charged a laboratory fee.) (Prerequisite: Math 102) (2-2)

### **GEOG 423 (1½) ADVANCED CARTOGRAPHY**

This course views the map as a communication system and explores the interface between models of graphic communication and principles of graphic design such as balance, contrast, and figure/ground relationships. Various data handling techniques such as generalization and classification are examined within the context of map communication models. (Prerequisites: 321, 322, and 323) (2-2)

### **GEOG 425 (formerly half of 421 and 402) (1½) SURVEY METHODS AND ANALYSIS IN GEOGRAPHY**

This course will examine various approaches to research design and then focus on the statistical approach. The development of questionnaires and sample frames will be discussed, followed by preliminary analysis of the research data using nonparametric statistical techniques. (Prerequisite: 321 or 300, or permission of Department) (3-0)

### **GEOG 426 (formerly half of 421 and 402) (1½) ADVANCED QUANTITATIVE METHODS IN GEOGRAPHY**

This course will introduce students to the more advanced statistical and quantitative techniques commonly used in geographical research. Particular emphasis will be placed on the role of the techniques in empirical and policy oriented research questions. Included in the course will be the multivariate statistical techniques of regression and factor analysis, as well as linear and simple location/allocation problems. (Prerequisite: 321, 300 or 425, or permission of Department) (3-0)

### **GEOG 427 (1½) CARTOGRAPHIC PRODUCTION**

Map construction and reproduction techniques are emphasized in this course. Students are familiarized with darkroom procedures and common production methods such as inking, scribing, peel coating, color proofing systems, and screen tinting. (Open only to fourth year Geography major or honours students; enrollment limited to 15.) (Prerequisite: 323 or permission of the Department) (0-3)

### **GEOG 428 (1½) AUTOMATED CARTOGRAPHY**

Automation is an important aspect of contemporary cartography. This course provides basic instruction in computer assisted base map construction, data manipulation, generalization, symbolization, editing, and output. (Enrollment limited to 10) (Prerequisites: 323; C SC 110; Math 100 or 102) (0-3)

### **GEOG 490 (1½ or 3) DIRECTED STUDIES IN GEOGRAPHY**

In special cases, with the consent of the Department and the individual instructor concerned, a student may be permitted to pursue a course of directed studies. Courses of 1½ or 3 units may be arranged, but no student is permitted to take more than three units of directed studies. In order to qualify for a 490 course a student must have at least a 6.00 G.P.A. in the previous fifteen units of University work.

### **GEOG 499 (3) HONOURS SEMINAR AND ESSAY**

It is recommended that honours students take the honours seminar in their third year. Honours students must register for the honours seminar and essay when admitted to the program. Students who register in their third year will receive a grade of INP until the essay is completed. The essay will be submitted at the end of the fourth year. (Grading: INP; letter grade) September-April (3-0; 3-0)

## **URBAN, ECONOMIC AND CULTURAL**

### **GEOG 330 (formerly half of 340) (1½) UNDERSTANDING CITIES**

A broad overview of issues in urban geography. The origin of cities, the spread of urbanization throughout the world, and the development of city systems are discussed. Cities of the urban industrial world, both Western and Communist, are compared with the cities of the Third World. Urban problems, including transportation, decentralization, spatial aspects of social justice, and new town planning are outlined. Alternative futures for cities are also considered. (May be taken only as an elective by students on a Geography program.) (Prerequisite: Third year standing. 101A and 101B are not prerequisites for this course.) (Not offered) (3-0)

### **GEOG 341 (1½) INDUSTRIAL GEOGRAPHY**

An analytical examination of factors affecting location of manufacturing industries and the growth of manufacturing regions. Topics of discus-

sions will include theories and models of industrial location; communist ideas of industrial location; measurement of industrial location and association; and consideration of industrial policies and planning in selected countries. (Not open to students who have taken 310) (3-0)

### **GEOG 342 (formerly 449) (1½) URBAN HISTORICAL GEOGRAPHY**

The aim of the course is to provide a comprehensive survey of the evolution of the city from its origins in the ancient world to its present form in the western world. The understanding of processes of growth and change is a major goal and this will be pursued generally in a chronological manner. The first half of the course will be concerned with urban origins, the classical city, the medieval city, and the mercantile and renaissance cities; and the second half with industrial age cities in Britain, United States and Canada, with emphasis on Canadian cities. (Prerequisite: 349 or permission) (3-0)

### **GEOG 343 (1½) REGIONAL ANALYSIS**

An examination of socioeconomic systems from a spatial viewpoint. Major themes are spatial structures, shifts in location of activities, circulation systems, city/region relations, and regional economic development. A variety of conceptual models will be applied to the above topics. Assignments will involve outside reading and two or three short term projects. (Prerequisites 201A and 201B, or 205A and 205B, or permission) (3-0)

### **GEOG 344 (1½) URBAN SYSTEMS SIMULATION**

Gaming procedures which simulate real world urban processes form the core of this course. By adopting the roles of developers, politicians, planners, public interest groups or other decision makers, participants gain an understanding of the complex interrelationships and interactions occurring within an urban system. The following topics are stressed: urban transportation; land use development; zoning; urban/rural relationships; pollution; poverty; politics and municipal finance. Participants will be given the opportunity to redesign the gaming procedures and also to relate specific gaming situations to contemporary planning problems in Canadian cities. (Enrollment limited to 20; preference given to students in related urban courses.) (Prerequisite: 349 or permission) (3-0)

### **GEOG 345 (1½) GEOGRAPHY AND PLANNING OF TOURISM**

The course examines the growth of tourism, its effects on environment and life, and the challenge of planning and managing this large scale activity. Topics to be discussed include the elements of tourism, its spatial patterns and development in various parts of the world. The planning and management aspect will concentrate on such issues as its effects on towns, the countryside and coastal areas. (3-0)

### **GEOG 347 (3) GEOGRAPHY OF ECONOMIC AND CULTURAL CHANGE**

A review of the variable factors affecting lesser developed parts of the world, and of technological, economic and cultural changes which result from the interaction of these factors. The initial part of the course will be devoted to a systematic treatment of factors affecting change. The second part of the course will consist of a number of geographical studies of areas at different stages of development. Students without the usual prerequisite who are particularly interested in the course should discuss the matter with the instructor. September-April (3-0; 3-0)

### **GEOG 349 (formerly half of 340) (1½) INTERNAL STRUCTURE OF CITIES**

This course explores the internal structure of major cities and the forces which create the city. Topics include the residential, commercial, and industrial structure of cities; problems of contemporary cities including housing and transportation; the planning of the urban environment. (Prerequisites: 101A and 101B or permission of instructor) Not open for credit to students with credit in 340 (formerly 305) (3-0)

### **GEOG 378 (1½) ENVIRONMENTAL AESTHETICS**

This course derives from the traditional concern of both humanist and applied geographers with the appearance, meaning, and value of landscape. The nature of aesthetic satisfactions in natural, rural and built environments, varying in scale from a building to a region, are considered. Following discussion of current environmental aesthetic theory, the varying approaches of contemporary practitioners in humanistic and applied geography, architecture, and planning are investigated. Planning techniques for environmental aesthetic assessment are outlined, and the implications for managing environments are discussed. (NOTE: Students seeking a philosophical approach to aesthetics should consider PHIL 242.) (3-0)

**GEOG 440 (1½) URBAN GEOGRAPHY OF CANADA**

Part of the course is focused on a study of the complete urban system as an introduction to a separate consideration of the cities in each of the five major regions of Canada. In the discussion of the national system topics will include population characteristics, economic base, functional structure and urban images. The distinctiveness of regional city systems will be explored, including case studies of individual cities. Special topics covered may vary from one region to another, such as the clothing industry in Montreal or ethnic groups in Winnipeg. (Prerequisite: 349 or permission) (3-0)  
(Not offered)

**GEOG 442 (formerly 460) (PACI 442) (1½) GEOGRAPHY OF CHINATOWNS AND CHINESE MIGRATION**

This seminar studies the urban overseas Chinese communities in the Pacific Rim countries. Major topics of discussion will include migration theory, concepts of culture conflict, assimilation and acculturation, urban ethnicity, home environment of Chinese emigrants, attitudes and policies of host society towards Chinese immigrants and imprints of Chinese culture on the urban landscape of the receiving country. Emphasis will be placed on the Chinese migration to Canada and the study of the urban problems of Canadian Chinatowns. (3-0)  
(Not offered)

**GEOG 443 (1½) GEOGRAPHY OF REGIONAL DEVELOPMENT**

The course is designed to examine policies and problems associated with regional development. The course will evaluate the changing spatial relationships between the location of resources and population. This will involve discussion of the 1) geographical limits of various political jurisdictions in federal states as opposed to unitary states and the powers vested in various levels of government to implement development plans and 2) problems of data availability on regional and subregional bases. Social and institutional obstacles to change will be discussed. Regional policies in Canada and the countries of Western Europe will be discussed and evaluated. (Prerequisites: 343 and ECON 201 and 202, or permission) (3-0)

**GEOG 444 (1½) URBAN TRANSPORTATION AND LAND USE PLANNING**

The problem of developing a satisfactory transportation system relative to the areal pattern of land use in an urban area is the major concern of this course. The functions of the various modes of transport and their effectiveness in the urban environment are investigated. Land use types are studied as generators of traffic in the city. An attempt is made to determine the volume and nature of traffic generated by different land uses. Consideration is given to the possibilities of drastically altering land use patterns of cities, as well as changing transport systems. (Prerequisite: 349 or permission) (3-0)  
(Not offered)

**GEOG 445 (formerly 346) (1½) COMMUNITY DEVELOPMENT AND PLANNING IN CANADA**

The course is concerned with the development of communities in the Canadian urban system. It examines the planning problems and administration issues that have evolved in Canada's wide range of communities and cultures. The focus is on the manner in which spatial and technological developments have influenced the social and environmental balance of present communities. (Prerequisite: 349 or permission) (3-0)

**GEOG 446 (1½) DEVELOPMENT AND PLANNING OF THE URBAN REGION**

The course examines the linkages that exist between current urban geography analysis and the planning problems of the metropolitan regions of the North American continent. The course attempts to demonstrate the contribution geography may make, as a social science, to the overall planning and development of such city regions. The aspects of the urban environment selected for study include such topics as migration and housing patterns, industrial and transportation considerations, and the influence of central government pressure and legislation. (Prerequisite: 349 or permission) (3-0)

**GEOG 447 (PACI 447) (1½) URBAN PROBLEMS OF PACIFIC RIM DEVELOPING COUNTRIES**

The course examines the fundamental differences in urban organization between developed and developing countries, and studies the political, cultural and socioeconomic conditions under which cities in Pacific Rim developing countries are growing. (Prerequisite: 349 or permission) (3-0)

**GEOG 448 (1½ formerly 3) URBAN SOCIAL GEOGRAPHY AND PLANNING**

A behavioural approach to the study of man-environment systems in an urban context. With bases in cultural geography and environmental psychology, the course will investigate the spatial dynamics of urban behaviour in western societies, with special reference to social interaction, and perceptions, attitudes and learning within the urban system. Students should become aware of the contemporary urban system. Students should become aware of the contemporary urban social problems which are involved in planning the metropolitan environment. (Prerequisite: 349 or permission) (3-0)

**RESOURCES AND PHYSICAL****GEOG 350A (formerly half of 350) (1½) GEOGRAPHY OF RESOURCE MANAGEMENT**

An introduction to the geographic study of natural resources: their form, inherent characteristics, and external relations with the geography of the areas in which they are found. Attention will be paid to the way in which resources and their use contribute to the character of areas and the manner in which interrelated aspects of culture — technology, perception, economic and institutional elements — help determine the pattern of use and its areal variations. (3-0)

**GEOG 350B (formerly half of 350) (1½) APPLIED RESOURCE GEOGRAPHY**

An analysis of contemporary problems and issues of resource management. Case studies will be used to examine such issues as common property exploitation, multiple use, area management and conflict resolution. Particular emphasis will be placed on North American examples. (Prerequisite: 350A or permission) (3-0)

**GEOG 370 (1½) HYDROLOGY**

A study of hydrology, focusing on the various factors that influence the distribution of water resources in time and space. Among the topics studied are: evaporation and transpiration; runoff and stream gauging; snow and ice surveying; flood prediction and droughts. A term project, generally involving field work, is required. This course provides the background in physical hydrology recommended for students registered for 371. (Prerequisite: 203A, 203B, or permission) (2-2)

**GEOG 371 (1½) WATER RESOURCES MANAGEMENT**

A study of water resources management in different parts of the world, examining the influence of various physical, economic, social, political, and technological factors. The alternative ways in which such problems as water scarcity, floods, and declining water quality are handled will be discussed. A number of major water development schemes will be examined in detail. Students will be expected to undertake a modest research project and report upon it. (Not open to students with credit for 353) (Prerequisite: 370 or permission) (2-2)

**GEOG 372 (1½) CLIMATOLOGY**

An investigation of the physical processes that determine the variation in climate and weather from place to place around the world. Emphasis will be on the process of mutual interaction between the earth's surface and the atmosphere, and the role of differing surface types in creating the climate above them. (2-2)

**GEOG 373 (1½) APPLIED CLIMATOLOGY**

A study of the application of physical principles to practical problems in climatology and the reciprocal interaction between climate and man's activities. Discussion topics will include: urban effects on climate, air pollution, human bioclimatology, agricultural climatology, and methods of microclimatic modification. (Not open to students with credit for 351) (2-2)

**GEOG 374 (1½) BIOGEOGRAPHY**

This course provides an analysis of the organization of biotic systems. Origins, dispersals, evolution, and limiting physical, biotic and cultural factors as they relate to present day distribution patterns and ecological relationships will be considered. Particular attention will be paid to: the nature of ecological relationships; the landscape patterns resulting from these relations; the dynamic character of ecosystems; the impact of man upon ecological processes and ecosystem character. (Prerequisite: 203A, 203B, or permission) (2-2)

**GEOG 375 (1½) FOREST RESOURCE MANAGEMENT**

An examination of the geographical and ecological parameters of forest systems, and the relationships of these parameters to actual and poten-

tual resource use. Major emphasis will be placed on the coastal forest resources of British Columbia, and comparisons drawn with Europe and United States examples. Topics, to be covered in both class and field work, will include forests as functioning ecological and management units, historical development and current changes in management policy and possible trends in future resource policies. (Not open to students with credit for 352) (Prerequisite: 374 or permission of Department) (2-2)

**GEOG 376 (1½) GEOMORPHOLOGY**

An investigation of the genesis and distribution of landforms. Emphasis will be placed upon techniques used in the measurement of those processes which are of prime importance in the evolution of glacial, periglacial, temperate and tropical landforms. Marine, karstic and volcanic landforms will also be studied. The course will involve outside readings, field trips, and participation in a group research project. (Prerequisite: 203A, 203B, or GEOL 100 or permission) (2-2)

**GEOG 377 (1½) APPLIED GEOMORPHOLOGY**

A detailed examination of the social relevance of geomorphology, in which three areas receive emphasis. Terrain analysis involves the evaluation of landscapes for mineral resources, trafficability, urban and industrial site suitability and agricultural productivity potential. Terrain stability studies explore the problems involved in maintaining landscape equilibrium in the face of major engineering schemes and waste disposal. Special attention is also paid to risk from natural hazards, especially those of importance in western North America, such as earthquake, tsunamis, avalanches and volcanic eruptions. Outside readings, field trips and participation in a group research project are involved. (Prerequisite: 376 or permission) (2-2)

**GEOG 450A (formerly half of 450) (1½) DECISION MAKING IN RESOURCES MANAGEMENT: THEORY**

An advanced course in the geography of resources management and conservation. Its purposes are to determine the factors which appear to influence decision making in the resources field, and to examine the effects of different decisions upon the physical and human environments. It is devoted to a review of the various approaches to the analysis of resources management decisions and their applicability to a variety of situations. (Prerequisite: 350A, 350B, or permission) (3-0)

**GEOG 450B (formerly half of 450) (1½) DECISION MAKING IN RESOURCES MANAGEMENT: PRACTICAL APPLICATIONS**

This course deals with a number of case studies, drawn from different parts of the world, applying theories and techniques developed in 450A, and comparing the impacts on the physical and human landscape. (Prerequisite: 450A) (3-0)

**GEOG 451 (1½, formerly 3) ADVANCED WATER RESOURCES MANAGEMENT**

An examination of the theory and practice of contemporary water resources management. While the major focus will be on experience in North America, illustrations will also be drawn from other parts of the world. A primary interest will be in planning and policy making. (Prerequisite: 371) (3-0)

**GEOG 452 (1½) COASTAL RESOURCE ANALYSIS**

The geographic study of the patterns, processes and problems involved in managing coastal zone resources. Emphasis will be placed on the coastal zone as a functional region, the jurisdictional aspects of management, the spatial processes apparent in the coastal zone and the origin of resource use problems. Consideration will be given to cases in coastal zone management from Canada, the United Kingdom and the United States, with particular focus on British Columbia. (Prerequisite: 350A, 350B, or permission of instructor) (3-0)

**GEOG 453 (1½) MARINE RESOURCE ANALYSIS**

A geographic study of the territorial organization, use and management of marine resources. Topics to be investigated include the common property nature of the ocean areas, different concepts and principles of territorial organization of the sea, exploitation of ocean resources, potential uses of the ocean and frameworks for future management. (Prerequisite: 350A, 350B, or permission of instructor. BIOL 310 or 311 recommended) (Not offered) (3-0)

**GEOG 454 (1½) GEOGRAPHICAL DIMENSIONS OF ENERGY POLICY**

An analysis of contemporary problems and issues in energy policy development. Particular attention will be paid to global variations in energy availability and requirements; transportation patterns, and environmental concerns. (3-0)

**GEOG 459A (formerly half of 459) (1½) RECREATION RESOURCE ANALYSIS: CONCEPTS**

Introduction to concepts underlying recreational activity such as motivations, satisfactions, participation and demand, and the use of concepts such as multiple use, commons resources, substitutability, conflict resolution, threshold determination and externalities in understanding and planning the management of recreation resources; specific case studies are examined with special emphasis on Canadian and British Columbian examples. (Prerequisite: 350A, or permission of instructor) (3-0)

**GEOG 459B (formerly half of 459) (1½) RECREATION RESOURCE ANALYSIS: EVALUATION, PLANNING AND MANAGEMENT**

An examination of the evaluation, planning and management of recreation resources at various scales and levels of use from high intensity day-use areas through to wilderness, tracing the evolution, current status and future directions of park systems; usually involves a three-day field trip for which there will be some charge. (Prerequisite: 459A) (3-0)

**GEOG 471 (1½) SEMINAR IN PHYSICAL GEOGRAPHY**

The course offers the opportunity to undertake advanced work in biogeography, climatology, geomorphology and hydrology. One of these fields will be specified for the course each year. Emphasis is on learning through experience, and students will complete suitable research projects in close consultation with the faculty member. This course may be taken twice only and no more than once from the same professor. (NOTE: Credit may not be obtained for 471 and 470, 472, 474 or 476)

Topics:

**471A Biogeography**

This course will centre upon intensive research projects involving fieldwork, literature studies and seminar discussions in ecological or applied biogeography. Topics will depend upon class size and student interests, and projects may be completed individually or in groups. (Prerequisite: 374 or 375 or permission) (3-0)

**471B Climatology**

This course will introduce students to various techniques used in climatological analysis, with special emphasis on radiation and energy budget processes. A group research project in applied climatology will form a major part of the course. (Prerequisite: 372 or permission) (Not offered) (3-0)

**REGIONAL**

Pacific Studies 200: Cultural Contact and Social Change in the Pacific Region, is recommended for students intending to take 347, 364, 365, 447, 463, 465.

**GEOG 361A (formerly half of 361) (1½) GEOGRAPHY OF CANADA: SYSTEMATIC APPROACH**

This course is concerned with the study of a number of topics relevant to the whole of Canada. The first half is devoted to the study of such topics as the environment and resource base, population and settlement, and the evolution of cities. The second half is more problem oriented, dealing with topics such as energy resources and development, foreign control and industrial policy, and preservation of agricultural land. (2-2)

**GEOG 361B (formerly half of 361) (1½) GEOGRAPHY OF CANADA: REGIONAL APPROACH**

The regional study of Canada is based chiefly on the macroregions of the Atlantic Provinces, Quebec, Ontario, the Territories, the Prairies and British Columbia. The elements that define regional character are examined, as well as the evolutionary process culminating in the present economic and social structure of each region. Regionalism and regional problems within these macroregions also are investigated. The course concludes with a consideration of the interrelationships between regions and the stresses that exist within the nation. (Prerequisites: None, but 361A is recommended) (2-2)

**GEOG 364 (1½) GEOGRAPHY OF TRADITIONAL CHINA**

The purpose of this course is to study the physical environment of China

and the role of the Chinese people in moulding and changing the landscape over the past four thousand years. The subject matter will deal primarily with conditions pertaining to the Chinese earth and the Chinese people in the period up to 1949, and provide an essential basis for appreciation of the transformation of China since 1949.  
(Not offered) (3-0)

**GEOG 365 (1½) GEOGRAPHY OF MODERN CHINA**

The purpose of this course is to study the transformation of the Chinese landscape since 1949. Emphasis will be placed on the study of the resource base in different economic regions and the impact of the modern, state-directed economy upon settlement, agriculture, transportation and industrial growth. (Prerequisite: None, but 364 is recommended)  
(Not offered) (3-0)

**GEOG 463 (3) GEOGRAPHY OF SOUTHEAST ASIA**

A geographic survey of the regions and resources, both physical and human, of the countries of Southeast Asia, together with a discussion of the problems associated with underdevelopment and the geographic implications of political differences in the area.  
September-April (3-0; 3-0)

**GEOG 465 (3) GEOGRAPHY OF JAPAN**

A survey of the physical environment, cultural patterns and economy of Japan, which is intended to provide the background which will enable the student to assess Japan's role in the world today. Both traditional patterns and present day changes will be discussed.  
September-April (3-0; 3-0)

**GEOLOGY**

**GEOL 100 (formerly 200 (3) GENERAL GEOLOGY**

Physical and historical geology. Origin and structure of the earth, materials of the earth, diastrophism, erosion, landforms, mineral deposits, history of the earth and the development of life.  
September-April (2-2; 2-2)

**GEOL 201 (1½) STRATIGRAPHY**

An investigation of some aspects of the geology of sedimentary rocks. The topics discussed include: physical and chemical properties of sediments; sediment transport and accumulation; stratification; structures; practical applications of stratigraphy; and an overview of the stratigraphy of Western Canada. (Prerequisite: 100 or permission of the Department) (2-2)

**GEOL 202 (1½) STRUCTURAL GEOLOGY**

The basic concepts of structural geology are introduced. The topics examined include: the physical controls, the analysis, the detection, and the geometric display of geologic structures. (Prerequisite: 100 or permission of the Department) (2-2)

**GEOL 203 (1½) INTRODUCTION TO MINERALOGY**

A study of the physical, chemical and crystal properties of minerals. The classification of minerals and the recognition and identification of common rock-forming and economic minerals. The determination of refractive index. (Prerequisites: 100; CHEM 120 or 124; PHYS 102 or 103 or 3 units of PHYS 100, 110, 120, 220)  
(Not offered) (2-2)

**GEOL 204 (1½) INTRODUCTION TO PETROLOGY**

A study of the optical properties of minerals and their identification under the microscope. Thin section examination of rocks. The classification of igneous and metamorphic rocks. (Prerequisites: 100 and 203)  
(Not offered) (2-2)

**GRADUATE COURSES**

*All courses may not be offered in any one year.*

**GEOG 500 (2) COLLOQUIUM IN GEOGRAPHY**

Presentations from full-time faculty members concerning issues in their fields of specialization and current research in these areas. Presentations followed by seminar discussion. Faculty presentations will be supplemented by guest lectures from prominent Geography researchers. Student presentations will be based on material gathered during September field trip.  
(Grading: INC, COM)  
Required core course September-April

**GEOG 522 (2) SEMINAR IN THE DESIGN AND CONDUCT OF RESEARCH**

This seminar will review the process of design and conduct of research. It will include an examination of steps involved in problem identification and hypothesis formulation, and some consideration of various unobtrusive data collection techniques. The course will conclude with the design of a research proposal.  
Required core course

**GEOG 523 (2) FIELD TECHNIQUES AND CONCEPTS IN GEOGRAPHY**

The course describes and explains survey research techniques currently used in geography. The emphasis will be on the mechanics of these techniques, their advantages and disadvantages and limitations.  
Required core course

**GEOG 524 (2) QUANTITATIVE METHODS IN GEOGRAPHY:II**

The emphasis is placed upon application of various statistical techniques to geographical problems rather than upon the mathematical bases of such techniques.

**GEOG 526 (2) THE NATURE AND PHILOSOPHY OF GEOGRAPHY**

The history of geography up to the 20th century will be examined, but the bulk of the course is concerned with the radical changes in geographical philosophies, methodologies, and approaches which have occurred since 1950. The nature of geography will be considered in relation to other disciplines and interdisciplines. Recommended for graduates who wish to place their specific research goals in the general context of the geographical research frontier.

**GEOG 542 (2) SEMINAR IN URBAN PROBLEMS**

A survey of the geographer's contribution to the understanding of contemporary urban problems. Seminars will be led by urban geography faculty.  
September-April

**GEOG 552 (2) SEMINAR IN RESOURCES MANAGEMENT PROBLEMS**

A seminar dealing with various problems encountered in resources management, including the collection and analysis of data, the organization of research, the formulation of plans and programs, and the analysis of economic and social aspects of resource development projects. Examples will be drawn from Canada and elsewhere. Seminars will be led by resource geography faculty.  
September-April

**GEOG 553 (2) RECREATION POLICY AND RESEARCH**

A course dealing with the formulation and implementation of recreation policy, and the identification of significant areas for research. Conducted as a seminar, it will include presentations from the instructors and outside speakers as well as students. Each student will be responsible for preparing a detailed proposal for a research topic.

**GEOG 555 (2) PROBLEMS IN THE MANAGEMENT OF COASTAL AND MARINE RESOURCES**

A seminar on the problems of coastal and marine resources with special reference to Canada. Topics to be investigated may include coastal resource conflicts, fishery resources.

**GEOG 556 (2) SEMINAR IN ENVIRONMENTAL IMPACT ASSESSMENT**

A review of the philosophy, process and methods of environmental impact assessment. It will include specific discussions of the origins, approaches, techniques of measurement, and the political process of assessment. Economic, social, and various physical and environmental parameters will be taken into account. The course will conclude with the application of the various techniques to an actual case study. One or more field trips will be undertaken. It is probable that the course will be conducted as a joint enterprise with the Department of Biology.

**GEOG 557 (2) FOREST RESOURCE MANAGEMENT: PROBLEMS AND POTENTIAL**

A seminar based on both student and guest speaker presentations together with field excursions that selectively examine ecological, social and economic factors related to the management of forest resources in British Columbia. Each student will prepare one major paper for critical discussion.

**GEOG 560 (2) PROBLEMS IN APPLIED BEHAVIOURAL GEOGRAPHY**

Contemporary issues in behavioural geography, from microspace (e.g. personal space) to macrospace (e.g. cognitive, imagery of the city) are investigated for their potential as planning tools. An attempt is made to develop a logical paradigm for the interdisciplinary area which relates behavioural geography and urban design.

**GEOG 570 (2) GEOGRAPHICAL ASPECTS OF REGIONAL PLANNING**

Contemporary approaches to geographic problems in regional planning. Speakers from three levels of government will be brought in to discuss

problems and approaches. Readings in the theory of planning from the geographic viewpoint and presentation of a major paper will be required.

**GEOG 590 (A-Z) (2) DIRECTED STUDIES IN GEOGRAPHY**

Individual titles will be assigned to each lettered section of the course arranged by supervisory committees.

**GEOG 599 (credit to be determined, normally 15 units) M.A. THESIS****GEOG 699 (credit to be determined, normally 24 units) PH.D. DISSERTATION**

## DEPARTMENT OF GERMANIC STUDIES

Michael L. Hadley, C.D., B.A. (Brit. Col.), M.A. (Man.), Ph.D. (Queen's), Associate Professor and Chairman of the Department  
 Walter E. Riedel, B.Ed., M.A. (Alta.), Ph.D. (McGill), Associate Professor  
 Rodney T.K. Symington, B.A. (Leeds), Ph.D. (McGill), Associate Professor  
 Angelika F. Arend, M.A. (Carleton), D. Phil. (Oxf.), Assistant Professor  
 Peter G. Liddell, M.A. (Edin.), Ph.D. (Brit. Col.), Assistant Professor  
 Johannes Maczewski, Staatsexamen (Marburg), Ph.D. (McGill), Assistant Professor

**GENERAL, MAJOR AND HONOURS PROGRAMS**

The Department provides three emphases in Germanic Studies which may be elected either independently or in concert:

- 1) German Language
- 2) German Literature and Cultural History
- 3) German Cultural Studies in English Translation

Students specializing in particular programs will find ample scope for complementing their German Studies in such recommended areas as English and Linguistics.

All students planning to take a concentration in a General program of Major or Honours in the Department must take 3 units of literature at the 200 level or higher in English or any language other than German.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours program, must satisfy the Department that they have satisfactory standing in appropriate German courses at the 200 level or in German 149. Students wishing to enroll in the Honours Program will first obtain the approval of the Chairman of the Department.

An Honours program in the Department normally requires a total of 63 units over a four year period, including graduating essay (see German 499). First and Second Class Honours degrees may be awarded. A First Class degree requires a first class graduating average and at least a B+ in German 499. A Second Class degree requires a second class graduating average and at least a C+ in German 499.

A student who fails to meet departmental requirements for First Class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet departmental requirements for Second Class standing but has a second class graduating average will be offered a Second Class Major degree.

The Department may give permission for individual studies and directed studies to be taken under course numbers 434 and 499 only. No other course numbers are offered as individual studies or directed readings at any time. German 499 is specifically intended for Honours students; German 434 may be taken for Major and Honours; as a general rule, both of these are available to students with a grade point average of at least 6.50 in German. German 434 would only be approved to be given in the Spring and Summer if such a student required the course in order to graduate that year.

**PROGRAMS IN GERMAN**

**General** — 100 or 140 (or equivalent); 200 and 204 (or equivalent); nine units of German courses chosen from 300 and those numbered 400 or above.

**Major** — 100 or 140 (or equivalent); 200 and 204 (or equivalent); 300, 420; ten and one half units of other German courses including at least one of 414, 418, 422.

**Honours** — 100 or 140 (or equivalent); 200 and 204 (or equivalent); 300, 420; at least one of 414, 418, 422; 499; at least twelve units of other German courses numbered 400 or above.

Students in the above programs may meet the requirements of 100 (140)-200 by completing 149.

**COURSES**

Students with secondary school credit for courses in German will be placed by the Department at a level appropriate to their knowledge.

Students with transfer credit from other postsecondary institutions, or those who are fluent in German, will be placed at an appropriate level.

Intermediate and advanced students will be expected to have a standard bilingual dictionary. The Department recommends Langenscheidt's or Cassell's.

**ELEMENTARY COURSES****GER 100 (3) BEGINNERS' GERMAN**

This course is designed for students who have no previous knowledge of German and who wish to acquire a command of the spoken and written language, in preparation for more advanced work. The language laboratory will reinforce the learning of basic speech patterns and idioms, and will complement the active use of German in the classroom. Text: Moeller, Liedloff, *Deutsch heute*

M.L. Hadley, J. Maczewski, W.E. Riedel September-April (3-1; 3-1)

**GER 149 (6) INTENSIVE GERMAN**

For students with no previous knowledge of German or insufficient knowledge to enter 200, this course is designed to cover a basic two year study of the German language in one year (equivalent to 100 plus 200) and to provide a rapid and thorough grounding in how to read, write and speak German, with emphasis on making practical use of the language as early as possible. In addition, readings of short texts will be introduced at an early stage and films and slides will be shown to illustrate aspects of German-speaking countries and to serve as topics for conversation practice. (Prerequisite: None. Students with credit for 100 or 140, or equivalent knowledge, may not take this course for credit. Students not making satisfactory progress will be advised to transfer to 100.) Text: To be announced

P.G. Liddell

September-April (5-2; 5-2)

**INTERMEDIATE AND ADVANCED GERMAN****GER 200 (3) INTERMEDIATE GERMAN**

This course aims at improving the student's practical mastery of the spoken and written language. Beginning at the level attained in first year German, its integrated approach to grammar review and contemporary texts focuses on the German speaking world. Classes consist of composition, translation and discussion. (Not open for credit to students who have credit for 149) (Prerequisite: 100) Text: Moeller/Liedloff, *Kaleidoskop*; and *Lab Manual*

A.F. Arend

September-April (3-1; 3-1)

**GER 204 (3) SURVEY OF GERMAN CULTURE AND INTRODUCTION TO GERMAN LITERATURE**

A general survey of the German cultural heritage through readings, films, music and a study of literary selections from the Middle Ages to the present. (Not open to students who have credit for 240, 260, 201 or 202.) Texts: Frisch, *Biedermann und die Brandstifter*; Claude Hill, *200 Jahre deutscher Kultur* and others to be announced (Prerequisite: 100 or 140 or equivalent; 200 is normally prerequisite to, or corequisite with, this course)  
W.E. Riedel September-April (3-1; 3-1)

**GER 295 (3) GERMAN LITERATURE AND MUSIC**

A study of the close relationship between German literature and music. The course will illustrate the twin themes of literature in music and music in literature. Texts which have musical settings, and compositions which appear in literary works, will be discussed. This course is designed to provide a general cultural background for students interested in more than one field. A knowledge of German, or musical training is not required, although General, Major or Honours students of German should do the reading in the original German. (Prerequisite: Open to any of the following groups of students:

- Any student who has been exempted from, or who has successfully completed first year English or equivalent
- Any student enrolled in the Department of Music, Faculty of Fine Arts
- General, Major, or Honours students of German by permission of the Department, as an elective)

(Not offered) September-April (3-0; 3-0)

**GER 300 (3) ADVANCED COMPOSITION: STYLISTICS AND TRANSLATION: I**

The aims of this course are to develop the student's mastery of the German language by intensive practice in the use of idiom in oral and written composition, translation, and style analysis, and to improve oral fluency by means of conversation classes. (Prerequisite: 200 or equivalent) Texts: Hammer, *German Grammar and Usage*  
A.F. Arend September-April (3-1; 3-1)

**GER 304 (3) A SURVEY OF GERMAN CULTURE (IN ENGLISH)**

A survey of outstanding cultural trends against the background of German's past and present. Lectures will focus on traditional concepts of German culture, and major developments in religion, philosophy, folklore, literature, art, architecture and music in an attempt to give students a cultural perspective for viewing the German way of life. Other areas of discussion will include an assessment of current attitudes to Germany past and present. (Representative texts will be read and discussed in English) (Knowledge of German is not required) (May be chosen as an elective by students of German with Departmental permission)  
September-April (3-0; 3-0)

**GER 310 (3) GERMAN LITERATURE IN ENGLISH TRANSLATION**

A study of major authors from the 18th Century to the present day. (Prerequisite: First year English or equivalent. This course is intended as an elective for students in any faculty. Knowledge of German is not required. Open to Major and Honours students in German by permission, as an elective only) Texts: Goethe, *Faust*; Spender (ed.), *Great German Short Stories*; Büchner, *Dantou's Death*, *Woyzeck*; Mann, *Tou Kröger*; Kafka, *The Metamorphosis*; Hesse, *Steppenwolf*; Brecht, *The Life of Galileo*; Dürrenmatt, *The Visit*; Weiss, *Marat/Sade*; Grass, *Cat and Mouse*  
(Not offered) September-April (3-0; 3-0)

**GER 320 (3) GERMAN NOVEL IN TRANSLATION**

A study of selected major works, emphasizing the principal authors and trends in the development of the genre. The novel will be approached both as an art form and a social document, and will be examined within a broad cultural context. (Prerequisite: Three units from ENGL 115, 121, 122. This course is intended as an elective for students in any faculty. Knowledge of German is not required. Major and Honours students in German may take the course as part of their programs, but may be asked to read certain passages in the original.) Texts: Goethe, *Elective Affinities*; Fontane, *Effi Briest*; Ludwig, *Between Heaven and Earth*; Franz Kafka, *The Trial*; Thomas Mann, *The Magic Mountain*; Herman Hesse, *Steppenwolf*, *Siddhartha*; Gunter Grass, *The Tin Drum*  
(Not offered) September-April (3-0; 3-0)

**GER 390 (3) GERMAN READING COURSE**

Rapid survey of grammar, reading of general and scientific articles, designed to meet the needs of students who have no knowledge of

German, but want to gain reading comprehension in a special field. (Limited normally to students in third or fourth year or in graduate studies.) (Credit cannot be granted both for 100 or 140 and 390.) Texts: H. Jannach, *German for Reading Knowledge*  
M.L. Hadley September-April (3-0; 3-0)

**GER 400 (3) ADVANCED COMPOSITION, STYLISTICS AND TRANSLATION: II**

A continuation and reinforcement of 300 through oral presentations, composition, analysis of texts, translation. *Übersetzungskritik* and conversation based on selected texts, topics and the newspaper "DIE ZEIT". (Prerequisite: 300) Text: Hammer, *German Grammar and Usage*  
J. Maczewski September-April (3-0; 3-0)

**GER 403 (1½) EVOLUTION OF THE GERMAN LANGUAGE**

A survey of the evolution of German from the Dark Ages, through the religious and chivalric influences of the Middle Ages, to the impact of trade, technology and politics of today. The course will study the effects of developments such as: the printing press; Luther's Bible translation; the influence of French and English; and the manipulation of German for propagandistic purposes (e.g., under National Socialist and Communist regimes). (Prerequisite: 200, LING 100, or permission of instructor)  
P.G. Liddell January-April (3-0)

**GER 405 (formerly half of 417) (1½) THE NOVELLE**

As the most "dramatic" of the shorter narrative forms, the *Novelle* gave rise in the 19th century to many attempts to define its characteristic form and its emphasis on intrigue, horror, love and the apparently inexplicable aspects of life. Against this background, representative *Novellen* from Goethe to the present day will be studied and compared to other short narrative prose forms, such as the *Märchen*, *Erzählung*, and *Kurzgeschichte*.  
(Not offered) (3-0)

**GER 406 (formerly half of 413) (1½) GERMAN DRAMA AND THEATRE**

A study of the development of the German drama and its relationship to the German theatre from the 18th century (e.g. Lessing) to the present day (e.g. Brecht). Representative texts will be studied, with the aim of enabling the student to understand various dramatic forms.  
(Not offered) (3-0)

**GER 408 (1½, formerly 3) POETRY**

German has long been considered an eminently poetic language because of its rich vocabulary, its flexibility informing new combinations, its ability to express a wide range of emotion and thought through simple language, and its rhetorical strength. This course will introduce the student to a variety of poems from different periods and writers, and will permit students to choose a particular poet for special study. The primary concern of the course is teaching how to read German poetry for pleasure and understanding.  
January-April (3-0)

**GER 411 (1½) MEDIEVAL GERMAN LITERATURE**

An introduction to chivalric literature and civilization through the study of writers and their works, mainly from the first *Blütezeit* in German literature (1170-1250); Early *Minnesang*, Walther von der Vogelweide, *Nibelungenlied*, Hartmann von Aue, Wolfram von Eschenbach, and others. The course will also provide a basic introduction to the Middle High German language through study of the original texts.  
(Not offered) (3-0)

**GER 412 (1½, formerly 3) GERMAN LITERATURE AND CULTURE OF THE 17TH CENTURY**

This course will focus on the literature of the Baroque period (ca 1600 to 1700). It will examine the social and cultural development of the German speaking areas of Europe, evaluating their contribution to 17th century culture within the European context. The emergence of truly individual and 'national' cultures will be shown by selected readings of poetry, drama, and prose. Texts: R. Fischetti, *Barock* (Reclam 9613); J. Biedermann, *Cenodoxus* (Reclam 8958/9); J.V. Andreae, *Christianopolis* (Reclam 9786); A. Gryphius, *Catherina von Georgien* (Reclam 9751/2); M. Holtzwarth, *Emblematum Tyrocinia* (Reclam 8555/7); H.J.C. von Grimmelshausen, *The adventurous Simplicissimus*  
(Not offered) (3-0)

**GER 414 (1½) ENLIGHTENMENT**

Enlightenment was a 17th to 18th century European phenomenon of broad cultural significance whose central tenet was trust in the ability of human Reason to provide man with ultimate knowledge in all areas of

endeavour. Literature in all its forms (essay, poetry, novel, drama) became the vehicle for a new optimism, which was encouraged by the view that man should "dare to know" all things. This course studies some of the major German contributions to rationalism by selectively examining such writers as Albrecht v. Haller, Lessing, Klopstock and Wieland. Texts: Bahr (ed.), *Was ist Aufklärung* (Reclam 9714); Albrecht v. Haller, *Die Alpen* (Reclam 8963/64); Lessing, *Die Erziehung des Menschengeschlechts* (Reclam 8963) and *Nathan der Weise* (Reclam 3); Klopstock, *Gedichte* (Fischer Bucherei 1066); Wieland, *Der Prozess um des Esels Schatten* (Clarendon German Series) (Not open for credit to students who have 3 units credit in 410 or 412) (Not offered) (3-0)

**GER 416 (formerly half of 412) (1½) LITERATURE OF THE STORM AND STRESS**  
A study of one of the briefest, yet most momentous revolutionary periods in the history of German literature (1770-1790) through reading, interpretation, and critical analysis of some of the early works of Goethe and Schiller and their contemporaries.  
J. Maczewski September-December (3-0)

**GER 418 (formerly half of 410) (1½) CLASSICISM**  
The literary period commonly described as German Classicism spans, in its broadest outlines, the years 1750-1810. More particularly, it describes that elevated classical idealism represented in the works of Goethe, Schiller and Hölderlin written between 1786 (Goethe's Journey to Italy) and 1805 (Schiller's death). Against the background of classical antiquity, this course examines such major themes as the tragedy of the individual in political society, freedom and self determination, and the search for human values. Texts: Goethe, *Egmont*, *Hermann and Dorothea* (MacMillan); Schiller, *Maria Stuart* (MacMillan); *Wallenstein* and *Selected Poems* (MacMillan); Hölderlin, *Hyperion* (Not offered) (3-0)

**GER 420 (formerly half of 410) (1½) FAUST**  
Goethe's *Faust*, commonly regarded as the greatest single work in German literature, provides the student with a special challenge in its panoramic treatment of key themes found both in Germany's centuries-long literary tradition, and in the works of Goethe. Here questions concerning the nature of knowledge and morality, faith and reason, myth and reality are presented with both lyrical and symbolic breadth. Against the background of the Faust-myth and its traditions this course focuses on Goethe's achievement through detailed study of selected sections of Parts I and II of his work. Text: J.W. von Goethe, *Faust*, (Goldmann Klassiker 7517) (Not offered) (3-0)

**GER 422 (formerly half of 404) (1½) GERMAN ROMANTICISM**  
The beginnings and principal achievements of this movement coincided with the period of Classicism. As an Idealistic movement, however, it emphasized individual sentiments, ideas and moods, and fostered a renewed German national feeling. Starting from a well defined philosophical basis, writers explored in poetry and prose new realms of the imagination. This course is a study of Romantic myth, fantasy, fairytales, and ghost story. Some attention will be given to art and music. (Not offered) (3-0)

**GER 424 (formerly half of 413) (1½) 19TH CENTURY GERMAN AUTHORS**  
Emphasizing drama in Germany and Austria, the course examines the major changes in 19th century German literature against the background of the great social and political upheavals of the period. In surveying the work of writers from Kleist and Grillparzer, through Büchner, Heine and Hebbel, to Fontane and Hauptmann, the course will pursue such topics as: the struggle for an ideal vision in an increasingly materialistic world; comedy and social drama; *Biedermeier* conversation and the young liberal writers; the effects of industrialization and of Darwin on literature; Realism as a reflection of, or refuge from, a harsher reality.  
A.F. Arend September-December (3-0)

**GER 426 (formerly half of 401) (1½) MODERN GERMAN LITERATURE: I**  
A study of German literature in the context of Germany's political and social transformation from about 1900 to World War I and the Weimar Republic. Representative literary texts from Naturalism, will be examined with the thematic focus on the search for the "New Man." Texts: Hauptmann, *Vor Sonnenaufgang*, *Die Weber*; Wedekind, *Frühlingserwachen*; Hofmannsthal, *Tor und Tod*, *Jedermann*; Georg

Kaiser, *Von morgens bis mitternachts*, *Die Bürger von Calais*, Brecht, *Die Dreigroschenoper*; Zuckmayer, *Der Hauptmann von Köpenick*; and selections from the poetry of Rilke, George, Holmannsthal and of Expressionism (Not offered) (3-0)

**GER 428 (formerly half of 401) (1½) MODERN GERMAN LITERATURE: II**  
A study of selected literary works by such major writers as Kafka, Hesse, Thomas Mann, and Brecht against the background of changing social, political and intellectual conditions in Germany, from the Weimar Republic to the end of the Third Reich. Texts: Kafka, *Die Verwandlung* and other selections; Hesse, *Der Steppenwolf*; Thomas Mann, *Tomio Kröger*, *Der Tod in Venedig*; Brecht, *Mutter Courage*, *Der gute Mensch von Sezuan* (Not offered) (3-0)

**GER 431 (formerly half of 402) (1½) CONTEMPORARY GERMAN LITERATURE**  
A study of selected works of West German, Austrian and Swiss writers since 1945. Within the context of political, social and cultural developments, selections from the following authors will be studied: Borchert, Böll, Grass, Weiss, Lenz, Handke, Frisch, Dürrenmatt. Texts: Borchert, *Draussen vor der Tür*; Zuckmayer, *Des Teufels General*; Hochwälder, *Das heilige Experiment*; Dürrenmatt, *Der Besuch der alten Dame*, *Die Physiker*; Frisch, *Andorra*, *Biedermann und die Brandstifter*; Weiss, *Marat/Sade*; Böll, *Katharina Blum* and others  
R.T.K. Symington January-April (3-0)

**GER 432 (formerly half of 402) (1½) LANGUAGE, LITERATURE AND THOUGHT OF EAST GERMANY**  
Since the creation of East Germany as the German Democratic Republic, it has established a distinctive literary and linguistic domain. This course will discuss and analyze major works of literature and other art forms created after 1949 in the light of socialist aesthetics from Marx to the present. Topics will include: Soviet Ideology and East German Culture; Politics and Art; Dissidents and Conformists; East German Literature and the West.  
P.G. Liddell September-December (3-0)

**GER 433 (1½) THE GERMAN POST WORLD WAR II NOVEL AND FILM (In English)**  
A study of selected major novels since 1945 and their film adaptations. The novels will be examined as works of literature, as adaptations to film, and as social documents. Students of German will be encouraged to read passages in the original. (Not offered) (3-0)

**GER 434A (formerly half of 430) (1½) SPECIAL TOPICS**  
Designed for Major and Honours students, this course may be offered either as a reading course, a tutorial, or a seminar as warranted. Students wishing to register for this course must consult with the Chairman. This course may be taken more than once in different topics, with permission of the Department. This year: A seminar on Bertolt Brecht.  
J. Maczewski January-April (3-0)

**GER 434B (formerly half of 430) (3) SPECIAL TOPICS**  
Designed for Major and Honours students, this course may be offered either as a reading course, a tutorial, or a seminar as warranted. Students wishing to register for this course must consult with the Chairman. This course may be taken more than once in different topics, with permission of the Department. (Not offered) September-April (3-0: 3-0)

**GER 499 (formerly 490) (3) HONOURS TUTORIAL AND GRADUATING ESSAY**  
This course will be conducted either as an individual tutorial or seminar as demand warrants. Its purpose is to help the student develop critical approaches to specialized materials at an advanced level, and to assist in preparation of a scholarly essay on an assigned topic. The essay must conform to acceptable standards of style and format, and be submitted before the end of second term classes. An oral examination covering the topic of the essay will normally be given.  
W.E. Riedel, A.F. Arend September-April (3-0)

## DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

Gregory P. Andrachuk, B.A., M.A., Ph.D. (Tor.), Associate Professor (Spanish)  
 Antonio Fama, B.A. (Brock), M.A. (W. Ont.), Ph.D. (S.U.N.Y., Buffalo), Associate Professor (Spanish)  
 Lloyd H. Howard, B.A. (Brit. Col.), M.A., Ph.D. (Johns Hopkins), Assistant Professor (Italian)  
 Caroline Monahan, B.A., M.A. (Brit. Col.), Ph.D. (London), Assistant Professor (Spanish)  
 Gerald T. Aaron, B.A. (Brigham Young), M.A. (Brit. Col.), Visiting Lecturer (1984-85)  
 Hilda B. Alfaro, M.A. (S. Fraser), Visiting Lecturer (1984-85)  
 Maria C. Barrera, B.A. (Univ. De Oviedo), M.A. (S. Fraser), Visiting Lecturer (1984-85)

### GENERAL, MAJOR AND HONOURS PROGRAMS

Students wishing to take courses in Spanish at the Third and Fourth Year levels are reminded that they must have the prerequisites of the first two years including Spanish 260 and Spanish 290. Exceptions may be made with the permission of the Department.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours Program, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. Spanish 290 should be taken in the Second Year and Spanish 302 in the Third Year. Students doing a General or Major in Spanish may take Spanish 260 in either the Second or Third Year.

An Honours program in the Department of Hispanic and Italian Studies normally requires a total of 66 units over a four year period. Honours students' graduation standing is based on their graduating average.

Students specializing in Spanish (including Honours), will find that they have sufficient electives to enable them to concentrate in a second field — for example, another language, Classics, English, History, Linguistics. A wise selection of courses is particularly important to those who may wish to enter graduate school, teaching, library work, government service, etc. The Department Chairman will be happy to assist students with their selection of courses.

### PROGRAMS IN SPANISH

**General** — First Year: 100; Second Year: 260 and 290; Third and Fourth Years: 302 and six units of Spanish courses numbered 400 or above, selected with the approval of the Department.

**Major** — First Year: 100; Second Year: 260 and 290; Third and Fourth Years: Spanish 302 and twelve units in Spanish courses numbered 400 or above, selected with the approval of the Department.

**Honours** — First Year: 100; Second Year: 260 and 290; Third and Fourth Years: Spanish 302 and 420 and at least fifteen units of courses numbered 400 or above, selected with the approval of the Department.

### COURSES

Students should consult the Department concerning courses offered in a particular year.

#### SPANISH

#### SPAN 100 (3) BEGINNERS' SPANISH

Emphasis will be placed on the acquisition of the basic skills of pronunciation, reading, writing and conversation. Attention will be paid to essential points of grammar. September-April (3-1; 3-1)

#### SPAN 240 (3) INTERMEDIATE SPANISH

A review of the fundamentals of the Spanish language, designed to reinforce and develop the student's speaking skills, comprehension and writing ability; readings will be of a topical nature; one hour a week will be devoted to conversation. (NOTE: Students who intend to do major or honours work in Spanish should take 260 and 290.) September-April (4-0; 4-0)

#### SPAN 260 (3) INTRODUCTION TO THE LITERATURE OF SPAIN AND SPANISH AMERICA

A study of major authors of Spain and Spanish America in the genres of narrative, drama, and poetry. The student will be instructed in the

techniques of literary criticism and discrimination. (For students who intend to do major or honours work in Spanish. May also be taken as an elective) September-April (4-0; 4-0)

#### SPAN 290 (3) REVIEW GRAMMAR AND CONVERSATION

Intensive review of grammatical structures, concentrating on the acquisition of composition and translation skills; readings will be taken from significant Spanish and Spanish American authors; one hour a week will be devoted to conversation. (NOTE: For students who intend to do major or honours work in Spanish. This course should be taken in the Second year. May also be taken as an elective) September-April (4-0; 4-0)

#### SPAN 302 (3) ADVANCED COMPOSITION, TRANSLATION AND STYLISTICS: I

This course concentrates on advancing the student's communication skills. Emphasis will be placed on the mastery of spoken Spanish, translation, composition and readings. September-April (4-0; 4-0)

#### SPAN 306 (1½) SPANISH CULTURE AND CIVILIZATION (IN ENGLISH)

An introduction to the artistic, intellectual, social and political history of Spain from pre-Roman times to the 20th century, using patterns and events to illustrate the evolution of Spanish attitudes and thought; specific reference will be made to Muslim Spain, the exploration and conquest of the New World, the loss of Spain's overseas empire, and the Civil War. (Knowledge of Spanish not required. May be chosen as an elective by General, Major or Honours students of Hispanic studies) (3-0)

#### SPAN 307 (1½) LATIN AMERICAN CULTURE AND CIVILIZATION (IN ENGLISH)

An introduction to the artistic, intellectual, social and political history of Latin America from pre-Columbian times to the present; particular attention will be paid to the indigenous cultures, the exploration and conquest and the years which led to independence (1800-1825). Contemporary political trends will be analyzed, drawing examples from the situation in Central America, the Cuban Revolution, the dictatorships in Chile and Argentina, etc. Contemporary literary and intellectual trends will be viewed through such major figures as Gabriel García Márquez, Pablo Neruda, and Jorge Luis Borges. (Knowledge of Spanish not required. May be chosen as an elective by General, Major or Honours students of Hispanic Studies) (3-0)

#### SPAN 400 (3) THE SPANISH REALIST NOVEL OF THE 19TH CENTURY

The development of Spanish realism from its origins in *costumbrismo* to naturalism; selected works of the major authors will be studied in the context of contemporary trends in other countries. September-April (3-0; 3-0)

#### SPAN 401 (1½, formerly 3) THE GENERATION OF 1898

The ideological and aesthetic response of an important group of writers to the social and intellectual problems of turn of the century Spain; selected works of the major authors will be studied, with special emphasis on their fiction. (3-0)

#### SPAN 402 (1½, formerly 3) CERVANTES' DON QUIXOTE

A study of *Don Quijote* in the context of Cervantes' life and times. (3-0)

#### SPAN 406A (formerly half of 406) (1½) EARLY MEDIEVAL LITERATURE (1100-1350)

A study of Spanish literature covering the turbulent formative period of Spain as a nation, beginning with the *Poema de Mio Cid*, the epic of the warrior-hero, and ending with the ribald *Libro de buen amor*, by the Archpriest of Hita. (3-0)

#### SPAN 406B (formerly half of 406) (1½) LATE MEDIEVAL LITERATURE (1350-1500)

A study of the major works of the late Middle Ages in Spain, dealing with aspects of Courtly Love, anti- and profeminism, and "immorality", beginning with the *Corbacho* by the Archpriest of Talavera, and ending with the story of the Spanish bawd, *La Celestina*. (3-0)

**SPAN 410 (1½, formerly 3) SPANISH ROMANTICISM**

The development of Spanish Romanticism from its origins to Bécquer, with particular emphasis on lyric poetry and drama; the aesthetic and ideological characteristics of the movement will be studied in the works of the major authors. (3-0)

**SPAN 411 (3, formerly 1½) 20TH CENTURY NOVEL**

A study of the main currents of the modern novel in Spain, with special emphasis on individual responses to the Civil War (1936-39) and on the development of the novel as a vehicle for social criticism; recent trends will be examined in the light of the continuing search for new values. (Not open to students with credit in 412 prior to 1979-80)

September-April (3-0; 3-0)

**SPAN 412 (1½, formerly 3) 20TH CENTURY DRAMA AND POETRY**

A study of the drama and poetry of modern Spain, covering the works of such writers as Juan Ramón Jiménez, García Lorca, Pedro Salinas and Alfonso Sastre. (3-0)

**SPAN 413 (3) GOLDEN AGE DRAMA**

A study of the development of Spanish drama from the middle of the 16th Century to the end of the 17th Century; particular emphasis will be placed on the works of Lope de Vega and Calderón de la Barca.

September-April (3-0; 3-0)

**SPAN 414 (1½, formerly 3) LITERATURE OF SPANISH AMERICA (1492-1880)**

A study of the literature and literary trends of Spanish America from 1492 to c. 1880. Special emphasis will be placed on Romanticism and Realism.

September-December (3-0)

**SPAN 415 (3) 20TH CENTURY SPANISH AMERICAN FICTION**

A study of the Spanish American novel and short story.

A. Fama September-April (3-0; 3-0)

**SPAN 416 (1½) SPANISH AMERICAN POETRY AND DRAMA**

A study of the main currents in Spanish American Poetry and Drama. (Not open for credit to students who have credit in 415 prior to 1980-81)

January-April (3-0)

**SPAN 417 (formerly parts of 403 and 404) (1½) POETRY OF THE GOLDEN AGE**

A study of the poetry of the Golden Age in Spain, ranging from the pastoral to the satirical; particular emphasis will be placed on the works of Herrera, Garcilaso de la Vega, Quevedo and Góngora. (3-0)

**SPAN 418 (formerly part of 403) (1½) MYSTICISM IN THE 16TH CENTURY**

A study of man's search for union with the Eternal as expressed in the writings of the Spanish mystics, particularly St. Teresa of Avila and St. John of the Cross. (3-0)

**SPAN 420 (3) ADVANCED COMPOSITION, TRANSLATION AND STYLISTICS: II**

The goal of this course is to develop the student's mastery of Spanish by

enhancing reading, writing and communication skills. Included will be intensive practice in composition and translation, together with an introduction to style analysis through discussion of selected texts. (Prerequisite: 302) September-April (3-0; 3-0)

**SPAN 425 (1½, formerly 3) HISTORY OF THE SPANISH LANGUAGE**

A study of the development of the Spanish language from its origins in Vulgar Latin to its stabilization in Cervantes' time. (Prerequisite: 290) (3-0)

**SPAN 426 (1½) TRANSLATION THEORY AND PRACTICE**

A review of basic linguistic and cultural patterns and the problems of translation; emphasis will be laid on the acquisition of practical experience in translating material drawn from a large variety of fields including advertising, business, literature, politics, law, social work and the sciences. (3-0)

**SPAN 430 (1½ or 3) DIRECTED READING COURSE**

For Honours and Major students.

**ITALIAN****ITAL 100 (3) FIRST YEAR ITALIAN**

Emphasis will be placed on the acquisition of the basic skills of pronunciation, reading, writing, and conversation. Attention will be paid to essential points of grammar. September-April (3-1; 3-1)

**ITAL 200 (3) SECOND YEAR ITALIAN**

A review of the fundamentals of the Italian language, designed to reinforce and develop the student's speaking skills, comprehension, and writing ability; there will be a particular focus on important liner points of grammar and translation. Readings are taken from modern Italian authors. One hour a week will be entirely devoted to conversation. September-April (4-0; 4-0)

**ITAL 310 (formerly part of 302) (1½) ADVANCED GRAMMAR AND TRANSLATION**

Conducted entirely in Italian, this course is designed to increase oral proficiency, and to aid written expression through grammatical analysis, translation, and composition. (3-0)

**ITAL 311 (formerly part of 302) (1½) SELECTED 20TH CENTURY ITALIAN AUTHORS**

This course, given in Italian, studies principal literary movements of the 20th Century with selections from some of the major authors of the period. They include: Pirandello, Svevo, Moravia, Ungaretti, Montale, and Calvino. (3-0)

**ITAL 403 (3) DANTE'S DIVINE COMEDY (In English)**

A study of all three parts of the *Divine Comedy*: the *Inferno*, the *Purgatorio*, and the *Paradiso*, and their relationship to Courtly Love, mythology, theology, and medieval thought in general. (Prerequisite: Second year standing) September-April (3-0; 3-0)

**DEPARTMENT OF HISTORY**

G.R. Ian MacPherson, B.A. (Assumption U. of Windsor), M.A., Ph.D. (W. Ont.), Professor and Chairman of the Department

Ralph C. Croizier, B.A. (Brit. Col.), M.A. (Wash.), Ph.D. (Calif., Berkeley), Professor

Brian W. Dippie, B.A. (Alta.), M.A. (Wyo.), Ph.D. (Texas), Professor

Sydney W. Jackman, B.S., M.A. (Wash.), A.M., Ph.D. (Harvard), F.S.A., F.R. Hist.S., Professor

Angus G. McLaren, B.A. (Brit. Col.), M.A., Ph.D. (Harvard), Professor

Reginald H. Roy, C.D., B.A., M.A. (Brit. Col.), Ph.D. (Wash.), F.R. Hist.S., Professor

Peter A. Baskerville, B.A. (Tor.), M.A., Ph.D. (Queen's), Associate Professor

Morris Berman, B.A. (Cornell), Ph.D. (Johns Hopkins), Associate Professor

Chad M. Gaffield, B.A., M.A. (McGill), Ph.D. (Toronto), Associate Professor

Charlotte S.M. Girard, B.A. (Brit. Col.), M.A., Ph.D. (Bryn Mawr), Associate Professor

James E. Hendrickson, B.A. (Sask.), B.Ed. (Alta.), M.A., Ph.D. (Ore.), Associate Professor

John Money, B.A., M.A., Ph.D. (Cantab.), Associate Professor

Patricia E. Roy, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Brit. Col.), Associate Professor

Donald L. Senese, A.B., Ph.D. (Harvard), Associate Professor

W. George Shelton, B.A., M.A. (Man.), Ph.D. (Pa.), Associate Professor

E. Patricia Tsurumi, B.A. (Brit. Col.), A.M., Ph.D. (Harvard), Associate Professor

Robert J. McCue, B.A., B.Ed. (Alta.), M.A., Ph.D. (Brigham Young), Assistant Professor

Eric W. Sager, B.A., Ph.D. (Brit. Col.), Assistant Professor

Phyllis M. Senese, B.A. (Tor.), M.A. (Carleton), Ph.D. (York), Assistant Professor

Wesley T. Wooley, A.B. (Ill.), A.M., Ph.D. (Chicago), Assistant Professor

## GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 210, for graduate courses, see page 95.

## UNDERGRADUATE PROGRAMS

The Department offers undergraduate course work at two levels: introductory courses at the 200 level, open to first and second year students; and advanced courses at the 300 and 400 level, open to students in both third and fourth years. Students are strongly advised to complete introductory courses in a given area before undertaking advanced courses in the same area. Students may not enroll in introductory courses after completing an advanced course in the same area; students may not enroll concurrently in introductory and advanced courses in the same area without written permission from the instructor in the advanced course. Please note that enrollment in seminars is limited and that the consent of the instructor is required for registration. In some instances, seminars in the first term may be offered again in the second if there is sufficient demand.

All history courses require substantial written and reading assignments. Information about textbooks in all courses is available from the bookstore.

### GENERAL

The General Program consists of any 9 units of history courses numbered 300 and above in the third and fourth years. Students entering the General Program should normally complete 6 units of introductory history courses in the first and second years.

### MAJOR

To be admitted to the Major Program, a student should have a C average in 6 units of introductory history courses. In his third and fourth years, the student must take 15 units in history courses numbered 300 and above. Of these 15 units, a minimum of 6 and a maximum of 12 units should be selected from one area of interest. In addition, 9 units of nonhistory courses must be selected in consultation with the department adviser to Majors. Students interested in majoring in history are advised to consult the Majors Adviser in their first year if possible. Majors must have their third and fourth year programs approved by the Majors Adviser.

For a Major in history, a maximum of 3 units taken from Classical Studies 330, 340, 480A and 480C may be accepted in lieu of a course in European history.

### HONOURS

In the Honours Program, students have the opportunity to study history more independently and intensively than is normally possible in the Major and General Program. Through small seminars, directed readings, and individual instruction in writing and research, the Honours Program encourages students to think critically and to deepen their understanding of both the content and craft of history. While the primary intent of the Honours Program is to help any interested and talented student of history achieve an excellent education in the liberal arts, the Program should be especially useful for students contemplating graduate work in history or careers in high school teaching, journalism, law, library science, or government service.

The Honours Program consists of 30 units of course work normally taken during a student's third and fourth years of study. Honours students must complete, usually by the end of their third year, 480, Approaches to History, and 495, an honours tutorial requiring a research essay of 7,500-10,000 words. During their fourth year, students may take either 496, a second honours tutorial requiring a 7,500-10,000 word research essay, or 497, a course enabling students to expand their third year research essays into theses of 15,000-25,000 words.

As part of 496 and 497 an oral examination will be conducted by a committee composed of the faculty supervisor of the paper, the second reader of the paper and the departmental Honours Adviser. The examination will be open to other interested members of the department.

Also, Honours students must complete an additional nine units of history at the advanced level and twelve units of electives chosen in consultation with the Honours Adviser. Furthermore, students are required to demonstrate a reading knowledge of a language other than English by passing, with at least a C, a 200 level language course (French 180 is also acceptable) or by successfully writing and passing a special language examination administered by the Department of History.

Admission to the Honours Program requires a high second class standing in six units of history courses or seminars. Application for admission to the Honours Program should normally be made in the spring, during the student's second year, although a small number of third year applications may also be accepted.

Honours candidates are required to have their program of courses approved by the Honours adviser. To avoid overspecialization, Honours students are encouraged to study more than one area of history and to choose several courses outside the Department of History. Candidates whose performance is unsatisfactory may be required to transfer from the Honours Program to the Major Program. Admission to the fourth year Honours Program is conditional upon satisfactory performance in the third year.

First and Second Class Honours degrees may be awarded. A First Class degree requires a first class graduating average and at least a 5.50 average in Honours courses (480, 495, 496 and 497). If an honours student has a first class graduating average but has averaged 2.50 to 5.49 in Honours courses, the student will be given the option of receiving Second Class Honours or a First Class Major. A Second Class degree requires a second class graduating average and at least a 2.50 average in Honours courses.

## UNDERGRADUATE COURSES

NOTE: *A brochure will be available through the department office at the start of the advance registration period, and will include any changes in scheduling made after publication of the University Calendar, as well as additional information not available at that time.*

### INTRODUCTORY COURSES

Students should consult the Department concerning courses offered in any particular year.

Please note – first year students may enroll in introductory courses at the 200 level.

#### HIST 205 (1½ or 3) INTRODUCTION TO HISTORY

This course is designed to introduce students to the kinds of questions historians ask about the past. The subject matter may vary according to the particular area of specialization of the instructor, and students are advised to consult the Department about the specific topic to be considered in any given year.

(Not offered)

(3-0)

#### HIST 210 (3) HISTORY OF THE UNITED STATES

A general survey of the history of the United States of America from the colonial period to the present. This course is strongly recommended to students wishing to take advanced courses in American history.

W.T. Wooley

September-April (3-0; 3-0)

#### HIST 220 (3) HISTORY OF ENGLAND

History 220 is designed as a course for those who wish some acquaintance with the broad sweep of British history since the Norman Conquest. It may be used as a terminal course, complete in itself, or it may be used as a preliminary to more intensive study. This course is strongly recommended to students wishing to take advanced courses in British history.

September-April (3-0; 3-0)

#### HIST 230 (3) HISTORY OF CANADA

A survey of Canadian development from the beginning of the French regime to the present. This course is strongly recommended to students wishing to take advanced courses in Canadian history.

September-April (3-0; 3-0)

#### HIST 234 (3) MAIN CURRENTS OF WESTERN THOUGHT

A survey of the most influential ideas and intellectual movements of western culture from their origins, in Greece, and the Middle East, to recent times. Not open to students who have credit for History 400.

W.G. Shelton

September-April (3-0; 3-0)

#### \* HIST 236 (3) MEDIEVAL EUROPE

Europe from the fall of the western Roman Empire to the Renaissance; a survey of feudalism, manorialism, the church, and the political and intellectual life that characterized the middle ages.

R.J. McCue

September-April (3-0; 3-0)

#### \* HIST 240 (3) HISTORY OF MODERN EUROPE

After providing a brief background in medieval institutions, this course surveys European history from the Renaissance to the mid 20th century. The lectures will focus on political, intellectual, cultural, and social aspects of European society and the modern state as it emerges in the contemporary world.

September-April (3-0; 3-0)

**\* HIST 242 (3) MAIN CURRENTS IN 20TH CENTURY HISTORY**

This course offers a background for contemporary world problems, surveying major historical developments and themes of the 20th century in Europe, the Communist world, East Asia, and North America. Offered on a team-teaching basis, it combines lectures and discussion groups and provides an introductory survey for most senior courses in 20th century history.

R.C. Croizier September-April (3-0; 3-0)

\* 236, 240 and 242 are introductory courses to European history and as such are recommended to all Major and Honours candidates as well as to students who are not intending to specialize in history.

**HIST 252 (PACI 252) (3) INTRODUCTION TO CHINESE AND JAPANESE CIVILIZATIONS**

The purpose of this course is to introduce the student to the traditional civilizations of China and Japan. Though a survey of many thousands of years in so short a space in time must of necessity be selective, the course will consider topics in the political, social, intellectual, and economic history of the two civilizations. (Students interested in this course may also be interested in CHIN 301, 302, 303, JAPA 301, 302.)

E.P. Tsurumi, R.C. Croizier September-April (3-0; 3-0)

**HIST 260 (1½) HISTORY OF SCIENCE**

A general survey of some of the major achievements of Western science from antiquity to the present; Aristotle, Galileo, Darwin and Einstein will be among those thinkers whose work is examined.

January-April (3-0)

**ADVANCED COURSES****AMERICAN****HIST 300 (3) COLONIAL NORTH AMERICA**

The British American colonies from their founding to the disruption of the first British Empire, with emphasis on intellectual, social, and economic development.

(Not offered) September-April (3-0; 3-0)

**HIST 301 (3) THE UNITED STATES IN THE 19TH CENTURY**

A study of the social, political, cultural, and economic development of the United States in the period from the framing of the Constitution to the Spanish-American War, with particular concentration on certain significant themes.

B.W. Dippie September-April (3-0; 3-0)

**HIST 304 (3) THE UNITED STATES IN THE 20TH CENTURY**

An intensive study of American political, economic, and social history from the late 19th century to the present. Various major themes will be examined: industrialization; the growth of corporate power, urbanization, racial and ethnic relations, cultural change, and liberal reform. Particular attention will be devoted to the economic, social, and cultural determinants of American political history.

W.T. Wooley September-April (3-0; 3-0)

**HIST 308 (3) AMERICAN INTELLECTUAL HISTORY**

A study of the evolution of American institutions and ideas. Emphasis will be given to selected aspects of the nation's cultural life.

B.W. Dippie September-April (3-0; 3-0)

**HIST 310 (3) THE AMERICAN WEST**

The frontier in American history, the Trans-Mississippi West with emphasis on the Far West.

B.W. Dippie September-April (3-0; 3-0)

**HIST 315 (3) AMERICAN DIPLOMATIC HISTORY**

A study of American foreign relations with emphasis on the 20th century and the history of American diplomatic thought.

W.T. Wooley September-April (3-0; 3-0)

**HIST 318 (1½ or 3) TOPICS IN AMERICAN HISTORY**

An intensive study of selected aspects of American history. Students are advised to consult the Department for an outline of the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.)

(Not offered) September-April (3-0; 3-0)

**HIST 319 (1½ or 3) SEMINAR IN AMERICAN HISTORY**

Selected topics in American history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.)

"The American Revolution as a Case Study in Revolution"  
W.G. Shelton September-December (3-0)

**BRITISH****HIST 321 (3) THE RISE AND FALL OF THE TUDOR STATE**

An intensive study of Monarchy, Church and Society in England under the impact of renaissance ideas, religious reformation and price inflation, from the final phase of medieval monarchy in the late 15th century to the breakdown of the institutions and relationships of Tudor government prior to the outbreak of Civil War in 1643.

(Not offered) September-April (3-0; 3-0)

**HIST 322 (3, formerly 1½) THE ENGLISH REVOLUTION AND ITS SETTLEMENT, 1643-1715**

The principal themes in the development and consequences of the "Great Rebellion" and the "Revolution of 1688". The course will consider interpretive problems raised by the political, social, and intellectual influence of these events in both British and European history. (Not open to students with credit for 323 (Britain, 1660-1815) prior to 1982-83)

(Not offered) September-April (3-0; 3-0)

**HIST 323 (3) BRITAIN, 1714-1815**

Britain from the accession of George I to Waterloo — an intensive study of the roots of political stability and of social change, and of the consequences of their interaction in Britain in the 18th century.

J. Money September-April (3-0; 3-0)

**HIST 325 (3) BRITAIN, 1815-1914**

Great Britain, industry and empire; an intensive study of British history during the 19th century.

September-April (3-0; 3-0)

**HIST 327 (3) 20TH CENTURY BRITAIN**

An examination of the major themes in the history of 20th century Britain, such as the collapse of imperial power, the development of closer relations with the European continent, and the social, cultural, and political tensions created by an era of rapid change and economic decline.

September-April (3-0; 3-0)

**HIST 338 (1½ or 3) SEMINAR IN BRITISH HISTORY**

Selected topics in British history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of the instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.)

"Selected Aspects of 18th Century Britain" (3-0) or (3-0; 3-0)

J. Money January-April (3-0)

**CANADIAN****HIST 340 (3) NEW FRANCE**

A study of the history of the French regime in Canada from 1500 to 1763. The course will deal with economic, social, and political aspects of the history of New France, as well as the forces in New England, France and Holland that influenced the development of New France.

(Not offered) September-April (3-0; 3-0)

**HIST 342 (3) BRITISH NORTH AMERICA, CONQUEST TO CONFEDERATION**

A combination of lectures and seminars examining the development of the economy, society, and culture of the area comprising presentday Ontario, Québec, and the Maritimes. Particular emphasis will be placed upon the emergence of distinct social and cultural entities in each of these areas.

P. Baskerville September-April (3-0; 3-0)

**HIST 343 (3) CANADIAN LABOUR HISTORY**

This course examines the working class experience and the development of organized labour movements in Canada, with particular emphasis on the 19th and 20th centuries. Topics include preindustrial working conditions, industrialization, labour organizations, the growth of trade unions, labour legislation, and labour politics. (Prerequisite: 230 or consent of the instructor)

E.W. Sager September-April (3-0; 3-0)

**HIST 344 (3) POLITICAL HISTORY OF CANADA SINCE CONFEDERATION**

A study of recurring themes and problems in Canadian history including national policies, French-English tensions, federal-provincial conflicts, and external relations. Attention will be given to the social and economic background of these problems as well as their political manifestations.

P.E. Roy September-April (3-0; 3-0)

**HIST 345 (1½) TOPICS IN CANADIAN-AMERICAN RELATIONS**

Selected topics in the economic, cultural, political, and diplomatic aspects of Canadian-American relations. (Students with credit for 358 should consult the instructor before enrolling in this course.)

P. Baskerville September-December (3-0)

**HIST 346A (formerly half of 346) (1½) CANADIAN URBAN HISTORY**

Examines Canadian urban development using two complementary approaches: a history of individual cities and a history of the process of urbanization; in analyzing these two general topics, some of the themes to be discussed will be: economic growth and metropolitan development; population growth and change; social and political organization; and spatial growth and the physical environment. The course will cover the period from 1608 to the present, but the emphasis normally will be on 20th century urban development.

E.W. Sager September-December (3-0)

**HIST 346B (formerly half of 346) (1½ or 3) SEMINAR IN CANADIAN URBAN HISTORY**

Selected topics in Canadian Urban History, with an emphasis on historiography and methodology; enrollment limited. (Prerequisite: 346A or consent of the instructor)

(Not offered) (3-0) or (3-0; 3-0)

**HIST 347 (3) BUSINESS AND SOCIETY IN PERSPECTIVE: THE CANADIAN EXPERIENCE, 1800-1970**

This course examines the changing function of the entrepreneur within Canadian society. There will be particular emphasis on business relations with labour, consumer, and politician; self-perception within the business community; and the influence of British, American, and multinational corporations on the development of a Canadian entrepreneurial class.

(Not offered) September-April (3-0; 3-0)

**HIST 348 (3) SOCIAL AND INTELLECTUAL HISTORY OF CANADA**

A thematic study of the major intellectual and social attitudes, values, assumptions, and expectations in 19th and 20th century Canada. Students will examine original works by Canadians in a number of disciplines including history, politics, the social sciences, literature and art.

September-April (3-0; 3-0)

**HIST 349 (1½) EDUCATION AND CHILDHOOD IN CANADIAN HISTORY**

This course examines the social, political, and ideological context of the development of educational systems in Canada. It emphasizes such topics as concepts of childhood, the interrelationships of school and society, and the nature of educational reform.

(Not offered) (3-0)

**HIST 350A (formerly half of 350) (1½) PRAIRIE HISTORY TO 1905**

The early history of the Prairie region; with special emphasis on such topics as native societies before the arrival of Europeans, the fur trade societies established by the Hudson's Bay Company and the St. Lawrence merchants, the Selkirk and other early settlements, the Métis civilization, the establishment of Manitoba, the North West Rebellion, and the establishment of Saskatchewan and Alberta.

(Not offered) (3-0)

**HIST 350B (formerly half of 350 (1½) PRAIRIE HISTORY SINCE 1905**

Emergence of the Prairie region after the creation of Alberta and Saskatchewan with particular emphasis on the immigration boom, the growth of cities, the wheat economy, agrarian and labour radicalism, the impact of the World Wars, the third party tradition, recent resource development, and the role of the region in national political development.

(3-0)

**HIST 350C (1½ or 3) RESEARCH SEMINAR IN PRAIRIE HISTORY**

Selected topics in Prairie History; the historiography of the region and methods of research will receive special emphasis. (Prerequisite: 350 or 350A or 350B or written consent of the instructor)

(Not offered) (3-0) or (3-0; 3-0)

**HIST 351 (3) QUEBEC**

A history of the province of Quebec from 1600 to the present. Emphasis will be on the development of a unique society in Québec. (History 230 and a reading knowledge of French would be useful but are not required. Students who received credit in 352 prior to 1979-80, or for 358, Section 2 in 1978-79, may not enroll in this course.)

(Not offered) September-April (3-0; 3-0)

**HIST 352 (1½, formerly 3) SEMINAR IN FRENCH CANADA**

A study of selected problems in French Canadian history stressing patterns in intellectual, social and economic development, emphasizing the 19th and 20th centuries. This course will be taught as a seminar, and will be offered in alternate years only. (Prerequisite: 230, and a reading knowledge of French, or written consent of the instructor)

(Not offered) (3-0)

**HIST 353 (1½ or 3) SEMINAR IN BRITISH COLUMBIAN HISTORY**

Selected topics in British Columbian history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of the instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.)

(3-0) or (3-0; 3-0)

**HIST 354A (1½) NORTHWEST AMERICA TO 1949**

An overview of the early history and literature of the region west of the Rocky Mountains and north of California, prior to the establishment of the colony of Vancouver Island in 1849. After a brief survey of the prehistory of the area, lectures will focus upon the period following the Indians' discovery of white men along the coast in the 18th century, and the consequences to both races that flowed from that initial contact. Topics to be considered will include maritime and overland exploration, European rivalries and claims, the development of the maritime and overland fur trade, and Indian-white relations.

J.E. Hendrickson September-December (3-0)

**HIST 354B (1½) BRITISH COLUMBIA, 1849-1900**

A study of the foundations of modern British Columbia, beginning with the founding of the colony of Vancouver Island to the emergence of provincial political parties about the end of the 19th century; topics to be considered will include the colonies of Vancouver Island and British Columbia, the gold rush, settlement patterns, the origins of institutional life, Indian policy and Indian-white relations, and early federal-provincial relations. Prerequisite: 230 or 354A or consent of the instructor

J.E. Hendrickson January-April (3-0)

**HIST 355 (1½) BRITISH COLUMBIA SINCE 1885**

The emphasis will be on social, economic, and political developments within the province. Written assignments will be required.

P.E. Roy September-December (3-0)

**HIST 356 (3) CANADIAN CONSTITUTIONAL HISTORY**

A study of the evolution of the Canadian Constitution from 1763 to the present.

September-April (3-0; 3-0)

**HIST 357A (formerly half of 357) (1½) SEMINAR IN CANADIAN DEFENCE POLICY**

A study of selected aspects of Canadian defence policy since 1867. Emphasis on the military policies and strategic role of Canada in the 20th century (Enrollment limited) (Not open to students with credit in 439 or 494) (Prerequisite: 230 or consent of the instructor)

R.H. Roy September-December (3-0)

**HIST 357B (formerly half of 357) (1½) SEMINAR IN CANADIAN EXTERNAL POLICY**

A study of selected aspects of Canadian external policy since 1867, with emphasis on Canada's position as a middle power. (Enrollment limited) (Not open to students with credit in 439 or 494) (Prerequisite: 230 or consent of the instructor) (3-0)  
(Not offered)

**HIST 358 (1½-6) TOPICS IN CANADIAN HISTORY**

An intensive study of selected aspects of Canadian history. (Students are advised to consult the Department for an outline of the topics to be considered.) (May be taken more than once in different topics with permission of the Chairman of the Department) (3-0) or (3-0; 3-0)

**HIST 359 (1½-6) SEMINAR IN CANADIAN HISTORY**

Selected topics in Canadian history. (Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered.) (May be taken more than once in different topics with permission of the Chairman of the Department) (Not offered) September-April (3-0; 3-0)

**EUROPEAN****HIST 360 (1½) THE RENAISSANCE**

A study of the conditions, ideas, and men involved in the intellectual quickening that ushered in the early modern period of European history. (Not offered) (3-0)

**HIST 361 (1½) THE REFORMATION**

A history of the men, and the political and religious factors involved in the upheavals of the Protestant and Roman Catholic reformations. (Not offered) (3-0)

**HIST 362 (1½, formerly 3) EUROPE UNDER THE ANCIEN REGIME**

Preindustrial Europe in the 17th and 18th centuries. A social and cultural history of Western Europe. Emphasis will be placed on sex roles, household and family structure, religious beliefs, economic relations, and attitudes towards crime, madness and poverty. (Prerequisite: None; 240 recommended) A.G. McLaren September-December (3-0)

**HIST 363 (1½) REVOLUTIONARY AND NAPOLEONIC EUROPE**

A study of the French Revolution and its impact on Europe in the late 18th and early 19th centuries. Students who received credit in History 362 (formerly 314) prior to 1975-76 may not enroll in this course. (Prerequisite: None; 240 recommended) (3-0)

**HIST 365A (formerly half of 365) (1½) SOCIAL AND CULTURAL HISTORY OF MODERN EUROPE: 1770-1848**

The early industrial society of 19th century Europe. An examination of the initial impact of the commercial and industrial revolutions on Europe in the first half of the 19th century with special attention being paid to the transformation of everyday life, the growth of cities, and the making of the working and middle classes. (Prerequisite: None; 240 recommended) A.G. McLaren September-December (3-0)

**HIST 365B (formerly half of 365) (1½) SOCIAL, CULTURAL, AND POLITICAL HISTORY OF MODERN EUROPE: 1848-1914**

The mature industrial society of late 19th century Europe. An examination of the full flowering of industrial society in the latter half of the 19th century with special attention being paid to the acceleration of economic development, the stabilization of urban life, the professionalization of culture, and the bureaucratization of business and government. (Prerequisite: None; 240 recommended) D.G. McLaren January-April (3-0)

**HIST 366 (1½, formerly 3) EUROPE BETWEEN TWO WORLD WARS**

This course will examine the impact of the First World War on European society through its effect on the international order and the rise of totalitarian ideologies such as communism and fascism. (Prerequisite: None; 240 or 242 recommended) September-December (3-0)

**HIST 367 (formerly half of 366) (1½) THE SECOND WORLD WAR AND THE RECOVERY OF WESTERN EUROPE**

An examination of the effects of the Second World War on Europe, and

the recovery of the Western European states in the postwar period. (Prerequisites: None; 240 or 242 recommended) January-April (3-0)

**HIST 370 (1½, formerly 3) FRANCE FROM THE REVOLUTION TO THE THIRD REPUBLIC, 1789-1870**

An examination of the principal themes in French history from 1789 to 1870 such as the revolutionary tradition and conservative responses, anticlericalism and Catholicism, Parisian culture and peasant backwardness, and the beginnings of French imperialism. (Prerequisite: None; 240 recommended) September-December (3-0)

**HIST 371 (formerly half of 370) (1½) MODERN FRANCE, 1870-1945**

An examination of the principal themes in French history from 1870 to 1945 such as the emergence of the 'stalemate' society, the clashes of Left and Right, the growth of the French Empire, and Franco-German conflict. (Prerequisite: None; 240 or 242 recommended) (Not offered) (3-0)

**HIST 372 (1½, formerly 3) IMPERIAL GERMANY**

An examination of the principal themes in German history between the formation of the united state in 1871 and the German revolution of 1918-1919. (Prerequisite: None; 240 recommended) September-December (3-0)

**HIST 373 (formerly half of 372) (1½) WEIMAR AND NAZI GERMANY**

An examination of the principal themes and developments in German history between the end of World War One and the collapse of the Third reich in 1945. (Prerequisite: None; 240 or 242 recommended) January-April (3-0)

**HIST 374 (SLAV 374) (3) IMPERIAL RUSSIA, 1689-1917**

A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change. D.L. Senese September-April (3-0; 3-0)

**HIST 376 (SLAV 376) (1½) THE SOVIET UNION**

A history of the U.S.S.R. from 1917 to the present. The course will analyze the forces that have moulded the policies of the Communist leadership and examine how these policies have affected the shape of Soviet society and the role of the Soviet Union in world affairs. D.L. Senese January-April (3-0)

**HIST 380 (1½, formerly 3) PROBLEMS IN MEDIEVAL EUROPE**

A detailed study of selected problems in the history of Medieval Europe. The specific topics to be considered will vary from year to year. (Prerequisite: None; 236 recommended) R.J. McCue January-April (3-0)

**HIST 382 (1½) THE SCIENTIFIC AND INTELLECTUAL REVOLUTION OF THE 17TH CENTURY**

A survey of the rise of modern science and the new world view which resulted from its success. Among the thinkers to be considered will be Galileo, Francis Bacon, Descartes, Hobbes, Newton and Locke. These men and their ideas will be examined in the social and political context of their times. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis (Not open to students who have credit for 368) W.G. Shelton September-December (3-0)

**HIST 383 (1½) THE ENLIGHTENMENT**

The 18th century challenge to authority; the revolutionary implications of attempts to discover scientific laws in human behaviour. The thought of the French *philosophes* will be considered together with that of other influential thinkers such as Rousseau, Hume and Adam Smith. These thinkers and their ideas will be discussed in the social and political context of their times. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. (Not open to students who have credit for 368) W.G. Shelton January-April (3-0)

**HIST 384 (1½) THE 19TH CENTURY MIND**

The Romantic reaction to the French Revolution, the role of ideologies such as liberalism, nationalism and socialism, and the impact of the theory of evolution. These movements and others will be explored in

terms of their social and political background. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. (Not open to students who have credit for 368)  
(Not offered) September-December (3-0)

### **HIST 385 (1½) THE CRISIS OF MODERN THOUGHT**

A study of the role of irrationalism and relativism in the work of such thinkers as Nietzsche, Freud and Einstein. Existentialism, fascism, Keynesian economics and other responses to the cataclysmic changes of the twentieth century will also be considered in their social and political setting. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. (Not open to students who have credit for 368)  
(Not offered) January-April (3-0)

### **HIST 388 (1½ or 3) TOPICS IN EUROPEAN HISTORY**

An intensive study of selected aspects of European history. Students are advised to consult the Department for an outline of the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.) (3-0) or (3-0; 3-0)

### **HIST 389 (1½ or 3) SEMINAR IN EUROPEAN HISTORY**

Selected topics in European history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.) (3-0) or (3-0; 3-0)

### **HIST 390 (3) WAR IN THE MODERN WORLD, 1755 TO THE PRESENT**

A survey of European military history from the Seven Years' War to the present day. It covers the change from the limited warfare of the early 18th century to the unlimited warfare of the 20th century. Emphasis is placed on the causes of war, the impact of new inventions on tactics and strategy, and the social, political, and economic results of wars on society up to and including the atomic age.  
R.H. Roy September-April (3-0; 3-0)

### **HIST 392 (1½ or 3) SEMINAR IN THE HISTORY OF THE SECOND WORLD WAR**

Selected topics in the history of the Second World War. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with the consent of instructor. Students are advised to consult with Department about topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department.) (3-0) or (3-0; 3-0)  
R.H. Roy January-April (3-0)

### **HIST 395 (3) SCIENTIFIC CONSCIOUSNESS IN HISTORICAL PERSPECTIVE**

A study of the "topography" of human consciousness as it has existed in the West from archaic times to the present; particular emphasis will be placed on the scientific consciousness of the modern era. Topics include the archaic tradition; the emergence of rationalism; the Scientific Revolution and its historical impact; and the current challenges being posed to the scientific world view.  
(Not offered) September-April (3-0; 3-0)

### **HIST 396 (1½ or 3) TOPICS IN THE HISTORY OF SCIENCE**

An intensive study of selected topics in the history of science; students are advised to consult the Department for an outline of the topics to be considered. The course may be taken more than once in different topics with permission of the Chairman of the Department.  
(Not offered) (3-0) or (3-0; 3-0)

### **HIST 399 (3) THE HISTORY OF MENTALITIES**

An analysis of a number of social phenomena and their structural relationships as they have existed in Western civilization from the Middle Ages to the present; topics to be studied include suicide, addiction, creativity, romantic love, heresy and revolution.  
(Not offered) September-April (3-0; 3-0)

## **ASIAN**

### **HIST 433A (formerly half of 433) (PACI 433A) (1½) ANCIENT CHINA**

A study of the rise of Chinese civilization and Empire from the earliest times to approximately 200 A.D. Major themes will be the origins of

Chinese civilization, the flowering of Chinese philosophy in the times of Confucius and Lao-tzu, the formation of a unified Empire, and the social foundations of the Imperial State. (Prerequisite: 252 of CHIN 301 or permission of the instructor)  
(Not offered) September-December (3-0)

### **HIST 433B (formerly half of 433) (PACI 433B) (1½) PRE-MODERN CHINA**

The development of Chinese civilization from the fall of the Han Empire in the 3rd century A.D., through the reunification of China under the Tang, to the Manchu Conquest of China in 1644. Major attention will be given to the political and social dynamics of the Imperial State and to the cultural basis of Chinese civilization. (Prerequisite: 252 or CHIN 301 or permission of the instructor)  
(Not offered) January-April (3-0)

### **HIST 434A (formerly half of 434) (PACI 434A) (1½) MODERN CHINA**

China's encounter with the modern West from the 17th century to the mid 20th century. Emphasis on the collapse of the traditional order and the search for new political, social, and cultural forms.  
R.C. Croizier September-December (3-0)

### **HIST 434B (formerly half of 434) (PACI 434B) (1½) CHINA IN REVOLUTION**

The roots of Chinese Communism, its rise to power, and the development of the People's Republic since 1949. Attention will also be given to China's new role in international politics. (Prerequisite: None)  
R.C. Croizier (3-0)

### **HIST 435 (PACI 435) (1½) FEUDALISM IN JAPAN: THE WAY OF THE WARRIOR FROM THE 12TH TO THE 19TH CENTURY**

A study of politics, economics, society and culture in medieval and Tokugawa Japan with emphasis upon the role of the samurai class.  
(Not offered) September-December (3-0)

### **HIST 436A (formerly half of 436) (PACI 436A) (1½) JAPAN'S MODERN TRANSFORMATION: FROM FEUDAL COUNTRY TO NATION-STATE**

The purpose of this course is, through a combination of lectures, student presentations, discussions and papers, to examine some of the problems which occur in the history of 19th and 20th century Japan. The format requires student participation throughout the course. Students are required to make class presentations, submit one short analytical paper and do one long research paper on a topic of their own choice. (Not open for credit to students who have credit in 414) (Prerequisite: None)  
E.P. Tsurumi September-December (3-0)

### **HIST 436B (formerly half of 436) (PACI 436B) (1½) 20TH CENTURY JAPAN**

A study of modern Japanese society and culture in the 20th century. Special attention will be paid to the influences of Westernization and industrialization upon traditional modes of thought, work, everyday life and creative endeavours. Changes in family life in the cities and in the countryside will be examined. (Not open for credit to students who have credit in 414) (Prerequisite: None)  
(Not offered) January-April (3-0)

### **HIST 438 (PACI 438) (1½ or 3) TOPICS IN EAST ASIAN HISTORY**

An intensive study of selected aspects of East Asian history. Students are advised to consult the Department for information regarding the subjects to be considered. (May be taken for credit more than once in different topics with permission of the Chairman of the Department.) (3-0) or (3-0; 3-0)  
"History of Japanese Women"  
E.P. Tsurumi September-December (3-0)

### **HIST 439 (PACI 439) (1½ or 3) SEMINAR IN EAST ASIAN HISTORY**

Selected topics in East Asian history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the department) (3-0) or (3-0; 3-0)  
"Modern Japan"  
E.P. Tsurumi January-April (3-0)  
"Chinese Political Art in Comparative Historical Perspective"  
R.C. Croizier January-April (3-0)

## COMPARATIVE STUDIES

**HIST 462 (HA 462) (3) ART AND REVOLUTION**

Examines the role of the artist (mainly through painting and graphics) in the major social and political revolutions of modern times. Emphasis on the French, Russian and Chinese revolutions but some consideration of political art in other revolutions and movements of social protest. (Not offered) September-April (3-0; 3-0)

**HIST 464 (1½) BRITISH COLUMBIA AND THE AMERICAN PACIFIC NORTHWEST**

A comparative examination of some of the political, economic, and cultural developments representative of the history of British Columbia and the American Pacific Northwest. J.E. Hendrickson January-April (3-0)

## SPECIALIZED COURSES

**HIST 480 (3) APPROACHES TO HISTORY**

A seminar devoted to studying the history of history and the nature of history as an intellectual discipline. September-April (3-0; 3-0)

**HIST 490 (1½ or 3) DIRECTED READING**

Students wishing to pursue a course of directed reading should, together with a faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Chairman of the Department. Students may take this course for a total of 6 units, but not more than 3 units in any given year.

**HIST 495 (3) THIRD YEAR HONOURS TUTORIAL**

Directed readings and research. Students will be required to write a research essay of 7,500-10,000 words under the direction of a member of the Department.

**HIST 496 (3) FOURTH YEAR HONOURS TUTORIAL**

Directed readings and research. Students will be required to write a research essay of 7,500-10,000 words under the direction of a member of the Department. After acceptance of the paper by the supervising faculty member the student will undergo an oral examination on the field covered in the paper.

**HIST 497 (3) HONOURS THESIS**

The preparation of an honours thesis from 15,000 to 25,000 words in length under the direction of a member of the Department. Normally, this thesis is an expansion of the student's research essay written for 495. After acceptance of the paper by the supervising faculty member, the student will undergo an oral examination on the field covered in the paper.

## GRADUATE COURSES

Not all the following courses will be offered in a particular year.

Students should consult the Department concerning specific content of the courses offered in any given year.

**HIST 500 (3) HISTORIOGRAPHY****HIST 501 (6) FIELD IN AMERICAN HISTORY****HIST 502 (6) FIELD IN BRITISH HISTORY****HIST 503 (6) FIELD IN CANADIAN HISTORY****HIST 504 (6) FIELD IN EUROPEAN HISTORY****HIST 505 (6) FIELD IN ASIAN HISTORY****HIST 508 (6) FIELD IN THEMATIC STUDIES: I****509 (6) FIELD IN THEMATIC STUDIES: II****HIST 595 (3) EXTENDED RESEARCH PAPER****HIST 598 (3) THESIS TUTORIAL****HIST 599 (12) M.A. THESIS**

## LIBERAL STUDIES PROGRAM

*The Liberal Studies Program is described on page 82 of the 1979-80 edition of the Calendar. Although no students will be admitted to the program in 1985-86, the two Liberal Arts courses, LA 306 and 307, will be offered as general electives.*

## LIBERAL ARTS COURSES

**LA 306 (1½) IDEAS AND PERSPECTIVES IN WESTERN CIVILIZATION: I**

A critical interdisciplinary inquiry into some seminal ideas of western civilization and some perennial questions human beings have raised about themselves, human relationships, the social order, nature, God, and human destiny. Representative works will be drawn from literature, art, religion, philosophy, history, and social theory, from the Hellenic age to the 17th century. Texts will be studied and discussed not only as indicative of the climate of opinion of their time but also as having significance for formulating a philosophy of life. Guest lecturers from other departments will contribute, and occasionally films or slides relevant to the cultural and historical context of a work will be shown. (There are no prerequisites for the course, except that first year students may enroll only with permission of the instructor.) Texts: Sophocles, *Antigone*; selections from: Plato, *Apology*, *Crito*, *Republic*, *Phaedo*, *Symposium*; Aristotle, *Ethics*; Vergil, *Aeneid*; *The Bible*; Dante, *The Divine Comedy*; Machiavelli, *The Prince*; and Pascal, *Pensées*. (For further

information concerning the course in any given year students should contact the department of Philosophy.) (Not open to students with credit in 305)

M. Langer

September-December (3-0)

**LA 307 (1½) IDEAS AND PERSPECTIVES IN WESTERN CIVILIZATION: II**

This course continues the inquiry of Liberal Arts 306, using texts (including at least one scientific work) drawn from the 18th century to the present. Guest lecturers from other departments will contribute, and occasionally films or slides relevant to the cultural and historical context of a work will be shown. (306 is not a prerequisite for 307 though students are encouraged to follow both studies in sequence; and there are no other prerequisites, except that first year students may enroll only with permission of the instructor.) Texts: Pope, *An Essay on Man*; Goethe, *Faust* (selections); Marx, *The Economic and Philosophic Manuscripts of 1844* (selections); Darwin, *The Origin of Species* (selections); Dostoevsky, *The Grand Inquisitor* (from *The Brothers Karamazov*); Nietzsche, *Twilight of the Idols* and *The Gay Science* (selections); Freud, *Civilization and Its Discontents* (selections); Weber, *Politics as a Vocation* (selections); Sartre, *Existentialism is a Humanism*; Merleau-Ponty, *Sense and Non-Sense* (selections). (For further information concerning the course in any given year students should contact the department of Philosophy.) (Not open to students with credit in 305)

M. Langer

January-April (3-0)

## DEPARTMENT OF LINGUISTICS

Henry J. Warkentync, B.A. (W. Ont.), M.A., Ph.D. (London), Associate Professor and Chairman of the Department.  
Joseph F. Kess, B.S. (Georgetown), M.A., Ph.D. (Hawaii), Professor

Geoffrey N. O'Grady, B.A. (Sydney), Ph.D. (Indiana), Professor  
Barry F. Carlson, B.A., M.A. (Colo.), Ph.D. (Hawaii), Associate Professor

- Thomas M. Hess, B.A. (Colo.), M.A., Ph.D. (Wash.), Associate Professor  
 Thomas E. Hukari, B.A. (Ore.), M.A., Ph.D. (Wash.), Associate Professor
- Robert D. Levine, B.A., Ph.D. (Columbia), Part time Adjunct Associate Professor (1984-85)
- James Arthurs, B.A. (Durham), M.A. (U. of Vic.), Ph.D. (Brit. Col.), Assistant Professor
- John H. Esling, B.A. (Northwestern), M.A. (Mich.), Ph.D. (Edin.), Assistant Professor
- Barbara P. Harris, B.A. (Carleton), M.A., Ph.D. (U. of Vic.), Assistant Professor

## GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 211; for graduate courses, see page 99.

## GENERAL, MAJOR AND HONOURS PROGRAMS

### PREREQUISITE

Except by permission of the Department, first year students may not take courses numbered 300 or higher. Courses numbered 400 or higher require at least a third year standing or permission of the Department.

Some knowledge of a language other than English is recommended.

Although it is not required for the General, Major and Honours programs in Linguistics, first year students who plan to undertake any of these programs are urged to enroll in Linguistics 100.

### B.A. In Linguistics

**General** — Students who begin the study of Linguistics as one of their fields in the General Program in their first or second year are advised to take Linguistics 100, and then at least three senior courses in Linguistics in their third and fourth years.

Students who begin the study of Linguistics as one of their fields in the General Program of their third and fourth years should take Linguistics 360 or 361 and at least two other senior courses in Linguistics.

**Major** — The requirements for a Major in Linguistics are 210A and 210B, 250, 251 and 15 units of senior courses in Linguistics including at least 3 units from Linguistics 410A, 410B, 440, and 441.

**Honours** — Students who wish to take an Honours program in Linguistics begin the program in the third year with the permission of the Department. Honours students must: (a) achieve at least a B average in all Linguistics courses taken in each of the third and fourth years and maintain a second class average in all work of the third and fourth years; (b) present 21 units of upper level Linguistics courses including 410A and 410B, 440, 441 and 499.

Students who meet the above requirements will be recommended for Honours degrees as follows. Successful completion of all prescribed courses together with the following graduating average: First Class Honours, 6.50 or higher, and a letter grade of at least A- in Linguistics 499 (Honours Thesis); Second Class Honours, 3.50 to 6.49, and a letter grade of at least B in 499. All Honours students are required to submit their proposals for Honours thesis research at the beginning of their final year. An Honours student with a first class graduating average, but with a grade less than A- in 499, will be given the option of receiving a Second Class Honours or a First Class Major degree.

### B.A. in Applied Linguistics (Emphasis on teaching English as a Second Language)

#### Major

##### *First and Second Years*

Required Courses: 210A & 210B, 250, 251; 4½ units of first and second year English courses including ENGL 115 or 215; PSYC 100. Six units in a second language of which three units should normally be at the second year level.

##### *Third and Fourth Years*

Required Courses: 374, 375, 376, 388, 410A, 440; and 6 units selected from 369, 370, 373, 378, 386, 390, 392 or 393, 395 (15 units). 376 will normally be taken in the final year of study.

Corequisite Courses: Three units selected from upper level English or Creative Writing in consultation with the Department.

Recommended Electives: Three units selected from Education-B 342, 343, 360, 361, 435.

#### Honours

In addition to the requirements for the Major, the Honours student must present 410B, 441, and 499 for a total of 21 units of upper level Linguistics courses. The regulations regarding the required level of

achievement and the class of Honours awarded are the same as those stated above for the B.A. in Linguistics.

Notes: 1. The B.A. degree in Applied Linguistics will prepare the individual for teaching English as a second language in many foreign countries and in Canadian programs existing outside the public school system.

2. The B.A. in Applied Linguistics does not qualify students to teach in the schools of British Columbia. Those who wish to be teachers in the British Columbia school system must either hold an Education degree or have successfully completed the professional program for graduates offered by Education faculties in the Province. (For particulars, see page 140.)

### B.Sc. in Linguistics

#### Major

##### *First and Second Years*

Required Courses: 210A and 210B, 250, 251; BIOL 150 or 207 and PE 141; MATH 100 and 101 (or 102 and 151 with permission of the Department); 3 units from PHYS 100, 102, 110, 120, 220; PSYC 100.

Recommended Electives: CSC 100, 110, 115; PE 241A and 241B (prerequisite 141); PHYS 214; PSYC 215A or 215B, 235; course(s) in a second language.

##### *Third and Fourth Years*

Required Courses: 369, 370, 380, 381, 382, 383; three units selected from 410A, 410B, 440, 441, and three additional units of Linguistics courses numbered upwards of 300, selected from the B.Sc. list in consultation with the Department (15 units).

Corequisite Courses: PSYC 300, and six units selected from PSYC 313A or B, 315, 317, 335, 371, 415.

#### Honours

In addition to the requirements for the Major, the Honours students must present all of 410A, 410B, 440, 441 and 499 for a total of 21 units of upper level courses. The regulations regarding the required level of achievement and the class of Honours awarded are the same as those stated above for the B.A. in Linguistics.

Notes: 1. The B.Sc. in Linguistics is a suitable preparation for post-graduate study in the Speech and Hearing Sciences and for advanced studies in Psycholinguistics and the Phonetic Sciences.

2. A General program leading to a B.Sc. Degree is not available.

### Diploma in Applied Linguistics (Emphasis on teaching English as a Second Language)

1. Applicants must have completed a University of Victoria Bachelor's degree or its equivalent including at least 6 units of courses in English and 6 units of second language courses.
2. Applicants whose previous instruction was given in a language other than English will normally be required to have a major in English.
3. The program may be completed within one year of full time study, but could also be taken part time. It must be completed within five years. For part time students, 376 will normally be taken in the final year of study.
4. A minimum of 15 units of course work in addition to those credited towards a degree is required to complete the program. Applicants who have received credit for some of these courses (or equivalent) previously will be allowed to substitute up to six units of courses recommended by the Department.
5. Courses (15 units)
  - a. 250, 388; 374, 375, 376.
  - b. Six units from 369 or 370 or 373; 378; 386; 390 or 392 or 393; 395; or 7½ units including 360.
  - c. One of ED-B 342, 343, 349, 436, -D 377.
6. Those who intend to pursue an M.A. degree in Applied Linguistics should select 7½ units from section B, including 360 which should be taken on entering the program, for a 16½ unit Diploma program.
7. Students who have completed the University of Victoria degree in Applied Linguistics or its equivalent may not register in the Diploma Program.
8. Those who wish to be teachers in the British Columbia school system must either hold an Education degree or have successfully completed the professional program for graduates offered by Education faculties in the province. (For particulars, see page 134).

## UNDERGRADUATE COURSES

NOTE: The following courses are acceptable for either the B.A. or the B.Sc. degree; 210A and 210B, 250, 251, 369, 370, 373, 380, 381, 382, 383, 386, 400, 410A, 410B, 440, 441 and 481.

**LING 099 (0) ENGLISH AS A SECOND LANGUAGE** (6 fee units)  
A noncredit course in English as a Second Language for students whose native language is not English — see page 12 for regulations governing such students. Successful completion of this course may be required at the discretion of individual departments. (3-0; 3-0)

**LING 100 (3) INTRODUCTION TO LINGUISTICS**

An introduction to the theory and methods of language analysis. Techniques and practical applications in the study of phonology (speech sounds), morphology (word building), syntax (sentence building), and semantics (meaning). Examples will be drawn from a wide variety of languages. Attention is paid to the history of the world's language families, language change, and the reconstruction of earlier stages of languages. The course may also include such topics as the relationship between language, thought, and culture, and the acquisition of language by children. (100 is intended for first year students and others seeking a general survey of the discipline of Linguistics. No previous knowledge of any foreign language is necessary.) September-April (3-0; 3-0)

**LING 120 (1½) PRINCIPLES OF PHONOLOGY**

Basic principles and techniques of phonological analysis. Students learn how to describe and write the sounds of language. (Prerequisite: Competence in one of the Native Indian languages of British Columbia. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 121 (1½) PRINCIPLES OF MORPHOLOGY AND SYNTAX**

Basic principles and techniques of morphological and syntactic analysis. Students study the ways in which words and sentences are formed. (Prerequisite: 120. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 122 (1½) PHONOLOGICAL ANALYSIS**

The application of principles and techniques of linguistic analysis to the phonologies of Native Indian languages. Students use their knowledge of linguistics to describe the sounds of their languages in order to devise practical orthographies. (Prerequisite: Competence in one of the Native Indian languages of British Columbia. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 123 (1½) GRAMMATICAL ANALYSIS**

The application of the principles and techniques of linguistic analysis to the morphology and syntax of Native Indian languages. Students apply their knowledge of linguistics to the description of words and sentences of their languages. (Prerequisite: 122. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 124 (1½) DISCOVERY PROCEDURES: I**

This course explores ways of gathering and analyzing language materials, including the use of tape recorders, field notes and card files. Work on special topics, such as the names of plants, animals or places and cultural activities such as fishing or food preparation, will be encouraged. A variety of resources will be used, including the student's knowledge of his language and culture, and, if available, other speakers or tape recordings. (Prerequisite: Competence in one of the Native Indian languages of British Columbia. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 125 (1½) DISCOVERY PROCEDURES: II**

The analysis of texts, such as traditional stories, histories and cultural descriptions is emphasized. Students will work with available materials, transcribing texts, preparing glossaries and, if possible, gathering further information from native speakers. (Prerequisite: 124. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 126 (1½) PEDAGOGICAL GRAMMARS OF AMERINDIAN LANGUAGES**

The application of linguistic principles to the preparation of grammars of languages indigenous to British Columbia. (Prerequisite: Competence in one of the Native Indian languages of British Columbia. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 127 (1½) AMERINDIAN LEXICOGRAPHY**

The application of linguistic and ethnoscientific principles to the preparation of dictionaries of languages indigenous to British Columbia. (Prerequisite: 126. This course is offered as part of the Native Indian Language Program.) (Not offered) (3-0)

**LING 210A (formerly half of 210) (1½) MORPHOLOGY AND SYNTAX: I**

Techniques and theory in the analysis of words (Morphology) and sentences (syntax), utilizing data from a wide variety of languages. Topics include basic morphological analysis, syntactic analysis and the grammatical systems of various languages (including English). This course will be of special interest to students who wish to study techniques of language analysis, especially those in Linguistics and Anthropology who may wish to work with languages not previously given to grammatical analysis. (Prerequisite: None; 100 recommended) T.E. Hukari September-December (3-0)

**LING 210B (formerly half of 210) (1½) MORPHOLOGY AND SYNTAX: II**

An introduction to formal theories of syntax and lexicon. Major syntactic structures of English will be analyzed in a transformational model. Analogous constructions in other languages will be examined for comparison and contrast. This course is a prerequisite to Linguistics 410A. (Prerequisite: 210A) T.E. Hukari January-April (3-0)

**LING 221 (3) FIELD RESEARCH FOR LANGUAGE LESSONS**

This course considers various techniques of gathering linguistic and cultural information from knowledgeable elders and the art of utilizing this information for lessons on language and culture. (Prerequisite: Completion of the first year of Native Indian Language Teacher Training program) (Not offered) (3-0; 3-0)

**LING 222 (3) COMPILING SCHOOL DICTIONARIES FOR NATIVE LANGUAGES**

This course treats problems unique to compiling dictionaries of Native languages with special emphasis on lexicons for school use. Each student develops a short dictionary as a model in his language during the year. (Prerequisite: Completion of first year of Native Indian Language Teacher Training program) (Not offered) (3-0; 3-0)

**LING 250 (1½) PHONETICS**

An investigation of the production and nature of speech sounds commonly occurring in languages of the world. The course will provide practice in recognizing, transcribing and producing such sounds. Preliminary study of the ways in which sound systems are structured. (Prerequisite: None; 100 recommended) G.N. O'Grady September-December (3-0)

**LING 251 (1½) PHONOLOGY**

The course deals with the overall organization and function of sound systems, with an investigation of their variety and of the universal features which unite them. (Prerequisite: 250 or permission of the Department) (Not open to students with 3 units of credit in 250) B.F. Carlson January-April (3-0)

**LING 260 (JAPA 260) (1½) INTRODUCTION TO THE JAPANESE LANGUAGE AND LINGUISTICS**

A general introduction to the synchronic and diachronic descriptions of Japanese; subjects covered may include: phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Japanese, the relationship between Japanese language, thought, and culture, and the history of Japanese linguistics. (Previous knowledge of Japanese not necessary) Y.H. Tohsaku September-December (3-0)

**LING 308 (3) A THIRD COURSE IN A NATIVE INDIAN LANGUAGE OF VANCOUVER ISLAND**

Advanced grammar and vocabulary presented through written and oral texts concerning *haawicqsh* mythology and subsistence techniques. Second Term project: each student interviews, in the Native language, an elder concerning one of the following: the meaning of a *haawicqsh* myth; the art of making an old style implement; the preparation of an old style meal. (Prerequisite: 208) (Not offered) September-April (3-0; 3-0)

**LING 340 (SLAV 340) (1½) INTRODUCTION TO THE SLAVIC LANGUAGES (In English)**

This course will acquaint students with the family of Slavic languages, their history and place within the Indo-European language family, and their present day structure. (Prerequisite: A previous course in Linguistics or permission of the Department)  
(Not offered) (3-0)

**LING 341 (SLAV 341) (1½) SEMINAR IN A SLAVIC LANGUAGE: STRUCTURE AND HISTORY (In English)**

Although designed as a continuation of 340 (SLAV 340), this course can be taken independently as well, and more than once for credit (in different languages) to a maximum of three units. This course will deal with the history and structure of a Slavic language not offered otherwise in the Department of Slavonic Studies. Depending upon demand, a different language will be treated in each given year. Languages offered at present are: Sorbian, Polish, Ukrainian, Czech. (Prerequisite: A previous course in Linguistics or permission of the Department)  
(Not offered) (3-0)

**LING 360 (3) GENERAL LINGUISTICS**

An introduction to Linguistics intended for students with no previous knowledge of the subject who desire a single senior course or who wish to begin the study of Linguistics in their senior years. This course will cover, at the level expected in senior courses, the material listed in 100. (Normally not open to students with 100) September-April (3-0; 3-0)

**LING 361 (3) ANTHROPOLOGICAL LINGUISTICS**

Language in relation to culture, semantics, and as an ethnographic tool. Intended for students with no previous knowledge of Linguistics. (Normally not open to students who have credit in or who are taking 100 or 220) (Prerequisite: An introductory course in Anthropology)  
September-April (3-0; 3-0)

**LING 364 (PACI 364) (1½) LANGUAGES IN THE PACIFIC AREA**

A survey of languages spoken on the islands of the Pacific Ocean (Indonesia, Philippines, Melanesia, Micronesia and Polynesia), their genetic relationships and area groupings; specific languages and families are selected for more detailed discussion, illustrating issues of relevance in linguistic theory and analysis, applied linguistics and sociolinguistics. (Prerequisite: None; 100 recommended)  
(Not offered) (3-0)

**LING 365 (PACI 365) (1½) SEMINAR ON A PACIFIC AREA LANGUAGE: STRUCTURE, CONTEXT AND USAGE**

This course deals each time with a different specific language spoken in Pacific Asia (except for Mandarin Chinese and Japanese) and on the Pacific Islands. Topics covered include phonological and grammatical structure, genetic relationships to others of its family, social and cultural context, political importance, use in the mass media and education, literature in the language, and the problems of language policy and planning. The language considered in a given term may be Korean, Tagalog, Chamorro, Palauan, Ainu, Tongan, Hawaiian, Samoan, Cantonese, Fijian, pidgin English and so on. May be repeated for credit up to a maximum of six units. (Prerequisite: 100 or 364 (PACI 364))  
(Not offered) (3-0)

**LING 369 (PSYC 369) (formerly half of 370) (1½) DEVELOPMENTAL PSYCHOLINGUISTICS**

Offered in collaboration with the Department of Psychology. The course covers the biological bases of language, the child's stage by stage acquisition of the phonology, morphology, syntax and semantics of his first language. Also treated are the child's metalinguistic abilities and his growing awareness of the form and function of speech acts. (Prerequisite: A previous course in Linguistics and PSYC 100)  
J.F. Kess, R.A. Hoppe January-April (3-0)

**LING 370 (PSYC 370) (1½, formerly 3) PSYCHOLINGUISTICS**

Offered in collaboration with the Department of Psychology. A course in the psychology of language covering such topics as the nature and function of language, experimental psycholinguistics, the relationship of language and cognition, speech perception and processing, comprehension and production of sentences, utilization of semantic systems, bilingualism, and nonverbal communication, language and sociocultural factors. (Prerequisite: A previous course in Linguistics and PSYC 100)  
J.F. Kess, R.A. Hoppe September-December (3-0)

**LING 372 (1½) NATIVE LANGUAGES OF BRITISH COLUMBIA**

This course surveys the semantic, phonological and morphological structure of thirty languages belonging to five different language families having among them greater linguistic diversity than is to be found in the whole of Europe, and discusses hypotheses of their history. (Prerequisite: A previous course in Linguistics) Text: Thomas and Hess. *An Introduction to Nitinaht Language and Culture*  
(Not offered) (3-0)

**LING 373 (1½) APPLIED PSYCHOLINGUISTIC TECHNIQUES OF LANGUAGE LEARNING AND TEACHING**

A survey of techniques applied to the problems of second language learning and teaching. These techniques, derived from applied psycholinguistic investigations, examine the nature of language, language learning abilities, and second language acquisition by adults.  
J.H. Esling January-April (3-0)

**LING 374 (1½) APPLIED LINGUISTICS**

Explores and demonstrates the relevance of theoretical linguistics, psycholinguistics, sociolinguistics and contrastive analysis to teaching and learning of language; introduction to approaches and methods in language teaching, curriculum development, error analysis, testing. (Prerequisite: A previous course in Linguistics or permission of the Department)  
J.H. Esling September-December (3-0)

**LING 375 (1½) TECHNIQUES IN APPLIED LINGUISTICS**

With special reference to teaching English as a second language, this course addresses problems such as course design, preparation and evaluation of pedagogical materials, selection of a curriculum, construction of a syllabus and lesson plans, classroom teaching techniques, and the use of audio-visual materials. Reassessment of the theoretical principles discussed in 374. (Prerequisite: 374 or permission of the Department)  
J.H. Esling January-April (3-0)

**LING 376 (1½) SEMINAR AND PRACTICUM IN APPLIED LINGUISTICS**

This course consists of a series of seminars dealing with teaching English as a second language methodology, observation of English as a second language classes, and participation by the students in English as a second language class instruction as arranged by the Department. Evaluation is based on one essay or report, a log covering observation of classes, participation in the seminars and classroom teaching, and on the successful completion of the student teaching practicum. (Normally taken in the final year. Open only to students registered in the Applied Linguistics programs. Students who are scheduled to complete the practicum during May-August will be given a grade of INP at the end of April.) (Prerequisite: 374 and 375 which may be taken concurrently)  
J.H. Esling September-April (1-2; 1-2)

**LING 378 (1½) CONTRASTIVE LINGUISTICS**

An introduction to the contrastive study of languages with respect to their phonological, morphological, syntactic and semantic systems. Special attention is also given to factors related to language learning situations, with reference to transfer and interference from the mother tongue. The language selected to be compared with English will vary from year to year. (Prerequisite: A previous course in Linguistics) Texts: Selected readings on the theory of contrastive analysis.  
J. Arthurs (3-0)

**LING 380 (1½) ACOUSTIC PHONETICS**

A study of the acoustical properties of speech sounds including the basic physical principles involved in the generation and propagation of sound energy and the phenomenon of resonance; students are introduced to experimental instruments and trained in the use of the sound spectrograph for the analysis of speech sounds. (Prerequisites: 250 or equivalent, and one of PHYS 100, 102, 110, 120 and 220)  
September-December (2-2)

**LING 381 (1½) PHYSIOLOGY OF SPEECH PRODUCTION**

A study of the physiology of the human speech mechanisms including the relevant aspects of the respiratory, laryngeal and supralaryngeal systems. (Prerequisite 250)  
September-December (2-2)

**LING 382 (1½) EXPERIMENTAL PHONETICS**

This course expands on topics covered in Linguistics 380. Emphasis is placed on the design of phonetic and phonological experiments using electronic systems and introducing computer technology for speech analysis. (Prerequisite 380)  
January-April (2-2)

**LING 383 (1½) AUDITORY PHONETICS**

A study in the perception of speech sounds in terms of the physiology of the organs of hearing with attention being focused on the hearing mechanism as a transducer of acoustical energy to neural impulses. Students are also introduced to speech perception research methodology.

January-April (2-2)

**LING 386 (1½) PROSODIC FEATURES OF ENGLISH**

Detailed analysis of the stress and intonation patterns of English and their relationship to grammatical functions; phonetic descriptions of rhythm and voice quality are practised and used to analyze speech in various languages. (Prerequisite: 250, 251, or permission of the Department)

J.H. Estling

September-December (3-0)

**LING 388 (1½) A GRAMMAR OF ENGLISH USAGE**

A functional treatment of English grammar. The relations of the parts of speech are examined in terms of their function in the construction of meaningful units of communication.

B.P. Harris

September-December. Also January-April (3-0)

**LING 390 (1½, formerly 3) THE GROWTH OF MODERN ENGLISH**

The history of the English language from its beginning to the present day, including Canadian English. Topics covered will include the significance of social and regional dialects, and the causes of language change. (Not open to students who have credit in English 390. Not normally open to students below third year.) (Prerequisite: A previous course in linguistics, preferably 388, or permission of the Department)

B.P. Harris

January-April (3-0)

**LING 392 (1½) CANADIAN ENGLISH**

A description of the distinctive features of modern Canadian English, especially in vocabulary, grammar and pronunciation, and an account of the economic, social, and political factors that have given rise to those features. (Prerequisite: A previous course in Linguistics, or permission of the Department). Texts: Scargill, *Short History of Canadian English*, McConnell, *Our Own Voice* (3-0)

**LING 393 (formerly half of 430) (1½) DIALECTOLOGY**

Dialect geography and its methodology with reference to English dialects including regional variation in Canada. (Prerequisite: A previous course in Linguistics or permission of the Department; 392 recommended) (3-0)

**LING 395 (1½) SOCIOLINGUISTICS**

A study of language in its social context. Attention is paid to linguistic, dialectal, and stylistic variation in speech communities and the relationship to sociocultural considerations such as class, sex, contextual setting, and ethnicity. Some consideration is given to sociolinguistic dimensions of bilingualism and multilingualism, languages in contact, language switching, and linguistic demography, nonstandard dialects and language standardization, and related educational issues. Consideration will also be given to the functions of language in speech communities, for example, rules of respectful address, conversational turn taking, and the range and interpretation of speech act types. Sociolinguistic implications for theories of language description and language change will be touched upon. (Prerequisite: A previous course in Linguistics or permission of the Department)

J.F. Kess

January-April (3-0)

**LING 410A (formerly half of 410) (1½) SYNTAX**

Major syntactic structures of English will be analyzed in the Government and Binding model. Topics include X bar grammar and the lexicon, case, formal properties of transformations and constraints on binding. (Prerequisites: 210B and 251, or Diploma status and 360)

T.E. Hukari

September-December (3-0)

**LING 410B (formerly half of 410) (1½) THEORIES OF GRAMMAR**

A nontransformational formal model of syntactic description will be examined in light of the material presented in 410A. Topics may include the lexicon, grammatical relations, phrase structure grammars, syntax and the mapping into logical form. The model this year will be generalized phrase structure grammar. (Prerequisite: 410A)

T.E. Hukari

January-April (3-0)

**LING 420 (1½) COMPARATIVE INDO-EUROPEAN**

This course provides an integrated account of the evolution of the principal Indo-European languages. (Prerequisite: 210 and 251, or permission of the Department)

(Not offered)

(3-0)

**LING 425 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS**

An investigation of language change through time. Theoretical considerations in the reconstruction of phonological and other linguistic subsystems. Emphasis will be on the evolution of languages other than Indo-European. (Prerequisites: 210 and 251, or permission of the Department)

(Not offered)

(3-0)

**LING 426 (1½) SEMANTICS**

The course addresses the question of meaning and its relation to language. Topics include the concept of the dictionary, types of meaning, uses and abuses of semantic values, analysis of meaning, translation. (Prerequisite: 210 or equivalent background)

J. Arthurs

(3-0)

**LING 440 (1½) GENERATIVE PHONOLOGY OF ENGLISH**

This course will emphasize description of the English sound system using procedures and theoretical bases of transformational generative phonology. It is intended for students who have had an introduction to phonology and who wish to learn language description using distinctive sound features, notational conventions, and rule interaction formalisms. (Prerequisite: 251 or permission of the Department or Diploma status and 360)

G.N. O'Grady

September-December (3-0)

**LING 441 (1½) ADVANCED PHONOLOGICAL ANALYSIS**

This course will survey current issues in phonological theory. Special topics, such as the question of abstractness of underlying representations, the effect of historical change on the sound component of language, the role of grammatical and lexical information in phonology, the treatment of exceptions, and the ways of handling rule interactions and applications will be considered. (Prerequisite: 440 or permission of the Department) Text: Kenstowicz and Kisseberth, *Topics in Phonological Theory*

B.F. Carlson

January-April (3-0)

**LING 448 (1½) DIRECTED READINGS IN LINGUISTICS**

(Open only to Major and Honours students with a minimum G.P.A. of 6.50 in linguistics courses.)

September-December (3-0)

**LING 449 (1½) DIRECTED READINGS IN LINGUISTICS**

(Open only to Major and Honours students with a minimum G.P.A. of 6.50 in linguistics courses.)

January-April (3-0)

**LING 450 (1½) SEMINAR IN LANGUAGES**

An elementary analysis of a language to be selected in consultation with the Department. (Prerequisites: 210 and 251)

(Not offered)

September-December (3-0)

**LING 451 (1½) SEMINAR IN LANGUAGES**

An elementary analysis of a language to be selected in consultation with the Department. (Prerequisite: 210 and 251)

(Not offered)

January-April (3-0)

**LING 481 (3) INTRODUCTION TO COMPUTER LINGUISTICS**

Study of selected topics concerning the application of the computer to linguistic problems in such areas as language data analysis and synthesis, literary research and language learning. Intended for Linguistics Majors. Suitable for language and linguistics majors and graduate students. (Prerequisite: Written permission of the Department required for students not registered in a Linguistics degree program)

September-April (3-0; 3-0)

**LING 499 (3) HONOURS THESIS**

The Honours thesis is to be based on supervised research carried out by the student during the final year. The recommended style and format of the Honours thesis are the same as those stipulated for graduate theses.

**GRADUATE COURSES**

*Students should consult the Department concerning courses offered in any particular field.*

**LING 500 (3) FIELD METHODS AND TECHNIQUES IN LANGUAGE ANALYSIS**

The study of field methods and techniques in language analysis with the aid of native speakers. (Prerequisite: 410B and 441 or equivalents)  
T.M. Hess (3-0)

**LING 501 (1½) CANADIAN ENGLISH**

A history of the phonology, syntax, and vocabulary of Canadian English. (Prerequisite: 392 or equivalent) (3-0)

**LING 502 (1½) LINGUISTIC THEORIES**

An introduction to the principles and methodological techniques of linguistic theories of language analysis other than the generative-transformational approach. (3-0)

**LING 503 (1½) TRANSFORMATIONAL-GENERATIVE GRAMMAR**

A survey of recent developments in transformational-generative semantic-syntactic theory. (Prerequisite: 410 or equivalent)  
T.E. Hukari (3-0)

**LING 505 (1½) PHONOLOGICAL THEORY**

A survey of the development of phonological theory, including such topics as phonological universals. (Prerequisite: 441 or equivalent)  
G.N. O'Grady (3-0)

**LING 506 (1½) LEXICOLOGY AND LEXICOGRAPHY**

The theory of lexicology and the practice of dictionary making. (3-0)

**LING 508 (1½) CURRENT ISSUES IN TRANSFORMATIONAL-GENERATIVE GRAMMAR**

Selected topics reflecting ongoing work in transformational-generative theory. (Prerequisite: 503 or equivalent) (3-0)

**LING 509 (1½) SOCIOLINGUISTICS**

Selected topics in recent research related to language variation. (3-0)

**LING 510 (1½) CURRENT ISSUES IN PHONOLOGY**

An examination of recent developments in phonological theory. (Prerequisite: 505 or equivalent)  
B.F. Carlson (3-0)

**LING 513 (1½) PROBLEMS IN GRAMMATICAL ANALYSIS**

Special studies selected on an individual basis to allow a student to pursue a particular topic in grammatical analysis. (Prerequisite: 508 which may be taken concurrently or permission of the Department) (3-0)

**LING 515 (1½) PROBLEMS IN PHONOLOGICAL ANALYSIS**

Special studies selected on an individual basis to allow a student to pursue a particular topic on phonological analysis. (Prerequisite: 510 which may be taken concurrently, or permission of the Department) (3-0)

**LING 517 (1½) EXPERIMENTAL PHONETICS LABORATORY**

Topics in the synthesis and analysis of speech. (Prerequisite: 380 or equivalent) (3-0)

**LING 518 (1½) PROJECTS IN EXPERIMENTAL PHONETICS**

Students will be guided in designing and carrying out experiments on an individual basis in the area of the acoustics and physiology of speech. (Prerequisite: 517 or equivalent) (3-0)

**LING 520 (1½-6) PACIFIC RIM LANGUAGES**

An overview of the structure of selected indigenous languages spoken around the Pacific Rim. One of the following will be offered in a given term: 520-A (1½) North American Indian Languages; 520-B (1½) Austronesian Languages; 520-C (1½) Australian Languages; 520-D (1½) East Asian Languages. (3-0)

**LING 524 (1½) ROMANCE LINGUISTICS**

Recent developments in comparative Romance linguistics; particular emphasis will be placed on contrastive features. (3-0)

**LING 527 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS: INDO-EUROPEAN**

An investigation of language change through time. Theoretical consider-

ations in the reconstruction of phonological and other linguistic subsystems. An integrated account of the evolution of the principal Indo-European languages. (3-0)

**LING 528 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS: NON-INDO-EUROPEAN**

An investigation of evolution of languages other than Indo-European. (3-0)

**LING 560 (Anthropology 560) (1½) LINGUISTIC ANTHROPOLOGY****LING 570 (1½-3) PSYCHOLINGUISTICS**

This course is offered in collaboration with the Department of Psychology. It covers such varied topics in the psychology of language as bilingualism, the relationship between language and thought, the problem of meaning, and topics in experimental psycholinguistics, such as language processing and production, as well as linguistic inference.  
J.F. Kess, R.A. Hoppe (3-0)

**LING 571 (PSYC 571) (1½-3) DEVELOPMENTAL PSYCHOLINGUISTICS**

This course is offered in collaboration with the Department of Psychology. It deals with the acquisition of a first language by children, focusing on the development of their phonological and grammatical abilities, as well as the development of their knowledge of the semantic system of their language, their capacity for metalinguistic judgements, and the utilization of speech acts.  
J.F. Kess, R.A. Hoppe (3-0)

**LING 580 (1½-3) LINGUISTICS SEMINAR**

(The contents of this course will vary.) (May be repeated for credit) (3-0)

**LING 581 (1½ or 3) LINGUISTICS COLLOQUIUM**

Students will prepare a written research paper (20-30 pages) and present it at a linguistics colloquium. Topics will be of current interest, bearing on linguistic theory, arising from the student's work or individual research. (May be repeated for credit) (Prerequisite: Graduate standing)

**LING 590 (1½ or 3) DIRECTED STUDIES**

A course designed to enable students to pursue individual interests.

**LING 598 (3) COMPREHENSIVE EXAMINATION**

Students will prepare a major written research paper to be presented orally to the Department. This paper will serve as the basis of the student's oral defense. Topics will be of current interest, bearing on linguistic theory. (Nonthesis students only.)

**LING 599 (Credit to be determined) THESIS**

Students enrolled in courses numbered 601 to 603 will explore current areas of research in the Linguistics literature, under the direction of their supervisory committee and other members of the Department. Each course may be repeated to a maximum of 3 units.

**LING 601 (1½ or 3) INDIVIDUAL STUDIES IN SYNTAX**

(Prerequisites: 502, 503 or equivalent courses, and graduate standing)

**LING 602 (1½ or 3) INDIVIDUAL STUDIES IN PHONOLOGY**

(Prerequisites: 505 or an equivalent course, and graduate standing)

**LING 603 (1½ or 3) INDIVIDUAL STUDIES IN HISTORICAL LINGUISTICS**

(Prerequisites: 420 or an equivalent course, and graduate standing)

**LING 690 (1½-6) INDIVIDUAL STUDIES**

Topics (A, B, C, etc.) will be assigned at the beginning of each year. A research topic will be pursued in depth under the direction of the student's supervisor. Students will be expected to write a research paper (or papers) and to give an oral report to the supervisor and interested members of the Department. It is anticipated, but not required, that this research will provide background material for a Ph.D. Dissertation. This course may be repeated for credit to a maximum of 6 units. (Prerequisites: Admission to a Ph.D. program in Linguistics and 502, 503 and 505 or the equivalent)

**LING 699 (Credit to be determined) PH.D. DISSERTATION**

## DEPARTMENT OF MATHEMATICS

- C. Robert Miers, B.A. (Knox Coll.), M.A., Ph.D. (Calif., Los Angeles), Associate Professor and Chairman of the Department
- Ernest J. Cockayne, M.A. (Oxon.), M.Sc. (McGill), Ph.D. (Brit. Col.), Professor
- Roger R. Davidson, B.Sc. (Queen's), M.A. (Tor.), Ph.D. (Florida St.), Professor
- Albert E. Hurd, B.A., M.A. (Tor.), Ph.D. (Stanford), Professor
- Robert E. Odch, M.S., Ph.D. (Carnegie Inst. of Tech.), F.A.S.A. (Washington, D.C.), F.S.S. (London), Professor
- John Phillips, B.Sc. (U. of Vic.), M.A., Ph.D. (Ore.), Visiting Professor (1984-85)
- Marvin Shinbrot, B.A., M.A., (Syracuse), Ph.D. (Stanford), F.R.S.C., Professor
- Hari M. Srivastava, B.Sc., M.Sc. (Allahabad), Ph.D. (Jodhpur), F.R.A.S. (London), F.N.A.Sc. (India), F.I.M.A. (U.K.), Professor
- Pauline van den Driessche, B.Sc., M.Sc. (Imp. Coll.), D.I.C., Ph.D. (Wales) Professor
- Stanley R. Clark, B.A.Sc. (Brit. Col.), M.Sc. (Aberdeen), Ph.D. (Manchester), Associate Professor
- William R. Gordon, B.A., M.A. (Brit. Col.), Ph.D. (Calif., Santa Barbara), Associate Professor
- W. Keith Hastings, B.A., M.A., Ph.D. (Tor.), Associate Professor
- Denton E. Hewgill, B.Sc., Ph.D. (Brit. Col.), Associate Professor
- Lowell A. Hinrichs, M.A., Ph.D. (Ore.), Associate Professor
- Bruce R. Johnson, B.S., M.A., (Ore. St.), Ph.D. (Ore.), Associate Professor
- Walter P. Kotorynski, B.A. (W. Ont.), M.A., Ph.D. (Tor.), Associate Professor
- David J. Lceming, B.Sc. (Brit. Col.-Vic. Coll.), M.A. (Ore.), Ph.D. (Alta.), Associate Professor
- Robert A. MacLeod, B.Sc. (Alta.), M.S. (Cal. Tech.), Ph.D. (Alta.), Associate Professor
- Fausto Milinazzo, B.Sc., Ph.D. (Brit. Col.), Part time Adjunct Associate Professor
- Donald J. Miller, B.Sc., Ph.D. (McMaster), Associate Professor
- Gary G. Miller, M.Sc., Ph.D. (Missouri), Associate Professor
- William E. Pfaffenberger, M.A., Ph.D. (Ore.), Associate Professor
- James Riddell, B.Sc., M.Sc., Ph.D. (Alta.), Associate Professor
- Earl D. Rogak, B.Ch.E. (Cooper Union), M.S.E., Ph.D. (Mich.), P.Eng., Associate Professor
- H. Paul Smith, B.A., M.Ed. (Brit. Col.), M.A., (Wash.), Ph.D. (Mont.), Associate Professor
- Ahmed Ramzi Sourour, B.Sc., (Cairo), M.Sc., Ph.D. (Illinois), Associate Professor
- Charles E. Murley, B.A. (Colo.), M.S., Ph.D. (Wash.), Assistant Professor
- William J. Reed, B.Sc., (Imperial Coll., London), M.Sc. (McGill), Ph.D. (Brit. Col.), Assistant Professor
- Barry W. Brooks, B.Sc., M.Sc., (Calgary), Cooperative Education Coordinator (Computer Sciences and Mathematics)
- M. Elizabeth Watton, B.Sc., M.Sc. (McMaster), Administrative Officer and Part time Lecturer

### GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.Sc. degrees, see page 212; for graduate courses, see page 106.

NOTE: Undergraduate and graduate courses presently labelled CSC are now part of the Department of Computer Science. For further information on courses and programs, consult the Department.

### LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff, it may be necessary to limit enrollment in certain first and second year Mathematics and Statistics courses. Enrollment limits in second year will be imposed primarily on the basis of academic standing. Course enrollment limits will be listed during registration.

### GENERAL, MAJOR AND HONOURS PROGRAMS

#### Mathematics Programs:

For either a B.A. or B.Sc. degree in Mathematics, students may take a General, Major or Honours Mathematics program. The Mathematics course requirements for each program are as follows:

#### General

- (a) 100 and 101 (130)
- (b) 233A and 233C
- (c) 200 and 201 (230)
- (d) 9 additional units of courses numbered 300 or higher in the Department.

#### Major

- (a) 100 and 101 (130)
- (b) 233A and 233C
- (c) CSC 110 (170) and 115 (171)
- (d) 200 and 201 (230)
- (e) 330A and 330B, 333A and one of 333C, 422 or 423
- (f) 9 additional units of Mathematics courses numbered 300 or higher (of which at least 3 units are numbered 400 or higher) chosen in consultation with the Department.

#### Major with Probability and Statistics Emphasis

- (a) 100 and 101 (130)
- (b) 233A and 233C
- (c) CSC 110 (170) and 115 (171)
- (d) 200 and 201 (230)
- (e) STAT 250 and 251 (253)
- (f) 330A and 330B
- (g) 333A and 333C
- (h) STAT 350 and 351
- (i) 6 additional units chosen from 352, 452, STAT 353, 354, 453, 454 selected to obtain at least 3 units chosen from Mathematics and Statistics courses numbered 400 or higher.

#### Honours in Mathematics

Students who wish to be admitted to an Honours program in the Department should apply in writing to the Chairman of the Department on completion of their second year. Normally a student will be admitted to the third year of an Honours program in the Department only if the student has achieved a first class average in the second year courses taken in the Department. A student whose third year work is not of honours calibre may be required to withdraw from the program. A student graduating in the Honours program will be recommended for a First Class Honours degree if the student has achieved a first class graduating average and a first class average in courses numbered 300 or higher in the Department. A student who completes the Honours degree requirements without attaining a first class standing, but with a graduating average of at least 3.50, will be recommended for a Second Class Honours degree.

The Honours Programs are as follows:

- (a) 100 and 101 (130)
- (b) 233A and 233C
- (c) CSC 110 (170) and 115 (171)
- (d) 200 and 201 (230)
- (e) 333A and 333C, 334, 336, 338
- (f) Completion of one of the following areas of emphasis:
  - (i) *Pure Mathematics*
    - a. 15 units from 325, 326, 352, 362, 422, 423, 433C, 435, 445A and 445B, 452, 462, 465, 466, 468, 491A, and 491B and CSC 349A and 349B, chosen in consultation with the Department and of which at least 9 units are numbered 400 or higher.
  - NOTE: Honours students in Pure Mathematics are encouraged to take at least 3 units of Statistics courses and at least 3 units of Computer Science courses.
  - (ii) *Applied Mathematics*
    - a. 12 units acquired by completing any two of the four area options listed.
      - Combinatorics and Operations Research Option: 422, 423, CSC 448A, 448B
      - Differential Equations Option: 325, 326, 445A, 445B
      - Mathematical Statistics and Probability Option: STAT 350, 351, MATH 352, 452
      - Numerical Analysis Option: CSC 349A, 349B, 449A, 449B
    - b. 3 units chosen from 491A, any course listed in the two area options not selected under a., or CSC 420. The 15 units needed for requirements a. and b. must contain at least 6 units numbered 400 or higher.

(iii) *Probability and Statistics*

- a. STAT 250 and 251
- b. STAT 350 and 351
- c. 6 additional units chosen from MATH 352, 452, STAT 353, 354, 453, 454
- d. 6 additional units offered by the Department chosen in consultation with the Department.

At least 6 units chosen from Mathematics and Statistics courses numbered 400 or higher must be completed.

(iv) *Department approved option*

- a. 15 units of courses offered by the Department numbered 300 or higher chosen in consultation with the Department. At least 9 of the 15 units must be chosen from courses numbered 400 or higher.

**Combined Programs in Chemistry and Mathematics:**

For a B.Sc. degree in Combined Chemistry and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Chemistry and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Chemistry and Mathematics Departments, and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult with their advisers prior to making their final choice of courses.

A student graduating in the combined Honours program will be recommended for a First Class degree if the student achieves a graduating average of at least 6.50 and a first class standing in Chemistry 499 (Honours Thesis). A student will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 4.00 and a second class standing in Chemistry 499. A student with a first class graduating average but with second class standing in Chemistry 499 will be given the option of receiving a First Class Major or a Second Class Honours degree.

**First and Second Year (Major or Honours)**

|  |      |
|--|------|
| CHEM 100 & 102, or 101 & 102, or 140 & 145, or 140 & 102 | (3)  |
| CHEM 213   | (1½) |
| CHEM 222 and 245   | (3)  |
| CHEM 231 and 235   | (3)  |
| Two of PHYS 110 or 125, 120 and 220                      | (3)  |
| CSC 110 (170) and 115 (171)                              | (3)  |
| MATH 100 and 101 (130)                                   | (3)  |
| MATH 233A and 233C                                       | (3)  |
| MATH 200 and 201 (230)                                   | (3)  |

**Third and Fourth Year (Major)**

(All courses below must be 300 level or above)

|   |      |
|---|------|
| CHEM 312  | (1½) |
| CHEM 324  | (1½) |
| CHEM 325  | (1½) |
| CHEM 345  | (1½) |
| CHEM 346  | (1½) |
| CHEM 446  | (1½) |
| CHEM 444 (or 422)   | (1½) |
| MATH 330A and 330B  | (3)  |
| MATH 333A   | (1½) |
| One of MATH 333C, 422 or 423  | (1½) |
| MATH 325 and 326  | (3)  |
| Course chosen from the Mathematics Department in consultation with the Mathematics Department | (1½) |
| Course(s) chosen in consultation with the Chemistry and Mathematics Departments               | (3)  |

**Third and Fourth Year (Honours)**

(All courses below must be 300 level or above)

|   |       |
|---|-------|
| All Chemistry courses listed under Major program plus                                 | (10½) |
| CHEM 399  | (1)   |
| CHEM 499  | (3)   |
| MATH 334 and 336  | (3)   |
| MATH 338  | (1½)  |
| MATH 333A and 333C  | (3)   |
| MATH 445A and 445B  | (3)   |
| Course(s) chosen from the Mathematics Department in consultation with that Department | (3)   |

Some possible courses which might be used to fulfill the units to be chosen in the above programs are:

CHEM 306; 318; 335; 338, 422 or 444; 423; CSC 349A and 349B; MATH 352; 368A; 368B; (for Honours — 325 and 326); STAT 353\*; 354\*.

\*These courses have STAT 250 and 251 as prerequisites, which would have to be included in the student's program as options.

**Combined Programs in Computer Science and Mathematics**

For a B.Sc. degree in Combined Computer Science and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Computer Science and Mathematics, but a single degree program composed of selected courses from each of the departments. Students opting for either of these combined programs must contact the Computer Science and Mathematics Departments, and will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Computer Science or Mathematics must consult with their advisers prior to making their final choice of courses.

A student graduating in the combined Honours program will be recommended for a First Class Honours degree if the student achieves a graduating average of at least 6.50. A student will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 5.00.

**First and Second Year (Major or Honours)**

|                             |      |
|-----------------------------|------|
| MATH 100 and 101            | (3)  |
| MATH 233A and 233C          | (3)  |
| MATH 200 and 201            | (3)  |
| MATH 222                    | (1½) |
| STAT 250 and 251            | (3)  |
| CSC 110 (170) and 115 (171) | (3)  |
| CSC 230 (272) and 275       | (3)  |

**Third and Fourth Year (Major)**

|                                       |     |
|---------------------------------------|-----|
| MATH 330A and 330B                    | (3) |
| MATH 333A and one of 333C, 422 or 423 | (3) |
| C SC 320 and 325 (374)                | (3) |
| C SC 349A and 349B                    | (3) |

Courses chosen from the Departments of Computer Science and Mathematics at the 300 level or above with at least 6 units at the 400 level. In selecting these courses students are urged to take at least 3 of the additional units in each of the two Departments. (12)

**Third and Fourth Year (Honours)**

|                               |      |
|-------------------------------|------|
| MATH 334, 336 and 338         | (4½) |
| MATH 333A and 333C            | (3)  |
| CSC 320 and 325 (374)         | (3)  |
| CSC 349A and 349B             | (3)  |
| Two of CSC 420, 449A and 449B | (3)  |

Courses chosen from the Department of Computer Science or Mathematics at the 300 level or higher (4½)

Courses chosen from the Departments of Computer Science or Mathematics at the 400 level (6)

Students must complete a minimum of 3 units of 400 level courses offered by the Department of Mathematics as part of the above program.

**Honours in Physics and Mathematics**

Admission to the third and fourth years of the Honours Program in Physics and Mathematics requires the permission of both the Department of Physics and the Department of Mathematics. The class of the Honours degree of a student graduating in the Honours in Physics and Mathematics Program will be determined on the basis of the grade point average calculated using the best 30 units of approved 300 and 400 level courses. The class designated will be First Class if this average is at least 6.50 and Second Class if this average is at least 3.50.

In year I students will take (a) PHYS 120 and 220 or (b) PHYS 110 and 120 (or 120 and 125) or (c) PHYS 100 and 110. In each case the student will then choose subsequent courses indicated by the appropriate letter (a), (b) or (c).

**Year I**

|   |     |
|---|-----|
| (a) PHYS 120 and 220 or                       | (3) |
| (b) PHYS 110 and 120 or PHYS 120 and 125 or   | (3) |
| (c) PHYS 100 and 110                          | (3) |
| 3 units of first year Chemistry excluding 103 | (3) |
| MATH 100 and 101                              | (3) |
| MATH 233A and 233C*                           | (3) |

**Year II**

- (a) PHYS 216 and 217 or (3)
- (b) PHYS 220 and 217 or (3)
- (c) PHYS 120 and 220 (3)
- PHYS 214 and 215 (3)
- MATH 200 and 201 (3)
- MATH 333A and 333C\* (3)

**Year III**

- (b) PHYS 316 (1½)
- (c) PHYS 316 and 217 (3)
- PHYS 325 and 326† (3)
- PHYS 321A and 321B (3)
- PHYS 413A and 413B (3)
- MATH 325 and 326 (3)
- MATH 334 and 336 (3)
- MATH 338 (1½)
- MATH elective\*\* (1½)

**Year IV**

- PHYS 422 and 421 (3)
- PHYS 423 and 420 (3)
- PHYS 460 (0)
- PHYS electives\*\* (3)
- MATH 445A and 445B (3)
- MATH electives\*\* (3)

\* MATH 233A and 233C may be deferred to the second year, in which case 333A and 333C may be deferred to the fourth year.

† PHYS 325 may be deferred to the fourth year.

\*\* Mathematics electives are to be chosen in consultation with the Department of Mathematics, and Physics electives are to be chosen in consultation with the Department of Physics. Students will normally enroll in 18 units of work in each of third and fourth year.

**Notes**

1. The application of credit for Math 160 or 180 to degree programs in the Faculty of Arts and Science is restricted — see the entries in the relevant course descriptions which follow.
2. All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.
3. Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.
4. Students from outside British Columbia, transfer students from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Mathematics course.
5. Students planning a career in secondary school mathematics teaching are strongly advised to include MATH 333A as part of their Mathematics degree program.

**MATHEMATICS COOPERATIVE EDUCATION PROGRAM**

The Cooperative Education Program in the Faculty of Arts and Sciences is described on page 31. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 27.

Full time students in the Cooperative Education Program participate in a combined Mathematics and Computer Science Cooperative Program during their first two years. In their third year, students may opt to complete a degree program in either Computer Science or Mathematics, and will then enter the Coop program in that department. Students who opt for the Major in Combined Computer Science and Mathematics, or for a Double Major in Computer Science and Mathematics, will remain in the combined Computer Science/Mathematics Coop Program.

The minimum academic requirements for entering the Mathematics and Computer Science Program are a grade point average of 4.50, a minimum grade point average of 5.50 in courses completed in the Departments of Computer Science and Mathematics and a grade of at least B- in each course completed in the Departments of Computer Science and Mathematics. Students are normally admitted to the program during May after the first year on campus, and application for admission should be made during the first academic year on campus. First year students wishing to apply for entry to the program should enroll in Mathematics 100 and 101, Computer Science 110 and 115, and Statistics 250.

In order to graduate in the Mathematics Cooperative Program or the combined Mathematics and Computer Science Cooperative Program students must:

- (i) successfully complete four Work Terms
- (ii) successfully complete the following thirteen courses, MATH 100, 101, 200, 201, 222, 233A and 233C, CSC 110, 115, 230 and 275, and STAT 250 and 251.
- (iii) satisfy the course requirements of any of the Major or Honours degree programs offered by the Department of Mathematics.

Students registered in the Coop Program must be enrolled in at least 6 units of course work during each campus term. The performance of students will be reviewed after each Campus Term and each Work Term. Students whose performance is deemed to be unsatisfactory by the Computer Science and Mathematics Coop Committee may be required to withdraw from the program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

Further information concerning the Cooperative Education Program in Mathematics may be obtained from the Department.

**UNDERGRADUATE COURSES**

**MATHEMATICS**

Students should consult the Department concerning courses offered in any particular year.

**MATH 012 (no credit) PRECALCULUS MATHEMATICS** (3 fee units)  
The essentials of Algebra 12 which are prerequisite to Mathematics 100 and 102. Topics covered include: set language, algebra of polynomials, relations, functions and their graphs, conics, trigonometry, plane analytic geometry. September-December. Also January-April (3-0)

**MATH 100 (1½) CALCULUS I**  
Review of analytic geometry; functions and graphs; limits; derivatives; techniques and applications of differentiation; antiderivatives; the definite integral and area; logarithmic and exponential functions; trigonometric and hyperbolic functions. (Prerequisite: Algebra 12 or its equivalent) (There is a special section of 100 available September-December for students who are well prepared in Mathematics and who wish to take a challenging course in the subject. A prerequisite for this section is a grade of A in Algebra 12. Note: All sections of 100 take a common final examination.) (Not open to students who have credit in 102 or 130. See Note 1 on left)

September-December. Also January-April (3-0-1)

**MATH 101 (1½) CALCULUS: II**  
Volumes; arc length and surface area; techniques of integration with applications; Newton's method, trapezoidal and Simpson's rules; polar coordinates and area; l'Hospital's rule; Taylor's formula; improper integrals; series and tests for convergence; power series and Taylor series. (Prerequisite: 100 or equivalent) (There is a special section of 101 available January-April for students who are well prepared in Mathematics and who wish to take a challenging course in the subject. A prerequisite for this section is a grade of A- or better in Mathematics 100. Note: All sections of 101 take a common final examination.) (Not open to students with credit in 130)

September-December. Also January-April (3-0-1)

**MATH 102 (1½) CALCULUS FOR STUDENTS IN THE SOCIAL AND BIOLOGICAL SCIENCES**  
Calculus of one variable with applications to the social and biological sciences. Exponential growth. (Prerequisite: Algebra 12 or its equivalent) (Not open to students who have credit in 100. See Note 1 on left)

September-December. Also January-April (3-0)

**MATH 133 (1½) MATRIX ALGEBRA FOR ENGINEERS**  
Complex numbers; matrices and basic matrix operations; vectors; linear equations; determinants; eigenvalues and eigenvectors; linear dependence and independence; orthogonality. (Prerequisite: Admission to the Faculty of Engineering) (Not open to students with credit in 110 or 233A)

September-December (3-0-1)

**MATH 151 (1½) FINITE MATHEMATICS**  
Geometric approach to linear programming, linear systems. Gauss-Jordan elimination, matrices, permutations and combinations, basic laws of probability, conditional probability, independence, urn problems, tree diagrams and Bayes formula, random variables and their

probability distributions; Bernoulli trials and the binomial distribution, hypergeometric distribution, expectation, applications of discrete probability. (Prerequisite: Algebra 12 or its equivalent, or MATH 012, which may be taken concurrently during the first term) (Students who have credit for 352 may not register in 151 for credit.)

September-December. Also January-April (3-0)

#### **MATH 152 (1½) MATHEMATICS OF FINANCE**

Compound interest and annuities-certain; analysis of securities, yield rates; equations of value; mortgages, amortization, sinking funds; depreciation, depletion and capitalization costs; mortality tables, life insurance and annuities. (Prerequisite: Algebra 12. Students are urged to take at least one of the following courses first or concurrently: 100, 102, or 151. See Note (1) page 103) (This course will not be offered after September 1985.)

September-December (3-0)

#### **MATH 160 (3) FUNDAMENTAL ASPECTS OF MATHEMATICS FOR THE ELEMENTARY TEACHER**

(Prerequisite: Algebra 11 or consent of the Department. See Note 1 page 103) (The credit a student receives towards a degree program in the Faculty of Arts and Science for 160 will be reduced by the number of units, up to three, of credit the student receives or has received for any other university level Mathematics course.)

September-April (3-0; 3-0)

#### **MATH 180 (3) THINKING MATHEMATICALLY**

Intended primarily for students who, although they do not plan to specialize in the exact sciences, nevertheless seek an opportunity to think mathematically. To this end the instructor will deal with worthwhile problems that admit elementary treatment, selected from such topics as matrix algebra, combinatorics, probability, and the calculus. (Prerequisite: Algebra 11 or Mathematics 11 or equivalent) (Not open to students who have completed or are concurrently registered in Algebra 12 or Mathematics 12 or MATH 012. See Note 1 page 103) (The credit a student receives towards a degree program in the Faculty of Arts and Science for 180 will be reduced by the number of units, up to three, of credit the student receives or has received for any other university level Mathematics course.)

(Not offered)

September-April (3-0; 3-0)

#### **MATH 200 (1½) CALCULUS OF SEVERAL VARIABLES**

Vectors and vector functions; solid analytic geometry; partial differentiation; directional derivatives and the gradient vector; Lagrange multipliers; multiple integration with applications; cylindrical and spherical coordinates; surface area; line integrals and surface integrals; Green's Theorem; the divergence theorem. (Prerequisite: A grade of C or higher in 101 or 130) (Not open to students with credit for 230 or 231)

September-December. Also January-April (3-0-1)

#### **MATH 201 (1½) INTRODUCTION TO DIFFERENTIAL EQUATIONS**

First order differential equations: linear, separate, exact, homogeneous equations and applications; second order linear equations and applications; solution in series; the Laplace transform; nonlinear equations; the phase plane. (Prerequisite: 200 or a grade of B or higher in 101) (Not open to students with credit for 230 or 231)

September-December. Also January-April (3-0-1)

#### **MATH 222 (1½) DISCRETE MATHEMATICS**

An introduction to discrete mathematical structures with applications. Sets and propositions. The principle of inclusion and exclusion. Permutations and combinations. Relations and functions. Graphs; shortest paths, Eulerian and Hamiltonian paths and circuits, spanning trees and cut-sets. Generating functions and recurrence relations. Boolean algebras and their applications. (Prerequisite: 101, or 102 and 151) (Not open for credit to students with credit in 422 and/or 423)

September-December. Also January-April (3-0)

#### **MATH 233A (1½) MATRIX ALGEBRA: I**

Matrices: simultaneous equations; determinants; vectors in 2-, 3- and n-tuple space; inner product; linear independence and rank; change of coordinates; rotation of axes in 2- and 3-dimensional Euclidean space; orthogonal matrices; eigen values and eigenvectors. (Prerequisite: 3 units of 100 level mathematics courses; a student who has received an A grade in Algebra 12 or Mathematics 12 may apply to the Department for a waiver of this prerequisite.) (Not open to students with credit for 110)

September-December (3-0)

#### **MATH 233B (1½) MATRIX ALGEBRA: II**

This course is not intended for students majoring in mathematics. Eigen values, eigenvectors and diagonalization of complex matrices with applications; orthogonal and unitary matrices; positive definite matrices with applications. (Prerequisites: 100 or 102, and 233A or 110 or 133) (Not open to students with credit for 333C)

January-April (3-0)

#### **MATH 233C (1½) INTRODUCTION TO ALGEBRA**

The integers, induction, factorization, congruences. Definition and examples of rings, fields and integral domains. Rational numbers, real numbers, complex numbers. Polynomials and their factorization. Permutations; definition and examples of groups. Additional topics chosen from Boolean algebras and lattices; transfinite arithmetic. (Prerequisite: 233A or 110 or 133, and a grade point average of at least 3.00 in all 200 level mathematics and statistics courses completed) (This course is intended primarily for Mathematics students.)

January-April (3-0)

#### **MATH 240 (3) MATHEMATICS FOR STUDENTS IN ECONOMICS AND COMMERCE**

Techniques of integration; multivariable calculus; optimization; difference and differential equations with applications; linear programming; further topics in probability and linear algebra. (Prerequisite: 151 and 102, or 151 and 100) (Students who have obtained credit for 100 and 101 (130) may enroll for 240 provided they enroll for 151 concurrently) (Not open to students with credit for 200, 201 (230), or 231)

September-April (3-0; 3-0)

#### **MATH 242 (1½) MATHEMATICS OF FINANCE**

Compound interest and annuities-certain; analysis of securities, yield rates; equations of value; mortgages, amortization, sinking funds; depreciation, depletion and capitalization costs; mortality tables, life insurance and annuities. (Prerequisite: 102 and 151, or 101 and some knowledge of probability) (Not open to students with credit for Mathematics 152)

January-April (3-0)

**Students with a D grade in Second Year Mathematics courses are advised not to register for further courses in Mathematics.**

#### **MATH 323A (1½) APPLIED DIFFERENTIAL EQUATIONS: I**

A review of the material on differential equations covered in Mathematics 201, 230 and 231. Special methods for first order differential equations, linear differential equations of first and higher orders with constant coefficients, Euler's equations, series solutions of selected second order differential equations with variable coefficients with special attention to Bessel's, Legendre's and hypergeometric equations. Laplace transforms and their applications to initial-value problems. (Primarily for students in the Physical Sciences) (Prerequisite: 200 and 201 (230)) (Credit may not be obtained for both 323A and 325. This course may not in general be included as part of the Mathematics Department's requirements for the Major or Honours degree.)

September-December (3-0)

#### **MATH 323B (1½) APPLIED DIFFERENTIAL EQUATIONS: II**

Systems of linear differential equations, numerical methods, boundary value problems including orthogonal functions and Fourier series. Partial differential equations and their applications to problems in physics. (Primarily for students in the Physical Sciences) (Prerequisite: 323A) (Credit may not be obtained for both 323B and 326. This course may not in general be included as part of the Mathematics Department's requirements for the Major or Honours degree.)

January-April (3-0)

#### **MATH 325 (1½) ORDINARY DIFFERENTIAL EQUATIONS**

First order equations: methods of solution, geometrical interpretation, singular solutions; Numerical methods, higher order linear equations, linear systems, series solutions, Bessel's equation, the Legendre equation, and solutions of equations by Laplace transforms. (Prerequisites: 200 and 201 and 110 or 133 or 233A. Corequisite: 330A or 334) (Credit may not be obtained for both 323A and 325.)

September-December (3-0)

#### **MATH 326 (1½) PARTIAL DIFFERENTIAL EQUATIONS**

Derivation by means of the calculus of variations and the divergence theorem of some of the fundamental equations of mathematical physics. Classification of second order equations; well posed problems. Fourier series and separation of variables. Initial value, boundary value, and initial boundary value problems. (Prerequisite: 325) (Credit may not be obtained for both 323B and 326.)

January-April (3-0)

**MATH 330A (1½) ADVANCED CALCULUS**

Sequences and series of real numbers; sequences and series of real valued functions; uniform convergence; Fourier series; differentiation and integration of series of real valued functions; power series; Taylor series; Taylor's formula with remainder. (Prerequisite: 200 and 201 (230) (Not open to students who have credit for 334) September-December (3-0)

**MATH 330B (1½) INTRODUCTION TO COMPLEX VARIABLES**

An introduction to the theory of functions of a complex variable, analytic functions, elementary functions, integration, power series, residue theory. (Prerequisite: 330A) (Not open to students who have credit for 338) January-April (3-0)

**MATH 333A (1½) ABSTRACT ALGEBRA: I**

Groups, rings and fields, including quotient structures. (Prerequisite: 233C or permission of the Department) September-December (3-0)

**MATH 333C (1½) LINEAR ALGEBRA**

Vector spaces and linear transformations; the canonical forms; inner product spaces and the spectral theorem. (Prerequisite: 233C or 233B or 210) January-April (3-0)

**MATH 334 (1½) FOUNDATIONS OF ANALYSIS**

Sets and functions, the real number system, set equivalence, sequences and series, introduction to point set and metric topology, limits and continuity in metric spaces. (Primarily for Honours students. Not open to students who have credit for 335 or 430.) (Prerequisites: 200 and 201 (230) and the consent of the Department) September-December (3-0)

**MATH 336 (1½) REAL ANALYSIS: I**

Theory of differentiation; Riemann-Stieltjes integration; Fourier series; functional analysis. (Primarily for Honours students. Not open to students who have credit for 335) (Prerequisite: 334) January-April (3-0)

**MATH 338 (1½) INTRODUCTION TO COMPLEX ANALYSIS**

Elementary functions of a complex variable, analytic functions, differentiation and integration of functions of a complex variable, power series and residue theory. (Primarily for Honours students. Not open to students who have credit for 330B) (Prerequisite: 334) January-April (3-0)

**MATH 352 (1½) DISCRETE PROBABILITY**

Discrete sample spaces, probability as a function of events on a sample space, combinatorial analysis, combination of events, inclusion-exclusion formulas, conditional probability, stochastic independence, law of large numbers, special discrete probability distributions. (Prerequisite: 200 or 201) (Not open to students who have credit for 350) September-December (3-0)

**MATH 362 (1½) ELEMENTARY NUMBER THEORY**

Divisibility, primes, congruences, arithmetic functions, primitive roots, quadratic residues, basic representation and decimals, and a selection from the following topics: Pythagorean triples, representation as sums of squares, infinite descent, rational and irrational numbers, distribution of primes. (For Mathematics Majors and Honours students, and for students planning to teach mathematics in secondary schools. Not open to students who have credit for 460.) (Prerequisite: 3 units of 200 level mathematics courses) September-December (3-0)

**MATH 368A (1½) EUCLIDEAN GEOMETRY**

The real affine and projective planes; Euclidean geometry; modern elementary geometry; elementary transformations; Euclidean constructions; the fundamental theorem of polygonal dissection; projectivities; proper conics. (Prerequisite: At least six units of mathematics or the consent of the Department) (Not open to students with credit for 366) September-December (3-0)

**MATH 368B (1½) NON-EUCLIDEAN GEOMETRY**

The parallel postulate; hyperbolic geometry; elliptic geometry; double elliptic geometry; the Poincaré model. (Prerequisite: At least six units of mathematics or the consent of the Department) January-April (3-0)

**NOTE: Admission to the following courses is by permission of the instructor or the Department.**

**MATH 422 (1½) COMBINATORIAL MATHEMATICS**

Permutations and combinations, generating functions, recurrence relations, inclusion-exclusion principle. Mobius inversion, Polya's enumeration theorem. Ramsey's theorem, systems of distinctive

representatives, combinatorial designs, algorithmic aspects of combinatorics. (Prerequisite: 333A) January-April (3-0)

**MATH 423 (1½) GRAPH THEORY**

An introduction to the combinatorial, algorithmic and algebraic aspects of graph theory. (Prerequisite: 333A) September-December (3-0)

**MATH 430 (1½) TOPICS IN REAL ANALYSIS**

A selection from the following topics: Cauchy or Dedekind construction of the real numbers; cardinality of integers, rationals and reals (types of infinities), open and closed sets; Heine-Borel and Bolzano-Weierstrass theorems; basic theorems from calculus. (Not open to students who have credit for 334 or 335) (Primarily for students in Secondary Education or those taking a Major in Mathematics) (Prerequisite: 330A or consent of the Department) January-April (3-0)

**MATH 431 (1½) TOPICS IN COMPLEX ANALYSIS**

A continuation of the complex analysis begun in Mathematics 330B. (Primarily for students taking a Major in Mathematics) (Prerequisite: 330B or 338) (Not offered) (3-0)

**MATH 433C (1½) ABSTRACT ALGEBRA: II**

Field theory; composition series of groups; Galois Theory. (Prerequisites: 333A, and 333C or 333B) (Not offered) (3-0)

**MATH 433D (1½) APPLIED ALGEBRA**

A survey of the applications of algebraic structures in computer science, applied mathematics, and electrical engineering. Topics to be covered include: switching circuits, finite state machines, state diagrams, machine homomorphism, group and matrix codes. Optional topics include Polya-Burnside enumeration, Latin squares, primality testing. (Prerequisite: 333A) January-April (3-0)

**MATH 435 (1½) REAL ANALYSIS: II**

Lebesgue measure and integration. The  $L_p$  spaces. Introduction to Hilbert and Banach spaces. (Primarily for Honours students) (Prerequisites: 334 and 336 or the consent of the Department) September-December (3-0)

**MATH 445A (1½) ADVANCED ORDINARY DIFFERENTIAL EQUATIONS**

Existence; uniqueness; continuous dependence; series solutions; examples and convergence; the Sturm-Liouville theory, Fourier series; convergence and completeness; attractors; other topics as time permits. (Prerequisites: 334 and 336 or the consent of the Department) January-April (3-0)

**MATH 445B (1½) ADVANCED PARTIAL DIFFERENTIAL EQUATIONS**

The Cauchy-Kowalewskaya theorem; geometric theory of first order partial differential equations; well posed problems; elliptic equations; semigroups. (Prerequisites: 334 and 336 or consent of the Department) September-December (3-0)

**MATH 452 (1½) STOCHASTIC PROCESSES**

Introduction to the branch of probability theory which deals with the mathematical analysis of systems that evolve in time while undergoing chance fluctuations. Main topics include random walks, Markov chains, Poisson processes, birth and death processes, renewal theory. Examples illustrate wide applicability of stochastic processes in many branches of science and technology. (Prerequisites: 330A or 334, and either 352 or STAT 350) January-April (3-0)

**MATH 462 (1½) NUMBER THEORY**

A selection of topics which may include compositions and partitions, geometry of numbers, rational approximation, distribution of primes, order of magnitude of arithmetic functions, proofs of the Prime Number Theorem and of Dirichlet's Theorem on primes in arithmetic progressions, continued fractions. (Not open to students who have credit for 460; 362 and 462 together form the equivalent of 460) (Prerequisites: Grade of B- or higher in 362, and consent of the instructor) January-April (3-0)

**MATH 465 (1½) INTRODUCTION TO TOPOLOGY**

Basic concepts of point set topology. (Prerequisite: 334, which may be taken concurrently, or 330A or the consent of the Department) September-December (3-0)

**MATH 468 (1½) TOPICS IN GEOMETRY**

Appropriate topics may be selected from among the following: finite Desarguesian spaces; symmetry geometry; polyhedra; geometric designs and tactical configurations; axiomatics. Since the same topic will not be offered in two successive years, the course may be repeated for credit. (Prerequisite: 368A or the consent of the Department) (Not offered) (3-0)

**MATH 490 (1½ or 3) DIRECTED STUDIES IN MATHEMATICS**

Students must consult the Department before registering. This course may be taken more than once in different fields with permission of the Chairman of the Department.

**MATH 491A (1½) TOPICS IN APPLIED MATHEMATICS**

Through this course the Department offers advanced topics in various areas of applied mathematics. Possible topics include population modeling, stochastic processes, discrete optimization, actuarial mathematics, calculus of variations, and fluid mechanics. Information on the topics available in any given year will be available from the Chairman of the Department. Entry to this course will be restricted to third or fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chairman of the Department. September-December (3-0)

**MATH 491B (1½) TOPICS IN PURE MATHEMATICS**

Through this course the Department offers advanced topics in various areas of pure mathematics. Possible topics include advanced complex analysis, functional analysis, introduction to manifolds, introduction to differential geometry, and mathematical logic. Information on the topics available in any given year will be available from the Chairman of the Department. Entry to this course will be restricted to third or fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chairman of the Department. January-April (3-0)

**STATISTICS****STAT 250 (formerly half of 253) (1½) INTRODUCTION TO STATISTICS: I**

Elementary probability theory; random variables, discrete and continuous probability distributions, expectation; joint distributions; linear functions of random variables; basic principles of statistical inference; random sampling; point estimates and their standard errors; interval estimation; one- and two-sample problems; an introduction to hypothesis testing, probability value. (Prerequisite: MATH 100 or 102) September-December. Also January-April (3-0)

**STAT 251 (formerly half of 253) (1½) INTRODUCTION TO STATISTICS: II**

Hypothesis testing; sampling distributions; introduction to analysis of variance, regression and correlation; analysis of contingency tables; tests for goodness of fit; nonparametric methods. (Prerequisite: Grade of C+ or higher in 250, or 254 and permission of the Department) January-April (3-0)

**STAT 254 (1½) PROBABILITY AND STATISTICS FOR ENGINEERS**

Probability axioms, properties of probability, counting techniques, conditional probability, independence, random variables, discrete and continuous probability distributions, expectation, variance; binomial, hypergeometric, negative binomial, Poisson, uniform, normal, gamma and exponential distributions; discrete and continuous joint distributions, independent random variables, expectation of functions of random vectors, covariance, random samples and sampling distributions, central limit theorem; point and interval estimation for one and two sample problems; linear regression and correlation. (Prerequisite: Admission to the Faculty of Engineering. Corequisite: MATH 200) (Credit may not be obtained for both 254 and 250) September-December (3-0-1)

**STAT 350 (1½) MATHEMATICAL STATISTICS: I**

Discrete and continuous probability models, random variables and their distributions, mathematical expectation, moment generating functions, sums of random variables, limit theory, and sampling distributions. Emphasis on the probability theory needed for 351. (Prerequisites: 251 and MATH 200) (Not open to students who have credit for 450) September-December (3-0)

**STAT 351 (1½) MATHEMATICAL STATISTICS: II**

Brief introduction to decision theory, point and interval estimation, hypothesis testing; regression and correlation, analysis of variance. Emphasis on the mathematics of statistics. (Prerequisite: 350) (NOTE: Not open to students who have credit for 451) January-April (3-0)

**STAT 353 (1½) APPLIED REGRESSION ANALYSIS**

An outline of linear regression theory with applications. (Prerequisite: 250 and 251, or 253, or MATH 353 or permission of the instructor) September-December (3-0)

**STAT 354 (1½) SAMPLING TECHNIQUES**

Principal steps in planning and conducting a sample survey. Sampling techniques including stratification, systematic sampling and multistage sampling. Practical survey designs with illustrations. Nonsampling errors. (Prerequisite: 250 and 251, or 253, or MATH 343 or permission of instructor) January-April (3-0)

**STAT 453 (1½) THE DESIGN AND ANALYSIS OF EXPERIMENTS**

An introduction to the principles of experimental design and the techniques of analysis of variance. A discussion of experimental error, randomization, replication, and local control. Analysis of variance is developed for single factor and multifactor experiments. The use of concomitant observations. Multiple comparisons and orthogonal contrasts. (Prerequisites: 251 or 253; 353 or some experience or familiarity with experimentation) September-December (3-0)

**STAT 454 (1½) TOPICS IN APPLIED STATISTICS**

Possible topics include: Multivariate analysis, multidimensional scaling methods, clustering methods, and time series analysis. (Prerequisites: 353 and the consent of the instructor) January-April (3-0)

**GRADUATE COURSES****MATHEMATICS**

The Department of Mathematics offers graduate programs leading to the degrees of Master of Arts and Master of Science in Pure Mathematics, Applied Mathematics and Statistics

Students should consult the Department of Mathematics concerning courses offered in any particular year.

**MATH 500A (1½) TOPICS FOR TEACHERS: DIRECTED STUDIES****MATH 500B (1½) TOPICS FOR TEACHERS: COMBINATORICS AND GRAPH THEORY****MATH 500D (1½) TOPICS FOR TEACHERS: DISCRETE PROBABILITY THEORY AND APPLICATIONS**

(Not open to students who have credit for 350 or 352)

**MATH 500E (1½) TOPICS FOR TEACHERS: FINITE ALGEBRAIC SYSTEMS****MATH 500F (1½) TOPICS FOR TEACHERS: HEURISTICS****MATH 500G (1½) TOPICS FOR TEACHERS: NUMERICAL METHODS**

(Not open to students who have credit for 349 or CSC 349)

Except by permission of the Dean of Graduate Studies, the above courses are open only to students in the M.Ed. (Mathematics) program.

**MATH 501A (1½) APPLIED STATISTICS**

An introduction to statistical methodology with particular emphasis on basic statistical principles, criteria for the selection of statistical principles, application of statistical procedures.

**MATH 501B (1½) NUMERICAL METHODS: I**

Numerical methods using the computer for solving mathematically posed problems which cannot be solved conveniently with exact formulas.

**MATH 501C (1½) SIMULATION**

Methods of studying the performance of systems by imitating their behaviour and an examination of the advantages, pitfalls and application of simulation methods.

**MATH 501D (1½) OPTIMIZATION**

Methods of maximizing and minimizing a function including linear and nonlinear programming, unconstrained optimization, dynamic programming, and a survey of available computer programs.

**MATH 501E (1½) APPLIED STOCHASTIC PROCESSES**

An examination of mathematical structures of process in which events take place in time or space according to probabilistic laws.

**MATH 501F (1½) PARTIAL DIFFERENTIAL EQUATIONS**

Specific partial differential equations such as the Laplace, diffusion, and wave equations, are studied as models for a wide range of application in continuum mechanics, fluid mechanics, theory of sound, electrostatics, etc.

**MATH 501G (1½) NUMERICAL METHODS: II**

Further coverage of numerical methods for problem solving with computers.

**MATH 501H (1½) MATHEMATICAL MODELS**

The formulation, analysis and interpretation of mathematical models of selected scientific topics.

**MATH 510 (2-4) ABSTRACT ALGEBRA****MATH 511 (2-4) TOPICS IN MATRIX THEORY AND LINEAR ALGEBRA****MATH 520 (2-4) NUMBER THEORY****MATH 530 (2-4) ANALYSIS****MATH 531 (2-4) FUNCTIONAL ANALYSIS****MATH 540 (2-4) TOPOLOGY****MATH 550 (2-4) TOPICS IN APPLIED MATHEMATICS****MATH 551 (2-4) DIFFERENTIAL AND INTEGRAL EQUATIONS****MATH 555 (2-4) TOPICS IN PROBABILITY****MATH 581 (2-4) DIRECTED STUDIES**

Directed studies may be available in the areas of faculty interest.

**MATH 585 (2-4) SEMINAR****MATH 599 (4-6) MASTER'S THESIS****STATISTICS****STAT 554 (2-4) TIME SERIES ANALYSIS****STAT 556 (2-4) TOPICS IN STATISTICS****STAT 557 (2-4) SAMPLING TECHNIQUES****STAT 558 (2-4) LINEAR AND NONLINEAR STATISTICAL MODELS****STAT 561 (2-4) DECISION THEORY AND STATISTICAL INFERENCE****STAT 562 (2-4) DISTRIBUTION FREE AND RANK ORDER STATISTICS**

## CENTRE FOR PACIFIC AND ORIENTAL STUDIES

Jan. W. Walls, B.A., M.A., Ph.D. (Indiana), Associate Professor and Director

Thomas K. Shoyama, B.A., B.Com. (Brit. Col.), Part time Visiting Professor (1984-85)

James A. Boutilier, B.A. (Dalhousie), M.A. (McMaster), Ph.D. (London), Part time, Adjunct Associate Professor (1984-85)

Daniel J. Bryant, B.A. Ph.D. (Brit. Col.), Associate Professor  
Hsin-i Hsiao, B.A., (Tunghai), M.A., Ph.D. (Harvard), Associate Professor

Yuen-Fong Woon, B.A., M.A. (Hong Kong), Ph.D. (Brit. Col.), Assistant Professor

Blake M. Young, B.A. (Alta.), M.A., Ph.D. (Brit. Col.), Assistant Professor

Yasu-Hiko Tohsaku, B.A., M.A. (Tokyo), M.A., Ph.D. (Calif.-San Diego), Assistant Professor

### PACIFIC STUDIES PROGRAM

The Interdisciplinary Pacific Studies Program, approved by the Senate in February 1969, is designed at present to provide a concentration in the area of Pacific Studies to be used for both general education and professional purposes. Its initiation stems from Canada's rapidly developing interest in the Pacific area, the location of Victoria in relation to the Pacific and a serious lack of knowledge about the area.

Students interested in the program should consult the Director, as soon as possible after entering the University, so guidance may be given to help in course selection during the first and second years.

Program requirements for a B.A. in Pacific Studies are as follows:

#### GENERAL

First and second years: 200. Students are also encouraged to take CHIN 100, 200 or JAPA 100, 200.

Third and fourth years: 9 units of upper level Pacific Studies courses which must be chosen from 311, 312, 319, 321, 412, 413, 414, 415, 419, 421, 490; and 6 other units of Pacific Studies courses or courses selected from the supporting course list below. Of these 15 units, each of the following regions must be covered by at least three units: Japan; China; Southeast Asia; Australia and/or Pacific Islands.

#### MAJOR

First and second years: 200, plus 3 more units selected from 252, CHIN 201, JAPA 201, ANTH 326, 327, 329. The Anthropology courses require 100A or B or 200 as a prerequisite, but 200 may be taken concurrently with a 300 level course. Students are also encouraged to take CHIN 100, 200 or JAPA 100, 200.

Third and fourth years: 15 units of upper level Pacific Studies courses which must be chosen from 311, 312, 319, 321, 412, 413, 414, 415, 419,

421, 490; and 9 other units of Pacific Studies courses or courses selected from the supporting course list below. Of these 24 units, each of the following regions must be covered by at least 3 units: Japan; China; Southeast Asia; Australasia and/or Pacific Islands.

*Supporting course list:* (Note: specific prerequisites are indicated in the course listings in departments but some departments have general prerequisites for upper level courses).

ANTH 326 (1½) Ethnology of Oceania: Micronesia and Polynesia  
ANTH 327 (1½) Ethnology of Oceania: Australia and Melanesia  
ANTH 329 (1½) Ethnology of Southeast Asia  
ANTH 418 (Sociology 418) (1½) Social Change  
ANTH 419 (Sociology 419) (1½) Modernization and Development  
BIOL 310 (3) Elements of Oceanography  
CHIN 201 (1½) Aspects of Chinese Culture  
CHIN 300 (3) Advanced Modern Chinese  
CHIN 302 (3) Introduction to Literature, in Translation  
CHIN 303A (1½) Topics in Chinese Thought: Legalism  
CHIN 303B (1½) Topics in Chinese Thought: Confucianism  
CHIN 304A (1½) Topics in Chinese Thought: Taoism  
CHIN 304B (1½) Topics in Chinese Thought: Buddhism  
CHIN 410 (3) Readings in Chinese Literature  
ECON 320 (1½) Economic Development  
ECON 323 (3) Comparative Economic Systems  
ECON 405 (3) International Economics  
ECON 420 (1½) Theory of Economic Development  
ENGL 439 (3) Commonwealth Literature  
GEOG 347 (3) Geography of Economics and Cultural Change  
GEOG 364 (1½) Geography of Traditional China  
GEOG 365 (1½) Geography of Modern China  
GEOG 463 (3) Geography of Southeast Asia  
GEOG 465 (3) Geography of Japan  
HA 231 (3) The Great Cultures of Asia  
HA 371 (1½) Early Chinese Art  
HA 372 (1½) Later Chinese Art  
HA 373 (1½) Early Japanese Art and Architecture  
HA 374 (1½) Early Japanese Art and Architecture  
HA 470 (3) Special Studies in Far Eastern Art  
HA 475 (1½ or 3) The Art and Architecture of Southeast Asia  
JAPA 201 (1½) Aspects of Japanese Culture  
JAPA 300 (3) Advanced Modern Japanese  
JAPA 302 (1½) Japanese Literature in Translation: From 1868 to the Present Day  
JAPA 400 (3) Readings in Modern Japanese Prose  
LING 360 (3) General Linguistics  
LING 361 (3) Anthropological Linguistics  
LING 395 (1½) Sociolinguistics

PHIL 287 (3) Eastern Philosophy  
 POLI 312 (3) Communist Political Systems  
 POLI 315 (1½) Government and Politics in the U.S.S.R.  
 POLI 317 (3) Politics of Developing Areas  
 POLI 445 (3) Comparative Foreign Policy  
 RUSS 301 (1½) Aspects of Russian Culture (in English)  
 SOCI 418 (Anthropology 418) (1½) Social Change  
 SOCI 419 (Anthropology 419) (1½) Modernization and Development

## PROGRAM IN CHINESE STUDIES

### GENERAL

First Year: 100

Second Year: 200

Third and Fourth Years: 300 plus six additional units of courses numbered 300 or above related to China and chosen in consultation with the Centre. Students eligible for placement in 410 may count it in place of 300 toward their General program.

Students who wish to proceed to the B.A. degree under the regulations for the General Program and who wish to study Chinese as one of their fields of concentration are urged to consider one of the following as their second field of concentration: Geography, History in Art, Pacific Studies, Linguistics or a second modern language.

## PROGRAM IN JAPANESE STUDIES

### GENERAL

First Year: 100

Second Year: 200

Third and Fourth Years: 300 plus six additional units of courses numbered 300 or above related to Japan and chosen in consultation with the Centre.

Students who wish to proceed to the B.A. degree under the regulations for the General Program and who wish to study Japanese as one of their fields of concentration are urged to consider one of the following as their second field of concentration: Geography, History, Pacific Studies, Linguistics, or a second modern language.

## COURSES

### CHINESE

Students with advanced credit from secondary schools or colleges, or those with some knowledge of Chinese will be placed at an appropriate level.

Chinese language instruction with University credit for 100, 200, 300 or 410 is also available at East China Normal University in Shanghai during Summer Studies. Consult the Centre for details.

#### CHIN 100 (3) FIRST YEAR CHINESE

Systematic introduction of Mandarin pronunciation followed by elementary grammar and basic vocabulary. Students will learn to speak and understand simple sentences and to read and write about five hundred Chinese characters in both traditional and simplified forms. Note that 100 is not open to students who have a reading knowledge of Chinese.

J.W. Walls

September-April (3-1; 3-1)

#### CHIN 200 (3) SECOND YEAR CHINESE

A sequel to 100. More advanced grammar and idioms, and the introduction of an additional seven hundred Chinese characters. (Prerequisite: 100 or the equivalent)

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September-April (3-1; 3-1)

#### CHIN 201 (formerly 301) (1½) ASPECTS OF CHINESE CULTURE

A survey of the development of outstanding aspects of the Han Chinese intellectual and literary tradition from earliest times to the present day. The emphasis will be on religious, philosophical, and literary traditions, but some reference will be made to relevant historical and social background and to the visual arts, particularly painting. Most of the course will be concerned with the premodern period, but the effects of modern events on cultural life will be dealt with in a series of lectures toward the end of the term. No knowledge of Chinese is required. (Prerequisite: None, the course is open to all students)

January-April (3-0)

#### CHIN 300 (3) ADVANCED MODERN CHINESE

A sequel to 200; further practice in conversation together with the reading and translation of materials in modern Chinese. Introduction of elements of the classical language. (Prerequisite: 200 or equivalent)

September-April (3-1; 3-1)

#### CHIN 302 (3) INTRODUCTION TO CHINESE LITERATURE, IN TRANSLATION

A survey of Chinese literature from early times to the present day. The emphasis will be on poetry and fiction, but examples of drama and of historical and philosophical prose will be discussed as well. While the course will be concerned chiefly with the literary interest of the works to be discussed, relevant social and historical backgrounds will be introduced as appropriate. (Prerequisite: None, the course is open to all students). Texts: Cyril Birch, *Anthology of Chinese Literature*, Volumes 1 and 2; Liu Wuchi and Irving Lo, *Sunflower Splendour*; David Hawkes, *Story of the Stone*

(Not offered)

September-April (3-0; 3-0)

#### CHIN 303A (formerly half of 303) (1½) TOPICS IN CHINESE THOUGHT: LEGALISM

An analysis of selected topics in Legalism, with emphasis on interpretation of controversial issues in Legalist thought. Among the areas to be discussed are: 1) the role of Legalism in Chinese history, 2) current official interpretation of Legalism, 3) Shang Yang's New Law, 4) Shen Pu-hai's Legalism and Taoism, 5) Han Fei Tzu's synthesis of early Legalism, 6) Legal codes in imperial China — the Confucianization of Legalism. This course will be taught in English and is open to all students.

(Not offered)

September-December (3-0)

#### CHIN 303B (formerly half of 303) (1½) TOPICS IN CHINESE THOUGHT: CONFUCIANISM

An analysis of selected topics in Confucianism, with emphasis on the interpretation of controversial issues in Confucian thought. Among the areas to be discussed are: 1) current official interpretations of Confucianism, 2) the anti-Confucian movement during the May Fourth period, 3) early Confucianism vs. state Confucianism, 4) the cultivation of sagehood in neo-Confucianism, 5) Confucianism and traditional Chinese political culture, 6) contemporary reinterpretation of Confucianism. This course will be taught in English and is open to all students.

(Not offered)

January-April (3-0)

#### CHIN 304A (1½) TOPICS IN CHINESE THOUGHT: TAOISM

An analysis of selected topics in Taoist thought and its influence on Chinese culture. Among the areas to be discussed are: 1) the quest for immortality in early Taoism, 2) Taoist folk religion, 3) Taoist monastic life, 4) Taoist influence on literature and arts, 5) Taoist influence on political culture. This course will be taught in English and is open to all students.

H. Hsiao

January-April (3-0)

#### CHIN 304B (1½) TOPICS IN CHINESE THOUGHT: BUDDHISM

An analysis of selected topics in the Buddhist conquest of China and the Chinese transformation of Buddhism. Among the areas to be discussed are: 1) the introduction of foreign Buddhism in terms of native Taoist concepts, 2) resistance against Buddhism in Confucian gentry circles and Buddhist counter arguments, 3) conflict between Buddhism and Taoism, 4) the triumph of Buddhism in the Sui and Tang dynasties, 5) major schools of Buddhism in China, 6) Buddhism in modern China. This course will be taught in English and is open to all students.

H. Hsiao

September-December (3-0)

#### CHIN 410 (3) READINGS IN CHINESE LITERATURE

Reading, analysis, and discussion of selected literary works in Chinese. There will be periodic translation assignments and one essay during the year. Regular class discussions of the readings will provide an opportunity for students to improve their competence in spoken Mandarin. The content of Chinese 410 will vary from year to year. (May be taken more than once in different topics with the permission of the Director of the Centre, up to a maximum of 6 units) (Prerequisite: Chinese 300, or the equivalent, or permission of the Director of the Centre)

H. Hsiao

September-April (3-0); (3-0)

## JAPANESE

#### JAPA 100 (3) FIRST YEAR JAPANESE

First introductory course in the Japanese language. Japanese letters will be introduced from the beginning.

Y.-H. Tohsaku

September-April (3-1; 3-1)

#### JAPA 200 (3) SECOND YEAR JAPANESE

Reading and writing of Japanese script (Kana and Kanji), as well as conversational practice. (Prerequisite: 100 or its equivalent)

Y.-H. Tohsaku

September-April (3-1; 3-1)

**JAPA 201 (formerly 301) (1½) ASPECTS OF JAPANESE CULTURE**  
A survey of cultural developments in Japan from earliest times to the present. The major trends of Japanese history will be examined, with emphasis on the outstanding cultural innovations of each epoch, especially in the areas of literature, drama, philosophy and religion, and the visual arts. Relevant social backgrounds will also be considered. Lectures on modern Japan will include discussion of aspects of contemporary society, and Japan's importance in the world community. No knowledge of Japanese is required. (Prerequisite: None, the course is open to all students)  
B.M. Young September-December (3-0)

**JAPA 260 (Ling 260) (1½) INTRODUCTION TO THE JAPANESE LANGUAGE AND LINGUISTICS**  
A general introduction to the synchronic and diachronic descriptions of Japanese; subjects covered may include: phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Japanese, the relationship between Japanese language, thought, and culture, and the history of Japanese linguistics. (Previous knowledge of Japanese not necessary)  
Y.-H. Tohsaku September-December (3-0)

**JAPA 300 (3) ADVANCED MODERN JAPANESE**  
A continuation of Japanese 200, designed to broaden the student's grasp of the grammar, vocabulary, and writing system of modern Japanese. Lectures will include further practice in conversation, together with reading and translation of selected materials. (Prerequisite 200 or its equivalent)  
B.M. Young September-April (3-1; 3-1)

**JAPA 302 (1½) JAPANESE LITERATURE IN TRANSLATION: FROM EARLIEST TIMES TO 1867**  
A survey, through material in English translation, of Japanese literature from its earliest beginnings to the eve of the Meiji Restoration. Prose, poetry, and drama, with selected readings from each of these literary forms, will be discussed. Where appropriate, relevant social and historical backgrounds will be examined. (Prerequisite: None, the course is open to all students)  
B.M. Young January-April (3-0)

**JAPA 303 (1½) MODERN JAPANESE LITERATURE IN TRANSLATION: FROM 1868 TO THE PRESENT DAY**  
A survey, through selected English translations, of Japanese literature since the Meiji Restoration. During this period Japan has been in constant contact with the outside world. Dramatic changes have taken place under Western influence, yet much that is uniquely Japanese remains. The course will consider both the traditional and the modern elements in contemporary Japanese literature. (Prerequisite: None, the course is open to all students) (This course will alternate with 302; next offered 1986-87)  
(Not offered) (3-0)

**JAPA 400 (3) READINGS IN MODERN JAPANESE PROSE**  
A graduated series of readings in modern Japanese, designed to broaden the students' acquaintance with the Japanese writing system, expand their working vocabulary, and give a firmer grounding to their general knowledge of the language. (Prerequisite: 300 or equivalent)  
B.M. Young September-April (3-0)

## PACIFIC STUDIES

**PACI 200 (formerly 300) (3) CULTURAL CONTACT AND SOCIAL CHANGE IN THE PACIFIC REGION**  
This is an interdisciplinary course serving as an introduction to the political, social and economic development of the Pacific Region from about 1500 to the present. Using selected case studies as illustrations, it depicts the causes, processes and effects of contact between the West on the one hand and the Far East, Southeast Asia and Oceania on the other. It includes such topics as prewar colonial activities, anticolonial movements and decolonization processes in the postwar era and the present economic and political relationships in the Pacific region; trans-Pacific migrations; ethnic relations; modernization and cultural change in the Pacific Region. This course provides an insight into Canada's role in the Pacific as well as a key to understanding peoples of Asian and Oceanic origin in British Columbia.  
Y.F. Woon September-April (3-0; 3-0)

**PACI 252 (HIST 252) (3) INTRODUCTION TO CHINESE AND JAPANESE CIVILIZATIONS**  
The purpose of this course is to introduce the student to the traditional civilizations of China and Japan. Though a survey of many thousands of years in so short a space in time must of necessity be selective, the course will consider topics in political, social, intellectual, and economic history of the two civilizations. (Students interested in this course may also be interested in CHIN 201, 302, 303, JAPA 201, 302.)  
E.P. Tsurumi, R.C. Croizier September-April (3-0; 3-0)

**PACI 311 (formerly 411/400) (1½) INTRODUCTION TO BIBLIOGRAPHY AND RESEARCH METHODS FOR PACIFIC STUDIES**  
An introduction to bibliography and research methods in Pacific Studies. Attention will be focused on the location, evaluation, and use of source materials in Western languages concerning China, Japan and selected countries of Southeast Asia. Lectures will concentrate on the introduction of fundamental references and working principles; seminars and written assignments will aim at the application of these to specific problems or disciplines of interest to the students enrolled. Insofar as possible, seminar and written assignment topics will be chosen with the regional interest of the student in mind. (Prerequisite: 200 (or 300); preference in enrollment given to students majoring in Pacific Studies or a closely related field)  
September-December (3-0)

**PACI 312 (1½) MINORITY PROBLEMS AND THE STATE IN SOUTHEAST ASIA**  
Using ethnic relations in Southeast Asian societies as case studies, this course questions the applicability of the "melting pot" theory to developing nations. It looks at minority problems in Southeast Asia as manifestations of power struggle between pressure groups and authority. (Prerequisite: 200 (or 300) or permission of the instructor)  
Y.F. Woon January-April (3-0)

**PACI 319 (1½) (formerly half of 320) SOCIAL STRUCTURE AND SOCIAL CHANGE IN CHINA**  
This course attempts to provide interpretations for the "development of underdevelopment" of China: the various structural, cultural as well as external barriers obstructing China's various attempts to modernize and industrialize in the 19th and early 20th centuries. It also examines the counter culture of China in the form of secret societies and peasant movements which paved the way for the triumph of Mao in 1949. (Prerequisites: 200 (or 300), or 252, or permission of the instructor) (This course will alternate with 321; next offered 1986-87)  
(Not offered) (3-0)

**PACI 321 (1½) (formerly half of 330) SOCIAL STRUCTURE AND SOCIAL CHANGE IN JAPAN**  
This course is an attempt to provide an understanding of the Meiji "miracle". It discusses the preconditions of development as well as the effects of economic growth on the various aspects of the Japanese society such as the polity, the urban and rural social structure and the Japanese family. It also deals with the problem of the applicability of the Meiji model to developing countries. (Prerequisite: 200 (or 300), or 252, or permission of the instructor)  
Y.F. Woon September-December (3-0)

**PACI 324 (ECON 324) (1½) ECONOMIC DEVELOPMENT IN SOUTHEAST ASIA**  
Economic performance and economic institutions of countries in Southeast Asia with special reference to Indonesia, Malaysia, the Philippines, and Thailand; focus will be mainly on current issues and on international economic relations of the region with the rest of Asia and with North America. (Prerequisite: 200; and either ECON 100 or 201, or permission of the Centre)  
I.-D. Pal September-December (3-0)

**PACI 364 (LING 364) (1½) LANGUAGES IN THE PACIFIC AREA**  
A survey of languages spoken on the islands of the Pacific Ocean (Indonesia, Philippines, Melanesia, Micronesia and Polynesia), their genetic relationships and area groupings; specific languages and families are selected for more detailed discussion, illustrating issues of relevance to linguistic theory and analysis, applied linguistics and sociolinguistics. (Prerequisite: None; LING 100 recommended)  
(Not offered) (3-0)

**PACI 365 (LING 365) (1½) SEMINAR ON A PACIFIC AREA LANGUAGE: STRUCTURE, CONTEXT AND USAGE**

This course deals each time with a different specific language spoken in Pacific Asia (except for Mandarin Chinese and Japanese) and on the Pacific Islands. Topics covered include phonological and grammatical structure, genetic relationships to others of its family, social and cultural context, political importance, use in the mass media and education, literature in the language, and the problems of language policy and planning. The language considered in a given term may be Korean, Tagalog, Chamorro, Palauan, Ainu, Tongan, Hawaiian, Samoan, Cantonese, Fijian, pidgin English and so on. May be repeated for credit up to a maximum of six units. (Prerequisite: LING 100 or PACI/LING 364) (3-0)

**PACI 371 (H A 371) (1½) EARLY CHINESE ART**

A comprehensive study of the rise and development of the major art forms in China from the Neolithic through the T'ang periods; areas of study will include ritual bronzes of the Shang and Chou dynasties, tomb sties, Buddhist sculpture and painting, ceramics and early secular painting, all within the social and historical background in which these forms developed. September-December (3-0)

**PACI 372 (H A 372) (1½) LATER CHINESE ART**

A comprehensive study of later Chinese art, from the Sung through the Ch'ing dynasties, including ceramics, furniture and other minor arts; the major focus will be on the development of painting, including landscape painting, court styles and the literati school. January-April (3-0)

**PACI 373 (H A 373) (1½) EARLY JAPANESE ART AND ARCHITECTURE**

A comprehensive study of the history of Japanese art and architecture from the prehistoric period through the Kamakura period; areas of study will include Jomon ceramics, religious and secular architecture, Buddhist sculpture and painting, and secular painting. There will be emphasis on the social and historical backgrounds of the art forms, the literature of the later periods, and on the absorption and transformation of continental influences into Japanese forms. September-December (3-0)

**PACI 374 (H A 374) (1½) LATER JAPANESE ART AND ARCHITECTURE**

A comprehensive study of Japanese art and architecture from the Muromachi through Tokugawa periods, including Zen architecture and painting, tea ceremony architecture and wares, the decorative schools of painting, Ukiyoe paintings and prints and Nanga painting, all studied within their historical context. January-April (3-0)

**PACI 412 (1½) SEMINAR IN EAST AND SOUTHEAST ASIAN STUDIES**

A detailed analysis of some problems in East and/or Southeast Asia. Where appropriate, attention will be paid to Canada's relationships to the area. Details of topics to be covered can be obtained from the Program Director prior to registration. (Prerequisite: 200 (or 300) or permission of the instructor) (Not offered) (3-0)

**PACI 413 (1½) TOPICS IN AUSTRALASIA AND/OR PACIFIC ISLAND STUDIES**

An intensive study of selected major issues and topics in Australasia and/or the Pacific Islands. Students should consult the Director for details of the topics to be covered. (Prerequisite: 200 (or 300) or permission of instructor) J.A. Boutilier September-December (3-0)

**PACI 414 (1½) SEMINAR IN AUSTRALASIA AND/OR PACIFIC ISLAND STUDIES**

A detailed analysis of some problems in Australasia and/or the Pacific Islands. Where appropriate, attention will be paid to Canada's relationships to the area. Details of topics to be covered can be obtained from the Director prior to registration. (Prerequisite: 200 (or 300) or permission of the instructor) T.K. Shoyama January-April (3-0)

**PACI 415 (1½) SEMINAR ON CANADA AND PACIFIC ASIA**

A survey course on Canada's economic and political relationships in Pacific Asia, examining the evolving patterns of and prospects for trade and investment flows, technology transfer, development aid, resources diplomacy, and political, security and defence relationships. (Prerequisite: 200 (or 300)) T.K. Shoyama September-December (3-0)

**PACI 419 (1½) (formerly half of 320) SEMINAR ON MODERN CHINESE SOCIETY**

This seminar traces the various attempts by China to modernize since 1949. Students are expected to discuss strategies, problems and prospects of development for the First Five Years Plan to the present Four Modernizations Program and the reactions of the Chinese people to such attempts. Special attention will be given to discussion of the disparities between the principles and actual practices of the the "Chinese model", its impact on the various aspects of social life in China as well as the appeal of the "Chinese model" of development to the Third World countries. (Prerequisite: 319, or permission of the instructor) (This course will alternate with 421) (Not offered; next offered 1986-87) (3-0)

**PACI 421 (1½) (formerly half of 330) SEMINAR ON MODERN JAPANESE SOCIETY**

A case study of the sociopolitical aspect of Japan's emergence as an industrialized nation in the postwar period and the prospects of further development in the 1980's in view of the world energy crisis, environmental degradation, and other domestic problems as well as the rise of the civic movement. Students are expected to participate, through seminar presentations and other means, in the discussion of modern Japan as an industrial society as well as the degree of continuity and change in Japan's social structure and processes. (Prerequisite: 321, or permission of the instructor) Y.F. Woon January-April (3-0)

**PACI 433A (HIST 433A, formerly half of 433) (1½) ANCIENT CHINA**

A study of the rise of Chinese civilization and Empire from the earliest times to approximately 200 A.D. Major themes will be the origins of Chinese civilization, the flowering of Chinese philosophy in the times of Confucius and Lao-tzu, the formation of a unified Empire, and the social foundations of the Imperial State. (Prerequisites: HIST 252 or CHIN 201 or permission of the instructor) (Not offered) September-December (3-0)

**PACI 433B (HIST 433B, formerly half of 433) (1½) PRE-MODERN CHINA**

The development of Chinese civilization from the fall of the Han Empire in the third century A.D., through the reunification of China under the Tang, to the Manchu Conquest of China in 1644. Major attention will be given to the political and social dynamics of the Imperial State and to the cultural basis of Chinese civilization. (Prerequisites: HIST 252 or CHIN 201 or permission of the instructor) (Not offered) January-April (3-0)

**PACI 434A (HIST 434A, formerly half of 434) (1½) MODERN CHINA**

China's encounter with the modern West from the 19th century to the mid 20th century. Emphasis on the collapse of the traditional order and the search for new political, social, and cultural forms. (Prerequisite: None) R.C. Croizier September-December (3-0)

**PACI 434B (HIST 434B, formerly half of 434) (1½) CHINA IN REVOLUTION**

The roots of Chinese Communism, its rise to power, and the development of the People's Republic since 1949. Attention will also be given to China's new role in international politics. (Prerequisite: None) R.C. Croizier January-April (3-0)

**PACI 435 (HIST 435) (1½) FEUDALISM IN JAPAN: THE WAY OF THE WARRIOR FROM THE 12TH TO THE 19TH CENTURY**

A study of politics, economics, society and culture in medieval and Tokugawa Japan with emphasis upon the role of the samurai class. (Not offered) September-December (3-0)

**PACI 436A (HIST 436A, formerly half of 436) (1½) JAPAN'S MODERN TRANSFORMATION: FROM FEUDAL COUNTRY TO NATION-STATE**

The purpose of this course is, through a combination of lectures, student presentations, discussions and papers, to examine some of the problems which occur in the history of 19th and 20th century Japan. The format requires student participation throughout the course. Students are required to make class presentations, submit one short analytical paper and do one long research paper on a topic of their own choice. (Not open for credit to students who have credit in HIST 414) (Prerequisite: None) E.P. Tsurumi September-December (3-0)

**PACI 436B (HIST 436B, formerly half of 436) (1½) 20TH CENTURY JAPAN**

A study of modern Japanese society and culture in the 20th century. Special attention will be paid to the influences of Westernization and industrialization upon traditional modes of thought, work, everyday life and creative endeavours. Changes in family life in the cities and in the countryside will be examined. (Not open for credit to students who have credit in HIST 414) (Prerequisite: None)  
(Not offered) January-April (3-0)

**PACI 438 (HIST 438) (1½ or 3) TOPICS IN EAST ASIAN HISTORY**

An intensive study of selected aspects of East Asian history. Students are advised to consult the Department for information regarding the subjects to be considered. This course may be taken for credit more than once in different topics with permission of the Chairman of the Department. Topic: "History of Japanese Women"  
E.P. Tsurumi September-December (3-0)

**PACI 439 (HIST 439) (1½ or 3) SEMINAR IN EAST ASIAN HISTORY**

Selected topics in East Asian history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chairman of the Department) (3-0) or (3-0; 3-0)  
Topics: "Modern Japan"  
E.P. Tsurumi January-April (3-0)  
"Chinese Political Art in Comparative Historical Perspective"  
R.C. Croizier January-April (3-0)

**PACI 442 (formerly 460) (GEOG 442) (1½) GEOGRAPHY OF CHINATOWNS AND CHINESE MIGRATION**

This seminar studies the urban overseas Chinese communities in the

Pacific Rim countries. Major topics of discussion will include migration theory, concept of culture conflict, assimilation and acculturation, urban ethnicity, home environment of Chinese emigrants, attitudes and policies of host society towards Chinese immigrants and imprints of Chinese culture on the urban landscape of the receiving country. Emphasis will be placed on the Chinese migration to Canada and the study of the urban problems of Canadian Chinatowns.  
(Not offered) (3-0)

**PACI 447 (GEOG 447) (1½) URBAN PROBLEMS OF PACIFIC RIM DEVELOPING COUNTRIES**

The course examines the fundamental differences between urban organization in developed and developing countries, and studies the political, cultural and socioeconomic conditions under which cities in Pacific Rim developing countries are growing. (Prerequisite: GEOG 349 (formerly 340 and 305) or permission)  
D.C.-Y Lai September-December (3-0)

**PACI 475 (H A 475) (1½ or 3) THE ART AND ARCHITECTURE OF SOUTHEAST ASIA**

An examination of the sculpture and architecture of Southeast Asia of the precolonial periods, with emphasis on those of Cambodia and Indonesia; these works will be studied within their religious, social and political contexts. (3-0)

**PACI 490 (3) DIRECTED STUDIES**

This will normally involve readings and a research project in a particular area of Pacific Studies, in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member designated by the Pacific Studies Committee. (May be taken more than once in different topics with the permission of the Director of the Centre, up to a maximum of 6 units) (Prerequisite: 200 (or 300)  
Coordinator: Y.F. Woon

## DEPARTMENT OF PHILOSOPHY

John M. Michelsen, B.A., M.A., Ph.D. (Wash.), Associate Professor and Chairman of the Department  
Eike-Henner W. Kluge, B.A. (Calgary), A.M., Ph.D. (Mich.), Professor  
Charles G. Morgan, B.S. (Memphis St.), M.S., Ph.D. (John Hopkins), M.Sc. (Alta.), Professor  
Rodger G. Beehler, B.A. (Man.), B.Phil. (Oxon.), Ph.D. (Calgary), Associate Professor  
Charles B. Daniels, A.B. (Chicago), D. Phil. (Oxon.), Associate Professor  
Alan R. Dréngson, B.A., M.A. (Wash.), Ph.D. (Ore), Associate Professor  
Jeffrey E. Foss, B.A. (Alta.), M.A., Ph.D. (W. Ont.), Assistant Professor  
Monika Langer, B.A., M.A., Ph.D. (Tor.), Assistant Professor

### GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 214, for graduate courses, see page 114.

### GENERAL, MAJOR AND HONOURS PROGRAMS

**General** — 9 units of courses in Philosophy numbered 300 or above with all prerequisites satisfied.

**Major** — 21 units of courses in Philosophy comprising:

- Introduction to Philosophy (100)
- either Applied Logic: I (201) and Applied Logic: II (203) or Theoretical Logic (304A and 304B)
- Moral Philosophy (302)
- either The Rationalists (306) or The Empiricists and Kant (310)
- Plato (421) and Aristotle (422)
- 6 additional units in philosophy courses numbered 300 or higher.

NOTE: Although not required, students are encouraged to include at least one of the following: Existentialism (211), Philosophy of Religion (214), Philosophy of Science (222A/B), Aesthetics (242), and Medieval Philosophy (245).

**Honours** — 30 units in courses in Philosophy comprising:

- Introduction to Philosophy (100)
- either Applied Logic: I (201) and Applied Logic: II (203) or Theoretical Logic (304A and 304B)

(c) Moral Philosophy (302)

(d) The Rationalists (306)

(e) The Empiricists and Kant (310)

(f) Plato (421) and Aristotle (422)

(g) 12 additional units in philosophy of which at least 6 must be in courses numbered 300 or higher.

NOTE: To obtain a First Class Honours degree it is required that a student have (1) a graduating average of 6.50 or higher, (2) at least a first class average of 6.50 in all credit courses taken in Philosophy, and (3) at least a 7.00 average in all upper level courses completed in fulfillment of the minimum requirement of the honours program in philosophy. Upon completing the program, any student who meets requirement (1), but not (2) or (3), has the option of graduating with a first Class Major degree instead of with a Second Class Honours degree. To obtain a Second Class Honours degree, a student must have at least a 3.50 graduating average and have at least a 5.00 average in all credit courses taken in Philosophy.

### UNDERGRADUATE COURSES

NOTE: Courses in the 100 series are broader in scope than those in the 200 series, but neither type should present any difficulty for the beginner. Both types are recommended for students in any program whether they plan to continue in Philosophy or not, and may be taken in any year; e.g. courses in the 200 series may be taken in the first as well as in later years. Other courses in Philosophy may be taken by satisfying the listed prerequisites or with permission of the Instructor.

Fuller information on each course will be issued by the Department. This will include the reading required and the name of the Instructor. Students are advised to ask the Department for copies of the annual Departmental handbook prior to registration. Not all courses will be offered every year. To meet the requirements for a Major or Honours program in the minimum number of years, students should plan accordingly.

### PHIL 100 (3) INTRODUCTION TO PHILOSOPHY

A beginner's investigation of questions which govern attitudes towards life such as: Can the unjust man be happy? Is what is right simply a matter of opinion? Does God exist? Is anything certainly true? The

course will include a first hand study of major philosophers, and, consequently, of some of the more original contributions to our intellectual heritage. But the overriding concern is to teach the student how to respond in a coordinated, controlled, and critical way to the sorts of question which these philosophers have raised or provided. (NOTE: This is a multisectioned course. Typical readings are from such texts as Plato's *Republic*, Aristotle's *Nicomachean Ethics*, Descartes' *Meditations*, Spinoza's *Ethics*, Berkeley's *Three Dialogues Between Hylas and Philonous*, Hume's *Dialogues Concerning Natural Religion*, Nietzsche's *Beyond Good and Evil*, Mill's *Essay on Liberty*, Ryle's *Dilemmas*, and more recent writing. But problems, types of approach, and texts vary from section to section.)

C.B. Daniels, J.E. Foss, E-H.W. Kluge September-April (3-0; 3-0)

#### PHIL 201 (1½) APPLIED LOGIC: I

The course is primarily concerned with the analysis of simple argument forms in natural language. Close attention is paid to the different uses of language in an argumentative context. There is a treatment of elementary principles of inductive logic, decision making, syllogistic reasoning, and informal fallacies. (The course is designed as a first course in logic for students with little or no symbolic orientation; it may be taken before or after 203. 304 is recommended for science students.) (Not open to students with credit in 202)

C.G. Morgan September-December (3-0)

#### PHIL 203 (1½) APPLIED LOGIC: II

The course is designed to teach students to generate deductively valid arguments and to detect invalid arguments. Correct inference rules for sentential arguments and quantificational arguments are identified and treated from a purely syntactical point of view. A rigorous treatment of the semantic theory for sentential logic and quantification logic is also presented. (The course is designed as a first course in logic for students with little or no symbolic orientation; it may be taken before or after 201. 304 is recommended for science students.) (Not open to students with credit in 202)

C.G. Morgan January-April (3-0)

#### PHIL 211 (1½, formerly 3) INTRODUCTION TO EXISTENTIALISM

An introduction to the themes and method of existentialism. The course will survey the writings of a number of existentialists, including representative literary works. Questions such as the following will be addressed: Can the individual realize an authentic form of existence in a technological society dedicated to the ideals of comfort, efficiency, and security? Why have existentialists been so vehemently attacked and how have they responded? Is existentialism compatible with Marxism, or are the two irreconcilable? The figures and works chosen may vary from year to year.

M. Langer September-December (3-0)

#### PHIL 214 (formerly 212 (1½, formerly 3) PHILOSOPHY OF RELIGION

A consideration of some of the conclusions that have emerged from a philosophical examination of such religious questions as: the existence of God, survival of death, the problem of evil, the significance of religious ignorance, etc. Class discussion will be much emphasized.

A.R. Drenson September-December (3-0)

#### PHIL 222A (formerly half of 222) (1½) PHILOSOPHY OF SCIENCE: METHODOLOGICAL ISSUES

This course will deal with philosophical questions raised by structural and methodological aspects of the various sciences. Topics may include an examination of changing conceptions of scientific methodology, the logical structure of scientific laws and theories, an analysis of patterns of explanation, and the nature of scientific confirmation. (Not open for credit to students with credit in former 221 and 223) (This course may be taken before or after 222B.)

(Not offered) September-December (3-0)

#### PHIL 222B (formerly half of 222) (1½) PHILOSOPHY OF SCIENCE: SOCIAL AND ETHICAL ISSUES

This course will deal with social and ethical aspects of philosophy of science. Topics may include the supposed value neutrality of science, the ethics of human and animal experimentation, the social and ethical responsibilities of scientists, community control of scientific research, and the social determination of the content of scientific theory. (Not open for credit to students with credit in former 221 and 223) (May be taken before or after 222A)

(Not offered) January-April (3-0)

#### PHIL 232 (1½) MORAL PROBLEMS OF CONTEMPORARY SOCIETY

An investigation of certain moral problems which might be called social problems as well. One or more of such topics as the following will be discussed: sexual relations, censorship, suicide; capital punishment; poverty; international hostilities. Differing moral positions concerning the issue(s) chosen will be identified, and their justifications sought out and examined. Students should consult the annual departmental hand-book for a more specific description of the course for a given year.

M. Langer January-April (3-0)

#### PHIL 233 (1½) PHILOSOPHY OF EDUCATION

A philosophical inquiry into education. Among the questions to be asked are: What are we seeking to do in educating people? What sort of difference is education supposed to bring about in individuals, and in society? How does educating persons differ from indoctrinating them? Is it the purpose of education to qualify people for employment? Is education essentially a conservative force in society? Does it corrupt or liberate?

R.G. Beehler September-December (3-0)

#### PHIL 235 (1½) VIOLENCE, WAR, AND TERRORISM

An investigation of the ethical issues attending violent political protest or revolt, military action in a nuclear age, and terrorism for political or other ends.

(Not offered) January-April (3-0)

#### PHIL 238 (1½, formerly 3) PHILOSOPHY IN LITERATURE

The purpose of this course is to explore various philosophical theories and themes as these find expression in literature. In some years the course may be devoted to an examination of a single theme as it emerges in distinct periods and writings. Readings may range over the literature of many countries and will not necessarily be confined to works in the Western tradition.

M. Langer September-December (3-0)

#### PHIL 242 (3) AESTHETICS

This course is an introductory examination of such basic philosophical problems of aesthetics as: What is a work of art? Do works of music differ from each other in much the same way as works in the plastic arts differ from each other? What role, if any, does consideration of emotions and intentions legitimately play in evaluation of a work of art? How does forgery differ from plagiarism? Time will be devoted to the discussion of the philosophical problems particular to each major art form, as well as to problems arising from comparison between these art forms. Texts: Aristotle, *Poetics*; Tolstoy, *What is Art?*; Hanslick, *The Beautiful in Music*; Gombrich, *Art and Illusion*; Goodman, *Language of Art*

C.B. Daniels September-April (3-0; 3-0)

#### PHIL 245 (3) MEDIEVAL PHILOSOPHY

The purpose of this course is to give the student some insight into the depth and richness of the philosophical, religious and political thought of the middle ages, and to convey an appreciation of the complexity and sophistication of medieval intellectual endeavour. Since Western thought was heavily influenced by Islamic philosophies and by mystical speculations, a special section of the course will be devoted to the philosophy of Islam and its impact on the West, and another to an examination of medieval mysticism.

E.-H.W. Kluge September-April (3-0; 3-0)

#### PHIL 269 (3) THE SELF, SOCIETY AND CONTEMPORARY CRITICAL THOUGHT

An introductory philosophical investigation of the assumptions behind, and the arguments advanced by, selected contemporary writings of influence. The writings chosen for examination may vary from year to year, but in each case will address fundamental questions about contemporary social life, and the implications of that life for human well-being. The majority of writings will be drawn from disciplines other than philosophy, and one example of a kind of question that might be raised by one or more of the works selected is: upon what does a person's conception of him- or herself depend, and how far is this conception sensitive to the way other persons appreciate, or treat, him or her?

September-April (3-0; 3-0)

#### PHIL 287 (3) EASTERN PHILOSOPHY

An introductory study of the major philosophic traditions of the East: Confucian, Taoist, Buddhist and Hindu; with comparisons made between Eastern and Western philosophies. Among the topics discussed

are major teachings about mysticism; the divine; the unified self; the nature of the cosmos; and the right way to live. An effort will be made to illustrate the methods of philosophizing characteristic of the philosophers discussed. Texts: Readings include the *Tao Te Ching*, *The Analects*, *The Upanishads*, and others. September-April (3-0; 3-0)

### PHIL 302 (3) MORAL PHILOSOPHY

A study of the theory and practice of the ethical traditions which have had the greatest influence on the contemporary world. J.M. Michelsen September-April (3-0; 3-0)

### PHIL 304A (formerly half of 304) (1½) THEORETICAL LOGIC: I

The course is primarily concerned with a treatment and justification of propositional logic from a theoretical point of view. Ideal formal languages will be developed, and their relationship to natural languages will be discussed. Syntactic and semantic theories will be formalized for the analysis of complex deductive arguments. The metathory of propositional logic, relating the syntactic theories and the semantic theories, will be developed in detail. Topics to be formally treated include consistency, compactness, soundness, completeness and interpolation. (The course is designed as a first course in logic for students with a symbolic orientation; it may also be taken as a further course in logic following 201 and/or 203. 304 is recommended for science students.) (Not open for credit to students with credit in 202) (Prerequisite: None) C.G. Morgan September-December (3-0)

### PHIL 304B (formerly half of 304) (1½) THEORETICAL LOGIC: II

The course is a continuation of Philosophy 304A and is concerned with a treatment and justification of quantificational logic from a theoretical point of view. Ideal formal languages will be developed, and their relationship to natural languages will be discussed. Syntactic and semantic theories will be formalized for the analysis of complex deductive arguments. The metathory of quantificational logic, relating the syntactic theories and the semantic theories, will be developed in detail. Topics to be formally treated include consistency, compactness, soundness, completeness, interpolation, and elementary theory. (Prerequisite: Philosophy 304A or permission of the instructor) C.G. Morgan January-April (3-0)

### PHIL 306 (3) THE RATIONALISTS

The main purpose of this course is to afford the student an in-depth study of the so-called "continental rationalists". To this purpose, the positions of representative figures will be examined in some detail and an attempt made to relate them to each other. Full emphasis will be placed on tracing the results to the rationalists' preoccupation with *a priori* necessary truths and the principle of sufficient reason vis-à-vis their theories of perception and knowledge. (Prerequisite: 100 or 102, or permission of the instructor) (Not offered) September-April (3-0; 3-0)

### PHIL 310 (3) THE EMPIRICISTS AND KANT

In the first term, a study of the major writings of Locke, Berkeley and Hume, with emphasis on metaphysics and epistemology. During the second term, an intensive study of Kant's epistemology and metaphysics, principally as presented in *The Critique of Pure Reason*. (Prerequisite: 100, 102 or permission of the instructor) (Not open to students with credit in 308 or 400) A.R. Drengson September-April (3-0; 3-0)

### PHIL 311 (1½) EXISTENTIALIST THINKERS

This course will focus on one or two of the great philosophers in the tradition of existentialism and phenomenology, such as Nietzsche, Sartre, Merleau-Ponty, Camus, Kierkegaard and Heidegger. The philosophers chosen for study in any given year will be announced in the departmental handbook. (Prerequisite: 211 or permission of the instructor) (Not offered) (3-0)

### PHIL 324 (3) PHILOSOPHY OF HISTORY

Major theories of history, such as those of Hegel, Marx, Spengler, Toynbee, and Niebuhr will be examined, as well as questions related to the conduct of historical inquiry. In addition, attention will be devoted to contemporary theories of history that attempt to explain the significance and direction of the 20th century. (Prerequisite: 100 or 102, or HIST 234, 236, 240, or 242, or permission of the instructor) (Not offered) September-April (3-0; 3-0)

### PHIL 326 (3) SOCIAL AND POLITICAL PHILOSOPHY: ROUSSEAU AND MARX

An inquiry into some foundational questions concerning human society and human good. Among the questions to be asked are: What are the causes of inequality and unfreedom in human societies? What are the bases of social power? Can political institutions provide the good society? Is achievement of the good society dependent upon the understanding and moral sensibility of individuals? Are the understanding and sensibility of persons a function of the kind of society in which they live? The centre of gravity of the study will be selected writings by Rousseau and Marx. But one or two important contemporary writings will be studied as well. Texts: J.-J. Rousseau, *Discourse on the Origin of Inequality*; *The Social Contract*; K. Marx, *The German Ideology*; *The Communist Manifesto*; *Wage, Labour and Capital*; Joshua Cohen and Joel Rogers, *On Democracy*; Richard Miller, *Analyzing Marx: Morality, Power, and History*. (Not open to students with credit in any of 325, 327, or 329) R.G. Beehler September-April (3-0; 3-0)

### PHIL 328 (1½) PHILOSOPHY OF LAW

What, exactly, is law? How far, for example, does a law's being a law depend upon there being a threat of punishment if one does not obey? (What then distinguishes a society living under law from a society living under the domination of an alien military regime?) Is one always obligated to obey the law? Even an unjust law? Does one owe a duty of obedience to a corrupt government? How far do courts determine the content of the laws? Should the laws enforce morality? Should the laws protect persons from themselves? (Prerequisite: 100 or 102, or permission of the instructor) (Not offered) September-December (3-0)

### PHIL 330 (1½) PROFESSIONAL AND BUSINESS ETHICS

An investigation into ethical problems and concerns that arise in the professions and business, irrespective of the particular nature of the business or profession. These include truth telling, confidentiality, paternalism, competition, monopolies, public vs. private interests or obligations, codes of ethics, ethics of cost benefit analysis. The aim of the course is not necessarily to produce definitive solutions but to foster an awareness of the ethical issues, and to provide tools which may help to resolve them. Texts: M. Bayles, *Professional Ethics*; R. de George, *Business Ethics*; and Codes of ethics of various professional associations. E.-H.W. Kluge May-August only (3-0)

### PHIL 331 (1½) ISSUES IN BIOMEDICAL ETHICS

An investigation into the various ethical problems and concerns that arise in the professional medical context. Issues such as the nature of the physician-patient relationship, informed consent and right to know, fetal experiments and human experiments in general, euthanasia, insanity-treatment, right to treatment, etc. will be discussed. The aim of this course is not to give definitive solutions but to inculcate an awareness and understanding of the nature of the problems involved. (Prerequisite: A course in Philosophy or permission of the instructor) E.-H. W. Kluge January-April (3-0)

### PHIL 332 (1½) PHILOSOPHY AND TECHNOLOGY

An inquiry into the nature of technology and its value and relevance to the human condition. The conceptual implications of the technological order on personal and interpersonal relationships and perceptions will be explored. Examples of topics to be addressed are: the distinction between tools and technology; technological development and values; engineering ethics and the ethics of technology transfer; technology and alienation; the domination of human life by technology; the mastery of technology; appropriate technology; art and technology; comparative analysis of different philosophies of technology. (Prerequisites: 333 or 6 units in Philosophy, plus third and fourth year standing; or permission of the instructor) (To alternate with 333, Philosophy and Environment) A.R. Drengson January-April (3-0)

### PHIL 333 (1½) PHILOSOPHY AND THE ENVIRONMENT

A philosophical investigation of the moral and conceptual dimensions of environmental problems. Different philosophies of 'man and nature' will be compared. Some of the topics to be examined are: human wants and human satisfactions; nature and spiritual values; community; human obligations to other animals; defining quality of life. (Prerequisite: One course in Philosophy, or permission of instructor) A.R. Drengson September-December (3-0)

**PHIL 334 (3) PHILOSOPHY OF LANGUAGE**

Is a competent theory of language likely to advance our philosophic understanding of philosophically perplexing concepts? This and other questions are pursued with special attention to such matters as: whether there yet exists an adequate semantical analysis of meaning (Carnap); whether man possesses an innate genetic endowment with which alone standard linguistic competence is possible (Chomsky); whether meaning can be adequately accounted for in terms of men's dispositions to respond overtly to socially observable stimulations (Quine); whether a satisfactory theory of meaning needs to take into account various types of purpose with which utterances are made (Austin). (Prerequisites: 201/203 or 304 (or former 202), or permission of the instructor)

(Not offered) September-April (3-0; 3-0)

**PHIL 342A (formerly half of 342) (1½) MINDS AND MACHINES: I**

The course is concerned with philosophical problems associated with the question of whether or not one can build a machine which thinks, reasons, learns from experience, understands natural language, is creative, feels pain, or has emotions. Topics may include mechanical analogues of life processes; the debate over mechanisms, organicism, and vitalism; mechanical self reproduction and evolution; free will and predictability. (Prerequisite: One full year course in at least one of the following areas: computing science, neurophysiology, philosophy or psychology; or permission of the instructor)

C.G. Morgan September-December (3-0)

**PHIL 342B (formerly half of 342) (1½) MINDS AND MACHINES: II**

The course is a continuation of 342A. Topics may include: the top-down approach to artificial intelligence as advocated in the Turing Test; the analogical argument for the existence of other minds and its relation to the bottom-up approach to artificial intelligence; mechanical parallels of the mind-body problem; the relationship of Gödel's incompleteness results to the possibility of mechanical minds. (Prerequisite: 342A or permission of the instructor)

(Not offered) January-April (3-0)

**PHIL 348 (1-3) DIRECTED STUDIES IN THE HISTORY OF PHILOSOPHY**

Under the supervision of a faculty member and with the approval of the Chairman of the Department. (Prerequisite: 6 units in Philosophy, or permission of the instructor)

**PHIL 379 (CLAS 379) (formerly one-half of 207) (1½) EARLY GREEK HISTORICAL AND PHILOSOPHICAL THOUGHT**

A study of the transition from the prescientific, mythical world views to more "scientific" ways of explaining the nature of the cosmos, man's place in it, and the course of human history. An attempt will be made to assess the intellectual and social significance of this development by placing in their historical context the writings of the philosophers and historians from the early 6th Century to the time of Socrates and the sophists. Some attention will also be given to the literature and art of the period.

(Not offered) September-December (3-0)

**PHIL 403 (1½) PHILOSOPHICAL LOGIC**

The primary objective is to determine the philosophical limitations of classical logic. By classical logic is meant bivalent first order quantification theory, together with the usual extensions of it adequate for identity theory and formal number theory. Among the questions that may be raised are: Is there satisfactory philosophical motivation for quantum logic or for many-valued logic generally? Does a good theory of reference counsel the rejection of bivalence? Does classical first order logic inhibit a philosophical understanding of existence, identity and predication? (Prerequisites: 201/203 or 304 (or former 202), or MATH 332 or 333, and an additional 3 units of Philosophy, or permission of the instructor)

(Not offered) September-December (3-0)

**PHIL 405 (3) 19TH CENTURY PHILOSOPHY**

A main emphasis will be on the post-Kantian development in German philosophy; Fichte, Hegel, Schopenhauer, Marx, Nietzsche. Some attention may also be given to the developments in France (e.g. Comte), Britain (e.g. Mill, Spencer, Bradley), and America (e.g. Royce, Peirce, James). The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (Prerequisites: 9 units of philosophy, or permission of the instructor. 306 and 310 are both recommended as background for the course.)

(Not offered) September-April (3-0; 3-0)

**PHIL 408 (3) CONTEMPORARY EUROPEAN PHILOSOPHY**

A study of one or more of the major developments in recent European philosophy, such as phenomenology, hermeneutics, structuralism, and critical theory (the Frankfurt School). Among philosophers whose works may be selected for study are: Husserl, Heidegger, Sartre, Merleau-Ponty, Ricoeur, Levi Strauss, Foucault, Althusser, Horkheimer, Habermas, and Lukacs. (The focus of the course may vary from year to year, and interested students should consult the departmental handbook for more detailed information about the course for any given year.) (Prerequisite: 6 units in Philosophy, or permission of the instructor)

(Not offered) September-April (3-0; 3-0)

**PHIL 414 (3) PHILOSOPHY OF MIND**

A study of some of the questions about mind that are of relevance both to philosophy and the various empirical sciences that deal with man: What is a person? Is he two things — a body and a mind? Can he exist in a disembodied state? Is his intelligence just a capacity for adaptive and discriminative behaviour? Or does it depend upon inner and private mental processes? Is introspective evidence in some way unscientific? Are mental processes just brain processes? Can one person be in two bodies or two persons in the same body? (Prerequisites: 100 or 102, 306 or 310, or permission of the instructor)

(Not offered) September-April (3-0; 3-0)

**PHIL 416 (1½) KNOWLEDGE AND CERTAINTY**

An analysis of the concepts of knowledge, certainty, evidence, confirmation, etc. mainly in the context of philosophical scepticism about our knowledge of the external world, other minds, the past, and the future. (Prerequisite: 6 units of Philosophy, or permission of the instructor)

September-December (3-0)

**PHIL 418 (1½) THEORY OF PERCEPTION**

A study of philosophical issues that pertain both to the psychology of perception and the theory of knowledge. The respective merits of realist, representationalist and phenomenalist theories of perception will come under examination. (Prerequisite: 6 units in Philosophy or permission of the instructor)

January-April (3-0)

**PHIL 421 (1½) PLATO**

A study of some central philosophical issues in Plato's middle and late dialogues. The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (Prerequisite: 9 units of Philosophy. 379 and CLAS 380 are both recommended as background for the course.)

R.G. Beehler September-December (3-0)

**PHIL 422 (1½) ARISTOTLE**

A study of a main work or a central problem in Aristotle's philosophy. The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (Prerequisite: 9 units of Philosophy. 379 and CLAS 380 are both recommended as background for the course. Although 421 is not a prerequisite, it is recommended that students intending to take 422 take 421 first.)

R.G. Beehler January-April (3-0)

**PHIL 432 (3) METAPHYSICS**

An inquiry into some of the more general distinctions upon which our notion of reality depends. The course may vary in emphasis from year to year. Problems for investigation will include, or relate to, some of the following: On what basis do we distinguish between substance, quality and relation? Do any of the categories have a more privileged type of being than the rest? What are universals? Must every event have a cause? What sort of necessity is causal necessity? What distinguishes an action from mere happening? Do human agents have free will? What distinguishes temporal from spatial order? Why is our language tensed? (Prerequisite: 6 units of Philosophy or permission of the instructor)

C.B. Daniels September-April (3-0; 3-0)

**PHIL 448 (1-3) DIRECTED STUDIES IN PHILOSOPHICAL TOPICS**

Under the supervision of a faculty member and with the approval of the Chairman of the Department. (Prerequisite: 9 units of Philosophy, or permission of the instructor)

**GRADUATE COURSES**

For information of the Department's graduate program and admission

requirements, consult page 214.

### PHIL 500 (3) PROBLEMS IN PHILOSOPHY

### PHIL 501T (3) HISTORY AND PHILOSOPHY OF SCIENCE

A study of some turning points in the history of science with particular

attention to the conceptual issues underlying scientific theory and practice. (Prerequisite: Open only to teachers enrolled in the M.Ed. Program) (Not offered) Summer Session only

### PHIL 502 (3) DIRECTED STUDIES

### PHIL 599 (9-15) M.A. THESIS

## DEPARTMENT OF PHYSICS

John T. Weaver, B.Sc. (Bristol), M.Sc., Ph.D. (Sask.), Professor and Chairman of the Department

Alan Astbury, B.Sc., Ph.D. (Liverpool), R.M. Pearee Professor of Physics  
Douglas A. Bryman, B.S. (Syracuse), M.S. (Rutgers), Ph.D. (Virginia Poly. Inst. and St. U.), Adjunct Professor

Reginald M. Clements, B.A.Sc., M.A.Sc., (Brit. Col.), Ph.D. (Sask.), Professor

Fred I. Cooperstock, B.Sc. (Man.), Ph.D. (Brown), Professor

John M. Dewey, B.Sc., Ph.D. (London), Professor

Harry W. Dosso, B.A., M.Sc., Ph.D. (Brit. Col.), Professor

F. David A. Hartwick, B.Eng. (McGill), M.A., Ph.D. (Tor.), Professor (Astronomy)

Robert E. Horita, B.A.Sc., M.A.Sc., Ph.D. (Brit. Col.), Professor

Grenville R. Mason, B.A.Sc., (Brit. Col.), M.Eng. (McMaster), Ph.D. (Alta.), Professor

Norman F. Moody, B.E. (Sask.), F.I.E.E., F.R.S.C., Part time Adjunct Professor

Howard E. Petch, B.Sc., M.Sc. (McMaster), Ph.D. (Brit. Col.), D.Sc. (McMaster), LL.D. (Waterloo), F.R.S.C., Professor

Charles E. Picciotto, A.B., M.A., Ph.D. (Calif.), Professor

Lyle P. Robertson, B.A., M.A., Ph.D. (Brit. Col.), Professor

Colin D. Scarfe, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Cantab.), Professor (Astronomy)

Sidney van den Bergh, A.B. (Princeton), M.Sc. (Ohio St.), Dr. rer Nat. (Göttingen), F.R.S.C., Part time Adjunct Professor (1984-85)

George A. Beer, B.A.Sc., (Brit. Col.), Ph.D. (Sask.), Associate Professor

J. Anthony Burke, A.B., A.M., Ph.D. (Harvard), Associate Professor (Astronomy)

David A. Farmer, B.Com., M.Sc. (McGill), Ph.D. (Brit. Col.), Part time Adjunct Professor

Gerhart B. Friedmann, B.Sc., M.A. (Madras), Ph.D. (Brit. Col.), Associate Professor

Donald E. Lobb, B.E., M.Sc., Ph.D. (Sask.), Associate Professor

Arthur Olin, B.Sc. (McGill), Ph.D. (Harvard), Adjunct Associate Professor

Harbajan S. Sandhu, B.A., B.Sc., M.Sc. (Panjab), Ph.D. (Brit. Col.), Associate Professor

Harry M. Sullivan, B.Sc. (Queen's), B.Sc. (Carleton), M.Sc. (McGill), Ph.D. (Sask.), Associate Professor

Jeremy B. Tatum, B.Sc. (Bristol), Ph.D. (London), Associate Professor (Astronomy)

Arthur Watton, B.Sc. (Imp. Coll., London), Ph.D. (McMaster), Associate Professor

Chi-Shiang Wu, B.S. (Nat. Taiwan U.), M.S., Ph.D. (West. Res.), Associate Professor

William Paul Budgell, B.A.Sc. (Waterloo), M.Eng. (McMaster), Ph.D. (Waterloo), Part time Adjunct Assistant Professor (1984-85)

Norman R. Chapman, B.Sc. (McMaster), Ph.D. (Brit. Col.), Part time Adjunct Assistant Professor (1984-85)

Ann C. Gower, B.A., Ph.D. (Cantab.), Part time Adjunct Assistant Professor

Richard K. Keeler, B.Sc. (McGill), M.Sc., Ph.D. (Brit. Col.), Adjunct Assistant Professor

Christopher J. Pritchett, B.Sc. (Sask.), M.Sc., Ph.D. (Tor.), Assistant Professor

Don A. VandenBerg, B.Sc. (Lethbridge), M.Sc. (U. of Vic.), Ph.D. (A.N.U.), Adjunct Assistant Professor

John Goudy, C.D. and Bar, B.A. (U. of Vic.), Administrative Officer

Roelant J. Hurkens, B.Sc. (Waterloo), M.Sc. (Tor.), Coordinator, Cooperative Education Program

Ken Lee, B.Sc. (U. of Vic.), Senior Scientific Assistant

Russell M. Robb, B.Sc. (Calgary), Senior Scientific Assistant

Donald E. Stenton, B.Sc. (Brit. Col.-Vic. Coll.), Senior Laboratory Instructor

Alexander Y. Wong, B.Sc. (U. of Vic.), Senior Laboratory Instructor

## PHYSICS AND ASTRONOMY GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 214; for Physics graduate courses, see page 118; for Astronomy graduate courses, see page 120.

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement Physics graduate students may participate in a Cooperative Education graduate program as described in the Faculty of Graduate Studies section of this Calendar (page 201).

Further information may be obtained from the Chairman of the Physics Department Graduate Committee.

### ENTRY INTO PHYSICS AND ASTRONOMY UNDERGRADUATE PROGRAMS

Algebra 12 or Mathematics 12 is required for entry into the Physics and Astronomy undergraduate programs; Physics 11 and 12 are expected, although students lacking Physics 12 may enter the programs by registering in Physics 100. Students planning to take the Honours programs should normally also have completed Chemistry 11 or 12. Advanced placement is available for students with high standing in both Algebra 12 or Mathematics 12 and Physics 12.

### PHYSICS COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 31.

The Physics Cooperative Education Program is a year round program which includes, in addition to the normal Major or Honours academic program for the B.Sc., employment in jobs related to Physics or Astronomy in industry or government for at least four scheduled Work Terms interspersed between academic terms. This employment is related as closely as possible to the student's course of studies and individual interest.

To qualify for entry to the Physics Coop program, a student must have satisfied the university's English requirement, be enrolled full time, be proceeding to an Honours or Major degree in the Department of Physics, have at least a 4.50 average, and at least a second class in each physics or astronomy course taken. To remain in the program, a student must be enrolled full time and maintain at least a second class average (3.50). In addition, satisfactory performance in each Work Term is required. The first Work Term (following first year) is optional; the last four scheduled Work Terms are required. Students who choose to take the first Work Term will thus complete a total of five Work Terms. Successfully completed Work Terms will be recorded on the student's record and transcript.

### PHYSICS UNDERGRADUATE PROGRAMS

For a B.Sc. degree in physics, students have a choice of five programs: General, Major, Combined Major in Physics and Astronomy, Honours Physics or Honours in Physics and Mathematics. For a B.A. degree, students may choose the General Program in Physics for one of their fields of concentration. The Astronomy Undergraduate programs are presented on page 119.

Physics 310A may not be used as a required elective in any Physics and Astronomy program; it may be taken for credit as a free elective.

#### GENERAL AND MAJOR PROGRAMS

A General program in Physics must include a minimum of 9 units of Physics and Astronomy courses numbered 300 or higher.

A Major program in Physics must include the following courses: 120, 214, 215, 216 (or 316), 217, 220, 325, 326, 413A, 413B; MATH 100, 101, 200, 201, 323A (or 325), 323B (or 326), 330A, 330B. In addition, 9 units (7½ units if 316 has been taken) of electives must be chosen from Physics and Astronomy courses at the 300 level or higher. At least 3 of these units must be in Physics courses.

Students who are not qualified to enter 120 directly must precede it with either or both 100 and 110 for any Physics or Astronomy program.

PHYS 413A and 413B may be taken in the third year. Fourth year students are invited to attend 460 (Seminar).

Students are strongly advised to take MATH 233A, and preferably also 233B, in addition to the Mathematics courses specified for these programs.

#### COMBINED MAJOR IN PHYSICS AND ASTRONOMY

This program consists of a minimum of the following courses: PHYS 120, 214, 215, 216 (or 316), 217, 220, 325, 326, 413A, 413B; ASTR 200A, 200B, 303, 304, 403, 404, and 400 or 402; MATH 100, 101, 200, 201, 330A, 330B, 323A (or 325), 323B (or 326); plus 7½ units (6 units for students who take PHYS 316) of Physics and Astronomy electives numbered 300 or higher.

A double major in Physics and Astronomy is not offered.

#### HONOURS PHYSICS PROGRAMS

The courses required in an Honours Physics Program are 3 units of first year Chemistry, excluding 103; PHYS 120, 214, 215, 216 (or 316), 217, 220, 321A, 321B, 325, 326, 410, 413A, 413B, 420, 421, 422, 423, 429A, 429B; 460; MATH 100, 101, 200, 201, 233A, 233B, 323A (or 325), 323B (or 326), 330A, 330B; plus 7½ units of Physics and Astronomy courses (or other approved courses) numbered 300 or higher (at least 3 units of which must be Physics courses) chosen in consultation with the Physics Department.

Admission to the third and fourth years of the Honours programs requires the permission of the Department. Students in the Honours programs will be expected to maintain at least second class standing. The class of Honours degree will be determined on the basis of the grade point average calculated using the best 30 units of upper level courses specified in that student's Honours program.

Completion of this program in four years normally requires 16½ units of credit in the third year and 18 units of credit in the fourth year; however, only 15 units are required in the third year of the Honours Physics Program if 216 has been taken in the second year, permitting 316 to be omitted in the third year. Honours students in the Cooperative Education program are normally required to obtain credit for at least 7½ units in each academic term, or 15 units in two successive academic terms which may be separated by a Work Term. The ninth academic term is not subject to this requirement.

#### HONOURS PHYSICS AND MATHEMATICS PROGRAM

The courses required in an Honours Physics and Mathematics program are three units of first year Chemistry, excluding 103; PHYS 120, 214, 215, 216 (or 316), 217, 220, 321A, 321B, 325, 326, 413A, 413B, 420, 421, 422, 423, 460; MATH 100, 101, 200, 201, 233A, 233C, 325, 326, 333A, 333C, 334, 336, 338, 445A, 445B; plus 1½ or 3 units of Physics and Astronomy courses numbered 300 or higher; plus 4½ units of Mathematics courses numbered 300 or higher.

Physics electives are to be chosen in consultation with the Physics Department; Mathematics electives are to be chosen in consultation with the Mathematics Department.

Admission to the third and fourth years of the Honours Program in Physics and Mathematics requires the permission of both the Department of Physics and the Department of Mathematics. The class of the Honours degree of a student graduating in the Honours in Physics and Mathematics Program will be determined on the basis of the grade point average calculated using the best 30 units of upper level courses in that student's Honours program. The class designated will be First Class if this average is at least 6.50 and Second Class if this average is between 3.50 and 6.49.

Completion of this program in four years normally requires 18 units of credit in each of the third and fourth years,

#### COURSE SEQUENCES IN PHYSICS PROGRAMS

Students will proceed according to the following table.

In Year I students will start their program with:

<sup>A</sup> Physics 120 & 220 or <sup>B</sup> Physics 110 & 120 or <sup>C</sup> Physics 100 & 110.

In each case the student will choose subsequent courses indicated by the same superscript.

| Year | General and Major   | Honours Physics   | Honours in Physics and Mathematics  |
|------|---|---|---|
| I.   | <sup>A</sup> PHYS 120 & 220   | <sup>A</sup> PHYS 120 & 220   | <sup>A</sup> PHYS 120 & 220   |
|      | <sup>B</sup> PHYS 110 & 120   | <sup>B</sup> PHYS 110 & 120   | <sup>B</sup> PHYS 110 & 120   |
|      | <sup>C</sup> PHYS 100 & 110<br>MATH 100 & 101   | <sup>C</sup> PHYS 100 & 110<br>MATH 100 & 101<br>CHEM 100 & 102<br>or 101 & 102<br>or 140 & 145<br>or 140 & 102<br>or 120         | <sup>C</sup> PHYS 100 & 110<br>MATH 100 & 101<br>CHEM 100 & 102<br>or 101 & 102<br>or 140 & 145<br>or 140 & 102<br>or 120<br>MATH 233A & C*       |
| II.  | <sup>A</sup> PHYS 216 & 217   | <sup>A</sup> PHYS 216 & 217   | <sup>A</sup> PHYS 216 & 217   |
|      | <sup>B</sup> PHYS 220 & 217   | <sup>B</sup> PHYS 220 & 217   | <sup>B</sup> PHYS 220 & 217   |
|      | <sup>C</sup> PHYS 120 & 220<br>PHYS 214 & 215<br>MATH 200 & 201                                 | <sup>C</sup> PHYS 120 & 220<br>PHYS 214 & 215<br>MATH 200 & 201<br>MATH 233A & B  | <sup>C</sup> PHYS 120 & 220<br>PHYS 214 & 215<br>MATH 200 & 201<br>MATH 333A & C*   |
| III. | <sup>B</sup> PHYS 316   | <sup>B</sup> PHYS 316   | <sup>B</sup> PHYS 316   |
|      | <sup>C</sup> PHYS 316 & 217<br>PHYS 325 & 326<br>MATH 330A & B<br>MATH 323A & B<br>or 325 & 326 | <sup>C</sup> PHYS 316 & 217<br>PHYS 325 & 326<br>PHYS 321A & B<br>PHYS 413A & B<br>MATH 330A & B<br>MATH 323A & B<br>or 325 & 326 | <sup>C</sup> PHYS 316 & 217<br>PHYS 325 & 326*<br>PHYS 321A & B<br>PHYS 413A & B<br>MATH 325 & 326<br>MATH 334 & 336<br>MATH 338<br>MATH elective |
|      | PHYS 413A & B<br>PHYS electives   | PHYS 410 & 420<br>PHYS 421<br>PHYS 423 & 422<br>PHYS 429A & B<br>PHYS electives<br>PHYS 460                                       | PHYS 421 & 422<br>PHYS 423 & 420<br>PHYS 460<br>PHYS electives<br>MATH 445A & B<br>MATH electives   |
| IV.  | PHYS 413A & B<br>PHYS electives   | PHYS 410 & 420<br>PHYS 421<br>PHYS 423 & 422<br>PHYS 429A & B<br>PHYS electives<br>PHYS 460                                       | PHYS 421 & 422<br>PHYS 423 & 420<br>PHYS 460<br>PHYS electives<br>MATH 445A & B<br>MATH electives   |

Students enrolling in a Physics program who have had no experience with computer programming should consider taking CSC 110 as a first year elective.

ASTR 200A and 200B are recommended electives in the second year.

\* MATH 233A and 233C may be deferred to the second year, in which case MATH 333A and 333C must be deferred to the fourth year. PHYS 325 may be deferred to the fourth year.

#### PHYSICS UNDERGRADUATE COURSES

Students should consult the Chairman concerning courses offered in any particular year. The timetable also shows which courses are offered.

Where Consent of the Department is specified as a course prerequisite, this consent must be obtained from the Department Chairman or his nominee.

A student may obtain a total of only three units of credit from the set of courses 100, 101, 102, 103, 110, and 121, with the exception that a student with credit for 100 may subsequently obtain credit for 102 or 103 for a total of 4½ units.

A student who has credit for 125 may not subsequently take any of 100, 102, 103, or 110 for credit. A student who has credit for 110 before taking 125 may count either, but not both, of these courses for credit.

The normal prerequisites for second year Physics courses are MATH 100 and 101 and either PHYS 120 or 110 (120 may be taken concurrently with a first term second year Physics course). Students who have credit for MATH 100 and 101 and a grade of at least B in PHYS 102 may, with Departmental consent, be admitted to second year Physics courses for which they lack the normal physics prerequisite.

Attention is drawn to 103, a course intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Physics.

Students should note the availability of 310A.

In many of the courses, especially those beyond first year, students will be given short lists of reference books that are helpful supplements to the prescribed texts, but that generally do not have to be bought by the students. Students may generally expect weekly problem assignments and a number of one hour tests during the term.

**PHYS 100 (1½) INTRODUCTORY PHYSICS**

Kinematics and dynamics of motion in one and two dimensions, electrostatics, electric currents, magnetism. Not open to students with credit for 101 or 102 or 120 or 121 (Prerequisites: B.C. Secondary School Physics 11 or equivalent; MATH 100 which may be taken concurrently) September-December (3-3)

**PHYS 102 (3) GENERAL PHYSICS**

Mechanics, heat, light, electricity, magnetism, and modern physics. (This course will meet the requirements in physics of students in the life sciences. Section 1, with 4 lectures per week, is for students who have not obtained credit for B.C. Secondary School Physics 11 or equivalent. Students intending to take further courses in Physics are strongly recommended to take 100 or 110 rather than 102 and must take MATH 100 and 101 rather than 102.) (Prerequisite: B.C. Secondary School Physics 11, except for Section 1, or equivalent; MATH 102, or 100 and 101, which may be taken concurrently) Text: Hooper/Gwynne, *Physics and the Physical Perspective*, 2nd ed. September-April (3-3; 3-3)

**PHYS 103 (3) A SURVEY OF PHYSICS**

A description of physical principles with some selected applications to problems in our modern technological society. This course is intended for students who wish to increase their understanding of science and the physical world as part of their cultural or career development. (Not offered) September-April (3-3; 3-3)

**PHYS 110 (1½) ELEMENTARY PHYSICS**

Review of concepts of force, work, energy. Periodic motion. Wave motion, sound, light. Reflection and refraction of light. Quantum properties of radiation; atomic and nuclear structure. Introduction to special relativity. (Prerequisites: B.C. Secondary School Physics 12 or equivalent or 100; MATH may be taken concurrently) September-December. Also January-April (3-3)

**PHYS 120 (1½) MECHANICS: I**

Kinematics, particle dynamics, curvilinear motion, momentum, angular momentum, energy. (Not open to students with credit for 121 or 211A) (Prerequisites: 110 or 101, or at least a B standing in B.C. Secondary School Physics 12, and Algebra 12 or Mathematics 12, or equivalent courses; MATH 100 or 101 either of which may be taken concurrently) September-December. Also January-April (3-3)

**PHYS 125 (1½) FUNDAMENTALS OF PHYSICS**

Simple harmonic motion; wave motion, sinusoidal waves, phase velocity, Huygens' Principle, resonance, reflection, refraction and interference; sound; the classic Doppler effect; ray and first order matrix optics, total internal reflection and dispersion; the electromagnetic spectrum; optical spectra and electronic structure; de Broglie waves; principles and applications of nuclear structure, nuclear reactions and ionizing radiation. (Prerequisites: 120; MATH 100, 133 or 233A, 101 which may be taken concurrently. Only under exceptional circumstances will the Chairman of the Department of Physics admit into this course a student who is not enrolled in the Faculty of Engineering.) Text: Serway, *Physics for Scientists and Engineers with Modern Physics* January-April (3-3)

**PHYS 210 (1½) INTRODUCTORY GEOPHYSICS**

Structure of the earth, plate tectonics and seafloor spreading. Principles of geomagnetism, geoelectricity, rock magnetism, gravity, seismology, geochronology; heat flow, and solar terrestrial relations. (Prerequisites: 120 or 121 or 211A, MATH 200) January-April (3-0)

**PHYS 214 (1½) AN INTRODUCTION TO LABORATORY ELECTRONICS**

Standard laboratory electronic equipment, circuit properties such as impedance and resonance, semiconductor devices such as diodes and transistors, system functions such as feedback and switching. (Prerequisites: 102, or 101 or 121; or any two of 100, 110, 120, 125, 220; MATH 100 or 102. It is suggested that students take MATH 233A or 151 either of which may be taken concurrently) September-December (2-4)

**PHYS 215 (1½) WAVES AND INTRODUCTORY MODERN PHYSICS**

Wave motion; an introduction to topics in modern physics. (Not open to students with credit in 212) (Prerequisites: 110 or 120, or 101 or 121; MATH 200 and 201 which may be taken concurrently, or 230 or 231) January-April (3-3)

**PHYS 216 (1½) INTRODUCTORY ELECTRICITY AND MAGNETISM**

Electrostatics, magnetostatics, dielectrics, magnetic materials, steady

currents, Faraday's Law of Induction. (Not open to students with credit in 212) (Prerequisites: 110 or 120 or 121; MATH 200 which may be taken concurrently, or 230 or 231) Text: Arthur S. Kip, *Fundamentals of Electricity and Magnetism*, 2nd ed. September-December (3-3)

**PHYS 217 (1½) INTRODUCTORY THERMODYNAMICS**

Introduction to equilibrium thermodynamics, with additional treatment of calorimetry and heat transfer. (Not open to students with credit in 213) (Prerequisites: 110 or 120 or 121; MATH 200 and 201 which may be taken concurrently, or 230 or 231) January-April (3-3)

**PHYS 220 (1½) MECHANICS: II**

Relativistic kinematics and dynamics. Noninertial systems, central force motion, harmonic oscillator, elementary rigid body dynamics. (Not open to students with credit for 121 or 211B) (Prerequisites: 120 or 211A; MATH 101 which may be taken concurrently) September-December. Also January-April (3-3)

**PHYS 290 (1-3) DIRECTED STUDIES**

This course is intended primarily to aid students transferring from other institutions to fit into the physics programs. Students must obtain the consent of the Department before registering.

**PHYS 310A (formerly half of 310) (1½) PHYSICS AND TECHNOLOGY OF ENERGY**

An introduction to the physics and technology of producing, distributing and using energy from various sources. Present and possible future energy systems are examined with respect to efficiency, hazards and impact on world energy reserves. The course is intended for students in the humanities and social sciences, as well as the natural sciences, and may be taken for credit by students in Physics or Astronomy programs as an elective outside these programs. (Prerequisites: 15 units of university level credit, including 3 units of Physics, or permission of the Department) September-December (3-0)

**PHYS 316 (1½) ELECTRICITY AND MAGNETISM: I**

Stationary electric and magnetic fields, scalar and vector potentials, dielectrics and magnetic materials, steady currents, electromagnetic induction. (Not open to students with credit in 216 or 322) (Prerequisites: 220 or 121, or 211A and 211B; MATH 200 and 201, or 230 or 231) September-December (3-3)

**PHYS 317 (1½) THERMODYNAMICS**

The theory and application of thermodynamics. (Not open to students with credit in 213, 217, or 313) (Prerequisites: 121, or 211A and 211B; MATH 200 and 201, or 230 or 231) Text: Sears and Salinger, *Thermodynamics, Kinetic Theory and Statistical Thermodynamics*, 3rd ed. (Not offered) January-April (3-3)

**PHYS 321A (1½) CLASSICAL MECHANICS: I**

Topics covered include oscillatory motion, motion under a central force, dynamics of a system of particles, gravitational potential theory, special relativity. (Prerequisites: 220 or 121, or 211A and 211B; MATH 330A or 303, and 323A or 325; the mathematics courses may be taken concurrently) Text: Symon, *Mechanics*, 3rd ed. September-December. Also May-August (3-0)

**PHYS 321B (1½) CLASSICAL MECHANICS: II**

Rigid body dynamics, an introduction to analytical mechanics including Lagrange's and Hamilton's equations, theory of small oscillations. (Prerequisites: 321A; MATH 303 or 330B, 323B or 326; the mathematics courses may be taken concurrently) Text: Symon, *Mechanics*, 3rd ed. January-April (3-0)

**PHYS 325 (1½) OPTICS**

Reflection and refraction at plane and spherical surfaces, thin lenses, lens aberrations, optical instruments, interference, diffraction, polarization. (Not open to students with credit in 313 or 412) (Prerequisites: 220 or 121, or 211A and 211B; MATH 200 and 201, or 230 or 231) Text: Hecht-Zajac, *Optics* September-December (3-3)

**PHYS 326 (1½) ELECTRICITY AND MAGNETISM: II**

Transients in RCL circuits, transmission lines, displacement current, Maxwell's equations, plane electromagnetic waves. (Not open to students with credit in 322) (Prerequisites: 214, and 216 or 316; MATH 330B, and 323B or 326; all the mathematics courses may be taken concurrently) January-April. Also May-August (3-3)

**PHYS 410 (1½) TOPICS IN MATHEMATICAL PHYSICS: I**

Elementary topics in functions of a complex variable applied to physical problems. (Prerequisites: 220 or 121, or 211A and 211B; MATH 303 or 330B, and 323B or 326) September-December (3-0)

**PHYS 411 (1½) TIME SERIES ANALYSIS**

Continuous and discrete Fourier transforms, convolution and correlation, autocorrelation, spectral density estimation, deconvolution, linear filtering, frequency domain and two dimensional filtering. Digital data processing and computer analysis are stressed. (Prerequisites: 214; MATH 330B, and 323B or 326) September-December (3-0)

**PHYS 413A (1½) MODERN PHYSICS: I — INTRODUCTION TO QUANTUM PHYSICS**

An introduction to quantum mechanics, the hydrogen atom, optical spectra and electronic structures, x-rays, lasers. (Prerequisites: Either (i) 215 and either 216 or 316; the latter may be taken concurrently; or (ii) 212 and either 213 or 313; MATH 330A, and 323A or 325; the mathematics courses may be taken concurrently) September-December (3-3)

**PHYS 413B (1½) MODERN PHYSICS: II**

Selected applications of quantum mechanics to molecular physics, statistical mechanics and solid state physics, nuclear physics, fundamental particles. (Prerequisites: 413A; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) January-April. Also May-August (3-3)

**PHYS 415 (1½) GENERAL RELATIVITY AND COSMOLOGY**

Introduction to Einstein's theory of gravitation and its experimental verification. Applications within the realms of astrophysics and cosmology. (Prerequisites: 321B; MATH 330B; or consent of the Department) September-December (3-0)

**PHYS 420 (1½) TOPICS IN MATHEMATICAL PHYSICS: II**

Tensor calculus with applications. Integral transforms with application to boundary value problems, generalized functions and Green's functions, and other topics. (Prerequisites: 410 or equivalent; MATH 110 and 210, or 233A and 233C) (Primarily for Honours students; others must seek Departmental advice before registering in this course.) January-April (3-0)

**PHYS 421 (1½) STATISTICAL MECHANICS**

Boltzmann, Bose-Einstein and Fermi-Dirac statistics. (Prerequisites: 217 or 317, or 213 or 313; 321B and 413A; MATH 330B, and 323B or 326) (Primarily for Honours students; others must seek Departmental advice before registering in this course.) January-April (3-0)

**PHYS 422 (1½) ELECTROMAGNETIC THEORY**

Potential theory, Maxwell's equations, electromagnetic waves. (Prerequisites: 326 or 322; MATH 330B, and 323B or 326) (Primarily for Honours students; others must seek Departmental advice before registering in this course.) Text: Lorrain and Corson, *Electromagnetic Fields and Waves* January-April (3-0)

**PHYS 423 (1½) QUANTUM MECHANICS**

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin. (Prerequisites: 321B and 413B; MATH 330A, and 323A or 325; the mathematics courses may be taken concurrently) (Primarily for Honours students; others must seek Departmental advice before registering in this course.) September-December (3-0)

**PHYS 424 (1½) ATOMIC, NUCLEAR AND PARTICLE PHYSICS**

Topics in nuclear, atomic, and particle physics. (Prerequisite: 423) January-April (3-0)

**PHYS 425 (1½) ELECTRONICS**

Electronic circuit theory with applications. (Prerequisites: 214, and 216 or 316 or 322; MATH 330B) Text: Holt, *Electronic Circuits, Digital and Analog* September-December (3-0)

**PHYS 426 (1½) FLUID MECHANICS**

Introduction to basic theory of flow, kinematics of flow, Navier-Stokes equations, boundary layers, turbulent flow, introduction to compressible flow. (Prerequisites: 220 or 121, or 211A and 211B; 217 or 317 or 213 or 313; MATH 330B, and 323B or 326; PHYS 217 and the mathematics courses may be taken concurrently) Text: Li and Lam, *Principles of Fluid Mechanics* January-April (3-0)

**PHYS 427 (1½) GEOPHYSICS**

Physics of the earth, including atmospheric studies and extraterrestrial effects. Structure and composition of the earth, elementary seismology, and geomagnetism. (Prerequisites: 326 or 322 which may be taken concurrently; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) Text: Garland, *Introduction to Geophysics*, 2nd ed. January-April (3-0)

**PHYS 428 (1½) INTRODUCTORY SOLID STATE PHYSICS**

An account of the central aspects of the physics of solids including crystal structure and symmetry; thermal, electrical, magnetic, elastic, and optical properties of solids. (Prerequisites: 326 or 322; 413A; MATH 330B, and 323B or 326) Text: Kittell, *Introduction to Solid State Physics* January-April (3-0)

**PHYS 429A (formerly half of 429) (1½) SENIOR LABORATORY AND THEORY OF MEASUREMENT: I**

Advanced experiments. Instruction on experimental techniques and theory of measurement. (Prerequisite: 413A) Text: One of: Barford, *Experimental Measurements: Precision, Error and Truth*; Squires, *Practical Physics*; Melissinus, *Experiments in Modern Physics* September-December. Also January-April (0-6)

**PHYS 429B (formerly half of 429) (1½) SENIOR LABORATORY AND THEORY OF MEASUREMENT: II**

Advanced experiments including student projects. Instruction on experimental techniques and theory of measurement. (Prerequisites: 429A, 422, 423; and 421 which may be taken concurrently) (Primarily for Honours students; others must seek Departmental advice before registering in this course.) Text: Any one of: Barford, *Experimental Measurements: Precision, Error and Truth*; Squires, *Practical Physics*; Melissinus, *Experiments in Modern Physics* January-April (0-6)

**PHYS 460 (0) PHYSICS SEMINAR**

Talks by students, faculty and outside speakers. (Grading: COM, N or F) September-April (2-0; 2-0)

**PHYS 490 (1-3) DIRECTED STUDIES**

Students must obtain the consent of the Department before registering.

**PHYSICS GRADUATE COURSES**

Students should consult the Department concerning the courses offered in any particular year.

**PHYS 500 (3) QUANTUM MECHANICS****PHYS 501 (3) NUCLEAR PHYSICS****PHYS 502 (3) ELECTROMAGNETIC THEORY****PHYS 503 (3) THEORY OF RELATIVITY****PHYS 504 (3) ATOMIC AND MOLECULAR SPECTROSCOPY****PHYS 505 (3) ADVANCED CLASSICAL MECHANICS****PHYS 506A (1½) PARTICLE PHYSICS: I****PHYS 506B (1½) PARTICLE PHYSICS: II****PHYS 510 (3) ADVANCED METHODS IN MATHEMATICAL PHYSICS****PHYS 511 (3) APPLIED TOPICS IN NUCLEAR PHYSICS****PHYS 512 (3) UPPER ATMOSPHERE PHYSICS****PHYS 514 (3) GAS DYNAMICS****PHYS 515 (3) GEOMAGNETISM AND SOLAR-TERRESTRIAL RELATIONSHIPS****PHYS 516A (1½) ACOUSTICS: I****PHYS 516B (1½) ACOUSTICS: II****PHYS 517 (3) NUCLEAR MAGNETIC RESONANCE****PHYS 518 (3) PLASMA PHYSICS****PHYS 519 (3) SELECTED TOPICS IN GEOPHYSICS****PHYS 520A (1½) SELECTED TOPICS IN GEOPHYSICAL FLUID DYNAMICS: I****PHYS 520B (1½) SELECTED TOPICS IN GEOPHYSICAL FLUID DYNAMICS: II****PHYS 521 (3) INTERMEDIATE ENERGY PHYSICS****PHYS 560 (0) SEMINAR**

**PHYS 580 (1-3) DIRECTED STUDIES**

**PHYS 599 (credit to be determined but normally in this Department 6 units) M.SC. THESIS**

**PHYS 600 (3) ADVANCED QUANTUM MECHANICS**

**PHYS 699 (credit to be determined) PH.D. DISSERTATION**

The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the Department, both Physics and Astronomy.

**ASTRONOMY UNDERGRADUATE PROGRAMS**

For a BSc degree, students have a choice of three programs: Major, Honours and a combined Major in Physics and Astronomy (See p. 116). The first two years of the Major and Honours Astronomy programs are the same as the corresponding Physics programs, with the addition of ASTR 200A and 200B. It is recommended that students planning a Major in Astronomy take 3 units of first year Chemistry, excluding 103. In the third and fourth years Astronomy students take the following courses:

| <i>Major</i>                   | <i>Honours</i>             |
|--------------------------------|----------------------------|
| ASTR 303 & 304                 | ASTR 303 & 304             |
| ASTR 400 or 402                | ASTR 400 or 402            |
| ASTR 403 & 404                 | ASTR 403 & 404             |
| (PHYS 316 or PHYS elective 1½) | ASTR 429A & B              |
| PHYS 217                       | ASTR 460                   |
| PHYS 325 & 326                 | (PHYS 316)                 |
| PHYS 413A & B                  | PHYS 217                   |
| MATH 330A & B                  | PHYS 321A & B              |
| MATH 323A & B, or 325 & 326    | PHYS 325 & 326             |
|                                | PHYS 410 & 420             |
|                                | PHYS 413A & B              |
|                                | PHYS 422 or 423            |
|                                | PHYS electives             |
|                                | MATH 320A & B              |
|                                | MATH 323A & B or 325 & 326 |

Students wishing to enter the third year of the Major or Honours program without having completed 200A and 200B will normally be required to take 200A and 200B in their third year. 303 and 304 should then be deferred to the fourth year. Students electing to take 400 or 402 in the third year may defer 304 to the fourth year. Students who have not obtained credit for PHYS 216 must take PHYS 316 in their third year.

Third and fourth year Major students are invited to attend ASTR 460, Astronomy Seminar.

**HONOURS PROGRAM**

Admission to the third and fourth years of the Honours program requires the permission of the Department. Students in the Honours program will be expected to maintain at least second class standing. The class of Honours degree will be determined on the basis of the grade point average calculated using the best 30 units of upper level courses specified in that student's Honours program.

The Honours program normally consists of 18 units in each of the third and fourth years. This may include 200A and 200B in the third year if credit has not been obtained for these courses in the second year. The electives, chosen in consultation with the Department, are normally selected from PHYS 411, 415, 421, 422, 423, 424, 425, 426, 427, 428.

**ASTRONOMY UNDERGRADUATE COURSES**

Attention is drawn to 120, a course intended for students who wish to increase their understanding of astronomy and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Astronomy.

**ASTR 120 (3) ELEMENTARY ASTRONOMY**

This course is primarily for students not majoring in Astronomy. It will present Astronomy as a representative science in its ancient and modern contexts. Topics will include: the earth, the moon, the planets, stars, stellar systems, galaxies, the universe, cosmology, space flight, and extra-terrestrial life. Practical and observational work will be included. Laboratories on alternate weeks. (Senior science and mathematics students who want a single astronomy course should take 200A and 200B rather than 120.) Text: Hartmann, *Astronomy; The Cosmic Journey*  
September-April (3-3; 3-3)

**ASTR 200A (formerly half of 200) (1½) GENERAL ASTRONOMY: I**  
Astronomical coordinate systems, time, Kepler's laws and planetary orbits, the earth-moon system, the planets and minor planets, comets, meteors and meteorites, interplanetary particles, cosmogony, the sun. (Prerequisites: PHYS 120 which may be taken concurrently, or 101 or 121; MATH 100 and 101)  
September-December (3-3)

**ASTR 200B (formerly half of 200) (1½) GENERAL ASTRONOMY: II**  
Stellar distances and magnitudes, binary stars, spectral classification, stellar evolution, variable stars, stellar motions, star clusters, interstellar medium, structure and rotation of the Galaxy, external galaxies and cosmology. (Prerequisites: PHYS 120, or 101 or 121; MATH 100 and 101)  
January-April (3-3)

**ASTR 303 (1½) INTRODUCTORY EXTRAGALACTIC ASTRONOMY**  
The distance scale, properties of galaxies, observational cosmology. (Prerequisites: 200A and 200B; PHYS 215; PHYS 216 or 316 which may be taken concurrently; MATH 303 or 330A, and 323A or 325; the mathematics courses may be taken concurrently. PHYS 217 or 317 is desirable.) (Not open to students with credit in 302 or 401) Text: Sciama, *Modern Cosmology*  
September-December (3-0)

**ASTR 304 (1½) THE SOLAR SYSTEM**  
Astronomy of the sun, the planets and satellites, meteors and comets, including recent results from space exploration. Prerequisites: 200A and 200B; PHYS 215; PHYS 216 or 316; PHYS 217 or 317 which may be taken concurrently; MATH 303 or 330B, and 323B or 326; the mathematics course may be taken concurrently) (Not open to students with credit in 301 or 401)  
January-April (3-0)

**ASTR 400 (1½) RADIO ASTRONOMY**  
The detection of cosmic radio waves; mechanisms for production of radio noise; the sources of radio waves; the contribution of radio astronomy to our knowledge of the universe. (Prerequisites: 200A and 200B or the consent of the Department; PHYS 326 or 322, 413B which may be taken concurrently; MATH 303 or 330B, and 323B or 326)  
(Not offered) January-April (3-0)

**ASTR 402 (1½) DYNAMICAL AND GALACTIC ASTRONOMY**  
The positions and motions of the stars, the two and three body problems, precession, perturbation techniques, galactic rotation, the spiral structure of our Galaxy. This course may not be taken for credit if credit has been obtained for 300 in 1974 or earlier. (Prerequisites: 200A and 200B or the consent of the Department; PHYS 321A and 321B which may be taken concurrently; MATH 303 or 330B, and 323B or 326; the mathematics courses may be taken concurrently) January-April (3-0)

**ASTR 403 (1½) INTRODUCTION TO ASTROPHYSICS: I**  
The observational data of astrophysics; stellar atmosphere and the production of stellar spectra. (Prerequisites: 200A and 200B or the consent of the Department, PHYS 213, or 313, or 217 and 325, or 317 and 325; PHYS 413A which may be taken concurrently; MATH 303 or 330B, and 323B or 326)  
September-December (3-0)

**ASTR 404 (1½) INTRODUCTION TO ASTROPHYSICS: II**  
The structure and evolution of the stars; interstellar matter; high energy astrophysics. (Prerequisites: 403 or consent of the Department; PHYS 413B which may be taken concurrently) January-April (3-0)

**ASTR 429A (formerly half of 429) (1½) OBSERVATIONAL ASTRONOMY: I**  
Observational and practical work, directed reading. (Normally open to Honours students only. Others by consent of the Department)  
(No text required) September-December (0-6)

**ASTR 429B (formerly half of 429) (1½) OBSERVATIONAL ASTRONOMY: II**  
Observational and practical work, directed reading. (Normally open to Honours students only. Others by consent of the Department)  
(No text required) January-April (0-6)

**ASTR 460 (0) ASTRONOMY SEMINAR**  
Talks by students, faculty and outside speakers. (Grading: COM, N or F)  
September-April (2-0; 2-0)

**ASTR 490 (1-3) DIRECTED STUDIES**  
(Students must obtain the consent of the Department before registering.)

## ASTRONOMY GRADUATE COURSES

Students should consult the Department concerning the courses offered in any particular year.

- ASTR 500 (3) STELLAR ATMOSPHERES**  
**ASTR 501 (3) STELLAR STRUCTURE AND EVOLUTION**  
**ASTR 502 (3) BINARY AND VARIABLE STARS**  
**ASTR 503 (3) THE INTERSTELLAR MEDIUM**

- ASTR 504 (3) GALACTIC STRUCTURE**  
**ASTR 505 (1½) GALAXIES**  
**ASTR 511 (1½ or 3) ADVANCED TOPICS IN ASTRONOMY**  
**ASTR 560 (0) SEMINAR**  
**ASTR 580 (1-3) DIRECTED STUDIES**

The thesis requirement for advanced degrees (PHYS 599 or 699) applies to all students in the Department, both Physics and Astronomy.

## DEPARTMENT OF POLITICAL SCIENCE

- Anthony H. Birch, B.Sc. (Econ.), Ph.D. (London), Professor and Chairman of the Department  
 Howard L. Biddulph, B.S. (Brigham Young), M.A., Ph.D. (Indiana), Associate Professor  
 Edgar S. Efrat, B.A. (Reed Coll.), M.A., Ph.D. (Texas), Associate Professor  
 Richard J. Powers, B.A. (New Mexico), M.A., Ph.D. (Claremont), Associate Professor  
 Warren Magnusson, B.A. (Manitoba), B.Phil., D.Phil. (Oxon.), Assistant Professor  
 J. Terence Morley, B.A. (Dalhousie), Ph.D. (Queen's), Assistant Professor  
 Norman J. Ruff, B.Sc. (Econ.), (Southampton), M.A. (McMaster), Ph.D. (McGill), Assistant Professor  
 Robert B.J. Walker, B.A. (Wales), M.A., Ph.D. (Queen's), Assistant Professor  
 R. Jeremy Wilson, B.A., M.A. (Alta.), Ph.D. (Brit. Col.), Assistant Professor  
 John DeMarco, B.A. (Tor.), M.Phil. (Yale), Visiting Lecturer (1984-85)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. degree, see page 215; for graduate courses, see page 123.

### GENERAL, MAJOR AND HONOURS PROGRAMS

The department of Political Science offers General, Major and Honours programs leading to the B.A. Third and Fourth Year students not enrolled in the General, Major or Honours programs may take as a free elective any third or fourth year course in Political Science for which no prerequisite or other restriction is specified.

Information about current course offerings may be obtained from the Departmental Office in the Cornett Building.

**General** — A concentration in Political Science under the general program requires 6 units of Political Science courses numbered at the 100 or 200 level and 9 units at the 300 or 400 level.

**Major** — The Major program is open to students who have completed 6 units of Political Science courses numbered at the 100 or 200 level. Major students are required to complete 15 units of Political Science courses at the 300 or 400 level, including 300. They must take a minimum of 3 units from each of at least three of the Groups I-VI. Students intending to major in Political Science are urged to consult a faculty member in the Department when planning their programs for the third and fourth years.

**Honours** — Students will be admitted to the Honours Program in Political Science, at the discretion of the Department, at the beginning of the third year. Students will be expected to have a grade point average of at least 5.00 in 6 units of Political Science courses numbered at the 100 or 200 level. To continue in the program in the fourth year, students must secure a grade point average of at least 6.00 in Political Science courses taken during the third year, and maintain an overall grade point average of 5.00.

The Honours program requires completion of 25½ units of Political Science courses numbered at the 300 and 400 level with a minimum of 3 units from each of at least four of the Groups I-VI. The courses must include 300, 337, 338, and 499. Honours students are urged to consult a faculty member in the Department when planning their programs for the

third and fourth years.

Graduation with First Class Honours requires:

- (1) a graduating average of 6.50 or higher
- (2) an average of 6.50 or higher in the 25½ units of Political Science at the 300 and 400 levels, and
- (3) at least a grade of A- in POLI 499

Upon completing the program, any student who meets requirement (1), but not (2) or (3), will have the option of graduating either with a First Class Major degree or (if the Honours work meets the requirements) with a Second Class Honours degree. To secure a Second Class Honours degree a student must have (1) a graduating average of 3.50 or higher, (2) an average of 4.50 or higher in the 25½ units of Political Science at the 300 and 400 levels, and (3) at least a grade of B in Political Science 499.

Students who may want to do graduate work are strongly advised to take Political Science 337 and also some course work in statistical methods.

### DEPARTMENT OF POLITICAL SCIENCE — UNDERGRADUATE COURSE INDEX

| First and Second Year          |  |   |                                     |
|--------------------------------|--|---|-------------------------------------|
| 100 (3)                        |  |   |                                     |
| 202 (1½)                       | 210 (1½)   | 220 (1½)                                | 230 (1½) 240 (1½) 250 (1½) 260 (1½) |
| Third and Fourth Year          |  |   |                                     |
| I                              | II   | III                                     |                                     |
| <i>Political Theory</i>        | <i>Comparative Government</i>                    | <i>Contemporary Political Analysis</i>  |                                     |
| 300 (3)                        | 311 (30)   | 330 (1½)                                |                                     |
| 301 (1½)                       | 312 (3)  | 337 (3)                                 |                                     |
| 302 (1½)                       | 313 (3)  | 338 (1½)                                |                                     |
| 404 (3)                        | 314 (3)  | 430 (1½)                                |                                     |
| 405 (3)                        | 315 (1½)   | 431 (1½)                                |                                     |
| 406 (3)                        | 316 (1½)   |   |                                     |
|                                | 317 (3)  |   |                                     |
|                                | 417 (1½)   |   |                                     |
|                                | 418 (1½)   |   |                                     |
| IV                             | V  | VI                                      | VII                                 |
| <i>International Relations</i> | <i>Public Administration and Policy Analysis</i> | <i>Canadian Government and Politics</i> | <i>Honours</i>                      |
| 340 (3)                        | 350 (3)  | 320 (3)                                 | 490 (1½ or 3)                       |
| 342 (1½)                       | 351 (1½)   | 360 (1½)                                | 499 (3)                             |
| 343 (1½)                       | 352 (1½)   | 361 (1½)                                |                                     |
| 443 (1½)                       | 353 (1½)   | 362 (1½)                                |                                     |
| 445 (3)                        | 425 (1½)   | 465 (3)                                 |                                     |
| 446 (1½)                       | 450 (3)  | 466 (1½)                                |                                     |
|                                | 457 (1½)   | 470 (3)                                 |                                     |

### PROGRAM STRUCTURE

| 6 units of courses numbered at the 100 or 200 level  |  |  |
|--|--|--|
| General  | Major  | Honours  |
| 9 units of courses numbered at the 300 or 400 level. | 15 units at the 300 or 400 level including 300. These must in- | 300, 337, 338, 499 and additional units to a total of 25½ at the 300 |

clude 3 units in each of at least 3 of the Groups I-VI. 490 may not be applied to this distribution requirement without approval of the Department.

or 400 level. These must include 3 units in each of at least 4 of the Groups I-VI. 490 may not be applied to this distribution requirement without approval of the Department.

## UNDERGRADUATE COURSES

*The department will make every effort to ensure that the courses marked with an asterisk are offered each year. For confirmation of this, together with details of other courses to be offered, the terms in which classes will be given, and the names of course instructors, prospective students should consult the Political Science Guidebook. This Guidebook will be published in May and copies will be available at the Department of Political Science office, at Records Services, and at the Arts and Science Advising Centre.*

### \* POLI 100 (3) CANADIAN GOVERNMENT AND POLITICS

An introduction to Political Science through an examination of the politics and institutions of Canadian Government. The course will include analysis of the social and economic context of Canadian politics and will cover such topics as parties, voting behaviour, nationalism and regionalism, federalism, parliament, the bureaucracy, the courts and the policy processes. (Students who have credit in 216 or 318 or 410 in previous years may not enroll in this course for credit. Credit cannot be obtained for both 100 and 470) September-April (3-0; 3-0)

### \*POLI 202 (1½) AN INTRODUCTION TO POLITICAL THEORY

This course will focus on one or more topics in contemporary political theory such as the nature of democracy, the role of ideology, or the functions of the state. Different analyses will be compared, and students will be introduced to various models and techniques of theoretical inquiry. (3-0)

### \*POLI 210 (1½) COMPARATIVE GOVERNMENT

An introductory course designed to acquaint the student with political concepts and the basic structures and processes of modern government through an examination of foreign governments, e.g. U.S.A., U.K., U.S.S.R. (3-0)

### POLI 220 (1½) LAW AND POLITICS

An introduction to the role of law in the political process, including a description of the judicial structure in Canada, and the processes of the judiciary in the English speaking world as compared with the European tradition. (3-0)

### POLI 230 (1½) THE EMPIRICAL STUDY OF POLITICS

This course will examine the extent to which generalizations about political behaviour can be formulated on the basis of empirical studies, such as surveys of opinions, voting behaviour, and other forms of political activity. The logical and methodological problems involved in such studies will be discussed together with some of the significant generalizations that have been established. (3-0)

### \*POLI 240 (1½) INTERNATIONAL POLITICS

A general introduction to the study of international politics. Attention will be directed to the foundation, development and current structure of the states system. Specific important events in the relationships among states will serve to illuminate the causes, goals, means and subsequent consequences of major foreign policy decisions. (3-0)

### POLI 250 (1½) PUBLIC POLICY FORMATION IN CANADA

An introductory examination of the impact of cultural, economic and political factors in the determination of Canadian public policies. This course will include some case studies which compare the policy formation process in Canada with that of other countries. (3-0)

### POLI 260 (1½) LOCAL GOVERNMENT IN CANADA

An introduction to the structure, processes and policies of local government in Canada, with some emphasis on British Columbia; topics include the legal, political, financial and administrative structures of municipal governments, and the interrelationships between local governments and urban social processes. (3-0)

## GROUP I — POLITICAL THEORY

### \* POLI 300 (3) MODERN POLITICAL THOUGHT

An examination of basic texts and persistent themes in western political thought from the 16th century to the present. Emphasis will be placed on the works of certain key thinkers such as Machiavelli, Hobbes, Locke, Rousseau, Marx and Mill. (Prerequisite: Third or fourth year standing or permission of the Department) September-April (3-0; 3-0)

### POLI 301 (1½) CLASSICAL THEMES IN POLITICAL THOUGHT

A survey of the main themes and assumptions of political thought before 1500, including study of the classics of ancient Greek political theory, such as Plato's *Republic* and Aristotle's *Politics*. (Not open to students with credit for 300, prior to 1982-83) (3-0)

### POLI 302 (1½) CONTEMPORARY THEMES IN POLITICAL THOUGHT

A general survey of the major themes in contemporary political thought. Among other things, it will examine suggestions that much traditional political thought has been rendered obsolete by other forms of social, economic and philosophical inquiry. The counter-assertion that the conventions of the great tradition remain vigorous and relevant to contemporary political life will also be considered. (3-0)

### POLI 404 (3) THEORIES OF THE MODERN STATE

An examination of 19th and 20th century theories of the state, with particular attention to liberal democratic thought and to the criticisms of it developed by Marxists, anarchists, and traditionalist conservatives. (Prerequisite: 300 or permission of the instructor) September-April (3-0; 3-0)

### POLI 405 (3) IDEOLOGY AND CONTEMPORARY POLITICAL THOUGHT

An examination of some of the major discussions of ideology in 19th and 20th century political thought. Particular attention will be paid to the analytical difficulties embodied in the concept of ideology, to the historical-philosophical context of current debates about ideology in advanced industrial societies, and to recent literature on ideology arising from the confrontation of major cultural traditions. (Prerequisite: 300 or permission of the instructor) September-April (3-0; 3-0)

### POLI 406 (3) MARXIST POLITICAL THOUGHT

This course provides an analysis of the contributions to political thought of Marx, Engels, and various Marxian thinkers in the 19th and 20th centuries. Marxism is examined as a scientific theory and method, as a philosophy of history, as a mode of social criticism, and as an ideology of political change in its main varieties. (Prerequisite: 300 or permission of the instructor) September-April (3-0; 3-0)

## GROUP II — COMPARATIVE GOVERNMENT

### POLI 311 (3) WESTERN EUROPEAN GOVERNMENTS AND POLITICS

An analysis of governmental institutions, parties and pressure groups, political behaviour, and political conflicts in France, Italy, the Federal Republic of Germany, and one of the smaller European nations. September-April (3-0; 3-0)

### POLI 312 (3) COMMUNIST POLITICAL SYSTEMS

An analysis of governmental processes in Communist ruled political systems, with emphasis on Eastern Europe, the U.S.S.R., and mainland China; comparative analysis of communist revolutions, parties and groups, leadership elites, policy making and administration, political culture and socialization; and the development of the Communist international system. September-April (3-0; 3-0)

### POLI 313 (3) AMERICAN GOVERNMENT AND POLITICS

An analysis of the politics and institutions of government in the United States; areas of study will include such topics as the presidential system and executive-legislative relations, judicial behaviour, political parties and electoral behaviour, and the federal framework. (Not open to students who have credit in 310) September-April (3-0; 3-0)

### POLI 314 (3) BRITISH GOVERNMENT AND POLITICS

An analysis of political institutions and behaviour in the United Kingdom. Areas of study will include the main institutions of government, political parties and ideologies, elections and pressure groups, the public

service, the policy making process in selected fields, and the relations between England, Scotland, Wales, and Northern Ireland. (Not open to students who have credit in 310 or 316)

September-April (3-0; 3-0)

**POLI 315 (1½) GOVERNMENT AND POLITICS IN THE U.S.S.R.**

An intensive analysis of the governmental process in the Soviet Union; examination of the political development of the U.S.S.R., the political culture and socialization process, interest groups and policy making process, administration and the judicial system. (3-0)

**POLI 316 (1½) PARLIAMENTARY DEMOCRACY IN BRITAIN**

An analysis of the character and operation of parliamentary democracy in the United Kingdom; areas of study include Parliament, the cabinet system, parties, pressure groups, electoral behaviour, and civil liberties. (Not open to students who have credit in 310 or 314) (3-0)

**\*POLI 317 (3) POLITICS OF DEVELOPING AREAS**

An examination of the political development and political processes in developing countries, with emphasis on Asia and/or Latin America.

September-April (3-0; 3-0)

**POLI 417 (1½) GOVERNMENT AND POLITICS IN SUB-SAHARAN AFRICA**

An introduction to the politics of African states south of the Sahara; particular attention is devoted to political ideologies, institutions and transnational problems. (3-0)

**POLI 418 (formerly 331) (1½) EXECUTIVE AND LEGISLATIVE POLITICS**

A consideration of the functions, roles, behaviour and organization of representative assemblies in Canada, Britain and the United States. Executive-legislative relationships will be emphasized. (3-0)

**GROUP III — CONTEMPORARY POLITICAL ANALYSIS**

**POLI 330 (1½) PUBLIC OPINION AND MASS POLITICAL BEHAVIOUR**

An examination of the factors shaping public opinion and mass political behaviour. Topics will include political participation and apathy, the formation of political attitudes and ideology, discontent and protest, social structure and political cleavages, political socialization, and voting. (3-0)

**\*POLI 337 (3) THE SCOPE AND METHODS OF POLITICAL SCIENCE**

This course, which is designed to sharpen students' analytical and critical skills, discusses the scope of political science and explores the philosophical underpinnings of the discipline. The course focuses on the character of political science as a discipline, its fundamental assumptions, the models and approaches employed in contemporary political studies, and the methods and problems of empirical research. (Required for Honours students, preferably in their third year; recommended for other students majoring in Political Science; but not recommended as a general elective) (3-0)

September-April (3-0; 3-0)

**\*POLI 338 (1½) POLITICAL CONCEPTS**

An analysis of some of the key concepts in contemporary political thought, such as "power", "authority", and "justice". This is a seminar course which Honours students are required to take during their third year. The course is recommended for other students majoring in Political Science but not recommended as a general elective. (3-0)

**POLI 430 (1½) MASS MEDIA AND POLITICS**

An examination of mass communication and the dissemination of political information; the course will cover both historical and contemporary questions. (3-0)

**POLI 431 (formerly 459) (1½, formerly 3) THE STATE IN SOCIETY**

An examination of the role and major functions of the state, with particular attention to social and economic policies in advanced industrial countries. (3-0)

**GROUP IV — INTERNATIONAL RELATIONS**

**\*POLI 340 (3) INTERNATIONAL STUDIES**

A seminar in the theory and practice of relations between modern nation-states; an examination of the traditional methods of studying

international politics will be followed by an introduction to normative and empirical theory and contemporary methodologies.

September-April (3-0; 3-0)

**POLI 342 (1½) INTERNATIONAL LAW**

A seminar in the principles and practices of international law; focus will be both historical and contemporary, and the emphasis will be on the political implications of international law. (3-0)

**POLI 343 (1½) INTERNATIONAL ORGANIZATION**

A seminar in the theory and development of international organizations focusing on the League of Nations, the United Nations, and institutions such as the European Economic Community and other regional organizations (3-0)

**POLI 443 (1½) COMMUNIST INTERNATIONAL RELATIONS**

An examination of the theory and practice of relations among Communist Party states, analyzing the domestic and external sources of behaviour, the comparative conduct of foreign policy, the integration and disintegration of the "world socialist system". (3-0)

**\*POLI 445 (3) COMPARATIVE FOREIGN POLICY**

A seminar in the formulation, execution and evaluation of foreign policy; the development of a theoretical model for foreign policy analysis will be followed by an application of the model to the current foreign policies pursued by the major nation-states. Each student will be responsible for systematically examining the foreign policy of one nation-state. (3-0)

September-April (3-0; 3-0)

**POLI 446 (1½) CANADIAN FOREIGN POLICY**

An examination of contemporary Canadian foreign policy, its aims, methods and effects and Canada's role in world affairs. Particular attention will be placed on the context (historical, political, cultural, geographic, economic) of policy making and the instruments (diplomatic, legal, political, economic, military) of its execution. (3-0)

**GROUP V — PUBLIC ADMINISTRATION**

**\*POLI 350 (3) PUBLIC ADMINISTRATION**

An introduction to the evolution of the administrative process in government, the theory, and practice of administrative decision making, and a review of issues in organizational structure, financial and personnel administration, budgeting and administrative responsibility. (3-0)

September-April (3-0; 3-0)

**POLI 351 (1½) PUBLIC POLICY ANALYSIS**

A consideration of various methods of explaining and evaluating public policies, with particular attention to the techniques employed by governments. (3-0)

**POLI 352 (1½) THE PUBLIC SERVICES**

An examination of the role of public servants in the modern state, with emphasis on selection, appointment, training and human relations; the political rights of public servants; and the role of public service unions. (3-0)

**POLI 353 (1½) THE POLITICS AND MANAGEMENT OF PUBLIC EXPENDITURE**

An examination of the budgetary processes within different levels of government, of the various forms of budgeting, and of the political and administrative factors influencing public expenditure outcomes. (3-0)

**POLI 425 (formerly 325) (1½) LAW AND PUBLIC POLICY**

An analysis of the structures and practices of the courts, the legal profession, the police and related legal institutions in Canada. (3-0)

**POLI 450 (3) LOCAL GOVERNMENT AND ADMINISTRATION**

A seminar in the theory and practice of local government in the English-speaking world and on the continent of Europe; the constitutional and socioeconomic setting of local government, its institutions, political processes, and public finance. (3-0)

September-April (3-0; 3-0)

**POLI 457 (1½) THE POLITICS OF ENVIRONMENTAL AND NATURAL RESOURCE POLICY**

An examination of the formation and implementation of environmental and natural resource policy, with an emphasis on British Columbia. Alternative approaches to the analysis of the policy making processes will be considered. (Not open to students with credit in 435, 456, 456A, or 456B) (3-0)

(3-0)

## GROUP VI — CANADIAN GOVERNMENT AND POLITICS

### POLI 320 (3) THE CANADIAN CONSTITUTION

An analysis of Canadian constitutional law and practice; parliamentary government, the division of power, judicial authority, the Charter of Rights and Freedoms, constitutional amendment and related problems; some comparisons with other jurisdictions will be made.

September-April (3-0; 3-0)

### POLI 360 (1½, formerly 3) CANADIAN FEDERALISM AND PUBLIC POLICY

An examination of the constitutional, political, social, economic, and cultural bases of Canadian federalism, the dynamics of contemporary intergovernmental relations, and the impact of the federal system on public policy.

(3-0)

### POLI 361 (1½) PARTIES AND PRESSURE GROUPS IN CANADA

An examination of political parties, pressure groups, and theories of representation in the Canadian context, with emphasis on the development, structure and ideologies of the major parties.

(3-0)

### POLI 362 (1½) COMPARATIVE PROVINCIAL POLITICS

A comparative analysis of political structures and processes in the Canadian provinces, and the variations in their forms of political behaviour.

(3-0)

### (POLI 465 (3) BRITISH COLUMBIA GOVERNMENT AND POLITICS

An examination of the political institutions and processes of government in British Columbia seen in the context of the political and economic development of the province, its political cleavages and party system, and the formation of provincial public policy.

September-April (3-0; 3-0)

### POLI 466 (1½) ISSUES IN CANADIAN POLITICS

An analysis of one or more selected issues in Canadian politics, such as labour relations, native rights, equality for women, Quebec independence, or resource ownership.

(3-0)

### \*POLI 470 (3) GOVERNMENT IN CANADA

A course designed for students in other disciplines who would like to gain some understanding of the structure and functioning of government in Canada; it will cover such topics as parties and political behaviour, federalism, the bureaucracy and the parliamentary process. This course will be of particular interest to students in the Faculties of Education, Human and Social Development, Fine Arts, and Engineering. (Not open to students with credit in 100. Not open for credit to Political Science Major and Honours students)

September-April (3-0; 3-0)

## GROUP VII — HONOURS

### POLI 490 (1½ or 3) DIRECTED READING

Directed reading and/or research for Honours students under the supervision of an available faculty member. Open to Majors only with the permission of the Department. This course is generally not offered in the Summer Session.

### POLI 499 (3) HONOURS SEMINAR AND ESSAY

A fourth year seminar for Honours students only, which will deal with selected problems of the discipline and will help students to develop a critical approach to specialized materials. The seminar will also assist students in the preparation of a graduating essay. The essay must conform to acceptable standards of style and format, and must be submitted before the end of second term classes.

(3-0; 3-0)

## GRADUATE COURSES

505, 506, 507, and 508 will be offered every year. The other courses are all normally available, although the precise offerings in any particular year will vary according to the requirements of students and the commitments of faculty members.

### POLI 505 (1½) SEMINAR IN POLITICAL CONCEPTS AND ANALYSIS

### POLI 506 (1½) SEMINAR IN RESEARCH METHODS AND DESIGN

### POLI 507 (1½) SEMINAR IN PUBLIC POLICY ANALYSIS

### POLI 508 (formerly 585) (1½) SEMINAR IN POLITICAL COMPARISONS

### POLI 509 (formerly 500) (1½ or 3) POLITICAL THEORY

### POLI 510 (1½ or 3) WESTERN EUROPEAN POLITICS

### POLI 511 (1½ or 3) POLITICAL BEHAVIOUR

### POLI 512 (1½ or 3) COMMUNIST POLITICAL DEVELOPMENT

### POLI 514 (1½ or 3) BRITISH POLITICS

### POLI 516 (1½ or 3) CANADIAN POLITICS

### POLI 517 (1½ or 3) AFRICAN POLITICS

### POLI 520 (1½ or 3) CANADIAN CONSTITUTIONAL PROBLEMS

### POLI 535 (1½ or 3) PUBLIC CHOICE

### POLI 540 (1½ or 3) INTERNATIONAL RELATIONS

### POLI 550 (1½ or 3) THE ADMINISTRATIVE PROCESS

### POLI 580 (6) LEGISLATIVE INTERNSHIP

### POLI 590 (Credit to be determined) DIRECTED READINGS

Offered under the following headings:

590A and 590B — Political Theory

590C and 590D — Comparative Politics

590E and 590F — Public Law

590G and 590H — Contemporary Political Analysis

590J and 590K — International Relations

590L and 590M — Public Administration

590N and 590P — Canadian Federal and Provincial Politics

### POLI 599 (6) THESIS

## DEPARTMENT OF PSYCHOLOGY

Michael E. Corcoran, B.A. (Northwestern), M.A., Ph.D. (McGill), Associate Professor and Chairman of the Department

Louis D. Costa, A.B. (C.C.N.Y.), M.A., Ph.D. (Columbia), Professor

Gordon N. Hobson, B.A., M.A., Ph.D. (Alta.) Professor

David F. Hultsch, B.A. (Lycoming College), M.A., Ph.D. (Syracuse), Professor

John K. Martin, B.S., M.B., M.R.C.P. (London), Part time Adjunct Professor

Richard B. May, B.A. (Whitman), M.A., Ph.D. (Claremont), Professor

G. Alexander Milton, B.A. (W. Wash.), M.S. (Ore.), Ph.D. (Stanford), Professor

Robert W. Payne, B.A. (Alta.), Ph.D. (London), Professor

Clare K. Porac, B.A. (Duquesne), M.A., Ph.D. (New School for Social Research), Professor

Otfried Spreen, B.A. (Bonn), Dipl-Pscy., Ph.D. (Freiburg), Professor

Kenneth R. Thornton, B.Sc., M.B.Ch.B. (Leeds), Part time Adjunct Professor

Loren E. Acker, A.A., B.A., M.A., Ph.D. (Calif., Los Angeles), Associate Professor

Janet Beavin Bavelas, A.B., A.M., Ph.D. (Stanford), Associate Professor

Basil Boulton, M.D., (Brit. Col.), C.R.C.P. (C), F.R.C.P. (C), Part time Adjunct Associate Professor

Pam Duncan, B.A. (Wis. St.), M.A. (Chicago), Ph.D. (Wis.), Associate Professor

Robert D. Gifford, B.A. (Calif. Davis), M.A., Ph.D. (S. Fraser), Associate Professor and Assistant Chairman of the Department

Bram C. Goldwater, B.A. (McGill), M.A. (Cornell), Ph.D. (Bowling Green), Associate Professor

Ronald A. Hoppe, B.A. (Mich.), M.A., Ph.D. (Mich. St. U.), Associate Professor

- Michael E.J. Masson, B.A. (Brit. Col.), M.A., Ph.D. (Colo.), Associate Professor  
 John W. Scull, B.A. (Calif., Los Angeles), M.A., Ph.D. (Tor.), Part time Adjunct Associate Professor  
 Frank J. Spellacy, B.A., (W. Wash.), M.Sc. (Ore.), Ph.D. (U. of Vic.), Associate Professor  
 Charles W. Tolman, B.S., M.S., Ph.D. (Wash.), Associate Professor  
 Roger E. Graves, B.S., Ph.D. (M.I.T.), Assistant Professor  
 Mark L. Howe, B.A., M.A., Ph.D. (Western Ont.), Assistant Professor  
 Michael A. Hunter, B.A. (S. Fraser), M.A. (Waterloo), Ph.D. (S. Fraser), Assistant Professor  
 Michael Joschko, B.Sc. (McMaster), M.A., Ph.D. (Windsor), Part time Visiting Assistant Professor (1983-85)  
 Donald E. Read, B.A. (S. Fraser), M.A., Ph.D. (McGill), Assistant Professor  
 Lorne K. Rosenblood, B.S. (Case West. Res.), M.A., Ph.D. (Ohio St.), Assistant Professor  
 Bernice M. Seyfort, B.A., M.A., Ph.D. (U. of Vic.), Part time Adjunct Assistant Professor  
 Ronald W. Skelton, B.Sc. (Bishop's Univ.), M.A. (Concordia), Ph.D. (Brit. Col.), Adjunct Assistant Professor (1984-87)  
 Esther H. Strauss, B.A. (McGill), M.A. (Northeastern), M.Ed. (Boston), Ph.D. (Tor.), Assistant Professor  
 Fouad A. Hamdi, M.D. (Alexandria), Ph.D. (Edin.), Honorary Professor

## GRADUATE PROGRAMS

For information on studies leading to the M.A., Ph.D. degrees, see page 215; for graduate courses, see page 128.

### GENERAL, MAJOR AND HONOURS PROGRAMS

Several undergraduate programs are offered by the Department of Psychology. The concentration in the General Program is designed to provide flexibility, and a general background for students planning to enter other fields such as social work or journalism. The Honours Program is recommended for students planning graduate work in scientific or professional psychology. The Major Program requires a degree of specialization in the last two years, and may permit the student to proceed to graduate study or to professional training or business careers if sufficiently high standing is obtained.

A student may proceed to either a B.A. or B.Sc. degree in Psychology. Students proceeding to the B.A. degree must take a minimum of 12 units of work outside psychology in any one or more disciplines offering a Major program leading to the B.A. degree (e.g. 6 units of English plus 6 units of Sociology would satisfy this requirement). Students proceeding to the B.Sc. degree must take a minimum of 12 units of work at any level from outside Psychology in any one or more disciplines offering a Major program leading to the B.Sc. degree (e.g. 6 units of Mathematics plus 6 units of Biology would satisfy this requirement).

**General** — 100 is prerequisite to all courses numbered 300 and above and is usually taken in the first year. The student's choice of one second year psychology course is recommended in the second year. Students must complete a minimum of 9 units numbered 300 or above.

**Major** — 100 is prerequisite to all courses numbered 300 and above and is usually taken in the first year. Major students must take 201, 210, 300 plus 12 units numbered above 300. At least 3 units must be chosen from each group (A and B). A: 311A, 311B, 312, 313A, 313B, 315, 317, 423, 424. B: 330, 331, 335, 336, 339, 430.

**Honours** — Students seeking an Honours degree in Psychology must apply to the Honours Adviser of the department before the start of their fourth year. Prospective honours students must complete the honours application form at the Arts and Science Advising Centre (Clearihue B137). All interested students should seek the advice of the Adviser before their third year; those with an overall first class average are encouraged to apply for early admission at this time. Admission to the Honours Program requires a minimum 6.50 grade point average in all psychology courses and a grade point average of 3.50 in nonpsychology courses. Honours students are responsible for finding a supervisor for their Honours thesis. Consistent with the regulations of the Faculty of Arts and Science, students should complete the requirements for an Honours program in four academic years. In certain cases an extension to five years may be recommended, but students must complete a minimum of 12 units in the winter session in which they complete the

honours thesis. Requests for extensions should be made through the Chairman of the Department to the Dean's office. 100 is prerequisite to all courses numbered 300 and above and is usually taken in the first year. 201, 210, 300, 499, 400A or 400C and either 400B or 401 are required, plus an additional nine units numbered above 300. Students who are in their third year and are thinking of joining the Honours program are encouraged to attend 499. At least 3 units must be chosen from each group (A and B, see Major, above).

To graduate with an Honours degree, a student must have a minimum 3.50 grade point average for all work completed outside the Department. First Class Honours will be awarded to students who obtain:

- (1) a graduating average of at least 6.50
- (2) a grade point average of at least 6.50 for 300 and 400 level Psychology courses
- (3) a grade of at least A- in 499

Second Class Honours will be awarded to students who obtain:

- (1) a graduating average of at least 3.50
- (2) a grade point average of at least 5.50 for 300 and 400 level Psychology courses
- (3) a grade of at least B- in 499

A student who obtains a first class average in all 300 and 400 level Psychology courses but a second class grade in 499 will have the option of receiving a B.A. or B.Sc. with a First Class Major in Psychology or Second Class Honours. A student who achieves a grade lower than B- in 499 will graduate under the Major program provided all other requirements for the degree are fulfilled. The submission date for the thesis in Psychology 499 is the last day of classes.

## RECOMMENDED ELECTIVES

### First and Second Years:

Students planning to major or honour in Psychology are urged to select at least one course from each of several areas outside of the Psychology Department. A Grade XII mathematics course or its equivalent is recommended preparation for 300 and 400A, 400B and 400C. Students who plan to take 215A and 215B, 315, 415, 423, or 424 are encouraged to take BIOL 150; in addition BIOL 207 and 320 or 305 are recommended. For students intending to take 315, 215A and 215B are recommended in the second year. *It is strongly recommended that students take no more than six units of second year Psychology courses in any one winter session.* Frequently chosen first and second year nonpsychology electives include: ENGL 115, 116; MATH 102, 151; BIOL 150, 207; SOCI 100, 202, 209; ANTH 100; PHIL 100, 222A, 222B, 232, 269; STAT 250, 251; CSC 110, 115.

### Third and Fourth Years:

The Psychology Department recognizes the diversity of career orientations which might lead a student to concentrate in Psychology. Accordingly it suggests the following guidelines for upper level courses.

Students planning to enter social services — mental health, school psychology, social work, parole, child care and related fields; 311 or 313, 315, 330, 331, 430 or 432, 450, and at least 1½ units from 335, 336, 337, 338, and 339.

Students planning careers in business and industry, civil service, government, personnel work: 311, 330, 331, 334, 401, 414, 432, plus courses in other social sciences such as ECON 10, POLI 100, SOCI 319, 321.

Students planning careers in business and industry, civil service, government, personnel work: 311, 330, 331, 334, 401, 414, 432, plus courses in other social sciences such as ECON 100, POLI 100, SOCI 319, 321.

Students planning to pursue advanced degrees in Psychology, but not enrolling in Honours: 300, 400A and/or 400C, and 400B and/or 401 plus six units from group A and six units from group B.

Frequently chosen third and fourth year nonpsychology electives include SOCI 301, 304, 319, 325, 383; ED-D 316, 317, 417; BIOL 320, and PHIL 342A and 342B.

NOTE: The Bachelor's degree in Psychology is intended primarily to prepare the student for further advanced study in psychology or related fields (Education, Social Welfare, etc.), and in no way implied professional competence as a psychologist without such advanced training. Although students may on occasion find employment of a psychological nature with an undergraduate degree, it is expected that further preparation, perhaps in the form of in service training, will normally be required by employers.

**Individual Studies and Directed Readings:**

During the Winter Session the Department of Psychology may give permission for individual studies and directed readings to be taken under the course numbers 390 and 490. Other course numbers are not offered as individual studies or directed readings at any time. During May-August, 390 and 490 are available only to students with an overall grade point average of 5.50 or higher in the last 15 units completed. Students seeking an exemption from these restrictions must make a formal application to the departmental undergraduate curriculum committee.

**UNDERGRADUATE COURSES**

Students should consult the Department concerning courses offered in any particular year.

**NOTES:**

1. 100 is a prerequisite for all courses numbered 300 and above unless an exemption is specifically stated in the course description. Second year courses are open without the 100 prerequisite to all except first year students, although it is recommended that the student first take 100 whenever possible. Students are cautioned that enrollment in a second year psychology course without 100 could mean that they will be required to take 100 at a later date in order to qualify for admission to a course at the 300 or 400 level.
2. It is strongly recommended that students take no more than 6 units of second year Psychology courses in any one winter session.
3. Students who have completed Psychology 100 may enroll in up to 4½ units of psychology courses numbered 300 or above in their second year.

**\*PSYC 100 (3) GENERAL PSYCHOLOGY**

An introduction to the concepts, methods and history of modern psychology. Topics include perception, motivation, learning, brain processes, personality, and social processes. The purpose of this course is to present a broad survey; however, experimental demonstrations and applications will be employed to illustrate some selected topics.

September-April (3-0; 3-0)

**\*PSYC 201 (formerly one-half of 200) (1½) INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY**

An introduction to the issues related to basic research techniques used in experimental psychology; emphasis will be on the conceptual rather than the statistical rationale underlying the various research strategies. Areas that will be discussed include the nature of variables, types of measurement, how to generate and test hypotheses, types of validity, and how to interpret and report results. These topics will be elaborated in the context of in class demonstrations that will provide essential experience with the processes involved in conducting empirical research. (Prerequisite: 100 or at least second year standing)

M.L. Howe

September-December (3-0)

**\*PSYC 210 (3) THE HISTORY OF PSYCHOLOGY**

This course is designed to provide students with the background necessary to facilitate a full appreciation of upper level courses. Current problems in psychology will be examined within a historical context by reference to outstanding past and present persons and issues. (Pre- or corequisite: 100)

C.W. Tolman

September-April (3-0; 3-0)

**\*PSYC 213 (formerly one-half of 200) (1½) HUMAN INFORMATION PROCESSING**

An introductory survey of important issues, phenomena, and experimental techniques in the field of human information processing; discussion will focus on both theories and research findings in the areas of human attention, perception, learning, memory, thinking, and problem solving; in class demonstrations will be used to illustrate important concepts and highlight relevant methodological procedures. This course will be particularly useful to those students planning to take Psychology 313A, 313B, or 317. (Prerequisite: 100 or at least second year standing)

**\*PSYC 215A (formerly half of 230) (1½) INTRODUCTION TO BIOPSYCHOLOGY**

This course will deal with basic concepts of brain function in relation to behaviour. Topics will include basic aspects of neuronal function, general anatomy of the nervous system, and the functioning of the nervous system in relation to motor output, sensation and motivation. (Prerequisite: 100 or at least second year standing)

September-December (3-0)

**\*PSYC 215B (formerly half of 230) (1½) INTRODUCTION TO BIOLOGICAL ASPECTS OF PSYCHOLOGY**

This course will deal with the relationships which exist between normal and abnormal biological states as they are related to human behaviour and cognition. Topics include brain injury, diet deficiencies, mental retardation and psychoses. (Prerequisite: 100 or at least second year standing)

January-April (3-0)

**\*PSYC 220 (3) INTRODUCTION TO PERSONALITY**

A study of empirical approaches to the understanding of individual personality. Includes several theories of personality (e.g. Freud, Jung, Maslow), methods of assessing personality, creativity, psychopathology. Related methodological techniques will be integrated with these topics throughout the course. (Prerequisite: 100 or at least second year standing)

(Not offered)

September-April (3-0; 3-0)

**\*PSYC 235 (1½) INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY**

A survey of the issues, theories and methods in the study of human psychological development across the entire span of life. Issues will include the influences of constitutional, familial and social factors in development. Theories will include stage, social learning, humanistic and empirical-descriptive accounts of development. Methods will cover the cross sectional, longitudinal, cross sequential, clinical, normative and experimental processes. (Prerequisite: 100 or at least second year standing)

September-December. Also January-April (3-0)

**\*PSYC 240 (3) INTRODUCTION TO SOCIAL PSYCHOLOGY**

A study of empirical approaches to the understanding of man's social behaviour. Topics will include social facilitation, social learning, aggression, conformity, attitudes, conflict, communication, and group performance. Related methodological techniques will be integrated with these topics throughout the course. (Prerequisite: 100 or at least second year standing)

September-April (3-1; 3-1)

**\*PSYC 250 (1½, formerly 3) INTRODUCTION TO APPLIED BEHAVIOURAL PSYCHOLOGY**

A survey of behaviour modification and biofeedback treatment technologies; behaviouristic approach is taken on such topics as sexual dysfunction, phobias and anxieties, weight control, energy conservation, pollution, employment problems, institutional and clinical treatment, public health and medical care, and alcohol and drug dependency; examples of successful programs and associated research will be pertinent to students beginning careers in Human and Social Development, Law, Public Administration, Biology, Education, Medicine, Health Sciences and Social Sciences and those intending to take 311A, 311B, 337 or 338.

L. Acker

January-April (3-0)

**PSYC 300 (3) RESEARCH METHODS IN PSYCHOLOGY**

Topics include descriptive statistics, analysis of data, and testing of hypotheses in empirical psychological research. Specific techniques include chi-square, linear regression, correlation and analysis of variance. Equivalent emphasis is placed on theory and practice. (Prerequisite: 201. With permission of the department 201 and 300ma be taken concurrently by students who (a) have second year standing and a first class average (at least 6.50) in their last 12 units or (b) have third year standing and permission of the instructor.)

September-April (3-1; 301)

**PSYC 311A (formerly half of 311) (1½) CONDITIONING AND LEARNING: COGNITIVE EMPHASIS**

A critical survey of the basic experimental findings and theories of learning process with emphasis on the conditions for learning, retention and transfer of learning; topics include classical and operant conditioning, reinforcement, generalization and discrimination, and an introduction to concept learning; this course will provide useful background for 313A and 313B. (Students should choose between 311A (cognitive emphasis) and 311B (behavioural emphasis). 311A is not a prerequisite for 311B and students may not receive credit for both courses.)

R.B. May

September-December (3-0)

**PSYC 311B (formerly half of 311) (1½) CONDITIONING AND LEARNING: BEHAVIOURAL EMPHASIS**

From a behaviourist's point of view, the field of "learning" concerns very general questions about how our behaviours are acquired, maintained,

\*It is strongly recommended that students take no more than 6 units of second year Psychology courses in any one winter session.

and modified. The approach and methodology which constitutes the experimental analysis of behaviour seeks answers to these questions in terms of observable environmental determinants. Such principles and phenomena as respondent and operant conditioning; positive and negative reinforcement; reinforcement schedules; generalization and discrimination; and punishment will be approached from this point of view. In addition to examining animal studies, the course is designed to give the student training in the application of behavioural principles to the understanding of everyday human behaviour. (311A is not a prerequisite for 311B. Students should choose between 311A (cognitive emphasis) and 311B (behavioural emphasis) and credit may be obtained for only one of the two courses. This course is the preferred prerequisite for 312.)  
B.C. Goldwater September-December (3-0)

**PSYC 312 (1½) ADVANCED CONDITIONING AND LEARNING: BEHAVIOURAL EMPHASIS**

This course follows Psychology 311B, examining some added complexities involved in phenomena covered here, as well as introducing some new topics, examples of which might include behavioural approaches to such "higher level processes" as attention, concept formation, and verbal behaviour; current controversies regarding the nature of reinforcement; and interrelations among instinctive, respondent, and operant behaviour. (Prerequisite: 311A or B or permission of instructor)  
B.C. Goldwater January-April (3-0)

**PSYC 313A (formerly half of 313) (1½) COGNITIVE PSYCHOLOGY: I**

An introduction to information processing analyses of the human memory system and natural language processes in adults. Topics covered will include pattern recognition, short and long term memory, mental imagery, representation of knowledge, and sentence and text processing. Group laboratory projects will be assigned. (Prerequisite: 100 and third year standing)  
M.E.J. Masson (3-1)

**PSYC 313B (formerly half of 313) (1½) COGNITIVE PSYCHOLOGY: II**

An introduction to information processing analyses of complex mental processes. Topics include a review of the basic human memory system, attention, concept formation, problem solving, decision making, and reasoning. Group laboratory projects will be assigned. (Prerequisite: 100 and third year standing)  
M.E.J. Masson January-April (3-1)

**PSYC 315 (3) INTRODUCTION TO NEUROPSYCHOLOGY**

An introduction to neuroanatomy and neurophysiology as related to human and animal brain function and behaviour. Consideration of the contributions of neurology, experimental and clinical neuropsychology to the understanding of normal cognitive and effective functioning and of disturbances resulting from brain damage in selected areas. Demonstrations involving selected patients with cerebral lesions at the Royal Jubilee Hospital will be arranged during the second term. (Should be taken as a prerequisite to 415) (Prerequisite: None, but 215A/B are strongly recommended)  
E.H. Strauss September-April (2-2; 2-2)

**PSYC 317 (formerly 411) (3) SENSATION AND PERCEPTION**

This course will deal with the physical bases of sensation and the relationship between sensation and what we perceive. Although the emphasis will be on human visual processing, audition and the other senses will also be covered. The course will include such topics as: psychophysics, sensory physiology, information processing, visual distortion and cognition involvement in human perception.  
C. Porac September-April (3-0; 3-0)

**PSYC 330 (3, formerly 1½) PERSONALITY**

An introduction to contemporary personality theory and research; survey of several traditional theories of individual behaviour (e.g. Freud, Rogers, need achievement), plus emphasis on newest developments in the field (e.g. social influences on personality); considerable emphasis on research and methods of evaluating theories.  
R.W. Payne (3-0; 3-0)

**PSYC 331 (3) SOCIAL PSYCHOLOGY**

A survey of theories and findings in the following areas: social perception, socialization, social motivation, attitude development and change, interpersonal interaction, and group processes.  
R.A. Hoppe September-April (3-0; 3-0)

**PSYC 334A (formerly half of 334) (1½) PERSONNEL AND ORGANIZATIONAL PSYCHOLOGY**

This course covers research and theory in personnel selection, placement, training, motivation, satisfaction, leadership, productivity and communication. (Not open to students with credit in COMM 120)  
R.D. Gifford September-December (3-1)

**PSYC 334B (formerly half of 334) (1½) WORKPLACE AND CONSUMER PSYCHOLOGY**

This course covers research and theory on the relationship between employees and the work setting; it also introduces consumer psychology. The impact of workplace technology, stress, noise, light and office design on productivity, alcohol and drug abuse and safety behaviour is considered. Research in and methods of investigating consumer behaviour and advertising are surveyed.  
(Not offered) (3-1)

**PSYC 335 (1½, formerly 3) CHILD PSYCHOLOGY**

This course provides an extensive study of human development from conception to 12 years of age. It is expected that students will have had previous contact with research methods and theories of child development for a critical, research oriented review of child psychology. Topics will include prenatal development, perceptual and cognitive development, language acquisition and social and personality development.  
M.L. Howe, M.A. Hunter September-December. Also January-April (3-0)

**PSYC 336 (1½) PSYCHOLOGY OF ADOLESCENCE**

Current problems and normal development in adolescence will be covered. Adolescence will be considered both as a transitional period between childhood and adulthood and as a period with special characteristics in its own right. Included will be normal physical, emotional and social developments as well as concerns specific to adolescents including abilities, interests and orientation.  
G.A. Milton January-April (3-0)

**PSYC 337 (1½) CHILD BEHAVIOURAL DEVELOPMENT: PRINCIPLES AND ANALYSIS**

This course will cover the basic principles of behavioural development from infancy to adulthood. The emphasis will be upon a critical analysis of the individual child's behaviour as being reciprocally a product of, and a determiner of, particular child rearing and institutional/educational practices.  
L.Acker September-December (3-0)

**PSYC 338 (1½) CHILD BEHAVIOURAL DEVELOPMENT ASSESSMENT AND MODIFICATION**

This course will extend the basic principles of behaviour to areas of application in home and institutional settings for infants, children and adolescents. The emphasis will be upon a critical analysis of various behaviour modification programs, their relationship to behaviouristic developmental theory, and the methodological requirements for implementing such programs. (Prerequisite: 311 or 337 or consent of instructor)  
L. Acker January-April (3-0)

**PSYC 339 (1½) PSYCHOLOGY OF AGING AND ADULTHOOD**

Examination of psychological processes associated with development in adulthood. Topics to include physiological concomitants of the aging process, cognitive functioning, personality change, sexual functioning, work and leisure, sources of stress, psychopathology, and death.  
D. Hultsch September-December. Also January-April (3-0)

**PSYC 340 (1½) INTERPERSONAL COMMUNICATION**

Considers communication as a social process, as the fundamental vehicle of human relationships, with emphasis on theory and research. Topics include various levels of communication (verbal/nonverbal, content/relationship); measurable characteristics of communication (incongruence, symmetry/complementarity); and face to face communication as a cybernetic system. The course does not cover linguistics, the mass media, nor personal communication skills. Text: P. Watzlawick, J.H. Beavin, D.D. Jackson, *Pragmatics of Human Communication*  
J.B. Bavelas September-December (3-0)

**PSYC 345 (3) DRUGS AND BEHAVIOUR**

An introductory course designed to give the student an opportunity to become familiar with the effects of selected drugs upon both learned and unlearned behaviour; topics will include: introductory pharmacology,

the stimulus properties of drugs, multiple drug use and the self-administration of drugs, and social implications of drug use; in the second term, the emphasis will be upon alcohol related problems. (Prerequisite: This course is restricted to third and fourth year psychology major and honours students who have either completed 215A or B, or BIOL 150, or who are taking one of these courses concurrently. Anyone wishing exemption must obtain written permission from the instructor.)

M.E. Corcoran, G.N. Hobson September-April (3-0; 3-0)

### PSYC 350 (3) ENVIRONMENTAL PSYCHOLOGY

Environmental psychology is an interdisciplinary area which stresses the behavioural effects of man's interaction with the physical environment. The emphasis of this course will be on this interaction and will include such topics as: (a) methods of environmental assessment; (b) the physical environment and how it is perceived and processed; (c) man's view of and interaction with his natural and manmade habitat; (d) ecological psychology and man as part of an ecological system. (Prerequisite: 100 or registration in Environmental Studies program)

R.D. Gifford September-April (3-1; 3-1)

### PSYC 369 (LING 369) (formerly half of 370) (1½) DEVELOPMENTAL PSYCHOLINGUISTICS

Offered in collaboration with the Department of Linguistics. The course covers the biological bases of language, the child's stage by stage acquisition of the phonology, morphology, syntax and semantics of the child's first language. Also treated are the child's metalinguistic abilities and growing awareness of the form and function of speech arts. (Prerequisite: 100 and a previous course in Linguistics)

January-April (3-0)

### PSYC 370 (LING 370) (1½, formerly 3) PSYCHOLINGUISTICS

Offered in collaboration with the Department of Linguistics; a course in the psychology of language covering such topics as the nature and function of language, experimental psycholinguistics, the relationship of language and cognition, speech perception and processing, comprehension and production of sentences, utilization of semantic systems, bilingualism, and nonverbal communication, language and sociocultural factors. (Prerequisite: 100 and a previous course in Linguistics)

September-December (3-0)

### PSYC 371 (1½) SPEECH, HEARING AND LANGUAGE

An introduction into this field with special emphasis on speech and sound perception, processing of speech information attention and the disorders of speech and language. (The course is designed to supplement 317 and 370, but requires no prerequisite other than 100) Text: J.G. Wolff, *Brain and Hearing*

(Not offered)

January-April (2-1)

### PSYC 390 (1½ or 3) SPECIAL PROBLEMS IN PSYCHOLOGY

Directed independent study for the student. Complete arrangements must be made with an instructor in the Department before registering. (The maximum credit for 390 and 490 together must not exceed six units unless permission of the Chairman of the department is obtained.)

### PSYC 400A (formerly part of 400) (1½) ADVANCED METHODS: THE GENERAL LINEAR MODEL

The course is an introduction to advanced research designs and their underlying rationale. Experimental design and statistical techniques will be applied to problems in psychology. Extensive treatment will be given to the use of the general linear model. The course will examine designs having multiple independent variables and a single dependent variable. Topics covered include correlation, multiple regression, analysis of variance and sampling. (Not recommended for third year students without permission of the instructor.) (Prerequisite: 300 or permission of the instructor)

L. Rosenblood

September-December (2-2)

### PSYC 400B (formerly part of 400) (1½) ADVANCED METHODS: MULTIVARIATE ANALYSIS

The course is a continuation of Psychology 400A to multivariate designs. Techniques used with multiple dependent variables such as factor analysis, multivariate analysis of variance and canonical correlation will be covered. In addition the historical and philosophical development of these techniques in psychological theory will be explored. (Prerequisite: 400A or 400C)

L. Rosenblood

January-April (2-2)

### PSYC 400C (1½) ADVANCED METHODS: ANALYSIS OF VARIANCE

The focus of this course is on advanced research designs that serve as the

foundation of empirical investigations involving multiple independent variables and a single dependent variable. Primary consideration will be given to testing experimental hypotheses through the use of analysis of variance and related techniques; with a secondary emphasis on investigative procedures that make specific use of correlational analyses. Both the rationale and the statistical machinery underlying these techniques will be elaborated in the context of practical research problems in psychology. (Prerequisite: 300 and third year standing or permission of the instructor)

M.L. Howe

September-December (2-2)

### PSYC 401 (1½, formerly 3) PSYCHOMETRIC METHODS

This course will cover the measurement of individual differences, especially personality and ability traits. The focus will be on reliability and validity — how do we know whether, and to what degree, a psychological measure is reliable and valid? Topics include designs for estimating reliability and validity, advanced correlation, and current problems and issues in the field. (The course does not teach how to give psychological tests.) (Prerequisite: 400A or 400C)

M.A. Hunter

January-April (2-2)

### PSYC 409 (1½) SOVIET PSYCHOLOGY

An examination of some current psychological research and theory in the Soviet Union, its historical background, and its place in socialist society.

C.W. Tolman

January-April (3-0)

### PSYC 410 (formerly 301) (3) THEORETICAL FOUNDATIONS OF CONTEMPORARY PSYCHOLOGY

An examination of the theoretical and methodological assumptions underlying the psychological study of behaviour, and their historical origins and development. A consideration of selected topics in the philosophy of science as they concern psychology, theoretical models in modern psychology, controversial issues, and a comparison of different approaches to the study of human behaviour.

C.W. Tolman

September-April (3-0; 3-0)

### PSYC 414 (3) MOTIVATION

The primary question — how best can the forces underlying human behaviour be studied? Theoretical, conceptual and methodological issues arising out of consideration of both natural science (man is a machine?) and human science (man is more than a machine?) models form the basis of the course. Topics include the role of the unconscious, emotions, cognition, physiology, creativity, intention, etc., in determining or reflecting human behaviour.

G.N. Hobson

September-April (3-0; 3-0)

### PSYC 415 (1½, formerly 3) HUMAN NEUROPSYCHOLOGY

The study of brain behaviour relationships with emphasis on clinical aspects. The course assumes basic knowledge acquired in 315 and discusses neuropsychological problems in a functional sequence (e.g. memory, language, right left differences, perceptual disorders) as they occur in brain damaged adults and children. Question of assessment of psychological impairment, reaction to brain damage and rehabilitation will be considered. One term paper is required. (Prerequisite: 315 or permission of instructor)

September-December (2-2)

### PSYC 423 (1½) ADVANCED TOPICS IN PHYSIOLOGICAL PSYCHOLOGY

Topics will include the psychobiology of motivation, memory, and neural plasticity. There will also be some emphasis on the neuropharmacology of behaviour. (Prerequisite: 215A or BIOL 150)

M.E. Corcoran

January-April (3-0)

### PSYC 424 (1½) HUMAN PSYCHOPHYSIOLOGY

The study of the physiological correlates of behaviour in the intact human subject. Topics will include the autonomic nervous system; measures and principles of research with the polygraph; physiological correlates of emotion, sleep and dreaming and psychopathology; conditioning of autonomic response; lie detection; and psychosomatic disorders. Laboratory assignments may be given. (Prerequisite: 215A or BIOL 150 is recommended, but not required)

B.C. Goldwater

September-December (3-0)

### PSYC 430 (3) ABNORMAL PSYCHOLOGY

Definitions and models of the behaviour disorders; study of behaviour disorders with regard to social attitudes, origins, development, manifestations, assessment and treatment. Emphasis is on both the behavioural and humanistic approaches to problems in abnormal psychology. Tentative structure of the course includes one formal term paper.

P. Duncan, R.W. Payne

September-April (3-0; 3-0)

**PSYC 432 (3) SURVEY OF CLINICAL PSYCHOLOGY**

An introductory survey of clinical psychology, including clinical research, methods of behaviour assessment and modification, and the role of the clinical psychologist in the community. Tentative structure of the course includes guest speakers, lectures and discussion. Open only to third and fourth year students.

F.J. Spellacy

September-April (3-0; 3-0)

**PSYC 435 (1½) SELECTED TOPICS IN DEVELOPMENTAL PSYCHOLOGY**

This course provides an in depth examination of selected topics in the psychological literature dealing with children and/or development. The topics covered in any given year will be announced annually by the department before registration. Students receive 1½ units for this course. However, with the permission of the Chairman of the Department, the course may be taken more than once for a maximum of 3 units. (Prerequisite: 3 units of 300 or 400 level Psychology and permission of the instructor)

September-December (3-0)

**PSYC 436 (1½) PSYCHOPATHOLOGY OF CHILDHOOD AND ADOLESCENCE**

A detailed study of theoretical and research approaches to the understanding of developmentally related disorders of childhood and adolescence. Emphasis will be on etiology, description and treatment of these disorders which are in specific developmental "stages", although other disorders which frequently occur during childhood/adolescence will also be considered. (Prerequisites: 335 or 336)

G.A. Milton

September-December (3-0)

**PSYC 439 (SOCI 485) (1½) SEMINAR IN GERONTOLOGY**

Offered in collaboration with the Department of Sociology; a course on the social and psychological aspects of gerontology; faculty members will present seminars on current research interest, and students will present seminars drawn from the following list of topics: physiological and neurological aspects of aging; cognitive functioning; personality; sexuality; work, retirement and leisure; psychopathological aspects of aging; death and dying; widowhood; demographic trends and consequences; aging and the family; age stereotypes and discrimination; methodological and statistical problems in the study of aging and the aged. (Prerequisite: 339 or SOCI 385 or permission of instructor) (Enrollment limited to 20 students)

January-April (3-0)

**PSYC 440 (1½) EXPERIMENTAL SOCIAL PSYCHOLOGY**

An examination of research and methodology in selected areas of social psychology. Individual research projects will be conducted.

(Not offered)

(2-2)

**PSYC 450 (3) DEVELOPMENTAL HANDICAP AND LEARNING DISABILITIES**

A survey of prevalence, causes, research, theory and applied aspects of developmental handicap and learning disabilities in children, adolescents, and adults; second term deals primarily with topics of training, treatment, education, integration, law and attitudes. Includes visits to several hospital and other facilities. (Open to nonpsychology students in related fields. One term paper may be required) (Prerequisites: 100 and either fourth year standing or written permission of the instructor)

September-April (3-0; 3-0)

**PSYC 490 (1½ or 3) ADVANCED SPECIAL PROBLEMS IN PSYCHOLOGY**

Independent study for the advanced student. Complete arrangements must be made with an instructor in the Department before registering. (The maximum credit for 390 and 490 together must not exceed six units unless permission of the Chairman of the Department is obtained.)

**PSYC 499 (3) HONOURS THESIS AND SEMINAR**

Students will attend a weekly seminar which includes oral presentation of their proposed thesis research in the first term and a progress report of the research in the second term. For the remainder of the program, the students will work closely with a faculty supervisor regarding details of the written thesis which is submitted in April. (Third year students who are thinking of joining the Honours program are encouraged to attend 499.) (Prerequisite: Honours standing)

G.N. Hobson and Members of the Department

September-April (1-2-1; 1-2-1)

**GRADUATE COURSES**

Students must consult the Department concerning courses offered in any year.

**PSYC 501 (1-5) PROSEMINAR****PSYC 502 (1-4½) RESEARCH APPRENTICESHIP****PSYC 503 (1½-6) PRACTICUM IN CLINICAL PSYCHOLOGY****PSYC 504 (1½-6) INDIVIDUAL STUDY**

May be offered in areas A through Z (excluding I and O). The student must consult with his instructor about the area of his individual study prior to registration. A maximum of 6 units of 504 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.

**PSYC 506 (1½-6) HUMAN LEARNING****PSYC 507 (1½-6) PERSONALITY****PSYC 508 (1½-6) MOTIVATION****PSYC 509 (1½-6) HISTORY OF PSYCHOLOGY****PSYC 510 (1½-6) THEORIES OF PSYCHOLOGY****PSYC 512 (1½-6) PHYSIOLOGICAL PSYCHOLOGY****PSYC 514 (1½-6) PERCEPTION****PSYC 515 (1½-6) HUMAN NEUROPSYCHOLOGY****PSYC 516 (1½-6) PSYCHOTHERAPY****PSYC 517 (1½-6) RESEARCH METHODS IN PSYCHOLOGY****PSYC 518 (1½-6) PSYCHOMETRIC METHODS****PSYC 519 (1½-6) SOCIAL PSYCHOLOGY****PSYC 520 (1½-6) DEVELOPMENTAL PSYCHOLOGY****PSYC 523 (1½-6) PSYCHOPATHOLOGY****PSYC 524 (1½-6) PSYCHOLOGICAL ASSESSMENT****PSYC 525 (1½-6) LEARNING DISORDERS****PSYC 526 (1½-6) SOCIAL PROCESSES****PSYC 527 (1½-6) SOCIAL DESIGN****PSYC 528 (1½-6) CLINICAL PSYCHOLOGY****PSYC 529 (1½-6) PSYCHOPHYSIOLOGY****PSYC 531 (1½-6) ENVIRONMENTAL PSYCHOLOGY****PSYC 532 (1½-6) PHARMACOPSYCHOLOGY**

Courses 506 to 532 inclusive may be taken in areas A, B, C and/or D. More than one area may be taken in any one Winter Session to a maximum of 6 units at the discretion of the student's Supervisory Committee. Each area carries 1½ units of credit. The specific content of each area will be designated prior to registration.

**PSYC 535 (1½-3) ADVANCED NEUROPSYCHOLOGY TOPICS**

Seminars on Selected Research Topics in Experimental and Clinical Neuropsychology (535A through D).

**PSYC 550 (1½) APPLIED BEHAVIOUR ANALYSIS**

May be taken in areas A, B, C and/or D.

**PSYC 560 (1½-6) BASIC TOPICS IN LIFESPAN DEVELOPMENT AND AGING****PSYC 561 (1½-6) ADVANCED TOPICS IN LIFESPAN DEVELOPMENT AND AGING**

(Prerequisite: 560)

**PSYC 562 (1½-6) SPECIAL TOPICS IN LIFESPAN DEVELOPMENT AND AGING**

(Prerequisites: 560 and 561 or permission of instructor)

**PSYC 570 (1½-3) PSYCHOLINGUISTICS****PSYC 571 (LING 571) (1½-3) DEVELOPMENTAL PSYCHOLINGUISTICS**

This course is offered in collaboration with the Department of Linguistics. It deals with the acquisition of a first language by children, focusing on the development of their knowledge of the semantic system of their language, their capacity for metalinguistic judgments, and the utilization of speech acts.

**PSYC 599 (3-6) THESIS****PSYC 602 (1-6) INDEPENDENT RESEARCH****PSYC 603 (1½-6) ADVANCED CLINICAL PRACTICUM****PSYC 604 (1½-6) INDIVIDUAL STUDY**

May be offered in areas A through Z, (excluding I and O). The student must consult with his instructor about the area of his individual study prior to registration. A maximum of 6 units of 604 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.

**PSYC 605 (1½-3) PRACTICUM IN THE TEACHING OF PSYCHOLOGY**

Teaching practicum with individual instructors of the department in areas of potential teaching interest for the student.

**PSYC 624 (1½-6) ADVANCED CLINICAL ASSESSMENT**

Advanced techniques and interpretation for a variety of clinical assess-

ment devices will be emphasized. Exposure to specialized assessment tools and opportunity to obtain experience in assessment.

**PSYC 628 (1½-6) ADVANCED CLINICAL PSYCHOLOGY**

May be taken in areas A, B, C, and/or D, but only by Ph.D. candidates.

**PSYC 699 (3-15) Ph.D. DISSERTATION**

## DEPARTMENT OF SLAVONIC STUDIES

Zelimir B. Juricic, B.A., M.A. (Brit. Col.), Ph.D. (Nott.), Associate Professor and Chairman of the Department

Gunter H. Schaarschmidt, M.A. (Alta.), Ph.D. (Indiana), Professor  
Zbigniew Folejewski, M.A. (Wilno), Ph.D. (Uppsala), Part time Adjunct Professor

Nicholas V. Galichenko, B.A., M.A. (Brit. Col.), Ph.D. (McGill), Assistant Professor

### GENERAL AND MAJOR PROGRAMS IN RUSSIAN

The Department of Slavonic Studies offers a full complement of courses in Russian (and Slavonic) Studies leading to the B.A. degree in the General or Major Programs. All students planning a program in the Department of Slavonic Studies should consult the Departmental Adviser concerning their selection of courses both within and outside the Department. Students specializing in particular programs will find that they have sufficient electives to enable them to concentrate (double Major) in a second field, in such recommended areas as History, Political Science, or a modern language. A wise selection of courses is therefore important, particularly to those students who may wish to enter graduate school, teaching, library work, government service, etc.

Students planning to take either a General or Major B.A. in Russian must have a satisfactory standing in courses at the 200 level. Students with advanced credit, or those competent in Russian, will be placed at an appropriate level.

#### PROGRAMS IN RUSSIAN

##### GENERAL

100, 200 and 203 (or 149 and 203); nine units of Russian, Slavonic or Serbo-Croatian courses at the 300 or 400 level.

##### MAJOR

100, 200 and 203 (or 149 and 203); 302, 406, plus nine additional units of Russian, Slavonic or Serbo-Croatian courses at the 300 or 400 level. Only 3 units of courses from the following list may be taken as required courses for the Major in Russian: RUSS 301, 304, 331, 414; SLAV 340, 341, 374, 376; SERB 300 and 400.

#### COURSES:

Students should consult the Department concerning courses offered in any particular year.

##### RUSSIAN

##### RUSS 100 (3) FIRST YEAR RUSSIAN

Introduction to the fundamentals of Russian grammar; basic reading, writing and conversational skills. (Prerequisite: No prior knowledge of Russian is required.) Text: Clark: *Russian* September-April (3-1; 3-1)

##### RUSS 149 (6) INTENSIVE RUSSIAN

This course is designed to cover a basic two year study of the Russian language in one year (equivalent to Russian 100 plus Russian 200) and to provide a rapid and thorough grounding in how to read, write and speak Russian, with an emphasis on making practical use of the language as early as possible. Short texts and audiovisual materials will be used to reinforce reading and comprehension and to prepare students for conversation practice. (Prerequisite: None. Students with credit for 100 may not take this course for credit. Students not making satisfactory progress will be advised to transfer to 100.)

September-April (5-2; 5-2)

##### RUSS 200 (3) SECOND YEAR RUSSIAN

Completion of the fundamentals of Russian grammar. Word building and idiomatic usage. Readings from Russian and Soviet authors and the

press. (Prerequisite: 100) (Not open to students with credit for 149)

September-April (3-1; 3-1)

##### RUSS 203 (3) ORAL AND WRITTEN PRACTICE

This course is designed to provide students with oral and written practice in Russian. (Prerequisite: 100) (Credit cannot be obtained for both 201 (or 300 or 202) and 203.)

September-April (3-0; 3-0)

##### RUSS 301 (1½) ASPECTS OF RUSSIAN CULTURE (In English)

A survey of outstanding cultural trends against the background of Russia's past and present. Lectures will focus on traditional concepts and major developments in folklore, religion, music, literature, philosophy, art, and architecture in an attempt to give students a cultural perspective for viewing the Russian way of life. (Prerequisite: None, this course is open to all students)

September-December (3-0)

##### RUSS 302 (3) RUSSIAN CONVERSATION AND COMPOSITION

This course, conducted completely in Russian, will emphasize oral practice and conversational exchange. It will also require the regular composition of essays. (Prerequisite: 200 and 203, or permission of the Department)

September-April (4-0; 4-0)

##### RUSS 304 (1½) LITERATURE AND CINEMA IN THE U.S.S.R. (In English)

A survey of selected films that are adaptations of significant literary works or illustrate important cultural events or movements. (Prerequisite: None, this course is open to all students)

January-April (3-0)

##### RUSS 321 (3) RUSSIAN WORKSHOP IN THE SOVIET UNION

Under the supervision of faculty, students will be engaged in specialized projects dealing with Russian language and culture. (May be taken more than once to a maximum of 6 units with permission of the Department) (Prerequisite: 100 or 390 or the permission of the Department) (Note: This course will involve one month's study in the Soviet Union; for details consult the Department.)

##### RUSS 331 (formerly 250) (1½) THE PEOPLES OF THE SOVIET UNION (In English)

An introductory survey of the cultures of the non-Slavic peoples of the Soviet Union. (Prerequisite: None. This course is open to all students)

January-April (3-0)

##### RUSS 350A (formerly half of 350) (1½) READINGS IN RUSSIAN LITERATURE OF THE 19TH CENTURY

This course will provide students with an introduction to the Golden Age of Russian literature and with practice in the reading of literary Russian. Writers to be studied include Pushkin, Lermontov, Gogol, Turgenev, Tolstoy, Dostoevsky and Chekhov. (Prerequisite: 200 or 149, and 203, or permission of the Department)

January-April (3-0)

##### RUSS 350B (formerly one-half of 350) (1½) READINGS IN SOVIET LITERATURE FROM THE REVOLUTION TO THE PRESENT

This course will acquaint students with the works of 20th century Soviet writers: Gorky, Babel, Zamyatin, Bulgakov, Solzhenitsyn, Aksekov, Shukshin and Trifonov. (Prerequisite: 200 or 149, and 203, or permission of the Department)

September-December (3-0)

##### RUSS 390 (3) RUSSIAN READING COURSE

A one year course, intended for students who wish to read Soviet journals in the fields of the Natural and Social sciences and the Humanities. Material is chosen corresponding to the students' areas of interest. (Prerequisite: None, this course is open to all students. Students who have passed 100 cannot receive credit for this course.)

September-April (3-0; 3-0)

**RUSS 400A (formerly half of 400) (1½) RUSSIAN PHONETICS**

A detailed study of the Russian sound system, including practical and remedial exercises in Russian pronunciation. (Prerequisite: 200 and 203, or permission of the Department)

September-December (3-0)

**RUSS 400B (formerly half of 400) (1½) RUSSIAN MORPHOLOGY AND SYNTAX**

A systematic study of Russian morphology and syntax, including practical exercises in Russian sentence structure. (Prerequisite: 200 and 203, or permission of the Department)

January-April (3-0)

**RUSS 406 (3) ADVANCED COMPOSITION AND STYLISTICS**

The course is conducted entirely in Russian and emphasizes written composition, stylistic analysis, and conversational fluency. (Prerequisite: 302)

September-April (3-0; 3-0)

**RUSS 408 (1½) HISTORY OF THE RUSSIAN LANGUAGE**

The development of Russian from the earliest written period to the present. Historical phonology, morphology, lexicology. (Prerequisite: 200 and 203, or permission of the Department)

September-December (3-0)

**RUSS 409 (1½) EARLY RUSSIAN LITERATURE**

The literary heritage of Medieval Russia from Kievan Rus through the 18th century. (Prerequisite: 408)

January-April (3-0)

**RUSS 414 (formerly part of 412 and 413) (1½) TOLSTOY AND DOSTOEVSKY (In English)**

The works of two major Russian writers of the 19th century will be studied against the background of their lives and times. (Prerequisite: None; this course is open to all students)

September-December (3-0)

**RUSS 426 (1½) PRACTICAL TRANSLATION**

A study of practical translation from and into Russian. Material will be drawn from a representative variety of fields including business, law, social work, politics, literature, Soviet press and sciences. (Prerequisite: 302)

January-April (3-0)

**RUSS 434 (1½ or 3) SPECIAL TOPICS**

This course is designed for Major students and may be offered either as a reading course, or a seminar, depending on the student's interest and on the availability of a supervising instructor. (May be taken twice in different topics to a maximum of six units) (Prerequisite: 200 or 149, and 203, and permission of the Department)

(3-0) or (3-0; 3-0)

**SLAVONICS****SLAV 340 (LING 340) (1½) INTRODUCTION TO THE SLAVIC LANGUAGES (In English)**

This course will acquaint students with the family of Slavic languages,

their history and place within the Indo-European language family, and their present day structure. (Prerequisite: A previous course in Linguistics or permission of the Department)

(Not offered)

(3-0)

**SLAV 341 (LING 341) (1½) SEMINAR IN A SLAVIC LANGUAGE: STRUCTURE AND HISTORY (In English)**

Although designed as a continuation of Slavonics 340 (Linguistics 340), this course can be taken independently as well, and more than once for credit (in different languages), to a maximum of 3 units. This course will deal with the history and structure of a Slavic language not offered otherwise in the Department of Slavonic Studies. Depending upon demand, a different language will be treated in each given year. Languages offered at present are: Sorbian, Polish, Ukrainian, Czech. (Prerequisite: A previous course in Linguistics or permission of the Department)

(3-0)

**SLAV 374 (HIST 374) (3) IMPERIAL RUSSIA, 1689-1917 (In English)**

A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change. (Students are strongly advised to complete an introductory course in history before undertaking this advanced course.)

September-April (3-0; 3-0)

**SLAV 376 (HIST 376) (1½) THE SOVIET UNION (In English)**

A history of the U.S.S.R. from 1917 to the present. The course will analyze the forces that have moulded the policies of the Communist leadership and examine how these policies have affected the shape of Soviet society and the role of the Soviet Union in world affairs. (Students are strongly advised to complete an introductory course in history before undertaking this advanced course.)

January-April (3-0)

**SERBO-CROATIAN****SERB 300 (3) FIRST YEAR SERBO-CROATIAN**

Introduction to the fundamentals of Serbo-Croatian grammar; basic reading, writing and conversational skills. (Prerequisite: A 200 level course in a foreign language or its equivalent, or the permission of the Department)

September-April (3-0; 3-0)

**SERB 400 (3) SECOND YEAR SERBO-CROATIAN**

Review of essential grammar, progressing into more advanced grammar and composition; conversation with some practice in the language laboratory. (Prerequisite: 300, or its equivalent, or the permission of the instructor)

September-April (3-0; 3-0)

**DEPARTMENT OF SOCIOLOGY****GRADUATE PROGRAM**

For information on studies leading to the M.A. degree, see page 218; for graduate courses see page 132.

**UNDERGRADUATE PROGRAMS**

The Department offers General, Major and Honours programs. Students interested in any of these programs are urged to consult the departmental undergraduate adviser as early as possible.

Sociology 100 is required for all three programs. Three units of Sociology at the second year level (viz., 202 and 209, or 200) are also required for all three programs. These requirements may be satisfied by course challenge or may be omitted by permission of the Department.

**General:** In addition to the above, the General Program requires nine additional units of Sociology from courses numbered 300 and above.

**Major:** In addition to 100 and 202/209 or 200 or both, the Major Program requires 300, 371, 375 and 7½ additional units of Sociology numbered 300 and above.

R. Alan Hedley, B.A., M.A. (Brit. Col.), Ph.D. (Ore.), Professor and Chairman of the Department

Robert B. Hagedorn, B.A. (San. Fran. St.), M.A. (Wash.), Ph.D. (Texas), Professor

Jean E. Veevers, B.A., M.A. (Alta.), Ph.D. (Tor.), Professor

Stephen D. Webb, B.A. (William and Mary), M.A. (George Washington), Ph.D. (Tennessee), Professor

Paul M. Baker, B.A. (U. of Vic.), M.A., Ph.D. (Minn.), Associate Professor

Daniel J. Koenig, A.B. (Notre Dame), M.S. (Florida St.), Ph.D. (Illinois), Associate Professor

Richard L. Ogmundson, B.A. (U. of Vic.), M.A., Ph.D. (Mich.), Associate Professor

T. Rennie Warburton, B.A. (Leeds), Ph.D. (London), Associate Professor

Roy E.L. Watson, B.A., M.A., Ph.D. (Tor.), Associate Professor

William K. Carroll, B.A. (Brock), M.A., Ph.D. (York), Assistant Professor

C. David Gartrell, B.A. (Brit. Col.), M.A., Ph.D. (Harvard), Assistant Professor

Mary J. Gallant, A.B., M.A. (Missouri), Visiting Lecturer (1984-85)

**Honours:** In addition to 100 and 202/209 or 200 or both, the Honours program requires 300, 371, 375, 471, 499, and nine additional units of Sociology numbered 300 and above. It is recommended that Honours students take Sociology 371 and 471 as early as possible.

To receive a First Class Honours degree a student must obtain a grade of at least A- in 499, and a minimum grade point average of 7.00 or higher for all Sociology courses numbered 300 and above, and have a minimum graduating average of 6.50.

To receive a Second Class Honours degree a student must obtain a grade of at least B- in 499, and a grade point average of at least 6.00 in all Sociology courses numbered 300 and above, and have a minimum graduating average of 3.50.

Honours students who do not meet the above requirements, but complete those for a Major in Sociology, may opt to receive a Major degree. A student who opts for this and who has a graduating average of 6.50 would receive a Major in Sociology with First Class standing, while a student with a graduating average between 3.50 and 6.49 would receive a Major degree with Second Class standing.

## UNDERGRADUATE COURSES

Some of these courses are not offered every year. Please consult with the Department to find out which courses will be given in a particular year.

Prerequisite for Third and Fourth Year courses: Courses numbered 300 and above may be chosen as electives by students in other departments if one of the following conditions is satisfied:

- Completion of 100.
- The student has at least third year standing and the permission of the course instructor.

### **SOCI 100 (3) INTRODUCTION TO SOCIOLOGY**

A general introduction to the perspectives and methods of sociology, including a consideration of basic concepts and problems in the analysis of groups and societies. September-April (3-0; 3-0)

### **SOCI 200 (3) CANADIAN SOCIETY**

The structure and development of modern Canadian Society. Topics include: ethnicity, immigration and population trends; social stratification, power and education opportunity; problems of national identity and integration. Material is taken from research and scholarship in sociology and other social sciences. (Prerequisite: At least second year standing or 100) September-April (3-0; 3-0)

### **SOCI 202 (1½) AN INTRODUCTION TO SOCIAL PROBLEMS**

A survey of the incidence, correlates, effects and social response to crime and delinquency, familial disruption, economic deprivation and racial, ethnic and sex discrimination, etc. (3-0)

### **SOCI 209 (1½, formerly 3) DEVELOPMENT OF MODERN SOCIOLOGY**

The sociological perspective as exemplified by theoretical and methodological innovations. Emphasis will be on the development of sociology from the late 19th century to the present. Students will participate in research projects in order to gain familiarity with sociological research techniques and strategies. (Prerequisite: 100) (3-0)

### **SOCI 300 (3) SOCIOLOGICAL THEORY**

A consideration of the nature of theory and explanation, with special emphasis on major sociological theories and theorists. The relation of earlier sociological thought to contemporary theory. September-April (3-0; 3-0)

### **SOCI 301 (3) DEVIANCE AND SOCIAL CONTROL**

Criminological conceptualizations and statistics are critically analyzed. Various types of social deviance are analyzed and used as case studies to outline the evolution of social control from religion through law to medicine and science. September-April (3-0; 3-0)

### **SOCI 304 (3) THE INDIVIDUAL AND SOCIETY**

Sociological perspectives on social psychology, emphasizing the importance of social structure in accounting for, e.g., social cognition, the self, social interaction, collective behaviour; students will have the opportunity to experience directly the diverse research methods used by social psychologists in a series of research exercises for the course. September-April (3-0; 3-0)

### **SOCI 305 (3) SOCIOLOGY OF FAMILIES AND HOUSEHOLDS**

Consideration of similarities and differences regarding families and

households as an alternative unit of analysis. In the first term the focus will be upon families and households in comparative perspective, and their relationship to the larger society. In the second term the internal organization of families and households and interpersonal processes within them will be examined. Sex roles. The socialization of the young. Alternatives to the conventional family. September-April (3-0; 3-0)

### **SOCI 310 (1½, formerly 3) RELIGION IN SOCIETY**

A critical examination of selected theories and research on the relationship of religion to such problems as order, control, conflict and change in various types of society. While the relationship between Christianity and the development of Western societies, including Canada, will be a major focus, other religions may be considered. (3-0)

### **SOCI 311 (1½) IDEOLOGY AND SOCIETY**

Selected topics from Marx, Mannheim and contemporary sociological studies on the relation of ideology to social structure and social change. (3-0)

### **SOCI 315 (3) CLASS, STATUS, AND POWER**

An overview of theory and research in the area of social inequality. Focus is on the sources and consequences of the various forms of inequality (e.g., political, social, economic) found in present day societies. September-April (3-0; 3-0)

### **SOCI 316 (1½) SOCIAL MOVEMENTS**

A study of the sources, stages and consequences of social movements. Various theories about the nature of social movements will be discussed. Data bearing on these theories concerning topics such as the nature of participants, the importance of elite leadership, the role of communication networks, and the activity of agents of social control will also be considered. Specific social movements may be examined in detail. These would vary from year to year, but may include religious, ecological, political, educational, industrial, agricultural, ethnic, racial, and/or nationalist movements. (3-0)

### **SOCI 319 (1½) INDUSTRIAL SOCIOLOGY**

Individual-work linkages, labour force trends; organizational, technological, and work group determinants of industrial behaviour. (Credit cannot be obtained for 319 (1½ units) and Sociology 320 (3 units)) (3-0)

### **SOCI 321 (1½) SOCIOLOGY OF OCCUPATIONS**

Attitudes to work, similarities and differences between occupations; the nature of professions; the contrast between jobs and careers. (Credit cannot be obtained for 320 (3 units) and Sociology 321 (1½ units)) (3-0)

### **SOCI 323 (1½) STRUCTURE OF FORMAL ORGANIZATIONS**

Theories of and methodological problems in the study of organizational structures. Structural dimensions of the division of labour, power, communication, hierarchy, size, technology, and the relationships between organizations will be stressed. (3-0)

### **SOCI 324 (1½) PROCESS AND CHANGE IN FORMAL ORGANIZATIONS**

The first half of the course will cover such topics as norms, values, and roles, including morale, administration, job satisfaction and alienation. The second half will cover organizational change including the evolving types of formal organizations. (Not open to students with credit in 421, or 3 units of credit in 420) (3-0)

### **SOCI 325 (1½, formerly 3) SMALL GROUP DYNAMICS**

A survey of sociological approaches to small groups, including topics such as group formation and cohesion, group influence on the individual, group differentiation, decision making and problem solving in groups, and collective behaviour. Small group research methodology will be a major concern, and will be taught by a series of labs in the Small Groups Laboratory as well as in the field. September-December (3-0)

### **SOCI 326 (1½) SOCIAL NETWORKS**

This course examines the major models, methods, and findings which characterize network analysis as an approach to the study of social life; the following areas may be discussed: friendship, social influence and status, small groups, communication and diffusion of information, corporate and community organization, social and economic mobility; the sorts of questions posed include: do contacts really make a difference in the kinds of jobs people get? How small is the "small world"? How closely connected are the boards of directors of major corporations? (3-0)

**SOCI 330 (formerly 415) (3) POLITICAL SOCIOLOGY**

A discussion of conflict and cooption, the distribution of power, voting behaviour, extremist political behaviours, international stratification and political change. (September-April (3-0; 3-0))

**SOCI 335 (1½, formerly 3) RACE AND ETHNICITY**

Minority and ethnic groups within complex societies with special reference to Canada. Not open to students with credit in Anthropology 335 prior to 1979. (3-0)

**SOCI 341 (1½) HUMAN ECOLOGY**

Study of the form and development of human communities as adaptations to continuously changing conditions of life. (3-0)

**SOCI 342 (1½) WORLD DEMOGRAPHY**

Study of the growth, distribution and movement of the world population with special emphasis upon the social causes of changes in patterns of fertility, mortality and migration and the social implications of these changes. (Note: Credit cannot be given for both 342 and 340) (3-0)

**SOCI 343 (1½) CANADIAN DEMOGRAPHY**

Study of the growth, distribution and movement of the Canadian population with special emphasis upon the social causes of changes in patterns of fertility, mortality and migration and the social implications of these changes for Canadian society. (Note: Credit cannot be given for both 343 and 340) (3-0)

**SOCI 350 (3) SOCIAL WELFARE AS A SOCIAL INSTITUTION**

The historical development of social welfare as a social institution; the organizations of welfare services and the functions they perform in modern society; the relation of social welfare to other institutions. (September-April (3-0; 3-0))

**SOCI 365 (1½) SOCIOLOGY OF LEISURE**

Conceptual problems in the identification of leisure. The production, consumption and distribution of leisure. The emergence of leisure defined lifestyles. The study of selected leisure activities. (3-0)

**SOCI 371 (1½) INTRODUCTION TO SOCIAL STATISTICS**

The logic and interpretation of statistical concepts and techniques in the Social Sciences. Specific topics include measurements, distributions, cross tabular analysis, bivariate correlation and regression, sampling, elementary probability and statistical inference. Credit cannot be obtained for 370 (3 units) and 371 (1½ units). Course restricted to students in a sociology program, or majoring in Nursing or Leisure Studies, or to others having permission of the instructor. NOTE: Students must register for a scheduled laboratory time. (3-1)

**SOCI 375 (3) INTRODUCTION TO SOCIAL RESEARCH**

Introduction to important concepts and strategies of social research to enable students to evaluate critically the results of published research and begin to carry out research of their own. Current methodological issues, basic steps involved in doing research, research techniques, and theory construction. (September-April (3-0; 3-0))

**SOCI 381 (1½) SEX ROLES**

An examination of the social import of sex roles in contemporary society. Includes evaluation of evidence of sex differences (biological, psychological and social); definitions of masculinity and femininity; sex role socialization; implication of sex roles for achievement in education, income, and occupations; and an analysis of the causes and consequences of sex role change. (3-0)

**SOCI 385 (1½) SOCIOLOGY OF AGING**

A survey of sociological approaches to aging, including topics such as: cultural definitions of age; demographic trends and consequences; methodological problems in the study of aging; age stratification; retirement; death and dying. (Credit cannot be obtained for 385 (1½ units) and 380 (1½ units)) (3-0)

**SOCI 390 (1½) SELECTED PROBLEMS IN SOCIOLOGY**

Presentation of current interests of various faculty members. Students interested in this course should enquire at Registration when the course is to be offered and what the substantive presentation will involve. (Students may enroll in this course in different areas for a maximum of 3 units) (3-0)

**SOCI 395 (1½) SPECIAL TOPICS IN CANADIAN SOCIETY**

Detailed study of one or more limited aspects of Canadian society.

Examples are sociological aspects of regionalism; recent social changes in Quebec; the position of original peoples; the changing status of women; protest movements; social structure and social policy. (Prerequisite: 200, or permission of instructor) (3-0)

**SOCI 401 (1½) SOCIOLOGY OF LAW**

The interrelationships of law and other social institutions, socio-economic origins and class interests of legal functionaries, and law as social conflict are analyzed in Canadian and cross cultural contexts. (3-0)

**SOCI 418 (ANTH 418) (1½) SOCIAL CHANGE**

General history of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. (Prerequisite: 100, and ANTH 100A and/or 100B or 200 or permission of the instructor) (3-0)

**SOCI 419 (ANTH 419) (1½) MODERNIZATION AND DEVELOPMENT**

An examination of selected theories and research on development, underdevelopment, and dependency in the modern world; examples will be taken from various parts of the world, including Canada. (3-0)

**SOCI 441 (1½) URBAN SOCIOLOGY**

This course focuses on the sociological analysis of the city, with specific emphasis on the social aspects of urbanization, urbanism and urban problems. Topical areas include the examination of various urban institutions as well as selected aspects of the urban environment which are seen as important concomitants of urban problems. These include the supposed effects of congestion, housing patterns, social class differentials and their relationship to various problems such as crime, welfare, alcoholism, problems of the aged and a variety of other concerns. (3-0)

**SOCI 445 (1½) SOCIOLOGY OF HEALTH AND MEDICINE**

Seminar in the social implications of illness, the health professions, systems of health care, epidemiology. (3-0)

**SOCI 471 (formerly 372) (1½) ADVANCED SOCIAL STATISTICS**

Techniques of multivariate analysis emphasizing topics in multiple regression. Laboratories will include analysis of data using SPSS. (Not open to students with credit in 370) (Prerequisite: 371, or permission of instructor) (January-April (3-1))

**SOCI 485 (PSYC 439) (1½) SEMINAR IN GERONTOLOGY**

Offered in collaboration with the Department of Psychology; a course on the social and psychological aspects of gerontology; faculty members will present seminars on current research interests, and students will present seminars drawn from the following list of topics: physiological and neurological aspects of aging; cognitive functioning; personality; sexuality; work, retirement, and leisure; psychopathological aspects of aging; death and dying; widowhood; demographic trends and consequences; aging and the family; age stereotypes and discrimination; methodological and statistical problems in the study of aging and the aged. (Prerequisite: 385 or PSYC 339, or permission of instructor. Enrollment limited to 20 students) (3-0)

**SOCI 490 (1-3) DIRECTED STUDIES**

This course may be submitted for an elective course in Sociology in the Fourth Year of the Honours Program with the permission of the Department.

**SOCI 499 (3) HONOURS SEMINAR AND GRADUATING ESSAY**

Honours students are permitted to audit this seminar in the Third Year and are required to take the seminar for credit in the Fourth Year.

**GRADUATE COURSES**

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

**SOCI 500 (1½ or 3) PROBLEMS IN SOCIOLOGICAL THEORY****SOCI 505 (1½) CURRENT PROBLEMS AND RESEARCH IN**

**SOCIOLOGY**

**SOCI 510 (1½ or 3) QUANTITATIVE METHODS**

**SOCI 511 (1½ or 3) RESEARCH DESIGN**

**SOCI 530 (1½ or 3) STUDIES IN SOCIAL STRUCTURE**

**SOCI 535 (1½ or 3) STUDIES IN SOCIAL PROCESSES**

**SOCI 590 (1½ or 3 or 6) DIRECTED STUDIES**

**SOCI 599 (3 or 6) THESIS**

## **WOMEN'S STUDIES**

Two courses, Women's Studies 200 A and B, serve as an introduction to women's issues and to feminist studies. There are a number of other courses on campus that deal with particular aspects of Women's Studies in the contexts of the various disciplines. Students interested in further information should contact the instructors of Women's Studies A and B or members of the Women's Studies Committee: Profs. M.J. Callahan (Social Work), C. Rooke (English), E.P. Tsurumi (History), J.R. Waelti-Walters (French).

The Division of University Extension offers nondegree courses on a variety of themes within Women's Studies. For more information call University Extension, Women's Studies Program Coordinator, local 8451.

**WS 200 A (1½) WOMEN IN SOCIETY: PAST AND PRESENT**

This is an interdisciplinary and cross cultural course about women and

their roles in society. Using an African novel as starting point, the course raises a number of feminist issues. Historical, anthropological, biological, and philosophical sources will be examined as appropriate. (Prerequisite: Second year standing or permission of the instructor) (3-0)

**WS 200 B (1½) WOMEN IN SOCIETY: PRESENT AND FUTURE**

In this interdisciplinary and cross cultural course, a North American utopian novel will provide the basis for analysis of contemporary women's experiences and of theoretical models for change. Some assumptions and research models that feminist scholarship brings to the study of psychology, political science, linguistics, sociology, and education will be examined) (Prerequisite: Second year standing or permission of the instructor) (3-0)

# FACULTY OF EDUCATION

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## FACULTY AND OTHER OFFICERS

- John J. Jackson, Dip. P.E. (Carnegie Coll.), M.Sc. (Ottawa), Ph.D. (Alta.), Professor and Dean of the Faculty
- Richard L. Williams, B.S. (St. Cloud St. Coll.), M.S. (Cornell), Ph.D. (Wash. St.), Associate Dean
- Robert Swailes, B.S.A. (Man.), M.Ed. (Brit. Col.), Assistant Dean
- R. Anne McLaughlin, B. Com. (Brit. Col.), M.S. (Ore.), Director of Academic Advising
- H. David Turkington, B.S., M.S., Ed.D. (Wash. St.), Dip.P.E. (Oslo), Director of Education Extension
- Elisabeth D. Haythorne, Advising Assistant
- Diana F. McBratney, C.D., Advising Officer

## DEPARTMENT OF ART AND MUSIC EDUCATION

- Ian L. Bradley, B.Ed. (Brit. Col.), M.Ed. (W. Wash. St. Coll.), Ed.D. (Brit. Col.), Associate Professor and Chairman of the Department
- Franklin E. Churchley, A.R.C.T., L.R.C.T. (Royal Cons. Music), B.Mus. (Tor.), M.A., Ed.D. (Columbia), Professor
- John C. Cawood, B.Ed., M.Ed. (Brit. Col.), M.F.A. (Gto.), Associate Professor
- Geoffrey S. Hodder, B.Ed., M.A. (U. of Vic.), Associate Professor
- R. Dale McIntosh, A.R.C.T. (Tor.), B.Ed. (Alta.), M.Ed. (Sask.), M.Mus. (Alta.), Ph.D. (Wash.), Associate Professor
- Marion A. Small, B.Ed. (Brit. Col.), M.Ed. (W. Wash. St. Coll. of Ed.), Associate Professor
- Margaret M. Travis, M.Sc., D.Ed. (Orc.), Associate Professor
- Margery M. Vaughan, L.R.S.M. (Royal School of Music), Mus.G., (W. Ont.), B.Mus. (Tor.), M.Litt. (Durham), Ed.D. (Georgia), Associate Professor
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- Noel T. Gantly, B.A., M.Ed. (Ottawa), Assistant Professor
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## DEPARTMENT OF COMMUNICATION AND SOCIAL FOUNDATIONS

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- Robert D. Armstrong, B.Ed., B.A., M.Ed. (Alta.), Ed.D. (Calif., Berkeley), Professor
- Peter O. Evans, B.Ed., M.Ed., Ph.D. (Alta.), Professor
- W. John Harker, B.A. (Brit. Col.-Vic. Coll.), M.A. (Wash.), Ed.D. (Brit. Col.), Professor
- Christopher E. Hodgkinson, B.Sc. Econ. (London), M.Ed., Ed.D. (Brit. Col.), Professor
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- Seyd A.P. Safavi, B.F.A. (U. of Vic.), Senior Academic Assistant

## SCHOOL OF PHYSICAL EDUCATION

- David Docherty, B.S., M.S., Ph.D. (Orc.), Professor and Director of the School
- Martin L. Collis, Dip. P.E. (Loughborough), M.S. (Idaho), Ph.D. (Stanford), Professor
- Gerald A. Carr, Dip. P.E. (Loughborough), B.A., B.A., M.S. (Calif., L.A.), Ph.D. (Stellenbosch), Professor
- John J. Jackson, Dip. P.E. (Carnegie Coll.), M.Sc. (Ottawa), Ph.D. (Alta.), Professor
- Howard A. Wenger, B.P.E., M.P.E. (Brit. Col.), Ph.D. (Alta.), Professor
- John D. Eckerson, B.S., M.A. (Wash.), Ph.D. (Ore.), Associate Professor
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- Maureen C. Hibberson, B.P.E. (Brit. Col.), M.A. (Ore.), Assistant Professor
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- R. Anne McLaughlin, B.Com. (Brit. Col.), M.S. (Ore.), Assistant Professor
- Mary M. O'Sullivan, B.Ed. (Thomond College of Education), M.A. (U. of Vic.), Ph.D. (Ohio State), Assistant Professor
- Leslie H. Peake, Dip. in P.E. (St. Paul's Coll., Bristol), M.Sc. (Springfield Coll.), Assistant Professor
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- H. Dawn Large, B.Sc. (U. of Vic.), Senior Academic Assistant

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- Roger A. Ruth, B.S., M.S. (Kansas State Teachers' Coll.), Ph.D. (Calif., Berkeley), Associate Professor and Chairman of the Department
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## DEPARTMENT OF SOCIAL AND NATURAL SCIENCES

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 David R. Stronck, A.B. (St. Patrick's Coll., Calif.), M.S., Ph.D. (Ore. St.), Associate Professor  
 Robert Swailes, B.S.A. (Man.), M.Ed. (Brit. Col.), Associate Professor  
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 James H. Vance, B.Sc. (Alta.), M.A. (Wash.), Ph.D. (Alta.), Associate Professor  
 Richard L. Williams, B.S. (St. Cloud St. Coll.), M.S. (Cornell), Ph.D. (Wash. St.), Associate Professor  
 Larry D. Yore, B.S., M.A., Ph.D. (Minn.), Associate Professor  
 John J. Sheppy, B.A., M.Ed. (Brit. Col.), Assistant Professor

## DIVISION OF PROFESSIONAL STUDIES

William K. Cross, B.Ed. (Brit. Col.), M.A., Ed.D. (Wash. St.), Director  
 Kenneth R. Frey, B.A. (Sheffield), M.Ed. (West. Wash. St. Coll.), Coordinator of School Experiences (Secondary)

# PROGRAMS OFFERED BY THE FACULTY OF EDUCATION

## UNDERGRADUATE PROGRAMS

### 1. BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM) DEGREE . . . . . page 138

This is a five year program in elementary teacher preparation leading to a degree in Education and to teacher certification. The basic preparation is for classroom generalists, although some specialization is included. Students may begin the program at a regional college and transfer to the University for Year Two or Year Three. A Standard Certificate is available after Year Four on the Regular program; the degree and a Professional Certificate are granted after Year Five. The Physical Education Specialist program requires completion of the degree for initial certification which will be the Professional Certificate.

### 2. BACHELOR OF EDUCATION (SECONDARY CURRICULUM) DEGREE . . . . . page 144

This is a five year program leading to a degree in Education and to teacher certification. The degree requires specialization in one or two teaching subject areas normally taught in the public secondary schools of British Columbia. On completion of the degree the student is eligible for the Professional Certificate.

### 3. BACHELOR OF EDUCATION DEGREE . . . . . page 143

#### a. Elementary . . . . . page 143

This is a two year post degree professional program for university graduates who wish to become elementary school classroom teachers. Completion of the program qualifies candidates for teacher certification and a degree in Education.

#### b. Secondary . . . . . page 149

This is a two year post degree professional program for university graduates who wish to become secondary school teachers. Completion of the first year qualifies candidates for a teaching certificate. Those who complete the second year will qualify for a degree in Education.

### 4. BACHELOR OF ARTS DEGREE . . . . . page 150

#### a. Major in Human Performance . . . . . page 150

This four year program offers a liberal arts and/or social science perspective in the study of fitness, sport, and physically active life styles.

#### b. Major in Leisure Studies . . . . . page 150

This four year program prepares students to enter the field of recreational administration and provides preparation in the planning, implementation and supervision of programs in a wide range of recreational settings. The leisure studies program is available only on a cooperative model basis.

### 5. BACHELOR OF SCIENCE DEGREE . . . . . page 151

#### Major in Human Performance . . . . . page 151

This four year program offers a science perspective in the study of fitness, sport, and physical activity.

### 6. DIPLOMA IN SCHOOL LIBRARIANSHIP

This is a 15 unit program (equivalent to one year) designed to prepare teachers to function as teacher librarians in either elementary or secondary schools.

### 7. NATIVE INDIAN LANGUAGE TEACHER TRAINING

A two year program leading to a special licence issued by the Ministry of Education prepares individuals to function as consultants, coordinators, or resource teachers in the teaching of native languages in communities or schools of British Columbia.

## GRADUATE PROGRAMS

Graduate degrees in Education are offered through the Faculty of Graduate Studies. General information about these degrees may be found on pages 199 and 206 of this Calendar.

Inquiries should be directed to the Dean of the Faculty of Graduate Studies, the Associate Dean of the Faculty of Education, or the Education Departmental Graduate Advisers. Students seeking teacher certification are referred to pages 143 and 149.

### 1. MASTER OF EDUCATION DEGREE . . . . . page 206

### 2. MASTER OF ARTS DEGREE . . . . . page 206

### 3. DOCTOR OF PHILOSOPHY DEGREE . . . . . page 206

## ACADEMIC ADVICE

Students needing advice about any of the undergraduate courses or programs offered in the Faculty of Education (including the Post-Degree Professional Programs) should consult the Education Advising Centre, Room A250, MacLaurin Building, or write to that office for information.

All undergraduate students registered in the Faculty are required to make a commitment to a particular program. The Education Advising Centre will prepare a Program Outline for each student based on current

Faculty regulations. All previously completed work will be considered in relation to the student's choice of program and teaching areas. The Faculty reserves the right to review any program or course work that is more than ten years old. Additional work may be required if courses taken ten or more years ago are outdated.

All students are advised to confirm program requirements with the Advising Centre before registering in any session.

## ADMISSION TO THE FACULTY OF EDUCATION

Applicants for admission to the Faculty of Education must meet general University requirements described on pages 7-11, as well as general Faculty and specific program requirements.

The University of Victoria reserves the right to limit enrollment in the Faculty of Education and to refuse admission to the various programs of the Faculty. Such factors as available space and facilities, teaching positions available in the schools, academic qualifications, general suitability of the applicant for teaching, physical abilities, and English usage will be taken into account.

### INTERVIEW REQUIREMENT (Suspended 1985)

Those students seeking entry to the Faculty of Education for the first time and others who may be specifically referred, must be interviewed by personnel in the Faculty of Education for the purpose of judging suitability for the teaching profession. The interview program is scheduled for February through June. Appointments may be made by contacting the Education Advising Centre. Applicants whose place of residence makes it difficult to travel to Victoria for the interview should write to this office before the end of May to determine whether alternate arrangements may be made.

The professional judgement of those conducting the interviews will be deemed sufficient grounds for recommending the acceptance or rejection of an application. A candidate whose suitability for teaching is questioned by an interviewer will be referred to a Review Committee. Appeal procedures are available.

Teachers holding valid British Columbia teaching certificates or whose training and experience have been in Canada, U.S.A., U.K., Australia or New Zealand are exempt from the interview requirement.

Human Performance and Leisure Studies applicants are also exempt this requirement.

### QUOTA RESTRICTIONS

Admission to the Faculty of Education may be restricted by quotas. If quotas are placed on any year or program, not all qualified applicants will necessarily be accepted.

At the time of preparation of this Calendar (January 1985), maximum enrollments had been established for all professional years, the Physical Education teaching area and the degree programs in Human Performance and Leisure Studies.

Selection criteria have been approved by the Senate. Further details are available from the Faculty of Education Advising Centre and the School of Physical Education.

### ADMISSION TO PHYSICAL EDUCATION

Entry into all programs in the School of Physical Education is limited: the Bachelor of Education degrees in elementary and secondary teaching; the Bachelor of Arts and Bachelor of Science in Human Performance; and the Bachelor of Arts in Leisure Studies. Selection is carried out by the School of Physical Education each spring or early summer for the following fall term. Please refer to pages 7 to 11 for academic admission requirements.

Students who wish to be considered for admission should comply with the following procedures:

1. New students to the University of Victoria — obtain Application for Admission and Physical Education Experience forms from Admission Services.
2. Students reregistering at the University of Victoria — obtain Application for Reregistration and Physical Education Experience forms from Records Services.

Detailed information about the physical education selection procedure is included with the above mentioned forms.

Students must arrange to attend one only of the selection sessions:

Either March 30, 1985 (one day only; space limited)  
or June 24-25, 1985 (two days)

Note: The March selection session is primarily for University of Victoria students.

Notification of acceptance or rejection will be sent by Admission Services (or Records Services) when all requirements for admission to the School of Physical Education have been completed. This may not be until late summer.

Those candidates who fail to qualify for acceptance and who intend to reapply in the next session should consult an Adviser in the Education Advising Centre to determine an appropriate program of courses.

Accepted candidates will register in the Faculty of Education irrespective of the intended degree. It should be noted that Faculty of Education regulations will apply to Physical Education students in all programs except where specific programs have requirements that supersede those of the Faculty.

### LIMITATION OF CREDIT ON PROGRAMS

Because of the accelerating rate of change in subject matter, students may not always receive full credit for work taken more than ten years earlier. The Faculty Admissions and Adjudication Committee will determine what credit for work already completed will be applied to the candidate's chosen program.

Applicants for admission or acceptance on a degree program who have completed basic professional training may be granted up to 18 units of credit for that professional training towards the Bachelor of Education degree. This is granted at the discretion of the Faculty Admissions and Adjudication Committee.

Teachers whose professional training was not completed within ten years prior to their application to the Faculty must submit the following for the Committee's consideration:

1. resume of all teaching experience including dates, locations and grade levels, and indicating whether full-time, part-time, or substitution; and
2. copies of the most recent Superintendent's and/or Principal's Reports; and
3. letter(s) from Principal(s) attesting to teaching effectiveness in substitution roles if applicable; and
4. copy of Teacher's Card as issued by the Ministry of Education.

# ACADEMIC REGULATIONS

## STANDING

### 1. Sessional Grade Point Average

The sessional grade point average is based only on courses which have a unit value. Courses bearing the grade COM are ignored. A sessional grade point average is found by multiplying the grade points for all the grades, and dividing the total grade points by the total number of units.

### 2. Minimum Sessional Grade Point Average

Normally students in the Faculty of Education must obtain a grade point average of at least 3.00 on every session attended, otherwise they will be required to withdraw from the Faculty.

Post professional year students on Bachelor of Education degrees who do not obtain a sessional grade point average of at least 3.00 will be placed on academic probation. A student who is on academic probation and whose grade point average falls below 3.00 will be required to withdraw from the Faculty. A sessional grade point average of at least 3.00 is sufficient to remove a student from academic probation.

Leisure studies students who do not obtain a sessional grade point average of at least 3.50 will have their academic performance reviewed by the Leisure Studies Committee and may be placed on probation or required to withdraw.

Students who have been required to withdraw from the Faculty must appeal to the Faculty for readmission. Appeals should be submitted in writing to Records Services when applying for reregistration.

### 3. Certification

For the purpose of determining eligibility for a teaching credential, successful completion of the professional year, or professional component in the case of the post degree programs, requires a grade point average of at least 3.00 on all courses taken that are applicable to the professional year or professional component. Students who do not obtain an average of at least 3.00 will not be reported to the Ministry of Education as eligible for certification, and normally will be required to withdraw from the Faculty.

Teachers accepted on the elementary degree program must obtain a grade point average of at least 3.00 on at least 30 units of courses required to complete Years One to Three in order to establish eligibility for a teaching credential.

## WITHDRAWAL

The Faculty reserves the right at any time to require any student to withdraw from the Faculty where it believes on consideration of scholarship, professional fitness or professional conduct that the student is unsuited for the teaching profession. Unsatisfactory performance in professional seminars may be considered reason to require a student to withdraw from the Faculty.

## REGULATIONS CONCERNING PRACTICA

Students are referred to the University regulation on page 14. Students in professional years should be aware that they must complete requirements in the methods courses (700 level) before they will be allowed to take practica in either the fall or the spring.

## REPEAT PRACTICUM

Students who wish to repeat ED-P 797 or a secondary curriculum,

instruction and practicum course must appeal to the Faculty Admissions and Adjudication Committee for permission.

## CREDIT FOR PHYSICAL ACTIVITIES

Physical activity credit is limited as indicated below:

1. B.Ed degrees (elementary and secondary curricula)
  - (a) Physical Education teaching areas and specialist program — the number of units specified in the individual degrees for activities.
  - (b) Non-Physical Education teaching areas — 3 units.
2. B.A. degree in Human Performance — 1½ units beyond the program requirements.
3. B.Sc. degree in Human Performance — 1½ units beyond the program requirements.
4. B.A. degree in Leisure Studies — 1½ units beyond the program requirements.

## GRADUATION REQUIREMENTS

Students should refer to the general statements on page 18 of this Calendar. In exceptional cases when programs do not include enough 300 or 400 level courses to satisfy 21 units in the degree, the Dean may approve the inclusion of courses at the 700 level. In addition, to be eligible for the Bachelor of Education degree, the candidate must normally have earned:

1. a passing grade in each of the courses comprising the degree program;
2. a grade point average of at least 3.00 on the work of the professional year;
3. a grade point average of at least 3.00 as specified on page 144 for the teaching areas on the secondary program;
4. a grade point average of at least 3.00 on all work taken subsequent to the professional year. Failed courses will be counted in computing the grade point average.

Graduation requirements for the Bachelor of Arts and Bachelor of Science degrees in Human Performance and Leisure Studies are shown under the descriptions for these programs on pages 150 and 151.

## GRADUATING AVERAGE

The graduating average of a student in the Faculty of Education shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300 and 400 level courses taken or challenged at this University and accepted for credit in the student's program in the Faculty. If the total unit value of all such courses does not exceed 30, all such courses will be included in the average. If the total exceeds 30, the average will be taken on a maximum of 30 units of such courses chosen so as to give the highest average, including, where necessary, the appropriate fraction of a course.

Students whose graduating averages are 3.50 or higher will be placed in one of the following classes on the basis of the graduating average:

1. First Class, an average of 6.50 or higher;
2. Second Class, an average between 3.50 and 6.49.

## CREDIT FOR STUDIES UNDERTAKEN AT OTHER INSTITUTIONS

Students who plan to undertake work at other institutions are required to seek prior approval from the Education Advising Centre if they wish such courses to be credited toward a degree at the University of Victoria.

Students are referred to the general University regulations on page 14.

# PROFESSIONAL PREPARATION

## SCHOOL EXPERIENCE, STUDENT TEACHING AND SEMINARS

School experience, student teaching and seminars form an integral part of the elementary and secondary programs. Requirements for these components of the Bachelor of Education elementary programs are outlined in the course descriptions of ED-P 197, 297 and 797 and for the secondary programs in the course descriptions of ED-P398, 498 and the secondary curriculum, instruction and practicum courses.

Students should be aware that all arrangements for school experience and student teaching are made through the School Experience Office

which is located in the MacLaurin Building.

Professional Year students should note that all elementary and secondary programs commence with school experience. Orientation and placement for these activities will take place on Tuesday, September 3, 1985. In order to provide for sufficient school placements it is necessary for each professional year applicant to apply for school experience on the form provided in the application package or available from Records Services. The school experience form must be returned to Admission Services or Records Services together with other application forms by February 28.

All Education students undertaking school experience during the year must be prepared to travel to any school in the three local school districts of Victoria, Sooke and Saanich. In order to do this, students should budget an additional \$100 to \$150 for transportation. Because of the heavy use of the three local school districts for school experience in the fall and winter and because it is considered important that students gain experience in nonmetropolitan areas, students should note that they will be required to undertake the final practicum in April-May in selected districts outside the Victoria, Sooke and Saanich districts. Extra expense will be involved and students should budget accordingly.

Students should note that School Districts may refuse placements and require students to withdraw from practica for failure to abide by the School Act or the British Columbia Teachers' Federation Code of Ethics.

### ELEMENTARY PROGRAMS

#### ED-P 197 —

Normally students will be required to have a two week school experience following final examinations. Transfer students taking ED-P 197 and 297 in the same academic year must complete ten weekly half day experiences in the schools as well as meeting the ED-P 297 school experience requirements.

#### ED-P 297 —

Requires a two week school experience following final examinations.

#### ED-P 797 —

During professional year, students begin in September with an orientation in a local school. This is followed by Tuesday morning visits to the same school in preparation for a six week practicum later in the fall. The final six week practicum from April to mid May will be undertaken in selected districts across the Province.

### SECONDARY PROGRAMS

#### ED-P 398 —

A school experience of ten half days in local schools. A two week post session practicum may be required.

#### ED-P 498 —

Requires a two week school experience following final examinations.

#### Secondary curriculum, instruction and practicum courses —

The school experience component of the professional year commences in September with an orientation in a local school, followed by a six week practicum later in the Fall in the same school. The final six week practicum from April to mid May will be undertaken in selected districts across the Province.

## TEACHER CERTIFICATION

The University does not issue teaching credentials or establish salary categories. The following is based on current information and Teacher Certification Regulations which came into effect July 1, 1974, and is provided to assist students in securing necessary credentials and evaluation. Specific questions regarding individual certificates, etc., must be directed to the authority concerned. Information regarding policy of the Ministry of Education of the Province of British Columbia should be secured by contacting:

Teacher Services  
Ministry of Education  
Parliament Buildings  
Victoria, B.C. V8V 2M4  
Telephone: 387-4611

Persons convicted of a criminal offence and considering a teaching career should write to the Director of Teacher Services for clarification of their status *before* undertaking a teacher education program.

### TEACHING CREDENTIALS

1. The Ministry of Education requires that all persons employed as teachers in the Public Schools of British Columbia have a valid teaching credential.

2. Credentials are issued by the Director of Teacher Services, Ministry of Education, Victoria, B.C., on application, when all requirements including university preparation are deemed to have been completed. A credential will not be issued to an applicant who, when directed to do so by the Ministry, fails to provide proof that he is of good moral character and a fit and proper person to be granted a credential.
3. Credentials:
  - (a) Standard Certificate:  
Requires a minimum 3-year approved program of post-secondary school studies beyond Grade XII, including appropriate teacher education. (Normally, minimum preparation for this credential at the University of Victoria is four years on the elementary program leading to Teacher Qualification Service Category 4.)
  - (b) Professional Certificate:  
Requires a minimum 4 year approved program of postsecondary school studies beyond Grade XII, including basic teacher education and qualification for a degree. (Minimum preparation for this credential at the University of Victoria is five years and qualifies the applicant for Teacher Qualification Service Category 5.)
4. Application for a teaching credential must be made to the Director of Teacher Services, Ministry of Education, Victoria, B.C. Application forms are available from the Ministry or the Records Services Office of the University. A copy of birth or baptismal certificate must accompany a first application.
5. As well as applying to the Ministry, students must also obtain and complete a Records Service Report Application available at Registration or from Records Services or the Education Advising Centre. Upon receipt of the Report Application and the appropriate transcript fee, the Records Services Office will provide the Ministry of Education with verification of the applicant's standing based on the number of completed years of a degree program. In the case of undergraduates such verification can be provided only when the student has registered a degree program through the appropriate academic advising centre.
6. Except where an expiry date is specified on a credential at the time of issue, any Professional or Standard certificate is valid for life unless suspended or cancelled for cause. No expiry date shall be specified where within five years of the date of application for initial certification, the applicant has completed an approved teacher preparation program at a British Columbia postsecondary institution.

### TEACHER QUALIFICATION SERVICE CATEGORY

Many school boards base salary on the category established by the Teacher Qualification Service of the British Columbia School Trustees Association and the British Columbia Teachers' Federation. The Service determines this category only upon application by a teacher, and only when a British Columbia teaching credential has already been granted by the Ministry. Categories are assigned on the basis of complete years on an approved program.

Teacher Qualification Service Application Forms and Records Services Report Applications may be obtained from the Records Services Office at the University. Requests for additional information should be directed to:

Teacher Qualification Service,  
Room 210-2609 Granville St.,  
Vancouver, B.C. V6H 3H3  
Telephone: 736-5484

Teachers who hold the four year Bachelor of Education (Elementary) degree may qualify for the Teacher Qualification Service's Category 5 by completing an approved program consisting of a minimum of 15 units of upper level courses. The courses must be acceptable to the Teacher Qualification Service.

### STATEMENT OF DEGREE COMPLETION

Students who require a statement verifying completion of their degree before official transcripts are available should contact the Records Officer, Professional Programs, Office of the Administrative Registrar.

## BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM)

### ADMISSION REQUIREMENTS

#### 1 Program Admission

Initial admission to the elementary degree program, *other than in the*

*area of Physical Education*, may be granted only after completion of at least one year of university level studies acceptable to the Faculty of Education.

The requirements for admission to the regular elementary programs are:

- (a) admissibility to the university; and
- (b) at least 12 units of credit including 3 units of English (except students who have successfully completed English 099 may be admitted with 1½ units of English); and
- (c) a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units; and
- (d) fulfillment of the interview requirement designated by the Faculty (see page 136 for details), unless waived by an ED-P 197 Seminar Leader;

and in addition, for admission to this program at any point prior to the professional year:

- (e) a science to the Grade 11 level or 3 units of an acceptable laboratory science.

Applicants for the Physical Education programs may be admitted to the Faculty provided they meet general University admission requirements and are accepted by the School of Physical Education. Further details may be found on pages 9 and 136. All such students accepted into Year One in the Faculty must meet the admission requirements of the elementary program in their first year or they will be required to withdraw from the Faculty.

Teachers who wish to be accepted on this program with credit from other institutions including professional training, must first make application in the normal manner to University Admission Services as detailed on page 7 under Application for Admission, number 4. Those whose studies commenced more than ten years ago are also referred to the section entitled Limitation of Credit on Programs on page 136.

### 2. Year Three Admission

In order to be acceptable for registration in Year Three of this program students must have at least 3 units of English.

### 3. Professional Year Admission

The requirements for admission to the professional year of any of the elementary programs described below are:

- (a) Applications must be submitted to Records Services no later than February 28,
- (b) All courses specified for the preprofessional years of any program must be complete.
- (c) A grade point average of at least 3.00 (UVic C+) must have been obtained on
  - (i) the most recently completed session; and
  - (ii) the most recent two years of at least 30 units.

Normally all of the above requirements must be complete by June 30 of the year in which an applicant wishes to begin the professional year. Any applicants unable to meet this deadline who wish to complete requirements during the summer session must write to the Faculty Admissions and Adjudication Committee, c/o the Education Advising Centre, indicating why they believe their circumstances to be unusual, and requesting permission to be considered for admission on the basis of the results of their work during the summer period. The Committee will not accept work completed during the summer to raise a deficient grade point average, but may accept courses taken to meet requirements when the grade point average is already sufficient.

Applicants for the professional year should be aware that the Faculty of Education has maximum enrollment limits and that therefore all qualified applicants are not guaranteed acceptance. Applicants will be notified regarding their admissibility as soon as possible, but final acceptance may not be until late July.

September 3, 1985 is the *firm* deadline for registration in the professional year.

## PROGRAM

The elementary program provides course work necessary for basic teacher certification on completion of the first four years, and for higher certification and the Bachelor of Education (Elementary Curriculum) degree following a fifth year. The program consists of specified academic courses from other faculties, professional studies in the Faculty of Education, and courses to complete the requirements of a teaching area or concentration. In some cases electives may be included.

Year Four is the professional year in which students spend an extended time in the schools and take courses on campus that are directly related to their professional training.

Prior to entry students must decide whether they wish their practicum experience to be at the primary (I to III) or intermediate (IV to VII) grade level. In order to gain admission to the professional year, it is necessary to meet the requirements as specified in the section above entitled

Professional Year Admission. Normally all courses listed for this year are taken as a coordinated program during one full winter session. Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

Students who complete the first four years of the program with a grade point average of at least 3.00 on the professional year will be reported to the Ministry of Education as eligible for the Standard Certificate. Students on the Physical Education Specialist program do not become eligible for certification until they have completed their degree.

Students who wish to attend a college may take up to two years of work toward this program through appropriate transfer courses. It is suggested that advice be sought from the Advising Centre to ensure that all courses taken will apply to the specific program chosen. Because the colleges do not offer transferable courses in Education, the program will be modified for anyone who takes two years in this manner. Such students would take all the academic requirements (including electives) of the first three years as specified, in their two years at college; and would then take the Transitional Preprofessional Year Three as their third year at the University. Students who want a program in Physical Education usually must come to Victoria for Year Two.

Other than on the Physical Education Specialist program, the fifth year may be completed by summer sessions or extension courses.

Teachers who are accepted on this program with credit from other institutions including professional training, should obtain a Program Outline from the Education Advising Centre as soon as Admissions Services has provided them with a Statement of Transfer Credit. This program will be modified on the basis of their previous training and experience. In cases where the professional training was completed more than 10 years ago, the Faculty Admissions and Adjudication Committee will determine what credit will be granted by Admissions Services and what credit will be used toward the program.

Graduation requirements are found on pages 18 and 137.

## COURSE REQUIREMENTS

The minimum degree requirement normally is successful completion of the following:

|                                       |                 |
|---------------------------------------|-----------------|
| Required Education courses            | 36½-42½ units   |
| Required courses from other faculties | 15-19½ units    |
| Teaching area/concentration/electives | 19½-25½ units   |
| <b>TOTAL</b>                          | <b>77 units</b> |

## PROGRAM BY YEARS

All students except those admitted to physical education will register in Arts and Science (or Fine Arts) in Year One. Advice may be obtained from the Education Advising Centre.

### 1. Regular Program

#### <sup>1</sup>Year One:

|   |            |
|---|------------|
| <sup>2</sup> ED-P 197   | 1½         |
| ENGL 115/116 or 121/122   | 3          |
| HIST 230 (or other Canadian history with permission of the Education Advising Centre) | 3          |
| MATH 160 or other approved mathematics  | 3          |
| PSYC 100  | 3          |
| Elective(s) from Faculties of Arts and Science or Fine Arts                           | 3          |
| <b>Total</b>  | <b>16½</b> |

#### Year Two:

|  |           |
|--|-----------|
| <sup>3</sup> AE 101                                | 2         |
| <sup>3</sup> ME 104                                | 2         |
| <sup>3</sup> PE 147                                | 2         |
| <sup>4</sup> Approved Laboratory Science           | 0 to 4½   |
| <sup>5</sup> ENGL 215                              | 1½        |
| <sup>5</sup> THEA 150                              | 1½        |
| <sup>6</sup> Teaching area/concentration/electives | 1½ to 6   |
| <b>Total</b>                                       | <b>15</b> |

### Year Three: Preprofessional Year — Regular

|  |           |
|--|-----------|
| ED-B 331   | 1½        |
| ED-B 430   | 1½        |
| <sup>7</sup> ED-D 200                              | 1½        |
| ED-D 305   | 3         |
| <sup>7</sup> ED-P 297                              | 1½        |
| <sup>6</sup> Teaching area/concentration/electives | 6         |
| <b>Total</b>                                       | <b>15</b> |

**Year Three: Preprofessional Year — Transitional**

|                       |    |
|-----------------------|----|
| AE 101                | 2  |
| ME 104                | 2  |
| ED-B 331              | 1½ |
| ED-B430               | 1½ |
| PE 147                | 2  |
| <sup>7</sup> ED-D 200 | 1½ |
| ED-D 305              | 3  |
| <sup>2</sup> ED-P 197 | 1½ |
| <sup>7</sup> ED-P 297 | 1½ |

16½ or 15

**<sup>8</sup>Year Four: Professional Year**

|          |    |
|----------|----|
| ED-B 359 | 1  |
| ED-B 748 | 1½ |
| ED-B 749 | 1½ |
| ED-D 337 | 1½ |
| ED-D 400 | 1½ |
| ED-E 743 | 2  |
| ED-E 745 | 2  |
| ED-E 746 | 1½ |
| ED-P 797 | 3  |

15½

Eligible for STANDARD CERTIFICATE

**Year Five:**

|  |          |
|--|----------|
| <sup>9</sup> ED-B 420, 423, 425 or 427                         | 3        |
| <sup>10</sup> ED-B 450 (Primary)<br>or ED-B 451 (Intermediate) | 3 or 1½  |
| Teaching area/concentration/electives                          | 9 or 10½ |
| Total Units for Degree   | 77       |

Eligible for PROFESSIONAL CERTIFICATE

<sup>1</sup>Students who do not have a science to the Grade 11 level must obtain credit for 3 units of an acceptable laboratory science in first year. It is recommended that this be taken in place of the elective which may be deferred to second year.

<sup>2</sup>This course will be marked INC, COM, N or F. To be eligible for awards, students must complete a minimum of 15 units in each year of which 13½ must be graded. College transfer students may take this course in Year Three.

<sup>3</sup>Those who choose the Art area should take AE 103 in lieu of AE 101; those who choose the Music area must take ME 106 and 1½ additional approved units in lieu of ME 104. College transfer students will take these courses in Year Three and will substitute teaching area/concentration/electives in Year Two.

<sup>4</sup>Students are expected to acquire background in each of the three years of general science: biological; physical, and earth science.

Those who have completed, within the past ten years, all three of Biology 11, Physics 11, and Earth Science 11, may substitute an elective for the science requirement. Students with any two of these need complete only an approved 1½ units of ED-E 145 or other approved science. Those with any one of these or Chemistry 11 must complete an approved 3 units of science.

Students who have no senior secondary science (within the past ten years) are required to complete 4½ units of ED-E 145 or other approved science.

PE 141, 241A, or 241B are acceptable to meet the biological science requirement.

Students who transfer from colleges or other institutions directly into the Transitional Year Three of the program may substitute equivalent courses, but must obtain background in biological and physical sciences from secondary and postsecondary level courses. No more than three units will be required.

<sup>5</sup>College transfer students may substitute the equivalent of ENGL 200, 201, 202 or 203. Courses given transfer credit as ENGL "200 level" are not normally acceptable to meet this requirement. Students who do not have credit for ENGL 115 with a grade of least C+ or 215 must satisfy an English competency examination prior to entry to Year Four.

<sup>6</sup>Students are required to complete a teaching area or concentration as part of the degree requirements. Note that the degree must include at least 21 upper level units.

<sup>7</sup>These courses should be taken concurrently and will be marked INC, COM, N or F. To be eligible for awards, students must complete a minimum of 15 units in each year of which 13½ must be graded.

<sup>8</sup>These courses must be taken in the year specified.

<sup>9</sup>May be taken in Year Three for students planning an area in Early Childhood Education, Language Arts or Learning Assistance.

<sup>10</sup>Students on the Early Childhood Education teaching area, primary emphasis, should take ED-B 450.

**2. Physical Education Program**

Normally college students must transfer to the University for Year Two.

**<sup>1</sup>Year One: Faculty of Education**

|  |    |
|--|----|
| <sup>2</sup> ED-P 197  | 1½ |
| ENGL 115/116 or 121/122  | 3  |
| HIST 230 (or other Canadian history with<br>permission of the Education Advising Centre) | 3  |
| MATH 160 or other approved mathematics   | 3  |
| PE 143   | 1½ |
| PSYC 100   | 3  |
| <sup>3</sup> Approved PE activities  | 1½ |

16½

**Year Two:**

|  |     |
|--|-----|
| AE 101                                   | 2   |
| ME 104                                   | 2   |
| ENGL 215                                 | 1½  |
| <sup>4</sup> Approved Laboratory Science | 0-3 |
| PE 141                                   | 1½  |
| PE 345                                   | 1½  |
| <sup>3</sup> Approved PE activities      | 2   |
| THEA 150                                 | 1½  |

15

**Year Three: Preprofessional Year**

|                                     |    |
|-------------------------------------|----|
| ED-B 331                            | 1½ |
| ED-B 430                            | 1½ |
| PE 241B                             | 1½ |
| PE 346                              | 1½ |
| PE 446                              | 1½ |
| <sup>3</sup> Approved PE activities | 1½ |
| <sup>5</sup> ED-D 200               | 1½ |
| ED-D 305                            | 3  |
| <sup>5</sup> ED-P297                | 1½ |

15

**<sup>6</sup>Year Four: Professional Year**

|          |    |
|----------|----|
| ED-B 359 | 1  |
| ED-B 748 | 1½ |
| ED-B 749 | 1½ |
| ED-D 337 | 1½ |
| ED-D 400 | 1½ |
| ED-E 743 | 2  |
| ED-E 745 | 2  |
| ED-E 746 | 1½ |
| ED-P 797 | 3  |

15½

Eligible for STANDARD CERTIFICATE

**Year Five:**

|  |         |
|--|---------|
| ED-B 420, 423, 425 or 427  | 3       |
| ED-B 450 (Primary),<br>or ED-B 451 (Intermediate)                                      | 3 or 1½ |
| <sup>3</sup> Approved PE activities  | 1       |
| PE 344   | 1½      |
| One and one-half units from: PE 142,<br>341, 342, 371, 442, 443, 444, 445,<br>461, 463 | 1½      |
| Electives from Faculties of Arts and Science<br>or Fine Arts                           | 3       |
| <sup>7</sup> Electives   | 2 or 3½ |
| Total Units for Degree   | 77      |

Eligible for PROFESSIONAL CERTIFICATE

<sup>1</sup>Students accepted into Physical Education and admitted to Year One of the Faculty of Education must meet the normal requirements for admission to the degree program as stated on page 138 in their first year, or they will be required to withdraw from the Faculty.

<sup>2</sup>This course will be marked INC, COM, N or F. To be eligible for awards, students must complete a minimum of 15 units in each year of which 13½ must be graded.

<sup>3</sup>See page 160 for a description of the activity requirements.

<sup>4</sup>See Note 4 in left column.

<sup>5</sup>These courses should be taken concurrently and will be marked INC, COM, N or F. To be eligible for awards, students must complete a minimum of 15 units in each year of which 13½ must be graded.

<sup>6</sup>These courses must be taken in the Year specified.

<sup>7</sup>Only 6½ units of activity credit may be applied toward this degree.

### 3. Physical Education Specialist Program

This program is designed to prepare students to teach physical education as a broadly based specialty and to give leadership and coordination to the overall physical education program in an elementary school.

#### <sup>1</sup>Year One: Faculty of Education

|                         |    |     |
|-------------------------|----|-----|
| PE 143                  | 1½ |     |
| Approved PE activities  | 2  |     |
| <sup>2</sup> ED-P 197   | 1½ |     |
| ENGL 115/116 or 121/122 | 3  |     |
| MATH 160                | 3  |     |
| PSYC 100                | 3  |     |
| <sup>3</sup> Electives  | 1½ | 15½ |

#### Year Two:

|                        |    |     |
|------------------------|----|-----|
| PE 141                 | 1½ |     |
| PE 345                 | 1½ |     |
| Approved PE activities | 2  |     |
| ENGL 215               | 1½ |     |
| HIST 230               | 3  |     |
| THEA 150               | 1½ |     |
| Electives              | 4½ | 15½ |

#### Year Three:

|                        |    |     |
|------------------------|----|-----|
| ME 104                 | 2  |     |
| PE 241B                | 1½ |     |
| PE 344                 | 1½ |     |
| PE 346                 | 1½ |     |
| PE 442                 | 1½ |     |
| PE 446                 | 1½ |     |
| Approved PE activities | 2  |     |
| Electives              | 4  | 15½ |

#### Year Four:

|                            |    |    |
|----------------------------|----|----|
| ED-B 331                   | 1½ |    |
| ED-B 420, 423, 425, or 427 | 3  |    |
| ED-B 430                   | 1½ |    |
| PE 443                     | 1½ |    |
| <sup>4</sup> ED-D 200      | 1½ |    |
| ED-D 305                   | 3  |    |
| <sup>4</sup> ED-P 297      | 1½ |    |
| Electives                  | 1½ | 15 |

#### <sup>5</sup>Year Five: Professional Year

|                        |    |     |
|------------------------|----|-----|
| ED-B 359               | 1  |     |
| ED-B 748               | 1½ |     |
| ED-B 749               | 1½ |     |
| ED-D 337               | 1½ |     |
| ED-D 400               | 1½ |     |
| ED-E 743               | 2  |     |
| ED-E 745               | 2  |     |
| ED-E 746               | 1½ |     |
| ED-P 797               | 3  | 15½ |
| Total Units for Degree |    | 77  |

#### Eligible for PROFESSIONAL CERTIFICATE

<sup>1</sup>Students accepted into Physical Education and admitted to Year One of the Faculty of Education must meet the normal requirements for admission to the degree program as stated on page 138 in their first year, or they will be required to withdraw from the Faculty.

<sup>2</sup>This course will be marked INC, COM, N or F. To be eligible for awards, students must complete a minimum of 15 units in each year of which 13½ must be graded.

<sup>3</sup>Of the 11½ units of electives, 8½ must be chosen from courses other than P.E. and should be chosen in consultation with the Elementary P.E. Adviser. Seven units of activity credit may be applied toward this degree. See page 160 for a description of the activity requirements.

<sup>4</sup>These courses should be taken concurrently and will be marked INC, COM, N or F. To be eligible for awards, students must complete a minimum of 15 units in each year of which 13½ must be graded.

<sup>5</sup>These courses must be taken in the year specified.

### TEACHING AREAS (ELEMENTARY)

#### ART EDUCATION

|                          |    |
|--------------------------|----|
| AE 103 (formerly AE 100) | 3  |
| AE 200                   | 1½ |
| AE 201                   | 1½ |
| AE 205                   | 1½ |

|        |    |
|--------|----|
| AE 208 | 1½ |
| AE 315 | 1½ |
| AE 316 | 1½ |
| AE 317 | 1½ |
| AE 401 | 1½ |

Approved courses chosen from the offerings in art education and HA 120 3 18

While AE 103 is strongly recommended, with permission of the Elementary Art Adviser AE 101 plus an additional course may be acceptable in lieu. A grade of B or higher is required on AE 103 (or 101).

Courses chosen to complete this area must be approved by the Adviser.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Adviser.

#### DRAMA IN EDUCATION

|          |    |     |
|----------|----|-----|
| THEA 100 | 3  |     |
| THEA 181 | 3  |     |
| THEA 381 | 3  |     |
| THEA 330 | 3  |     |
| ED-B 341 | 3  |     |
| ED-B 360 | 1½ | 16½ |

#### EARLY CHILDHOOD EDUCATION

(1) \* Primary Emphasis:

|                  |    |    |
|------------------|----|----|
| ED-B 339         | 1½ |    |
| ED-B 341         | 3  |    |
| ED-B 342         | 1½ |    |
| ED-B 440         | 1½ |    |
| ED-D 306         | 1½ |    |
| Approved options | 6  | 15 |

\* Primary emphasis students should also take ED-B 450.

(2) Preschool/Kindergarten Emphasis: †

|                  |    |    |
|------------------|----|----|
| AE 320           | 1½ |    |
| ED-B 339*        | 1½ |    |
| ED-B 440         | 1½ |    |
| ED-B 441         | 1½ |    |
| ED-B 448         | 1½ |    |
| ED-D 306         | 1½ |    |
| ED-E 447         | 1½ |    |
| ME 302           | 1½ |    |
| Approved options | 3  | 15 |

† These courses meet the course work requirements for certification as a supervisor by the Community Care Facilities Licensing Board.

\* Experienced teachers should consult with Early Childhood Education instructors to substitute an approved option.

A list of options is available from the Education Advising Centre.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the above required courses in Year Five.

#### FRENCH LANGUAGE EDUCATION

|          |   |    |
|----------|---|----|
| ED-B 121 | 3 |    |
| ED-B 221 | 3 |    |
| ED-B 321 | 3 |    |
| ED-B 390 | 3 | 12 |

These courses may be offered during the summer studies period and will not be offered during regular winter sessions.

#### LANGUAGE ARTS

|                  |    |    |
|------------------|----|----|
| ED-B 342         | 1½ |    |
| ED-B 343A or B   | 1½ |    |
| ED-B 349         | 3  |    |
| ED-B 442         | 3  |    |
| Approved options | 6  | 15 |

A list of options is available from the Education Advising Centre. It is strongly recommended that 6 units be chosen from a faculty other than Education.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the required courses in Year Five.

**LEARNING ASSISTANCE**

|                                |         |
|--------------------------------|---------|
| ED-B 442 .....                 | 3       |
| ED-D 316 or ED-D 417 .....     | 1½ or 3 |
| ED-D 405 .....                 | 3       |
| ED-D 410 and/or ED-D 411 ..... | 1½ or 3 |
| ED-D 415 .....                 | 3       |
| ED-E 484 .....                 | 1½      |
| Approved options* .....        | 1½ or 0 |

\* As recommended by Special Education Area Adviser.

A list of options is available from the Education Advising Centre.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the required courses in Year Five.

**MATHEMATICS EDUCATION**

|   |    |
|---|----|
| MATH 151 and 102 or 100<br>(or other approved mathematics)* ..... | 3  |
| ED-E 443 .....  | 1½ |
| ED-E 444 .....  | 1½ |
| ED-E 484 .....  | 1½ |
| Approved mathematics* .....                                       | 7½ |

\* An appropriate selection would be 151, 102, 152, 233A, 233C; C SC 110, 115. Other approved courses are MATH 100, 101, 240, 362, 368A; STAT 250, 251. Other mathematics courses must be approved by the Elementary Mathematics Adviser.

**MATHEMATICS/SCIENCE**

|  |   |
|--|---|
| MATH 151 and 102 or 100<br>(or other approved mathematics) ..... | 3 |
| Approved laboratory science .....                                | 3 |
| Approved mathematics .....                                       | 3 |
| ED-E 345 .....   | 3 |
| Two of ED-E 443, 444, 484 .....                                  | 3 |
| ED-E 445 or approved science .....                               | 3 |

Mathematics and science courses must be approved by the Elementary Mathematics and Science Advisers.

**MUSIC EDUCATION**

|   |    |
|---|----|
| ME 106 .....                                | 1½ |
| ME 207 .....                                | 1½ |
| ME 208 .....                                | 1½ |
| ME 300 .....                                | 1½ |
| ME 306 .....                                | 3  |
| Approved Music and/or Music Education ..... | 9  |

Students wishing to enter this area must first seek acceptance through the Department of Art and Music Education. Prior to acceptance it will be necessary to demonstrate competence in theory to the level of ME 105, Royal Conservatory of Music Toronto Grade 2, or the equivalent, and to perform satisfactorily on a short musical aptitude test.

ME 104 is not acceptable for credit in a program which includes ME 106. Music and Music Education courses must be approved by the Elementary Music Adviser.

**OUTDOOR EDUCATION**

|                        |    |
|------------------------|----|
| ED-E 345 .....         | 3  |
| ED-E 373 .....         | 1½ |
| ED-E 374 .....         | 1½ |
| PE 371 or 372 .....    | 1½ |
| Approved options ..... | 6  |

Students will choose options from approved courses in education, biology, geography, anthropology, or history. Selection must include courses in two of these subject areas. A list of approved options is available from the Education Advising Centre.

**PHYSICAL EDUCATION**

|  |    |
|--|----|
| Refer to page 136 for information regarding acceptance into this area.                 |    |
| Basic Skills (chosen from PE 104-125, and<br>PE 461; refer to Notes on page 160) ..... | 6  |
| PE 141 .....   | 1½ |
| PE 143 .....   | 1½ |
| PE 241B .....  | 1½ |

|   |    |
|---|----|
| PE 344 .....  | 1½ |
| PE 345 .....  | 1½ |
| PE 346 .....  | 1½ |
| PE 446 .....  | 1½ |
| One and one half units from: PE 142, 341,<br>342, 371, 442, 443, 444, 445, 461, 463 ..... | 1½ |

Students who fail to qualify for acceptance into this area on first application and who intend to reapply in their second year are warned that PE 147 is not acceptable for credit on a degree program with a Physical Education teaching area.

Students who have completed activities under PE 100/101 are not eligible to repeat such activities for credit.

**SCIENCE**

A laboratory science chosen from each of the following:

|   |   |
|---|---|
| Physics or Chemistry (or with approval,<br>two of ED-E 145A, B, C) .....  | 3 |
| Biology or Microbiology .....   | 3 |
| ASTR 120, 200; GEOL 100; or, with<br>permission, GEOG 203A/B .....  | 3 |
| A science elective chosen from any<br>subject listed above (except ED-E 145);<br>or from:<br>ED-E 345, 373, 374; BIOC 300;<br>GEOG 372; PE 241A/B ..... | 3 |
| ED-E 445 .....  | 3 |

**SOCIAL STUDIES**

|   |   |
|---|---|
| Three units from: GEOG 101A, 101B,<br>205A, 205B .....                          | 3 |
| HIST 230 .....  | 3 |
| Three units from: ANTH 100A, 100B, 200,<br>321, 339A, 339B; SOCI 100, 200 ..... | 3 |
| ED-E 346 .....  | 3 |
| Approved social studies options .....   | 6 |

A list of approved options is available from the Education Advising Centre.

The area must include a minimum of 9 units of upper level courses.

**ACADEMIC SUBJECT AREAS**

With prior approval of the Education Advising Centre, 15 units of a General Program offered by a department of the Faculty of Arts and Science or a teaching area in Social Sciences may be acceptable as a teaching area.

**SOCIAL SCIENCES**

This 15 unit teaching area is intended for students who have specific career teaching aspirations which make it desirable to have a greater depth of social science knowledge. The 15 units may be any combination of courses from anthropology, linguistics or sociology.

**CONCENTRATIONS (ELEMENTARY)**

**Art Education:** AE 200, 201, 205, 401; additional courses approved by the Elementary Art Adviser and chosen from AE 303 or 309, 304 or 310, 305, 306, 307, 308, 315, 317, 319, 320, to total 9 units. (AE 320 is recommended for students wishing to emphasize primary teaching.)

**Music Education:** Two of ME 207, 208, 300; ME 306; one of ME 400A, 400B, 400C; ME elective to total 9 units.

In addition the student will have to satisfy the core requirement in music education which could be ME 106, or ME 104 with permission of the Department Adviser.

**Drama in Education:** THEA 181, 330, 381.

**Early Childhood Education:**

1. Primary Emphasis: ED-B 339, 341, 342, 440; ED-D 306.  
2. Preschool/Kindergarten Emphasis: ED-B 339, 440, 441, 448; ED-D 306; ED-E 447.

**NOTE:** These concentrations do not meet requirements for certification as a supervisor by the Community Care Facilities Licensing Board.

**Language Arts:** ED-B 341, 342, 343A or 343B, 349.

**Educational Technology:** ED-B 360, 361, 362, 463; ED-D 338, 438.

**Physical Education:** PE 143, 345, 346, 446, and 3 units from PE 141, 241A, 241B, 341, 371, 372, 442, 445, three activities. Acceptance subject to approval of the School of Physical Education.

**Remedial Methodology:** ED-D 411A, 415; ED-B 442; ED-E 484.

**Interpersonal Skills:** ED-D 414, 417, 433, 434.

**Mathematics Education:** ED-D 338; ED-E 443, 444, 484, 3 units chosen

from CSC 110, MATH 151, 233A, STAT 252, or other electives approved by the Elementary Mathematics Adviser.

**Science:** ED-E 345, 445; 3 units of science electives approved by the Elementary Science Adviser.

**Social Studies:** ED-E 346; 3 units of approved social studies option(s) (in addition to the core requirement); 3 units of approved upper level social studies option(s), preferably Canadian history or a regional geography.

## BACHELOR OF EDUCATION POST DEGREE PROFESSIONAL PROGRAM – ELEMENTARY

### ADMISSION

The deadline for receipt of application forms is February 28.

Applications will be considered from those who meet the following requirements:

- successful Faculty interview; and
- a degree from a recognized university; and
- the equivalent of 60 units acceptable in content to the Faculty of Education Admissions and Adjudication Committee; and
- a grade point average of at least 3.00 (UVic C+) on the most recent session and on the most recent two years (30 units); and
- academic preparation which includes the following:
  - Approved English ..... 3 units  
Canadian history ..... 3 units
  - Approved mathematics ..... 3 units  
Introductory psychology ..... 3 units
  - Approved laboratory science ..... 3 units

In addition, it is recommended that THEA 150 and ENGL 215 be included in the preparatory work.

<sup>1</sup>The Faculty requires students to demonstrate competency in written English. This may be satisfied by ENGL 115 with a grade of least C+ or 215 as part of the required 3 units, or by completion of the ENGL 115 equivalency examination in addition to the 3 units of approved English.

<sup>2</sup>The approved mathematics must normally have been completed within the past ten years.

<sup>3</sup>General science, biology, physics, chemistry, astronomy, geology, completed within the past ten years. Not required if both B.C. Biology 11 and Physics 11 have been completed within the past ten years or if applicant presents Bachelor of Music with Major in Music Education (Elementary) from the University of Victoria.

Students of exceptional ability who do not meet the stated admission requirements may appeal to the Faculty Admissions and Adjudication Committee for consideration. "Exceptional" may be considered in terms of high grade point average, relevant work experience, or unique academic qualifications.

Normally, all of the above requirements must be complete by June 30 of the year of application. Students who believe their circumstances are unusual may appeal to the Faculty Admissions and Adjudication Committee for permission to meet the minimum requirements at the summer session prior to commencement of the program.

### PROGRAMS

The Post Degree Professional Programs prepare students for teaching certificates and lead to the Bachelor of Education degree. The programs consist of professional courses and extended school experiences.

Maximum enrollments have been established; therefore the Faculty cannot guarantee that all qualified candidates will be accepted. Accepted candidates will be notified as early as possible, but final acceptance may not be until late July.

Registration in sessions which include ED-P 797 must be completed by Tuesday, September 3, 1985. No registration will be accepted after that date as school opening orientation begins on Wednesday, September 4. Students should be prepared to spend Wednesday, Thursday and Friday in local elementary schools.

The courses required to complete the programs should normally be taken as a coordinated package over two winter sessions as shown below. Because of the professional involvement off campus, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

A grade point average of at least 3.00 must be obtained on every session in this program in order to qualify for certification.

### COURSE REQUIREMENTS

#### 1. Regular Program

Year 1 - September-April

|                            |    |     |
|----------------------------|----|-----|
| AE 101 .....               | 2  |     |
| ED-B 331 .....             | 1½ |     |
| ED-B 359 .....             | 1  |     |
| ED-B 430 .....             | 1½ |     |
| ED-D 200 .....             | 1½ |     |
| ED-D 305 .....             | 3  |     |
| ED-P 297 .....             | 1½ |     |
| ME 104 .....               | 2  |     |
| PE 147 .....               | 2  |     |
| Approved foundations ..... | 1½ | 17½ |

Year 2 - September-May

|                               |      |           |
|-------------------------------|------|-----------|
| ED-B 450 (Primary) or         | 3 or |           |
| ED-B 451 (Intermediate) ..... | 1½   |           |
| ED-B 748 .....                | 1½   |           |
| ED-B 749 .....                | 1½   |           |
| ED-D 337 .....                | 1½   |           |
| ED-D 400 .....                | 1½   |           |
| ED-E 743 .....                | 2    |           |
| ED-E 745 .....                | 2    |           |
| ED-E 746 .....                | 1½   |           |
| ED-P 797 .....                | 3    | 16 or 17½ |
| Total Units for Degree .....  |      | 33½ or 35 |

Eligible for CERTIFICATION  
and DEGREE

#### 2. Special Music Program

Special Music Program for candidates with a Bachelor of Music degree with Major in Music Education (Elementary) from University of Victoria:

|                          |    |    |
|--------------------------|----|----|
| ED-D 200 .....           | 1½ |    |
| ED-D 337 .....           | 1½ |    |
| ED-A 701 .....           | 1  |    |
| ED-E 744 .....           | 1½ |    |
| ED-E 746 .....           | 1  |    |
| ED-C 747 .....           | 1  |    |
| ED-B 748 .....           | 1½ |    |
| ED-B 749 .....           | 1½ |    |
| ED-P 797 .....           | 3  |    |
| Education elective ..... | 1½ | 15 |

Eligible for CERTIFICATION

Music students may proceed to a B.Ed. degree by taking an additional 15 units including:

|   |    |    |
|---|----|----|
| ED-D 305 .....                            | 3  |    |
| ED-B 342 and 343A or B, or ED-B 349 ..... | 3  |    |
| ED-B 420, 423, 425 or 427 .....           | 3  |    |
| ED-D 400 .....                            | 1½ |    |
| Approved education electives .....        | 4½ | 15 |
| Total Units for Degree .....              |    | 30 |

# BACHELOR OF EDUCATION (SECONDARY CURRICULUM)

## ADMISSION REQUIREMENTS

### 1. Program Admission

Initial admission to the secondary degree program *other than in the area of Physical Education*, may be granted only after completion of at least one year of university level studies acceptable to the Faculty of Education.

The requirements for admission to the secondary program are:

- admissibility to the university; and
- at least 12 units of credit including 3 units of English (except students who have successfully completed English 099 may be admitted with 1½ units of English); and
- a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units; and
- fulfillment of the interview requirement designated by the Faculty (see page 136 for details).

Applicants for the Physical Education teaching areas may be admitted to the Faculty provided they meet general university admission requirements and are accepted by the School of Physical Education. Further details may be found on pages 9 and 136. All such students accepted into Year One in the Faculty must meet the admission requirements of the secondary program in their first year or they will be required to withdraw from the Faculty.

Teachers who wish to be accepted on this program with credit from other institutions including professional training, must first make application in the normal manner to University Admission Services as detailed on page 7 under Application for Admission, number 4. Those whose studies commenced more than ten years ago are also referred to the section entitled Limitation of Credit on Programs on page 136.

### 2. Year Three Admission

In order to be acceptable for registration in Year Three of this program, students must have at least 3 units of English.

### 3. Professional Year Admission

The requirements for admission to the professional year of the secondary program are:

- Applications must be submitted to Records Services no later than February 28.
- All courses specified for the preprofessional years of the program, with the exception of electives, must be complete.
- The candidate must have obtained either
  - a grade point average of at least 3.00 (UVic C+) on the upper level courses of the two teaching area(s), including prerequisites and corequisites (**NOTE:** where fewer than 9 units of upper level work has been completed in any one area, the grade point average will be calculated on the upper level courses plus one or more of the 200 level courses in that area, to a total of 9 units); or
  - a grade point average of at least 3.00 (UVic C+) in the teaching area courses of Years Three and Four on any single expanded teaching area (**NOTE:** where fewer than 18 units of upper level work has been completed in the area in these years, the calculation will include sufficient courses from second year to total 18 units and if the area is physical education expanded, a grade point average of at least 3.00 is required on the 7.5 units of other area work.)
- A grade point average of at least 3.00 (UVic C+) must have been obtained on
  - the most recently completed session; and
  - the most recent two years of at least 30 units.

Normally all of the above requirements must be complete by June 30 of the year in which an applicant wishes to begin the professional year. Any applicants unable to meet this deadline who wish to complete requirements during the summer session must write to the Faculty Admissions and Adjudication Committee, c/o the Education Advising Centre, indicating why they believe their circumstances to be unusual, and requesting permission to be considered for admission on the basis of the results of their work during the summer period. The Committee will not accept work completed during the summer to raise a deficient grade point average, but may accept courses taken to meet requirements when the grade point average is already sufficient.

Applicants for the professional year should be aware that the Faculty of Education has maximum enrollment limits and that therefore all qualified applicants are not guaranteed acceptance. Applicants will be notified regarding their admissibility as soon as possible, but final acceptance may not be until late July.

September 3, 1985 is the *firm* deadline for registration in the professional year.

## PROGRAM

This is a five year program leading to a Bachelor of Education (Secondary Curriculum) degree and professional teacher certification. The first four years are mainly concerned with academic preparation in two teaching subject areas or in a single expanded teaching subject area. The fifth year contains the professional preparation for teaching these subjects in the secondary schools. The teaching areas offered in this Faculty are described on pages 145 to 148. With approval of the Dean of the Faculty, students may be recommended for a degree with a teaching area regularly taught in the B.C. school system but outside of those offered by the Faculty.

The program ordinarily requires attendance at five winter sessions. However, depending on the choice of teaching area(s), students may transfer credit to this program from course work taken at B.C. regional colleges or elsewhere. It is suggested that advice be sought from the Education Advising Centre to ensure that courses taken will carry credit to the desired program. For those wishing a physical education teaching area, it is usually necessary to attend campus for Year Two. Details regarding acceptance in this area are found on page 136.

Year Five is the professional year in which students spend an extended time in the schools and take courses on campus that are directly related to their professional training. In order to gain admission to the professional year, it is necessary to meet the requirements as specified in the section above entitled Professional Year Admission. Normally all courses listed for this year are taken as a coordinated program during one full winter session. Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

Students who complete this degree program with a grade point average of at least 3.00 on the professional year will be reported to the Ministry of Education as eligible for the Professional Certificate.

Teachers who are accepted on this program with credit from other institutions including professional training, should obtain a Program Outline from the Education Advising Centre as soon as Admission Services has provided them with a Statement of Transfer Credit. This program will be modified on the basis of their previous training and experience. In cases where the professional training was completed more than 10 years ago, the Faculty Admissions and Adjudication Committee will determine what credit will be granted by Admission Services and what credit will be used toward the program.

Teachers accepted on this program will be eligible for Teacher Qualification Service Category 3 when 30 units in addition to the professional year have been completed, provided no more than 33 units remain to the degree. They will be eligible for Category 4 when 45 units including ED-D 337 have been completed in addition to the professional year, provided no more than 18 units remain to the degree.

Graduation requirements are shown on pages 18 and 137. The teaching area calculation used for graduation will be as for admission to the professional year, shown above.

## COURSE REQUIREMENTS

The minimum degree requirement is successful completion of the following:

|  |                 |
|--|-----------------|
| Required Education courses   | 22½ units       |
| Required Arts and Science and Fine Arts courses                        | 9 units         |
| Teaching area(s) courses<br>(including prerequisites and corequisites) | 37½ units       |
| Electives  | 6 units         |
| <b>TOTAL</b>   | <b>75 units</b> |

## PROGRAM BY YEARS

All students except those admitted to Physical Education will register in Arts and Science (or Fine Arts) in Year One. Advice may be obtained from the Education Advising Centre.

### Year One:

|                                     |   |    |
|-------------------------------------|---|----|
| ENGL 115/116 or 121/122             | 3 |    |
| PSYC 100                            | 3 |    |
| Courses to meet degree requirements | 9 | 15 |

### Year Two:

|                                     |    |    |
|-------------------------------------|----|----|
| <sup>2</sup> ENGL 215               | 1½ |    |
| <sup>3</sup> THEA 150               | 1½ |    |
| Courses to meet degree requirements | 12 | 15 |

### Year Three:

|                                     |     |    |
|-------------------------------------|-----|----|
| ED-D 406                            | 3   |    |
| ED-P 398                            | 1½  |    |
| Courses to meet degree requirements | 10½ | 15 |

### Year Four:

|                                     |    |    |
|-------------------------------------|----|----|
| ED-D 303                            | 1½ |    |
| ED-P 498                            | 1½ |    |
| Courses to meet degree requirements | 12 | 15 |

### Year Five: Professional Year (Regular Option)

|   |      |    |
|---|------|----|
| <sup>4</sup> ED-B 343C  | 1½   |    |
| ED-B 359  | 1    |    |
| ED-B 420, 423, 425 or 427   | 3    |    |
| ED-B 430  | 1½   |    |
| ED-D 337  | 1½   |    |
| ED-P 792  | 1½   |    |
| Approved Curriculum, Instruction and Practicum in Secondary School subject(s) | 4½-6 |    |
| Approved Education elective (if only one area)                                | 1½-0 | 15 |

<sup>1</sup>Students accepted into Physical Education and admitted to Year One of the Faculty of Education must meet the requirements for admission to the degree program as stated on page 144 in their first year, or they will be required to withdraw from the Faculty.

<sup>2</sup>Students on the English teaching area will take this course as part of the area and will substitute an elective in the core.

<sup>3</sup>Students on the Dramatic Arts teaching area will substitute an elective.

<sup>4</sup>Prerequisite is waived.

### NOTE: ALTERNATIVE PROFESSIONAL YEARS MAY NOT BE OFFERED EVERY YEAR

### Year Five: Alternative Professional Year (Sequential Option)

|   |   |    |
|---|---|----|
| Approved Curriculum, Instruction and Practicum in Secondary School subjects | 6 |    |
| ED-P 799A   | 9 | 15 |

### Year Five: Alternative Professional Year (Saanich and Sooke Internship Programs)

#### July-August 1985

|           |    |  |
|-----------|----|--|
| ED-B 343C | 1½ |  |
| ED-B 430  | 1½ |  |
| ED-P 777  | 1½ |  |

#### September-May 1986

|   |    |  |
|---|----|--|
| Approved Curriculum, Instruction and Practicum in Secondary School subjects | 6  |  |
| ED-D 337  | 1½ |  |
| ED-P 793  | 1½ |  |

#### May-June 1986

|                           |   |     |
|---------------------------|---|-----|
| ED-B 420, 423, 425 or 427 | 3 | 16½ |
|---------------------------|---|-----|

### Year Five: Alternative Professional Year (Internship Program)

#### July-August (on campus)

|           |    |  |
|-----------|----|--|
| ED-B 343C | 1½ |  |
| ED-B 430  | 1½ |  |
| ED-P 777  | 1½ |  |

#### September-April\*

|   |      |  |
|---|------|--|
| Approved Curriculum, Instruction and Practicum in Secondary School Subject(s) | 4½-6 |  |
| ED-P 793  | 1½   |  |

#### May-June (on campus)

|                            |    |        |
|----------------------------|----|--------|
| ED-D 337                   | 1½ |        |
| ED-B 420, 423, 425, or 427 | 3  | 15-16½ |

\* Eight month teaching practice in participating districts on mid Vancouver Island

### Year Five: Alternative Professional Year (Music) \*

|   |   |    |
|---|---|----|
| ED-P 799A   | 9 |    |
| ED-A 762  | 3 |    |
| Approved Curriculum, Instruction and Practicum in other teaching area | 3 | 15 |

\* restricted to applicants who have completed the music teaching area.

Total Units for Degree 75 or 76½

Eligible for PROFESSIONAL CERTIFICATE

## TEACHING AREAS (SECONDARY)

Students will choose either two teaching areas or one expanded teaching area from those described on the following pages.

The following are usual combinations of teaching areas taken by students on the Secondary Regular Program:

1. any two of mathematics, chemistry, physics or biology;
2. mathematics or biology in combination with physical education;
3. any two of English, French, Spanish or German, art, music, dramatic arts, geography, history, physical education, social studies, mathematics.

Any student wishing to take a combination of teaching areas not listed above should consult the Education Advising Centre.

Where two teaching areas are chosen, the minimum number of units required in each area is 15. In addition to these 30 units a total of 7½ units are required, to be made up of corequisites and additional area courses.

Where one expanded area is chosen, 37½ units of area and corequisite work are required.

Exceptions to any of the following subject and course requirements may be permitted only with prior permission of the Education Advising Centre.

The six units normally reserved for electives may be used to strengthen a teaching area.

## ART

|   |   |   |
|---|---|---|
| Corequisite:                            |   |   |
| ENGL 200, 201, 202, 203, 250, or HA 120 | 3 | 3 |

### Area:

|                          |    |  |
|--------------------------|----|--|
| AE 103 (formerly AE 100) | 3  |  |
| AE 200                   | 1½ |  |
| AE 201                   | 1½ |  |
| AE 315                   | 1½ |  |
| AE 316                   | 1½ |  |
| AE 401                   | 3  |  |

### Approved courses chosen from:

|  |   |    |
|--|---|----|
| AE 205, 208, 305, 306, 307, 308, 303 or 309, 304 or 310, 317, 318, 319 | 6 | 18 |
|--|---|----|

AE 103 with a grade of B or higher is required for acceptance in this area. Students should attempt to obtain this course in Year I.

Courses chosen to complete this area must be approved by the Secondary Art Adviser.

Up to 3 units of additional work may be required if a student's background is considered to be inadequate for teaching art in the public school system.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Adviser.

Upper level visual arts courses may be substituted in the program with the approval of the Adviser.

## ART (EXPANDED)

Acceptance into the area is subject to approval of the Chairman of the Department of Art and Music Education.

|   |   |   |
|---|---|---|
| Corequisite:                            |   |   |
| ENGL 200, 201, 202, 203, 250, or HA 120 | 3 | 3 |

Area:

|  |       |
|--|-------|
| AE 103 (formerly AE 100)                   | 3     |
| AE 200                                     | 1½    |
| AE 201                                     | 1½    |
| AE 315                                     | 1½    |
| AE 316                                     | 1½    |
| AE 401                                     | 3     |
| Approved Art Education                     | 13½   |
| Approved upper level art or History in Art | 9 34½ |

AE 103 with a grade of B or higher is required. Students should attempt to obtain this course in Year 1.

Courses chosen to complete this area must be approved by the Secondary Art Adviser.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Adviser.

Upper level visual arts courses may be substituted in the program with the approval of the Adviser.

### BIOLOGICAL SCIENCES

Corequisites:

|                         |      |
|-------------------------|------|
| CHEM 100 or 101 or 140* | 1½   |
| CHEM 102 or 145*        | 1½   |
| CHEM 231                | 1½   |
| CHEM 232                | 1½ 6 |

Area:

|   |       |
|---|-------|
| BIOL 150**  | 3     |
| BIOC 200  | 1½    |
| BIOL 200  | 1½    |
| Two of BIOL 203, 204, 206, 207                                      | 3     |
| BIOL 300 or 320   | 1½    |
| Approved courses from biology, microbiology, biochemistry, ED-E 373 | 4½ 15 |

\* CHEM 140 and 145 have MATH 100 and 101 co- or prerequisites, respectively.

\*\* Students excused BIOL 150 by the Biology Department (see page 38) will substitute 3 units of biology or microbiology.

One botany course must be included in the area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen by the student from those numbered 300 or higher.

### CHEMISTRY

Area:

|                               |      |
|-------------------------------|------|
| CHEM 100 or 101 or 140*       | 1½   |
| CHEM 102 or 145*              | 1½   |
| CHEM 222                      | 1½   |
| CHEM 231                      | 1½   |
| CHEM 235                      | 1½   |
| CHEM 245**                    | 1½   |
| Approved chemistry courses*** | 6 15 |

\* CHEM 140 and 145 have MATH 100 and 101 co- or prerequisites, respectively.

\*\* Replace by Chemistry elective if 145 completed.

\*\*\* CHEM 213 is prerequisite to many upper level courses.

Additional area courses must be approved by the Secondary Science Adviser.

### DRAMATIC ARTS

Corequisites:

|  |     |
|--|-----|
| ENGL 301, or two of ENGL 302, ED-B 351, ED-B 360 | 3 3 |
|--|-----|

Area:

|          |      |
|----------|------|
| THEA 100 | 3    |
| THEA 105 | 3    |
| THEA 181 | 3    |
| THEA 330 | 3    |
| THEA 382 | 3 15 |

Additional area courses will be chosen by the student from any Theatre offerings.

**NOTE:** An elective will be substituted for the core requirement of THEA 150.

### ENGLISH

Corequisites:

|          |       |
|----------|-------|
| ED-B 342 | 1½    |
| ED-B 351 | 1½    |
| LING 388 | 1½ 4½ |

Area:

|   |      |
|---|------|
| ENGL 200  | 3    |
| ENGL 201, 202, 203, 250 or higher                     | 3    |
| ENGL 215  | 1½   |
| ENGL 400  | 1½   |
| ENGL 437  | 3    |
| ENGL 457; or one of 452 or 453, and either 450 or 451 | 3 15 |

Additional area courses will be chosen by the student from those numbered 350 or higher. In selecting additional courses students are advised to develop a balanced program of modern poetry, fiction and drama in preparation for teaching current secondary school curricula.

### FRENCH

Area:

|          |       |
|----------|-------|
| FREN 180 | 3     |
| FREN 285 | 3     |
| FREN 290 | 3     |
| FREN 302 | 3     |
| FREN 320 | 1½    |
| FREN 350 | 3 16½ |

Additional area courses will be chosen by the student from those numbered 300 or higher. FREN 402 and 426 are recommended.

### GENERAL SCIENCE (EXPANDED)

Corequisite:

|                  |     |
|------------------|-----|
| MATH 100 and 101 | 3 3 |
|------------------|-----|

Area:

|  |        |
|--|--------|
| ASTR 120 or 200  | 3      |
| BIOL 150*  | 3      |
| BIOL 306   | 1½     |
| CHEM 100 or 101 or 140   | 1½     |
| CHEM 102 or 145  | 1½     |
| CHEM 222   | 1½     |
| CHEM 245   | 1½     |
| GEOG 100 or GEOG 203A and 203B   | 3      |
| PHYS 110 and 120**   | 3      |
| Approved courses chosen from astronomy, biochemistry, microbiology, biology, chemistry, resource and physical geography, physics | 15 34½ |

\* Students excused BIOL 150 by the Biology Department (see page 38) will substitute 3 units of approved courses.

\*\* Students required to take Physics 100 may include the credit as an area course.

At least one additional course in Physics is recommended. Credit for MATH 200 and 201 will be included as part of the 15 units if an additional course in physics is taken.

Courses chosen to complete this area must be approved by the Secondary Science Adviser.

### GEOGRAPHY

Corequisite:

|                      |     |
|----------------------|-----|
| HIST 230, 240 or 242 | 3 3 |
|----------------------|-----|

Area:

|                       |      |
|-----------------------|------|
| GEOG 101A and 101B    | 3    |
| GEOG 203A and 203B    | 3    |
| GEOG 361A and 361B    | 3    |
| GEOG 349 and 350A     | 3    |
| Upper level geography | 3 15 |

GEOG 330 is not acceptable for credit in this area.

GEOG 350B and one upper level course in regional geography are recommended.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen by the student from those numbered 300 or higher.

Students in this area may not choose Geography/Social Studies or Social Studies as their other area.

### GEOGRAPHY/SOCIAL STUDIES

|  |   |  |    |
|--|---|--|----|
| Corequisites:  |   |  |    |
| HIST 230, 240 or 242   | 3 |  | 3  |
| Area:  |   |  |    |
| GEOG 101A and 101B   | 3 |  |    |
| GEOG 203A and 203B   | 3 |  |    |
| GEOG 361A and 361B   | 3 |  |    |
| GEOG 349 and 350A  | 3 |  |    |
| Approved courses (minimum 3 units upper level) in anthropology, classics, economics, history, law, pacific studies, political science, sociology | 9 |  | 21 |

This is a 21 unit area for students wishing to take courses in geography and social studies as one teaching area. Students in this area may not choose Geography or Social Studies as their other area.

Courses chosen to complete this area must be approved by the Secondary Geography Adviser.

### GEOGRAPHY/SOCIAL STUDIES (EXPANDED)

|   |    |  |     |
|---|----|--|-----|
| Corequisite:  |    |  |     |
| HIST 230, 240 or 242  | 3  |  | 3   |
| Area:   |    |  |     |
| GEOG 101A and 101B  | 3  |  |     |
| GEOG 203A and 203B  | 3  |  |     |
| GEOG 361A and 361B  | 3  |  |     |
| GEOG 349 and 350A   | 3  |  |     |
| Upper level geography   | 9  |  |     |
| Approved courses (minimum 3 units upper level) in ONE of the following areas: anthropology, classics, economics, history, pacific studies, political science, sociology | 9  |  |     |
| Approved courses in anthropology, classics, economics, history, law, pacific studies, political science, sociology  | 4½ |  | 34½ |

GEOG 330 is not acceptable for credit in this area.

Courses chosen to complete this area must be approved by the Secondary Geography Adviser.

### GERMAN

|  |   |  |    |
|--|---|--|----|
| Corequisite:   |   |  |    |
| Literature course at the 200 level or higher in any language other than German | 3 |  | 3  |
| Area:  |   |  |    |
| GER 100 and 200, or 149  | 6 |  |    |
| GER 204  | 3 |  |    |
| GER 300  | 3 |  |    |
| GER 400 or higher  | 3 |  | 15 |

Additional area courses will be chosen by the student from those numbered 400 or higher.

### HISTORY

|   |   |  |    |
|---|---|--|----|
| Corequisites:                                 |   |  |    |
| ENGL 200, 201 or 202                          | 3 |  |    |
| GEOG 101A and 101B                            | 3 |  | 6  |
| Area:   |   |  |    |
| Canadian History                              | 3 |  |    |
| Modern European or contemporary world history | 3 |  |    |
| POLI 100, 360 and 361 or 362, or 470          | 3 |  |    |
| Approved history electives                    | 6 |  | 15 |

Courses chosen to complete this area must include at least 6 units

lower level and at least 9 units upper level.

Students in this area may not choose History/History in Art, History/Social Studies, or Social Studies as their other area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen by the student from those numbered 300 or higher. Three units from CLAS 330 or 340 or HA 390 are also acceptable.

### HISTORY/HISTORY IN ART

|   |     |  |    |
|---|-----|--|----|
| Corequisite:                                  |     |  |    |
| GEOG 101A and 101B                            | 3   |  | 3  |
| Area:   |     |  |    |
| Canadian History                              | 3   |  |    |
| Modern European or contemporary world history | 3   |  |    |
| Approved history electives                    | 3-6 |  |    |
| HA 120 or 390                                 | 3   |  |    |
| History in Art electives                      | 6-9 |  | 21 |

At least 3 units of course chosen in history must be upper level.

This is a 21 unit area for students wishing to take History and History in Art as one area.

Students in this area may not choose History or History/Social Studies as their other area.

### HISTORY/SOCIAL STUDIES

|   |   |  |    |
|---|---|--|----|
| Corequisite:  |   |  |    |
| GEOG 101A and 101B  | 3 |  | 3  |
| Area: (at least 6 units upper level)  |   |  |    |
| Canadian History  | 3 |  |    |
| Modern European or contemporary world history   | 3 |  |    |
| POLI 100, 360 and 361 or 362, or 470  | 3 |  |    |
| Approved history elective   | 3 |  |    |
| Approved courses (including at least 3 units upper level) in anthropology, classics, economics, geography, law, pacific studies, political science, sociology | 9 |  | 21 |

Courses chosen to complete this area must include at least 9 units upper level and must be approved by the Secondary History Adviser.

This is a 21 unit area for students wishing to take courses in History and Social Studies as one teaching area. Students in this area may not choose History, History/History in Art or Social Studies as their other area.

### HISTORY/SOCIAL STUDIES (EXPANDED)

|   |    |  |     |
|---|----|--|-----|
| Corequisites:   |    |  |     |
| ENGL 200, 201, or 202   | 3  |  |     |
| GEOG 101A and 101B  | 3  |  | 6   |
| Area: (at least 6 units upper level)  |    |  |     |
| Canadian History  | 3  |  |     |
| Modern European or contemporary world history   | 3  |  |     |
| POLI 100, 360 and 361 or 362, or 470  | 3  |  |     |
| Approved history electives  | 9  |  |     |
| Approved courses (minimum 3 units upper level) in ONE of the following areas: Anthropology, classics, economics, geography, pacific studies, political science, sociology | 9  |  |     |
| Approved courses in anthropology, classics, economics, geography, law, pacific studies, political science, sociology  | 4½ |  | 31½ |

Courses chosen to complete this area must include 12 units upper level and must be approved by the Secondary History Adviser.

### MATHEMATICS

|                    |    |  |  |
|--------------------|----|--|--|
| Area:              |    |  |  |
| MATH 100 and 101   | 3  |  |  |
| MATH 233A and 233C | 3  |  |  |
| MATH 362           | 1½ |  |  |

|                        |    |
|------------------------|----|
| MATH 368A .....        | 1½ |
| STAT 250 and 251 ..... | 3  |
| CSC 110 and 115 .....  | 3  |
|                        | 15 |

Students who consider Mathematics their first teaching area are advised to take a minimum of 18 units of mathematics and computer science courses. In addition to the 15 units listed above. MATH 333A and 333C are recommended. Additional area courses will be chosen by the student from courses in mathematics and/or computer science.

## MUSIC

Area:

|   |    |
|---|----|
| MUS 100A* .....                             | 1  |
| MUS 100B .....                              | 1  |
| MUS 170 .....                               | 1  |
| ME 101 .....                                | 1½ |
| ME 201 .....                                | 1½ |
| ME 301 .....                                | 1½ |
| ME 401** .....                              | 1½ |
| Approved music and/or music education ..... | 6  |
| Two of: MUS 180, 280, 380, 480;             |    |
| ME 118, 218, 318, 418 .....                 | 2  |
|   | 17 |

\* MUS 100 placement test must be taken in the Spring or during registration week. Details available from the School of Music.

\*\* Any student who wishes to substitute an elective for ED-P 498 should consult the Education Advising Centre.

Students wishing to enter this area must first seek acceptance through the Department of Art and Music Education. Prior to acceptance it will be necessary to demonstrate competence in theory to the level of ME 105, Royal Conservatory of Music Toronto Grade 2, or the equivalent, and to perform satisfactorily on a short musical aptitude test.

Courses taken to complete this area and additional area courses must be approved by the Secondary Music Adviser.

## PHYSICAL EDUCATION

Refer to page 136 for information regarding acceptance into this area.

Area:

|   |    |
|---|----|
| Basic skills (chosen from PE 104-125;<br>see Note page 160) ..... | 5½ |
| PE 141 .....  | 1½ |
| PE 142 .....  | 1½ |
| PE 143 .....  | 1½ |
| PE 241A .....   | 1½ |
| PE 241B .....   | 1½ |
| PE 344 .....  | 1½ |
| PE 443 .....  | 1½ |
| PE 452 .....  | 3  |
| PE 461 in three areas .....                                       | 1½ |
| PE 463 .....  | ½  |
|   | 21 |

Students who have completed activities under PE 100/101 are not eligible to repeat such activities for credit.

Additional area courses will be chosen by the student from those courses numbered 300 or higher.

## PHYSICAL EDUCATION (EXPANDED)

Refer to page 136 for information regarding acceptance into this area.

Area:

|   |    |
|---|----|
| Basic Skills (chosen from PE 104-125;<br>see Note page 160) ..... | 5½ |
| PE 141 .....  | 1½ |
| PE 142 .....  | 1½ |
| PE 143 .....  | 1½ |
| PE 241A .....   | 1½ |
| PE 241B .....   | 1½ |
| PE 341 .....  | 1½ |
| PE 342 .....  | 1½ |
| PE 344 .....  | 1½ |
| PE 441 .....  | 1½ |
| PE 442 .....  | 1½ |
| PE 443 .....  | 1½ |
| PE 444 .....  | 1½ |
| PE 452 .....  | 3  |
| PE 461 in three areas .....                                       | 1½ |

|                                    |    |
|------------------------------------|----|
| PE 463 .....                       | ½  |
| One of PE 343, 346, 371, 372 ..... | 1½ |
|                                    | 30 |

Students choosing the expanded teaching area in physical education will be required to take, in addition, at least 7½ units not including corequisites, chosen from one other teaching area with a grade point average of 3.00 (UVic C+).

Students who have completed PE 100/101 are not eligible to repeat such activities for credit.

## PHYSICS

Corequisites:

|                        |   |
|------------------------|---|
| MATH 100 and 101 ..... | 3 |
| MATH 200 and 201 ..... | 3 |
|                        | 6 |

Area:

|   |    |
|---|----|
| PHYS 100, 110, 120, 220,<br>215, 217, 316, 325;<br>or 110, 120, 214, 215,<br>217, 220, 316, 325 ..... | 12 |
| Approved Physics .....  | 3  |
|   | 15 |

Students are urged to seek advice from the Secondary Science Adviser. Additional area courses must be approved by the Adviser.

## SOCIAL STUDIES

Area:

|  |    |
|--|----|
| GEOG 101A and 101B .....   | 3  |
| GEOG 203A and 203B .....   | 3  |
| GEOG 361A and 361B .....   | 3  |
| Canadian History .....   | 3  |
| Modern European or contemporary<br>world history .....                     | 3  |
| POLI 100, 360 and 361 or 362, or 470 .....                                 | 3  |
| Three units chosen from GEOG 349,<br>350A, 350B, upper level history ..... | 3  |
|  | 21 |

Courses chosen in history and political science must include at least 3 units upper level.

This is a 21 unit area for students wishing to take Geography and History as one teaching area. In the professional year students will choose either ED-E 755 or 758. Students in this area may not choose Geography, History, History/History in Art, Geography/Social Studies or History/Social Studies as their other area.

## SOCIAL STUDIES (EXPANDED)

Corequisite:

|                            |   |
|----------------------------|---|
| ENGL 200, 201 or 202 ..... | 3 |
|                            | 3 |

Area:

|   |     |
|---|-----|
| GEOG 101A and 101B .....  | 3   |
| GEOG 203A and 203B .....  | 3   |
| GEOG 361A and 361B .....  | 3   |
| Two of GEOG 349, 350A 350B .....  | 3   |
| Upper level geography .....   | 3   |
| Canadian history .....  | 3   |
| Modern European or contemporary<br>world history .....  | 3   |
| POLI 100, 360 and 361 or 362, or 470 .....  | 3   |
| Approved history electives .....  | 6   |
| Approved courses in anthropology,<br>classics, economics, upper level<br>geography, upper level history,<br>law, pacific studies, political<br>science, sociology ..... | 4½  |
|   | 34½ |

Courses chosen in history and political science must include at least 6 units upper level.

Students who elect this area will take both ED-E 755 and 758 in the professional year.

## SPANISH

Corequisite:

|                       |   |
|-----------------------|---|
| LING 100 or 360 ..... | 3 |
|                       | 3 |

Area:

|                |   |
|----------------|---|
| SPAN 100 ..... | 3 |
| SPAN 260 ..... | 3 |

|                    |   |    |
|--------------------|---|----|
| SPAN 290           | 3 |    |
| SPAN 302           | 3 |    |
| SPAN 400 or higher | 3 | 15 |

Additional area courses will be chosen by the student from those numbered 400 or higher.

## BACHELOR OF EDUCATION POST DEGREE PROFESSIONAL PROGRAM — SECONDARY

The first ten months of this program will prepare students for a teaching certificate. Students may then proceed to a degree as described below.

### ADMISSION

The deadline for receipt of application forms is February 28. Applications will be considered from those who meet the following requirements:

- successful Faculty interview; and
- a degree from a recognized university; and
- the equivalent of 60 units acceptable in content to the Faculty of Education Admissions and Adjudication Committee; and
- a grade point average of at least 3.00 (UVic C+) on the most recent session and on the most recent two years (30 units); and
- credit for 3 units of approved English (The Faculty requires students to demonstrate competency in written English. This may be satisfied by ENGL 115 with a grade of at least C+ or 215 as part of the required 3 units, or by successful completion of the ENGL 115 equivalency examination in addition to the 3 units of approved English.); and
- academic preparation which includes one of the following:

- the equivalent of at least 9 units in upper level courses in each of two of the following subjects with a grade point average of at least 3.00 (UVic C+) on the best 9 units of upper level courses in each subject:

|                                  |                                 |
|----------------------------------|---------------------------------|
| Art <sup>1</sup>                 | History <sup>4</sup>            |
| Biological Sciences <sup>1</sup> | Mathematics <sup>5</sup>        |
| Chemistry <sup>1</sup>           | Music <sup>1</sup>              |
| English <sup>2</sup>             | Physical Education <sup>1</sup> |
| French                           | Physics <sup>1</sup>            |
| Geography <sup>3</sup>           | Spanish                         |
| German                           | Theatre <sup>1</sup>            |

(Other subject areas normally taught in the secondary schools of British Columbia may be acceptable subject to the approval of the Dean.)

<sup>1</sup>All art, music, physical education, theatre and science courses must be acceptable to the appropriate Departments for admission to the Curriculum, Instruction and Practicum courses. Potential art and music applicants are advised to include at least 3 units of Art Education and Music Education courses respectively, and to consult with the Department prior to submission of applications.

<sup>2</sup>Courses in children's literature are not acceptable.

<sup>3</sup>Students presenting geography must also have an approved 3 units of introductory work in history (for example, History 230, 240, or 242).

<sup>4</sup>Students presenting history must include at least 3 units of Canadian history at lower or upper level and also have an approved 3 units of introductory work in geography (for example, GEOG 101A, 101B, 201A, 201B, 203A, 203B, 205A, 205B).

<sup>5</sup>Students presenting mathematics may substitute the equivalent of the specified mathematics teaching area (page 147) with a grade point average of at least 3.00 (UVic C+) on the best 9 units, in place of 9 units of upper level mathematics.

- Master's or Honours degree in one of the subjects listed in (i) with the exception of German, Spanish and Theatre, all of which require a second teaching area;
- at least 15 units in upper level courses in any one of the subjects listed in (i) with the exception of German, Spanish, Theatre, and Physical Education, with a grade point average of at least 3.00 (UVic C+) on the best 15 units of upper level courses;
- an approved expanded teaching area (single teaching area) with a grade point average of at least 3.00;
- A Bachelor of Music with Major in Music Education (Secun-

dary) from the University of Victoria including ED-D 303, 406, ME 101, 201, 301, and either ED-P 498 (choral only) or ME 401 (instrumental only), with a grade point average of at least 3.00 on all upper level courses in music and music education. Students in this category will be accepted with the same priority status as regular Bachelor of Education secondary students.

In addition, it is recommended that 1HEA 150, ENGL 215 and PSYC 100 be included in the preparatory work.

Students of exceptional ability who do not meet the stated admission requirements may appeal to the Faculty Admissions and Adjudication Committee for consideration. "Exceptional" may be considered in terms of high grade point average, relevant work experience or unique academic qualifications.

Normally applicants must have fulfilled the above requirements by June 30 of the year of application. Students who believe their circumstances are unusual may appeal to the Faculty Admissions and Adjudication Committee for permission to meet the minimum requirements at the summer session prior to commencement of the program.

### PROGRAMS

Maximum enrollments have been established; therefore the Faculty cannot guarantee that all qualified candidates will be accepted. Accepted candidates will be notified as early as possible, but final acceptance may not be until late July.

Registration must be completed by Tuesday, September 3, 1985. No registration will be accepted after that date as school opening orientation begins on Wednesday, September 4.

Students interested in an Internship Program should make inquiries in the Education Advising Centre early in February or prior to submission of their application for admission.

Students will spend an extended time in the schools and take courses at the University directly related to their professional training. Normally, the courses are taken as a coordinated unit during a ten month period beginning in September. Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

A grade point average of at least 3.00 must be obtained on this program in order to qualify for certification.

### COURSE REQUIREMENTS

#### 1. Regular Program - Year 1

| September-May       | 1 Area | 2 Areas* |
|---------------------|--------|----------|
| ED-D 303            | 1½     | 1½       |
| ED-D 337            | 1½     | 1½       |
| ED-B 343C           | 1½     | 1½       |
| ED-B 359            | 1      | 1        |
| ED-D 406            | 3      | 3        |
| ED-A 750 - ED-E 770 | 4½     | 6        |
| ED-P 790            | 1½     | 1½       |
| ED-P 792            | ½      | ½        |

\*except sciences and second languages 15 16½

#### May-June

|                           |    |    |
|---------------------------|----|----|
| ED-B 420, 423, 425 or 427 | 3  | 3  |
| ED-B 430                  | 1½ | 1½ |
|                           | 4½ | 4½ |

Total units 19½ 21

Eligible for CERTIFICATION

#### 2. Alternative Programs - Year 1

**NOTE: ALTERNATIVE PROGRAMS MAY NOT BE OFFERED EVERY YEAR**

|   |           |            |    |
|---|-----------|------------|----|
| <b>(a) Sequential Option</b>  |           |            |    |
| <i>September-May</i>  |           |            |    |
| Approved Curriculum,<br>Instruction and Practicum<br>in Secondary School Subjects | 4½        | 6          |    |
| ED-P 799B   | 12        | 12         |    |
|   | 16½       | 18         |    |
| <i>May-June</i>   |           |            |    |
| ED-B 343C   | 1½        | 1½         |    |
| ED-B 420, 423, 425 or 427   | 3         | 3          |    |
|   | 4½        | 4½         |    |
| <b>Total units</b>  | <b>21</b> | <b>22½</b> |    |
| * except sciences and second languages  |           |            |    |
| <b>(b) Saanich Internship Program</b>   |           |            |    |
| <i>July-August 1985</i>   |           |            |    |
| ED-D 303  | 1½        |            |    |
| ED-B 343C   | 1½        |            |    |
| ED-B 430  | 1½        |            |    |
| ED-P 777  | 1½        |            |    |
| <i>September-May 1986</i>   |           |            |    |
| Approved Curriculum,<br>Instruction and Practicum in<br>Secondary School Subjects |           | 6          |    |
| ED-D 337  |           | 1½         |    |
| ED-D 406  |           | 3          |    |
| ED-P 793  |           | 1½         |    |
| <i>May-June 1986</i>  |           |            |    |
| ED-B 420, 423, 425 or 427   | 3         |            | 21 |
| <b>(c) Internship Program</b>   |           |            |    |
| <i>July-August (on campus)</i>  |           |            |    |
| ED-D 303  | 1½        |            |    |

|   |      |  |        |
|---|------|--|--------|
| ED-B 343C   | 1½   |  |        |
| ED-B 430  | 1½   |  |        |
| ED-P 777  | 1½   |  |        |
| <i>September-April*</i>   |      |  |        |
| Approved Curriculum,<br>Instruction and Practicum<br>in Secondary School subject(s) | 4½-6 |  |        |
| ED-P 793  | 1½   |  |        |
| <i>May-June (on campus)</i>   |      |  |        |
| ED-D 337  | 1½   |  |        |
| ED-B 320  | 1½   |  |        |
| ED-D 406  | 3    |  | 18-19½ |

\* Eight month teaching practice in participating districts on mid Vancouver Island.

|   |         |  |    |
|---|---------|--|----|
| <b>(d) Special Music Program*</b>   |         |  |    |
| <i>September-May</i>  |         |  |    |
| ED-P 799A   | 9       |  |    |
| ED-A 762  | 3 or 4½ |  |    |
| Approved Curriculum, Instruction and<br>Practicum in a Secondary School<br>subject, if required | 3 or 0  |  |    |
| Approved Education elective,<br>if required   | 0 or 1½ |  | 15 |

\* Restricted to applicants who have completed the Bachelor of Music with Major in Music Education (Secondary) from the University of Victoria, or equivalent.

Eligible for CERTIFICATION

**3. Degree Completion**

Students may proceed to a B.Ed. degree by taking an additional 12 to 15 units. The courses should be selected in consultation with the Education Advising Centre to ensure that they support the teaching areas or are used to complete a second teaching area if appropriate.

**BACHELOR OF ARTS**

**1. MAJOR IN HUMAN PERFORMANCE**

The Bachelor of Arts, Human Performance, offers a liberal arts and/or social science perspective in the study of fitness, sport, and physically active lifestyles. Options could focus on assessing the social and psychological implications of different activities and/or the administration of exercise programs.

The School of Physical Education each year will accept students in the Human Performance major by the selection process described under Admission to Physical Education on page 136. Students entering the Human Performance Program with the intent of applying for the Leisure Studies Cooperative Program which begins in Year Two should take the courses listed for Year One under the Major in Leisure Studies.

In order to graduate, students must successfully complete all requirements of the program and must have a grade point average of at least 3.00 on the final year of at least 15 units.

**Program Admission:**

Normal admission requirements for the Faculty of Education include 12 units of credit, at least 3 units of which must be English (except students who have successfully completed ENGL 099 may be admitted with 1½ units of English), and a grade point average of at least 3.00. An exception is made for students admitted to Year One of this program; however, in order to continue into Year Two students must meet the normal admission requirements. Students who are applying for admission to this program who have 12 or more units of credit must also meet the normal admission requirements.

In order to continue in this program a grade point average of at least 3.00 is required in every session attended.

**Years One and Two:**

|                         |     |
|-------------------------|-----|
| ENGL 115/116 or 121/122 | 3   |
| PE activities           | 4-6 |
| PE 141                  | 1½  |
| PE 142                  | 1½  |
| PE 143                  | 1½  |
| PE 241A                 | 1½  |

|                 |     |       |
|-----------------|-----|-------|
| PE 241B         | 1½  |       |
| PE 243          | 1½  |       |
| PSYC 100        | 3   |       |
| PSYC 240 or 331 | 3   |       |
| SOCI 100        | 3   |       |
| Electives       | 6-8 | 31-35 |

**Years Three and Four:**

|                                 |       |           |
|---------------------------------|-------|-----------|
| PE activities                   | 0-2   |           |
| PE 342                          | 1½    |           |
| PE 346                          | 1½    |           |
| PE 347                          | 1½    |           |
| PE 443 or 453A                  | 1½    |           |
| PE 444                          | 1½    |           |
| PE 445                          | 1½    |           |
| PE 447                          | 3     |           |
| Approved upper level psychology | 3     |           |
| Upper level sociology           | 3     |           |
| Electives                       | 13-15 | 31-35     |
| <b>Total Units for Degree</b>   |       | <b>66</b> |

**NOTES:**

- (a) Students must complete 6 units of activity courses which must include PE 105, PE 115, and at least two from the PE 461 series.
- (b) Twelve units of electives must be from the Faculty of Arts and Science and at least 9 of these must be at the 300 or 400 level. No more than 6 may be additional physical education units.
- (c) A second area of concentration should be included. Consult the Human Performance Faculty Adviser.

**2. MAJOR IN LEISURE STUDIES**

The Leisure Studies program prepares students to enter the field of Recreational Administration and provides preparation in the planning, implementation and supervision of programs in a wide range of recreation settings.

The Leisure Studies Program is available only on a cooperative model

basis. Please refer to page 27 for a general description of the Cooperative Education concept and general regulations governing all cooperative education students.

Full time students are normally admitted to the Leisure Studies Cooperative Program after the first year in the Human Performance (B.A.) program (i.e., at least 12 units of credit, normally including 3 units of English). Application for admission should be made to the School of Physical Education by December 1 of the first year. The minimum academic requirement for entering the Leisure Studies Cooperative program is a 4.50 grade point average in the first year of the Human Performance (B.A.) program. Students meeting this academic requirement will be given a personal interview with the Selection Committee which includes members of the faculty of the School of Physical Education and members of the Leisure Studies Advisory Board as a further requirement for admission.

A maximum of 15 students will be admitted per year. Students must maintain at least a 3.50 grade point average and must complete four Work Terms (each a minimum duration of 13 weeks).

Each Work Term is noted on the student's academic record and transcript (grading: COM, N or F). A student who does not complete a Work Term satisfactorily will normally be required to withdraw from the program but the Leisure Studies Committee may, upon review, authorize a further Work Term. The performance of students in the Leisure Studies Cooperative Program will be reviewed after each campus term and each Work Term. Students whose performance is deemed unsatisfactory by the Leisure Studies Committee will be so informed and will be advised by the Committee of the conditions they are to satisfy in order to remain in the program.

In order to graduate, students must successfully complete all requirements of the program including at least four Work Terms and must have a grade point average of at least 3.50 on the final year of at least 15 units.

**Work Term Transcript Entries**

When a Work Term is satisfactorily completed, the notation COM (completed) will be entered on the student's academic record and transcript together with one of the following, as appropriate:

- LEIS 001 (0) Coop Work Term: I
- LEIS 002 (0) Coop Work Term: II
- LEIS 003 (0) Coop Work Term: III
- LEIS 004 (0) Coop Work Term: IV

**Year One:**

ENGL 115/116 or 121/122 ..... 3

|               |    |     |
|---------------|----|-----|
| PE 141        | 1½ |     |
| PE 142        | 1½ |     |
| PE 143        | 1½ |     |
| PE activities | 1½ |     |
| PSYC 100      | 3  |     |
| SOCI 100      | 3  |     |
| Elective      | 1½ | 16½ |

**Year Two:**

|                 |    |     |
|-----------------|----|-----|
| PE 241B         | 1½ |     |
| PE 243          | 1½ |     |
| PE 244          | 1½ |     |
| PE 252          | 1½ |     |
| PE 253          | 1½ |     |
| PE activities   | 1½ |     |
| PSYC 240 or 331 | 3  |     |
| SOCW 200B       | 1½ |     |
| Electives       | 3  | 16½ |

**Year Three:**

|               |    |    |
|---------------|----|----|
| PE 371 or 372 | 1½ |    |
| PE 354A       | 1½ |    |
| PE 354B       | 1½ |    |
| SOCI 371      | 1½ |    |
| ED-D 417      | 3  |    |
| Electives     | 6  | 15 |

**Year Four:**

|  |    |    |
|--|----|----|
| PE 454                                       | 1½ |    |
| ADMN 423                                     | 1½ |    |
| ADMN 425                                     | 1½ |    |
| SOCI 365 (or approved upper level sociology) | 1½ |    |
| ED-B 336                                     | 1½ |    |
| ADMN 437                                     | 1½ |    |
| Electives                                    | 6  | 15 |
| Total Units for Degree                       |    | 63 |

**NOTES:**

- (a) Students must complete six activities from PE 104-125.
- (b) Of the 16½ units of electives 6 units must be approved upper level courses from faculties other than the Faculty of Education.
- (c) When neither of the upper level sociology courses is offered, a substitute will be approved by the Leisure Studies Faculty Adviser.

## BACHELOR OF SCIENCE

**MAJOR IN HUMAN PERFORMANCE**

The Bachelor of Science, Human Performance, offers a science perspective in the study of fitness, sport, and physical activity. Options can focus on assessing fitness and performance, and the prescription of exercise programs.

The School of Physical Education each year will accept approximately 10 students in the Human Performance major by the selection process described under Admission to Physical Education on page 136.

In order to graduate, students must successfully complete all requirements of the program and must have a grade point average of at least 3.00 on the final year of at least 15 units.

**Program Admission:**

Normal admission requirements for the Faculty of Education include 12 units of credit, at least 3 units of which must be English (except students who have successfully completed ENGL 099 may be admitted with 1½ units of English), and a grade point average of at least 3.00. An exception is made for students admitted to Year One of this program; however, in order to continue into Year Two students must meet the normal admission requirements. Students who are applying for admission to this program who have 12 or more units of credit must also meet the normal admission requirements.

In order to continue in this program a grade point average of at least 3.00 is required in every session attended.

**Years One and Two:**

\*BIOL 150 ..... 3

|  |       |       |
|--|-------|-------|
| *CHEM 100 or 101 or 140                | 1½    |       |
| *CHEM 102 or 145                       | 1½    |       |
| ENGL 115/116 or 121/122                | 3     |       |
| *MATH 100/101 or 102/151               | 3     |       |
| PE activities                          | 4-6   |       |
| PE 141                                 | 1½    |       |
| PE 142                                 | 1½    |       |
| PE 143                                 | 1½    |       |
| *PE 241A                               | 1½    |       |
| *PE 241B                               | 1½    |       |
| *PHYS 102, 103 or two of 100, 110, 120 | 3     |       |
| Electives                              | 4½-6½ | 31-35 |

**Years Three and Four:**

|                        |       |       |
|------------------------|-------|-------|
| PE activities          | 0-2   |       |
| *PE 341                | 1½    |       |
| *PE 344                | 1½    |       |
| *PE 441                | 1½    |       |
| *PE 442                | 1½    |       |
| *PE 444                | 1½    |       |
| PE 447                 | 3     |       |
| *PE 451                | 1½    |       |
| Electives              | 19-21 | 31-35 |
| Total Units for Degree |       | 66    |

\* science designated units

**NOTES:**

- (a) To qualify for the Bachelor of Science degree 33 science designated units must be completed within the program.
- (b) Students must complete 6 units of activity courses which must include PE 105, PE 115, and at least two from the PE 461 series.
- (c) Students may substitute a second 3 units in any of the four areas for one of the basic sciences (chemistry, physics, mathematics, biology).
- (d) At least 12 units of electives must be from science designated courses listed below and 9 of these must be at the 300 or 400 level. No more than 9 additional physical education units may be included.

|   |                 |
|---|-----------------|
| Biochemistry                                      | Mathematics     |
| Biology   | Microbiology    |
| Chemistry   | Physics         |
| Computer Science                                  | Statistics      |
| The following specific courses are also approved: |                 |
| ANTH 100A/B                                       | PSYC 315 or 415 |
| ANTH 250  | PSYC 423        |
| PSYC 215A/B                                       | PSYC 424        |

- (e) Students should develop a second science concentration in their program. Consult the Human Performance Faculty Adviser.

## DIPLOMA IN SCHOOL LIBRARIANSHIP

This is a fifteen unit program leading to a Diploma in School Librarianship, designed to prepare teachers to function as teacher librarians in either elementary or secondary schools.

Admission to the program normally requires certification and at least one year's successful teaching experience. For those teachers who have completed part or all of the former elementary program Library Education teaching area, it may be possible to replace those courses with other approved electives and complete requirements for the Diploma. It should be noted, however, that courses taken to apply toward the Diploma may not also apply toward a degree.

Normally students must complete 9 units of the required program at the University of Victoria.

The Diploma program is intended to be offered in summer sessions although some courses may be available during winter session. While it is hoped that all courses will be offered over a three summer cycle, it is not possible to ensure that all will be available.

### DIPLOMA IN SCHOOL LIBRARIANSHIP (ELEMENTARY)

|            |    |
|------------|----|
| LE 432     | 1½ |
| LE 433     | 1½ |
| LE 434A    | 1½ |
| LE 435     | 1½ |
| LE 436     | 1½ |
| LE 437A    | 1½ |
| ED-B 494Q* | 1½ |
| ED-B 360   | 1½ |

|                       |    |
|-----------------------|----|
| ED-B 361              | 1½ |
| ED-B 430 or 431       | 1½ |
| Pre- or corequisites: |    |
| ED-B 341**            | 3  |
| ED-B 342              | 1½ |
| ED-B 343A or B        | 1½ |

### DIPLOMA IN SCHOOL LIBRARIANSHIP (SECONDARY)

|                 |    |
|-----------------|----|
| LE 432          | 1½ |
| LE 433          | 1½ |
| LE 434B         | 1½ |
| LE 435          | 1½ |
| LE 436          | 1½ |
| LE 437B         | 1½ |
| ED-B 494Q*      | 1½ |
| ED-B 360        | 1½ |
| ED-B 361        | 1½ |
| ED-B 430 or 431 | 1½ |

|                       |    |
|-----------------------|----|
| Pre- or corequisites: |    |
| ED-B 342              | 1½ |
| ED-B 343C             | 1½ |
| ED-B 351              | 1½ |

- \* Directed studies
- \*\* May substitute other approved children's literature course (1½-3)

## PROGRAM IN NATIVE INDIAN LANGUAGE TEACHER TRAINING

A two year program leading to a special licence issued by the Ministry of Education prepares individuals to function as consultants, coordinators, or resource teachers in the teaching of native languages in communities or schools of British Columbia.

Priority for admission will be given to individuals who are identified by local community organizations which express an interest in developing or continuing native language instruction. Some degree of competence in one of the native languages of British Columbia is a desirable prerequisite, but is not absolutely necessary if the applicant meets other admission criteria and has adequate access to speakers of a native language.

Preliminary screening will be made by a committee from the Department of Linguistics of the Faculty of Arts and Science and the Faculty of Education which will forward applications and committee recommendations to the Senate Committee on Admission and Re-registration when such action is appropriate. In addition to the usual application form and transcripts for new admissions to the University submitted to the Director of Admission Services (see pages 7-11), each application should include two letters of reference and a letter written by the applicant outlining the applicant's personal background and future aspirations.

All students will register in the designated sections of the following courses:

**Year One:**

LING 120 (1½) Principles of Phonology

|               |   |
|---------------|---|
| LING 121 (1½) | Principles of Morphology and Syntax                             |
| LING 122 (1½) | Phonological Analysis   |
| LING 123 (1½) | Grammatical Analysis  |
| LING 124 (1½) | Discovery Procedures: I   |
| LING 125 (1½) | Discovery Procedures: II  |
| ED-B 290 (3)  | Principles of Teaching Native B.C. Languages as Second Language |
| ED-B 360 (1½) | Educational Technology  |
| ED-B 361 (1½) | Advanced Educational Technology                                 |

**Year Two:**

|                |  |
|----------------|--|
| LING 221 (3)   | Field Research for Language Lessons                  |
| LING 222 (3)   | Compiling School Dictionaries for Native Languages   |
| ED-B 748A (1½) | Reading Instruction in the Elementary School         |
| ED-B 749A (1½) | Oral and Written Expression in the Elementary School |
| ED-B 788 (6)   | Institute for Native Language Teachers               |

After admission to the program, orientation, counselling and general University coordination of the program will be provided by the Studies of Intercultural Education Office of the Faculty of Education. At the completion of the program, the University will award a certificate.

(Not available in 1985-86)

## COURSES IN THE FACULTY OF EDUCATION

Courses are designated as follows:

|                  |   |  |
|------------------|---|--|
| ED-A<br>AE<br>ME | } | Department of Art and Music Education                |
| ED-B<br>LE       |   | Department of Communication and Social Foundations   |
| ED-C<br>PE       |   | School of Physical Education                         |
| ED-D             |   | Department of Psychological Foundations in Education |
| ED-E             |   | Department of Social and Natural Sciences            |
| ED-P             |   | Division of Professional Studies                     |

**Not all courses listed hereunder will be offered every session.**

The University timetable lists the courses that will be offered in a specific session. Students should check with the appropriate Department or School regarding the upper level courses of their teaching areas.

Both core and elective courses included in the professional year and in specialized programs will be scheduled as part of a program and may vary from the normal timetable.

Elementary students registering in the professional year will be issued prepared timetables at the initial meeting on September 3, 1985. Secondary students will be given a preassigned course schedule from which they can make up their timetables at the initial meeting on September 3, 1985. Professional year students should not attempt to make up individual timetables before these meetings.

Courses numbered 700-799 are restricted to students accepted in a professional year. Students who wish to repeat ED-P 797 or a course in the ED-A 750 to ED-E 770 series must appeal to the Faculty Admissions and Adjudication Committee for permission.

Registration in all 300 level courses is restricted to students having second year standing or higher. Except in the Department of Art and Music Education, courses numbered 400 or above are reserved for students registered in third or following years. These regulations do not apply to students registered in a post degree professional program.

It is the responsibility of all registrants to ensure that all calendar prerequisites for the courses in which they register have been met. Prerequisites may be waived (a) if the student has completed equivalent work, or (b) in other exceptional cases. Consult the Education Advising Centre.

Many Education courses are open to students in other faculties. Further information is printed in the University timetable.

## DEPARTMENT OF ART AND MUSIC EDUCATION

### UNDERGRADUATE COURSES

#### ART EDUCATION

Professor M.A. Small, Coordinator  
Dr. M.M. Travis, Elementary Adviser  
Professor G.S. Hodder, Secondary Adviser

#### **A E 101 (2) ART FOR GENERAL CLASSROOM TEACHERS (Elementary)**

Content of the Art program in the elementary school; principles, practice and techniques of instruction. (Not available for credit on a degree program for students who have already completed 100 or ED-A 701) (Students planning to emphasize art in their degree program should register in 103.) (2-1; 2-1)

#### **A E 103 (formerly 100) (3) INTRODUCTION TO ART EDUCATION**

The role of art in education; practical exploration in art, classroom management and teaching techniques (elementary and secondary). (Not available on a degree program for students who have already completed 101 or ED-A 701) (Students planning to emphasize art in their degree program should register in this course.) (3-1; 3-1)

#### **A E 200 (1½) DESIGN FOR THE CLASSROOM**

Analysis of the elements and principles of design, through practical and theoretical experiences as applied to the classroom (elementary and secondary). (3-1)

#### **A E 201 (1½) IMAGE DEVELOPMENT FOR THE CLASSROOM**

An introduction to theories, methods and practices of image development for the classroom (elementary and secondary). (3-1)

#### **A E 205 (1½) TWO DIMENSIONAL ART FOR THE CLASSROOM**

Teaching methods, techniques and studio investigation of media in drawing, painting, design, printmaking and other two dimensional art (elementary and secondary). (3-1)

#### **A E 208 (1½) THREE DIMENSIONAL ART FOR THE CLASSROOM**

Teaching methods, techniques and studio investigation of media in carving, modelling, construction and other three dimensional art (elementary and secondary). (3-1)

#### **A E 303 (3) CERAMICS**

An introductory course in ceramics for elementary and secondary teachers. Discussion and practice will include all aspects of ceramics as these relate to human development and classroom practice. (Consent of an art education adviser required if 309 already completed.) (3-1; 3-1)

#### **A E 304 (3) APPLIED DESIGN FOR THE CLASSROOM**

An in depth study of skills and teaching methods in one or more selected

applied design areas through studio exploration (elementary and secondary). (The area of study offered each year may vary. Further details at the Department Office) (Consent of an art education adviser required if 310 already completed) (3-1; 3-1)

#### **A E 305 (1½) DRAWING FOR THE CLASSROOM**

Development of skills and teaching methods in drawing through studio exploration (elementary and secondary). (Normally not available for credit on a degree program for students who have already completed 302) (3-1)

#### **A E 306 (1½) PAINTING FOR THE CLASSROOM**

Development of skills and teaching methods in painting through studio exploration (elementary and secondary). (Normally not available for credit on a degree program for students who have already completed 302) (3-1)

#### **A E 307 (1½) PRINTMAKING FOR THE CLASSROOM**

Development of skills and teaching methods in printmaking through studio exploration (elementary and secondary). (Normally not available for credit on a degree program for students who have already completed 300) (3-1)

#### **A E 308 (1½) SCULPTURE FOR THE CLASSROOM**

Development of skills and teaching methods in printmaking through studio exploration (elementary and secondary). (Normally not available for credit on a degree program for students who have already completed 301) (3-1)

#### **A E 309 (1½) CERAMICS FOR THE CLASSROOM**

Development of basic skills and teaching methods in hand-built ceramics, including operation of kilns. (Normally not available for credit on a degree program for students who have already completed 303) (3-1)

#### **A E 310 (1½) INTRODUCTION TO APPLIED DESIGN**

Introduction to skills and teaching methods in selected applied design areas through studio exploration (elementary and secondary). (Normally not available for credit on a degree program for students who have already completed 304) (3-1)

#### **A E 315 (1½) CURRICULUM PLANNING IN ART EDUCATION**

Study of art education curriculum guides and of methods of planning programs for the classroom (elementary and secondary). (3-1)

#### **A E 316 (1½) ART CRITICISM SKILLS FOR THE CLASSROOM**

Development of critical skills for the classroom through study of art criticism theories and field experiences (elementary and secondary). (3-1)

**A E 317 (1½) ART APPRECIATION FOR THE CLASSROOM**

Methods of teaching art appreciation in the classroom with emphasis on Canadian Art. Students will prepare teaching materials (elementary and secondary). (3-1)

**A E 318 (1½) DISPLAY FOR THE CLASSROOM**

Lettering, design, layout and display methods for the classroom (elementary and secondary). (3-1)

**A E 319 (1½) PHOTOGRAPHY FOR THE CLASSROOM**

Basic approaches to the use of photography as an art medium. (3-1)

**A E 320 (1½) ART AND THE YOUNG CHILD**

Study and development and characteristics of child art at preschool, kindergarten and primary levels with practical experience, teaching and evaluation methods. (3-1)

**A E 401 (1½ or 3) SPECIAL STUDIES**

Studies of selected topics in the theory and practice of Art Education. (May be repeated up to 6 units with permission of the Faculty Adviser in the Department of Art and Music Education) (3-1) or (3-1; 3-1)

**MUSIC EDUCATION**

Professor N.T. Gantly, Elementary Adviser

Dr. R.D. McIntosh, Secondary Adviser

Dr. F.E. Churchley, Secondary Adviser

**M E 101 (1½) INTRODUCTION TO MUSIC EDUCATION**

Orientation to the profession; introduction to the role of music in education and society. Field trips to schools and institutions with exemplary music education programs to be included. Secondary level. (1-2; 1-2)

**M E 104 (2) MUSIC FOR GENERAL CLASSROOM TEACHERS (Elementary)**

Content of the music program in the elementary school; principles, practice, and techniques of instruction. (Students planning to enter a music teaching area should register in 106.) (Not available for credit on a degree program for students who have already completed 106, ED-A 705 or 706.) (2-1; 2-1)

**M E 105 (1½) MUSIC FUNDAMENTALS FOR CLASSROOM TEACHERS**

Introduction to music for schools. This course will normally be followed by Music Education 106 in the second term. (Students with exceptionally strong music backgrounds may not be required to take this course.) (Not available for credit on a degree program for students who have already completed MUS 100) (3-0)

**M E 106 (1½) ELEMENTARY SCHOOL MUSIC MATERIALS AND ACTIVITIES**

Survey of texts and materials for use in the elementary classroom music program. Use of materials in a sequential program involving singing, listening, playing, rhythmic and creative activities. (Students with considerable music background may be permitted to enter 106 without the regular 105 prerequisite.) (Not available for credit on a degree program for students who have already completed 104, ED-A 705 or 706) (Pre- or corequisite: Music Education 105 or equivalent) (3-0)

**M E 118 (1½) MUSIC THEATRE WORKSHOP**

In depth study of techniques and procedures related to the production of musical plays in the school. Both artistic and technical (e.g., staging, lighting, costumes, makeup) aspects will be included. (May be repeated for credit.) (3-0)

**M E 120 (1) INSTRUMENTAL JAZZ CLINIC**

A study of techniques for teaching jazz through performance and experience. (0-4; 0-4)

**M E 121 (1) VOCAL JAZZ CLINIC**

A study of techniques for teaching vocal jazz through performance and experience. (0-4; 0-4)

**M E 201 (1½) MUSIC EDUCATION SEMINAR: I**

A study of the foundations of music education for secondary schools. School experience will be required. (Pre- or corequisite: 101) (1-0; 1-2) or (2-2; 0-0)

**M E 207 (1½) EDUCATIONAL MATERIALS FOR LISTENING**

Continuation and development of classroom music activities with spe-

cial emphasis on listening experiences. (3-0)

**M E 208 (1½) PIANO CLASS FOR CLASSROOM TEACHERS**

Development of piano keyboards skills useful in classroom music. (2-2) or (1-1; 1-1) or (1½-1; 1½-0)

**M E 216 (formerly 116) (1) INSTRUMENTAL CLINIC**

Practical ensemble experience on secondary instruments; techniques and materials for teaching, including conducting and instrument repair. (0-4; 0-4)

**M E 218 (1½) MUSIC THEATRE WORKSHOP (Laboratory)**

Workshop productions of one or two musical plays. (Prerequisite: 118 or permission of the department) (0-6)

**M E 219 (1) CHORAL SEMINAR**

A study of choral techniques and literature as they apply to schools, including both conducting experience and school involvement. A piano component may be included. (0-4; 0-4)

**M E 220 (1) INSTRUMENTAL JAZZ CLINIC**

(Description as for 120)

**M E 221 (1) VOCAL JAZZ CLINIC**

(Description as for 121)

**M E 300 (1½) THE TEACHING of choral and classroom singing**

Materials and rehearsal techniques for use with school choral activities. (Prerequisite: 105 or MUS 100A/100B or consent of instructor) (3-0)

**M E 301 (1½) MUSIC EDUCATION SEMINAR: II**

A study of programs and materials for secondary schools with an emphasis on general music programs. Some school experience will be required. (Grading: INC; letter grade) (Prerequisite: 201) (1-0; 1-2) or (2-2)

**M E 302 (1½) MUSIC IN EARLY CHILDHOOD**

A survey of developmental implications as they pertain to the musical growth of the young child. Current Music Education methods and materials will be studied, and laboratory experiences will be included. (Consult Department before registering as this course may be offered in some sessions for students with little or no music background and in other sessions for students with music background, e.g. 104, 106 or equivalent.) (3-0)

**M E 303 (1½) CLASSROOM INSTRUMENTS**

Students will acquire a satisfactory level of proficiency for classroom purposes. (A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the Department.) (2-2)

303A Guitar

YO1 Beginning guitar for classroom teachers with little or no music background

YO2 Beginning guitar for classroom teachers with Music Education 105 or equivalent music background

303B Ensembles

303C Ukulele

**M E 306 (3) MUSIC IN THE ELEMENTARY SCHOOL (Advanced)**

A study of the foundations of music education (objectives, methods and materials) for elementary schools. (Prerequisite: 106 or other methods course in music) (3-0; 3-0)

**M E 308 (1½) PIANO CLASS FOR CLASSROOM TEACHERS (Advanced)**

Continuation of development of piano keyboard skills useful in classroom music. (Prerequisite: 208 or equivalent) (2-2) or (1-1; 1-1) or (1½-1; 1½-0)

**M E 309 (1½) CANADIAN MUSIC FOR SCHOOLS**

A survey of current educational resources in Canadian music; literature, activities and teaching techniques; correlation with other classroom studies. (3-0)

**M E 316 (formerly 216) (1) INSTRUMENTAL CLINIC**

(Description as for 216)

**M E 318 (1½) MUSIC THEATRE WORKSHOP (Laboratory)**  
(Description as for 218)

**M E 319 (1) CHORAL SEMINAR**  
(Description as for 219).

**M E 320 (1) INSTRUMENTAL JAZZ CLINIC**  
(Description as for 120)

**M E 321 (1) VOCAL JAZZ CLINIC**  
(Description as for 121).

**M E 400 (1½) STUDY OF SPECIFIC METHODOLOGY IN MUSIC EDUCATION CURRICULUM, MATERIALS AND TECHNIQUES**  
(A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the Department.) (Prerequisite: 306) (3-0)

400A Kodaly

400B Orff

400C Experimental Music in Schools

**M E 401 (1½) MUSIC EDUCATION SEMINAR: III**  
Initiating and maintaining instrumental programs in the schools. School experiences will be required. Secondary level. (Grading: INC; letter grade) (Prerequisite: 301) (1-0; 1-2) or (2-2)

**M E 418 (1½) MUSIC THEATRE WORKSHOP (Laboratory)**  
(Description as for 218)

**M E 420 (1) INSTRUMENTAL JAZZ CLINIC**  
(Description as for 120)

**M E 421 (1) VOCAL JAZZ CLINIC**  
(Description as for 121)

#### SPECIAL STUDIES

Contact individual professors or department Chairman for information.

**ED-A 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — ART AND MUSIC**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-A 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — ART AND MUSIC**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-A 494 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494A Art Education

494T Music Education

**ED-A 495 (1½) DIRECTED STUDIES**  
(Description as for 494)

**ED-A 499 (½-3) PROFESSIONAL DEVELOPMENT — ART AND MUSIC**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N, or F)

**ED-A 701 (1) CURRICULUM AND INSTRUCTION IN ART**

A study of the curriculum organization and techniques of instruction in

elementary art. (Except with permission not available for credit for those who have completed a course in Art Education) (Prerequisite: Acceptance in a professional year) (1-½; 1-½)

**ED-A 705 (1) BASIC CONCEPTS IN MUSIC**

Introductory course in fundamentals, methods and materials for elementary classroom teachers. Designed for students with little or no background in music. (Not available for credit on a degree program for those who have completed ME 104 or 106) (Prerequisite: Acceptance in a professional year) (1-1; 1-1)

**ED-A 706 (1) MUSIC FOR CLASSROOM TEACHERS**

Methods, materials and philosophy of music education for elementary classroom teachers. Designed for students who have had some previous musical experience, for example, private lessons or participation in choirs or bands. (Not available for credit on a degree program for students who have already completed M E 104 or 106) (Prerequisite: Acceptance in a professional year) (1-1; 1-1)

**ED-A 750 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — ART**

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.

(Grading: INC; letter grade; INP)

**ED-A 762 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — MUSIC**

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.

(Grading: INC; letter grade; INP)

## GRADUATE COURSES

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

Dr. W.M. Zuk, Adviser, Art Education

Dr. M.M. Travis, Adviser, Art Education, Interdepartmental Studies

Dr. I.L. Bradley, Adviser, Music Education

**ED-A 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES — MUSIC**

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level.

**ED-A 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — MUSIC**

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

**ED-A 551 (1½) GENERAL MUSIC PROGRAMS IN THE SCHOOLS**

An examination of the principles and procedures for developing and implementing curricula for general music classes from the intermediate through the senior secondary grades. Theories of curriculum building will be applied to this specific subject matter.

**ED-A 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA — ART AND MUSIC**

Application of relevant theories and models to the design and development of school curricula in a specific area.

558A Art

558M Music

**ED-A 590 (credit to be determined) SPECIAL PROBLEMS — ART AND MUSIC**

(May be offered in areas A through Z for credit toward a Master's degree. The student must obtain consent of the chairman of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

**ED-A 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it

more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-A 597 (0) COMPREHENSIVE EXAMINATION — ART AND MUSIC**

Comprehensive examination which must be passed as required for indi-

vidual Master of Education programs within the Faculty of Education  
(Grading: COM, N or F)

**ED-A 598 (credit to be determined) PROJECT — ART AND MUSIC**

**ED-A 599 (credit to be determined) Thesis — ART AND MUSIC**

## DEPARTMENT OF COMMUNICATION AND SOCIAL FOUNDATION

### UNDERGRADUATE COURSES

#### ADULT EDUCATION

Dr. L.E. Devlin, Area Adviser

**ED-B 336 (1½) PROGRAM PLANNING IN ADULT EDUCATION**

An examination of the elements associated with the planning of educational programs for adult learners in a wide variety of social and institutional settings. Specific attention will be given to program planning models, needs assessment, analysis of participants, classroom processes and instructional design, evaluation, and practical program management. Each of these program planning elements will be examined both conceptually and within the context of their actual manifestation in current adult education practice. (3-0)

**ED-B 436 (3) ADULT EDUCATION: CONCEPTS, THEORY AND PRACTICE**

An identification of the theoretical basis of adult learning behaviour and the characteristics of adult education as a social and institutional practice. Topics include an operational definition of adult education, an historical development of the concept, an analysis of the various roles of persons involved with adult education, a review of the learning patterns of adults, an analysis of particular program emphasis in adult education, and the articulation of selected contemporary issues in the area. The concept of adult education is considered as separate from degree oriented higher education. (3-0; 3-0)

#### CURRICULUM STUDIES

Dr. A. Oberg, Area Adviser

**ED-B 450 (3) PRIMARY CURRICULUM IN THE CLASSROOM**

Theory and practice of creating effective learning environments through the development of classroom programs in grades one, two and three, with reference to the selection of appropriate classroom organization, materials and teaching strategies in all areas of the curriculum. (Pre- or corequisite: Professional year) (3-0; 3-0)

**ED-B 451 (1½) INTERMEDIATE CURRICULUM IN THE CLASSROOM**

Trends, research and issues of the intermediate/middle grades as a basis for curriculum development, organization and instruction. (Pre- or corequisite: Professional year) (3-0)

**ED-B 788 (6) INSTITUTE FOR NATIVE LANGUAGE TEACHERS**

An integrated program in current curriculum developments and methods of instruction for native language teachers. Limited to students enrolled in the Native Indian Language Teacher Training program.

#### EARLY CHILDHOOD EDUCATION

Dr. M. Mayfield, Area Adviser

**ED-B 339 (1½) INTRODUCTION TO EARLY CHILDHOOD EDUCATION**

An introductory survey of early childhood education designed as an initial orientation to teaching children ages three to six. The course provides an overview of typical programs, curricula, methods and materials found in early childhood education today. (3-0)

**ED-B 440 (1½) EARLY CHILDHOOD EDUCATION**

A comparative evaluation of contemporary issues and early childhood education program models to provide a theoretical basis for curriculum development. (Pre- or corequisite: 339 or consent of the instructor; Professional year (except students in Child Care) (3-0)

**ED-B 441 (1½) EARLY CHILDHOOD EDUCATION CURRICULUM DEVELOPMENT**

An in depth study of principles, procedures, related research and literature of early childhood education curriculum development emphasizing selection and application of methods, materials, and resources for teaching day care, preschool and kindergarten children. (Prerequisite: 440 or equivalent; Professional year (except students in Child Care) (3-0)

**ED-B 448 (formerly 496B) (1½) SEMINAR AND PRACTICUM IN EARLY CHILDHOOD EDUCATION**

Observation and supervised practice teaching in the preschool and kindergarten. Course activities include weekly half day observations and a seminar. A post session practicum or a project will be required. (Pre- or corequisite: 441 or consent of the instructor; Professional year) (3-0)

#### EDUCATIONAL ADMINISTRATION AND SUPERVISION

Dr. C. Hodgkinson, Area Adviser

**ED-B 430 (1½) THE ORGANIZATION AND ADMINISTRATION OF EDUCATION IN BRITISH COLUMBIA**

Introduction to structure and process of the B.C. School System. Teacher-administration relationships. Emerging trends and controversial issues in school organization and practice. Value problems in the profession. School law and legal requirements. Public and professional relationships. Classroom management. (3-0)

**ED-B 431 (1½) INTRODUCTION TO EDUCATIONAL ADMINISTRATION**

The meaning and purpose of educational administration. Concepts related to the theory, tasks, authority, processes of educational administration. The Administrator — characteristics, qualifications, selection, preparation. (Pre- or corequisite: Professional year) (3-0)

**ED-B 435 (1½) SUPERVISION — SETTING, METHODS AND OVERVIEW**

An examination of leadership, change, authority and power structures and organizational climate in supervision settings. Consideration given to evaluation, motivation, techniques available for the systematic observation and analysis of teaching, and supervision of program development and evaluation. (Prerequisite: Consent of the instructor) (3-0)

#### EDUCATIONAL FOUNDATIONS

Dr. A.B. Olson, Area Adviser

**ED-B 320 (1½) SOCIAL ISSUES IN CANADIAN EDUCATION**

A colloquium to explore salient and current social issues relevant to provision of formal education in Canada. (3-0)

**ED-B 420 (3) PHILOSOPHY OF EDUCATION**

An introductory course dealing with the philosophical foundations of education and their implications for curriculum and instruction in the schools. (3-0; 3-0)

**ED-B 423 (3) HISTORY OF EDUCATION**

Development of educational theory and practice from the time of ancient Greece to the present. (3-0; 3-0)

**ED-B 425 (3) ANTHROPOLOGY AND EDUCATION**

Theory and perspectives from cultural anthropology relevant to the processes of education and operations of schools. (3-0; 3-0)

**ED-B 427 (3) SOCIOLOGY OF EDUCATION**

The social structure of western civilization and its significance for education. (3-0; 3-0)

**ED-B 432 (1½) VALUE EDUCATION**

An examination of the nature of value, the developmental and psychometric aspects of values, and some current practices in value education in schools. (3-0)

**EDUCATIONAL TECHNOLOGY**

Dr. G.D. Potter, Area Adviser

**ED-B 359 (1) INTRODUCTION TO LEARNING RESOURCES**

The role of resources in learning; utilization of materials in schools and the role of school libraries, laboratory in basic audio visual instructional techniques. (Grading: COM, N or F) (1-2)

**ED-B 360 (1½) EDUCATIONAL TECHNOLOGY**

The use of communications media in education. Practical experiences in the operation of audio visual and computing equipment and the utilization of instructional materials. Basic production skills in photography, audio and video taping. (2-2)

**ED-B 361 (1½) ADVANCED EDUCATIONAL TECHNOLOGY**

The theoretical and practical elements of educational technology; comparative study of contemporary theories of communication; in depth practical skills in one of television production, film making, photography, graphics, microcomputing, or audio production. (Prerequisite: 360) (2-2)

**ED-B 362 (1½) THE MASS MEDIA AND EDUCATION**

The history and development of mass media in North America; the effects of radio, television and film on children's home life and school experience; the educational uses of the mass media; current developments in educational television; satellite based interactive instructional systems. (Offered in 1985-86 and alternate years) (2-2)

**ED-B 463 (1½) FILM AND EDUCATION**

The theory, form and social function of film, and its utilization as an instructional resource in education; basic elements of composition; techniques of analysis, evaluation and incorporation into curriculum. (Offered in alternate years commencing 1984-85) (2-2)

**LANGUAGE ARTS**

Dr. T.D. Johnson, Area Adviser

**ED-B 290 (3) PRINCIPLES OF TEACHING NATIVE B.C. LANGUAGES AS SECOND LANGUAGE**

The application of linguistic principles to teaching B.C. native languages in school native studies or native language retention programs; includes instructional methods, evaluation and program strategies, micro-teaching, observation and final practicum.

**ED-B 331 (1½) INTRODUCTION TO THE STUDY OF LANGUAGE ARTS IN THE ELEMENTARY SCHOOL**

An overview of teaching the language arts and developing oral and written skills through the use of children's literature. (Not available for credit on a degree program for students who have completed a professional year.) (3-0)

**ED-B 341 LITERATURE IN THE ELEMENTARY SCHOOL**

Survey of children's literature; selection of books for children; scope and sequence in the development of a literature program in the primary and intermediate grades. (3-0; 3-0)

**ED-B 342 (1½) FOUNDATIONS OF READING**

Consideration of the processes and psychology of reading. (Prerequisite: Elementary professional year. Exception: secondary degree students may take 342, secondary section, in a senior year) (3-0)

**ED-B 343 (1½) READING IN THE SCHOOL**

Components of a total reading program: examination, evaluation, and construction of instructional materials; curricular organization. (Prerequisites: 342; professional year for students on an elementary program) (Credit for only one of the following areas may be applied to a degree program) (3-0)

343A — Reading in the Primary Grades

343B — Reading in the Intermediate Grades

343C — Reading in the Secondary Schools

**ED-B 349 (formerly 347/348) (3) LANGUAGE IN THE ELEMENTARY SCHOOL**

Program development in listening, speaking and writing in the elementary school; principles and practices. (Prerequisite: Professional year) (3-0; 3-0)

**ED-B 351 (1½) LITERATURE FOR YOUNG ADULTS**

Survey of standard, classic and current books for the adolescent. Stimulation of reading through appropriate books for young adults. Specific reading may be required, in advance, for this course. (3-0)

**ED-B 442 (3) CORRECTIVE READING INSTRUCTION**

A course covering classroom diagnosis and treatment of reading difficulties; prevention of reading disabilities; corrective classroom procedures. Students will become familiar with materials and procedures for the correction of various types of reading disabilities. This course is useful to the classroom teacher and to the reading specialist. A portion of the course may involve remedial work in a school setting. (Pre- or corequisite: The professional year, and 342 or permission of the instructor. Students on the Learning Assistance teaching area will be allowed to take this course without 342 provided they have completed the professional year.) (3-0; 3-0)

**ED-B 490 (3) PRINCIPLES OF TEACHING SECOND LANGUAGES**

The application of linguistic principles in teaching second languages, including contrastive language analysis, methods, materials: gradation, presentation, repetition, and measurement in lesson development. Attention given to automated language teaching. (Prerequisite: One of LING 100, 210, 360, 390; professional year) (3-0; 3-0)

**ED-B 748 (formerly half of 742) (1½) READING INSTRUCTION IN THE ELEMENTARY SCHOOL. (Primary or Intermediate Grade Emphasis)**

A study of the elementary reading curriculum emphasizing selection and application of materials, resources and methods for teaching reading. (Prerequisite: Acceptance in a professional year) (2-0; 2-0)

**ED-B 748A (1½) READING INSTRUCTION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)**

Course content as for 748 with application for native language teachers. (Limited to students enrolled in the Native Indian Language Teacher Training program.) (2-0; 2-0)

**ED-B 749 (formerly half of 742) (1½) ORAL AND WRITTEN EXPRESSION IN THE ELEMENTARY SCHOOL. (Primary or Intermediate Grade Emphasis)**

A study of the elementary language arts curriculum emphasizing selection and application of materials, resources and methods for teaching oral and written expression. (Prerequisite: Acceptance in a professional year) (2-0; 2-0)

**ED-B 749A (1½) ORAL AND WRITTEN EXPRESSION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)**

Course content as for 749 with application for native language teachers. (Limited to students enrolled in the Native Indian Language Teacher Training program.) (2-0; 2-0)

**ED-B 753 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — ENGLISH**

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**ED-B 754 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — SECOND LANGUAGE**

754A (3-4½) French      754D (3) Latin  
754B (3) German      754E (3) Russian  
754C (3) Spanish

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. More than one of these courses can be taken with permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**SPECIAL STUDIES**

Contact individual Professors or Department Chairman for information.

**ED-B 121 (3) ORAL FRENCH I**

This course is designed to provide a basis for teachers of core French in the elementary school. It covers a review of the basic grammatical structures included within the Grade 12 syllabus. At its conclusion, students will have an active vocabulary level of 2000 words with specific phonetic work with phonemes. Cultural content includes coverage of modern France. (Prerequisite: French 12 or consent of instructor). (Not offered) (3-1-2; 3-1-2)

**ED-B 221 (3) ORAL FRENCH II**

This course is a continuation of 121. At its conclusion, students will have mastered formal study of grammar of spoken French with reference to written forms. In addition they will have an active vocabulary of 2500 words with specific phonetic work with intonation. Cultural content includes coverage of modern Quebec. Readings will be assigned in French with no restriction on vocabulary. (Prerequisite: 121 or consent of instructor) (Not offered) (3-1-0; 3-1-0)

**ED-B 321 (3) ORAL FRENCH III**

This course is a continuation of 121 and 221. At its conclusion, students will have mastered comparisons of written and spoken French with emphasis on acquisition of idiomatic speech patterns. The vocabulary will be 2500 + words, with specific phonetic work with liaison, nasalization, and the mute "e". Cultural content drawn from selected parts of the French speaking world. Additional readings will be assigned with no restriction on vocabulary. (Prerequisite: 221 or consent of instructor) (Not offered) (3-1-2; 3-1-2)

**ED-B 390 (3) CLASSROOM TECHNIQUES IN TEACHING ORAL FRENCH**

This course includes analysis of theoretical and practical elements of teaching French as a second language. Students will be introduced to the B.C. Curriculum Guide, methods of presentation, and use of aids. Special attention will be given to automated language teaching. (Prerequisite: 321 or consent of instructor) (Not offered) (3-0-1; 3-0-1)

**ED-B 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — COMMUNICATION AND SOCIAL FOUNDATIONS**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-B 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — COMMUNICATION AND SOCIAL FOUNDATIONS**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-B 494 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

- 494C Drama in Education
- 494D Early Childhood Education
- 494E Educational Administration
- 494F Educational Foundations
- 494G Educational Technology
- 494J Teaching of English
- 494K Language Arts
- 494L Teaching of a Second Language
- 494Q Library Education

**ED-B 495 (1½) DIRECTED STUDIES**  
(Description as for 494)**ED-B 499 (½-3) PROFESSIONAL DEVELOPMENT — COMMUNICATION AND SOCIAL FOUNDATIONS**

This is a variable content course directed at improving specific teacher

and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.) (Grading: COM, N or F)

**ED-B 767 (3) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — THEATRE**

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**LIBRARY EDUCATION**

Mr. D. Hamilton, Area Adviser

**L E 432 (1½) THE SCHOOL LIBRARY AND THE TEACHER**

The library as a visual part of the teacher's program, its philosophy and services. For all teachers — elementary and secondary. (3-0)

**L E 433 (1½) THE SCHOOL LIBRARIAN**

The role of the school librarian, administration of a school library, staffing supervision. (Prerequisite: Professional year) (3-0)

**L E 434 (1½) SCHOOL LIBRARY MATERIALS**

The evaluation, selection and acquisition of learning materials in all media formats. (Credit for only one of the following areas may be applied to a program.)

434A — Elementary school emphasis

434B — Secondary school emphasis

(Prerequisite: Professional year)

(3-0)

**L E 435 (1½) CATALOGUING AND CLASSIFICATION FOR SCHOOL LIBRARIES**

The principles and practice of basic classification systems and cataloguing rules applied to the needs of the school library. (Prerequisite: Professional year) (3-0)

**L E 436 (1½) PROBLEMS IN CATALOGUING AND CLASSIFICATION FOR SCHOOL LIBRARIES**

An examination of new cataloguing standards. Principles and practice in nonprint cataloguing. Advanced bibliographic control procedures. (Prerequisites: 435; professional year) (3-0)

**L E 437 (1½) REFERENCE SERVICES FOR SCHOOL LIBRARIES**

The role of reference materials in meeting students' and teachers' needs. (Credit for only one of the following areas may be applied to a degree program.) (3-0)

437A — Elementary school emphasis

437B — Secondary school emphasis

(Prerequisite: Professional year)

**GRADUATE COURSES**

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year. Offerings will depend upon student program needs and the availability of instructors.

Dr. J. Harker, Language Arts Adviser

Dr. C. Hodgkinson, Administration Adviser

Dr. A. Oberg, Curriculum Studies Adviser

Dr. G. Potter, Educational Technology Adviser

**ED-B 520 (3) SEMINAR IN PHILOSOPHY OF EDUCATION**

An analysis of the theories of leading contemporary thinkers as they relate to basic values, purposes and problems in public education.

**ED-B 521 (3) EDUCATIONAL CLASSICS**

A study in depth of certain selected "great books" that have had significant influence upon educational thought and practice.

**ED-B 531 (3) CONCEPTS AND THEORY IN ADMINISTRATION**

Critical examination of the classical and modern literature of administrative studies within organizational perspectives, with emphasis on administrative philosophy, decision making processes, power and au-

thority, leadership studies, and general systems theory.

### **ED-B 532 (3) ADMINISTRATION OF THE CURRICULUM**

Examination of approaches to, and problems associated with, the implementation, coordination, supervision, and evaluation of the school's instructional programs.

### **ED-B 533 (1½ or 3) CRITICAL DETERMINANTS OF ADMINISTRATION**

#### **533A Politics and Governance of Education**

An analysis of the electoral processes in public education, the forces which emanate from and impinge on elected educational officials, the activities of special interest groups, and the resulting implications for appointed administrators.

#### **533B The Law and Education**

The study of Federal and Provincial statutes, Ministerial regulations, school board policies, and pertinent court decisions as they impinge, legally, upon the role of the educational administrator.

#### **533C Educational Finance**

An analysis of the funding of public education, with emphasis upon general principles of finance, governmental structures, taxation procedures, resource allocation, and budgetary practices, with a specific focus on the British Columbia scene.

### **ED-B 534 (1½ or 3) ORGANIZATIONAL ANALYSIS AND DEVELOPMENT**

A review of strategies for change and development in educational organizations, with special attention to survey research, action research, organizational diagnosis, team building, and overcoming organizational resistance.

### **ED-B 535 (1½ or 3) COMPARATIVE ADMINISTRATION**

#### **535A Regional Comparisons**

Comparative studies of educational administration and systems in Canada and selected foreign countries.

#### **535B Institutional Comparisons**

Selected cross organizational studies in public, military, hospital, and commercial administration.

### **ED-B 536 (3) PHILOSOPHY AND ADMINISTRATION**

An examination through a case study approach, of the relevant interaction of philosophy and administration, with a view to clarifying philosophical concepts and theories and their application to the analysis, by administrators, of their own and others' behaviour.

### **ED-B 537 (1½ or 3) TASKS AND PROCESSES OF ADMINISTRATION**

#### **537A Planned Change**

An analysis of the processes associated with planned change in public education, with a view to assisting administrators to facilitate such change.

#### **537B Decision Making**

A study of the factors affecting, and processes involved in, effective decision making by educational administrators.

#### **537C Leadership**

An examination of general leadership theories, leadership styles, and leadership effectiveness models as they apply to educational administrators.

#### **537D Instructional Supervision**

Through an analysis of literature in leadership, communication, change and activation, as well as through an analysis of classroom observation techniques, the development of rational organizational patterns of supervision for educational administrators.

#### **537E Personnel Management**

An examination of the personnel function within educational institutions, with emphasis upon effective personnel policies, recruitment and selection, placement, professional development, promotion and performance evaluation.

#### **537F Policy Making**

An analysis of the nature of policy development and policy execution at provincial and school district levels, and the implications for educational administrators.

### **ED-B 540 (3) RESEARCH IN CURRICULUM AND INSTRUCTION — LANGUAGE AND READING**

Review of the literature; critical analysis of significant research; planning research in curriculum and instruction. (Prerequisite: 342, 343 and 349 or equivalent)

### **ED-B 541 (3, formerly 1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — ENGLISH**

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

### **ED-B 542 (3) READING PROCESSES IN THE SCHOOL CURRICULUM**

An intensive examination of the acquisition and the development of reading competence, focusing on the cognitive and linguistic processes. The course will include an analysis of reading research, methods and materials. (Pre- or corequisite: 540 or consent of instructor)

### **ED-B 543 (3) LANGUAGE PROCESSES IN THE SCHOOL CURRICULUM**

An intensive examination of the processes through which competence in listening, speaking and writing is developed and of the products which result. The course will include an analysis of language research, methods and materials. (Pre- or corequisite: 540 or consent of instructor)

### **ED-B 544 (3) ADVANCED COURSE IN REMEDIAL READING**

This course focuses on theoretical and practical issues in the causation, diagnosis, and remediation of reading difficulties as these are encountered in the school setting. Seminar discussions will centre on the research literature relevant to reading difficulties; the practical component will involve students in working in a clinical setting with children with reading problems. (Prerequisite: 342/343)

### **ED-B 545 (1½) THE READING CURRICULUM IN THE SECONDARY SCHOOL: THEORY AND PRACTICE**

This course will focus on issues in the definition, development and function of secondary school developmental, corrective, and remedial reading programs. The course will also consider the role of the reading consultant in program implementation. (Prerequisite: 342/343C)

### **ED-B 546 (1½) INTERPRETATION AND ANALYSIS OF LANGUAGE ARTS RESEARCH**

A critical review of research methodologies used in the general area of language arts. Consideration of the appropriateness of specific methodologies to research in classroom problems.

### **ED-B 547 (3) ISSUES IN ENGLISH EDUCATION IN THE SECONDARY GRADES**

An extensive critical examination of issues in the learning and teaching of English in the secondary grades. (Pre- or corequisite: 541 or consent of instructor)

### **ED-B 555A (1½) FOUNDATIONS OF CURRICULUM STUDIES**

Philosophical foundations in the study of education and curriculum: (1) conceptions of education and curriculum; (2) philosophical justifications of educational and curriculum practice; (3) historical perspectives; (4) criteria for judging education and curriculum practice; and (5) a personal stance.

### **ED-B 555B (1½) FOUNDATIONS OF CURRICULUM STUDIES**

Further development and elaboration of topics in 555A. (Prerequisite: 555A)

### **ED-B 556 (1½) CURRICULUM DEVELOPMENT**

A description of a variety of selected approaches to curriculum planning. This course aims to compare traditional Tylerian approaches to curriculum planning with alternative approaches in terms of their origins, underlying assumptions, utility in various settings, and effects. The course provides the students the opportunity to identify and characterize their own approaches to curriculum planning.

### **ED-B 557 (1½) CURRICULUM IMPLEMENTATION**

A description of selected approaches to curriculum implementation. This course aims to describe and compare problems, practices, and models of implementing curriculum at institutional and individual levels and to provide students the opportunity to extract principles and procedures applicable to their own situations.

**ED-B 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA**

Application of relevant theories and models to the design and development of school curricula in a specific area. (Students may enroll in more than one of the areas listed below at 1½ units each.)

558A Language  
558B Reading  
558C English

**ED-B 580 (1½) RESEARCH METHODS IN CURRICULUM STUDIES**

An investigation of modes of research used in the study of education and curriculum with emphasis on qualitative methods.

**ED-B 590 (credit to be determined) SPECIAL PROBLEMS — COMMUNICATION AND SOCIAL FOUNDATIONS**

(May be offered in areas A through Z for credit toward a Master's degree. The student must obtain consent of the chairman of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

**ED-B 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-B 597 (0) COMPREHENSIVE EXAMINATION — COMMUNICATION AND SOCIAL FOUNDATIONS**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: COM, N or F)

**ED-B 598 (credit to be determined) PROJECT — COMMUNICATION AND SOCIAL FOUNDATIONS****ED-B 599 (credit to be determined) THESIS — COMMUNICATION AND SOCIAL FOUNDATIONS****ED-B 642 (3) ADVANCED PROCESSES OF READING**

Advanced study and research of the acquisition and development of reading competence with special attention to psycholinguistic and neu-

rological processes. (Prerequisite: 542 or suitable equivalent)

**ED-B 643 (3) ADVANCED LANGUAGE PROCESSES IN THE SCHOOL CURRICULUM**

Advanced study and research of the processes through which competence and performance in listening, speaking, and writing are developed. (Prerequisite: 543 or suitable equivalent)

**ED-B 644 (3) RESEARCH FOUNDATIONS FOR REMEDIAL READING**

Critical review and analysis of research in diagnosis, correction and remediation of reading difficulties; criteria for appraising research findings; educational implications. (Prerequisites: 442 and 544 or suitable equivalents)

**ED-B 647 (3) ADVANCED COURSE IN SECONDARY ENGLISH EDUCATION**

Advanced study of the processes of learning English language and literature in the secondary grades. (Prerequisite: 547 or suitable equivalent)

**ED-B 649 (1-3) DOCTORAL SEMINAR IN ENGLISH LANGUAGE ARTS**

A seminar at the doctoral level to consider special problems in education and educational research. Seminars are organized around educational theory and practice in the English Language Arts. (Offered in areas 649A, 649B and 649C.)

**ED-B 690 (1½-6) INDIVIDUAL STUDIES — COMMUNICATION AND SOCIAL FOUNDATIONS**

Under the direction of program supervisors, topics in the area of research interests of doctoral students will be examined, leading to the development of background material for a Ph.D. dissertation. (Prerequisites: Appropriate prerequisites to be determined in specific instances)

**ED-B 691 (1½-3) SPECIAL PROBLEMS — COMMUNICATION AND SOCIAL FOUNDATIONS**

Issues pertaining to students' research interests and faculty expertise will be examined. (Prerequisites: Appropriate prerequisites to be determined in specific instances)

**ED-B 699 (30) PH.D. DISSERTATION — COMMUNICATION AND SOCIAL FOUNDATIONS**

## SCHOOL OF PHYSICAL EDUCATION

### UNDERGRADUATE COURSES

Professor M.C. Hibberson, Elementary and Secondary Adviser  
Dr. H.A. Wenger, Human Performance Adviser  
Dr. G.H. Van Gyn, Leisure Studies Adviser

**P E 104-125 BASIC SKILLS IN PHYSICAL EDUCATION ACTIVITIES**

Priority will be given in these courses to students accepted into physical education programs. Other students may register for activity courses during the course change period for the term in which the course is offered. Registration is subject to availability of space. See course instructor for permission. Students who have completed activities under 100 and 101 are not eligible to repeat such activities for credit.

**P E 104 (½) SPECIAL ACTIVITY**

With special permission, may be taken more than once for credit on a degree program

**P E 105 (½) SWIMMING****P E 106 (½) TRACK AND FIELD****P E 107 (½) GYMNASTICS: I****P E 108 (½) GYMNASTICS: II**

(Prerequisite: 107)

**P E 109 (½) RECREATIONAL DANCE****P E 110 (½) RHYTHMICS****P E 111 (½) CURLING****P E 112 (½) ARCHERY****P E 113 (½) GOLF****P E 114 (½) MOVEMENT EDUCATION****P E 115 (½) FITNESS AND CONDITIONING****P E 116 (½) BADMINTON****P E 117 (½) TENNIS****P E 118 (½) WRESTLING****P E 119 (½) DANCE TECHNIQUE****P E 120 (½) BASKETBALL****P E 121 (½) SOCCER****P E 122 (½) VOLLEYBALL****P E 123 (½) RUGBY****P E 124 (½) FIELD HOCKEY****P E 125 (½) SOFTBALL**

For students accepted in the Physical Education teaching area:

1. Proficiency in skills is required in the following:

*Elementary Program — 6 units*

(a) 106, 107, 109, 110, 114, 115

(b) The remaining 3 units may be selected from 104-125 or 461 courses. Students who do not possess a valid Bronze Medallion Certificate must take 105.

*Secondary Program — 5½ units*

(a) 106, 107, 109, 115, 120 and 122

(b) One of 116 or 117

(c) One of 121, 123, 124 or 125

(d) Any three 100 level activities that are not required above.

Students who do not possess a valid Bronze Medallion Certificate must take 105.

2. Not all activities may be offered every year.
3. Maximum credit for activities in degree programs offered by the Faculty of Education is specified on page 137.
4. Each activity course is scheduled for 24 hours of instruction. Students are expected to complete most of the required activity courses in the first two years.
5. Activity courses completed prior to September 1, 1975 will not receive credit.

**P E 141 (1½) INTRODUCTORY HUMAN ANATOMY**

Lecture and laboratory orientation to human anatomy. Emphasis on the basic anatomical structures used in locomotion and fundamental motor skills. Reference made to the structural components of the circulatory, digestive, excretory and endocrine systems. Labs include examination and dissection of mammalian specimens, and extensive use of human anatomical charts, models and stereoscopic slides. (Not available for credit on a degree program for students who have already completed 242) (3-2)

**P E 142 (1½) HUMAN POTENTIAL**

An introduction to the physical, emotional and social aspects of human growth and human interpersonal relationships. (3-0)

**P E 143 (1½) INTRODUCTION TO PHYSICAL EDUCATION**

Orientation to the profession; the aims and objectives of physical education; relationship of physical education to education, athletics, health, recreation, and safety education. (3-0)

**P E 147 (2) PHYSICAL EDUCATION FOR GENERAL CLASSROOM TEACHERS (Elementary)**

Content of the Physical Education program in elementary school; principles, practice and techniques of instruction. (Not available for credit on a degree program for students who have already completed 149 or ED-C 747 or who are taking a Physical Education teaching area) (Prerequisite: Authorization to register in the Faculty of Education) (2-1; 2-1)

**P E 241A (1½) INTRODUCTION TO HUMAN CELLULAR PHYSIOLOGY**

The study of the molecular and cellular functions in man with emphasis on homeostasis, cellular transport, protein synthesis, energy metabolism, electrical properties of cells, and blood as a tissue. (2-2)

**P E 241B (1½) INTRODUCTION TO HUMAN SYSTEMIC PHYSIOLOGY**

The study of the integrated functions of physiological systems with emphasis on the nervous, endocrine, muscular, cardiovascular and respiratory systems. (Prerequisite: 141 or consent of the instructor) (Not available for credit on a degree program for students who have already completed 242) (2-2)

**P E 243 (1½) FOUNDATIONS OF RECREATION AND LEISURE**

An introduction to the nature and scope of recreation; a consideration of past influences and future trends; the role of the recreational professional. (3-0)

**P E 244 (formerly 343) (1½) CANADIAN RECREATION DELIVERY SYSTEMS**

An overview of the development and delivery of recreational programs in Canada. Canadian federal, provincial, municipal, private and volunteer agencies are described and analyzed. (3-0)

**P E 252 (formerly 352) (1½, formerly 3) LEADERSHIP METHODS FOR RECREATION**

Methods of leadership and methods of teaching leisure skills. Classes will provide skills in presenting material to different age groups. Field experience is required as part of this course. (3-0)

**P E 253 (formerly 353 and half of 352) (1½) PROGRAM PLANNING FOR RECREATION**

An analysis of theoretical and practical approaches for developing effective recreation programs. (3-0)

**P E 341 (1½) BIOMECHANICS (formerly Kinesiology)**

Analysis of human movement and performance. The relationship of the laws of physics concerning motion, force, inertia, levers, etc., to muscu-

lar and mechanical analysis of motor skills. (Prerequisite: 141 and 241B or equivalent) (3-0)

**P E 342 (1½) HISTORY OF PHYSICAL EDUCATION (formerly History and Principles of Physical Education)**

Interpretative study and analysis of physical education and sport through their historical development; current trends, social and cultural implications; relationship to education. (3-0)

**P E 344 (1½) CARE AND PREVENTION OF ATHLETIC INJURIES**

Training techniques, protective equipment and strapping for the prevention of athletic injuries; emergency procedures and first aid practices for the treatment of athletic injuries; care and retraining of injured areas. Field experience is required as part of this course. (Prerequisite: 141 and 241B or equivalent) (3-0)

**P E 345 (1½) PHYSICAL EDUCATION IN EARLY CHILDHOOD**

Methods of teaching physical education activities to young children with emphasis on primary grades. Instructional techniques, activities, and curriculum development for this age group will be included. Field experience (approximately 10 hours) is required as part of this course. (Prerequisites: 147 or 149 or ED-C 747 or 3 units of Physical Education teaching area or consent of the instructor; and authorization to register in the Faculty of Education) (3-0)

**P E 346 (1½) MOTOR DEVELOPMENT AND MATURATION OF CHILDREN**

Growth and maturational characteristics of elementary school children as they relate to motor behaviour. (3-0)

**P E 347 (1½) COMPARATIVE PHYSICAL EDUCATION**

An in depth study of physical education and sport systems in selected countries. (Prerequisite: 342 or consent of instructor) (3-0)

**P E 348 (ED-D 348) (1½) PSYCHOLOGY OF SPORT**

An examination of the current findings in psychological research into sport and physical activity with special attention to personality characteristics of the performer, motivation for performance, cohesiveness, and spectator behaviour. (Prerequisite: PSYC 100) (3-0)

**P E 354A (formerly 453A) (1½) ADMINISTRATION OF LEISURE SERVICES: I**

A review of general administrative and organizational theories with particular reference to their application in leisure service agencies. Topics include: the nature of administration, structure of organizations, leadership, supervision of workers and supervision of clients. (Prerequisite: 244 or 343) (3-0)

**P E 354B (formerly 453B) (1½) ADMINISTRATION OF LEISURE SERVICES: II**

A continuation of 354A, including budgeting, financial control, policy making, planning, goal setting, performance appraisal, public relations, meetings, office management, executive distress, and legal issues. (Prerequisite: 354A or 453A) (3-0)

**P E 371 (1½) OUTDOOR RECREATION — LAND BASED**

Study of the outdoor environment as an educational medium; survey of local outdoor recreational facilities; care and selection of equipment; organization of outdoor programs and practical laboratory experiences in camping skills and outdoor recreation pursuits. (Not available for credit on a degree program for students who have already completed EDUC 371) (Prerequisite: Consent granted through the School of Physical Education) (3-0)

**P E 372 (1½) OUTDOOR RECREATION — WATER BASED**

A consideration of the sea and river environments as educational media; a survey of local river and marine recreational areas; care, selection and construction of equipment; organization of outdoor programs; pool management and practical laboratory experience in water based outdoor recreational pursuits. (Not available for credit on a degree program for students who have already completed EDUC 371) (Prerequisite: Consent granted through the School of Physical Education) (3-0)

**P E 441 (1½) EXERCISE PHYSIOLOGY**

The anatomical and physiological adaptation of the human body to exercise and training; the relationship of exercise to hypokinetic diseases; nutrition of the athlete. (Prerequisite: 241A and B or 242) (2-2)

**P E 442 (1½) MOTOR LEARNING**

Implications of perceptual motor development for learning; psychology of motor skill acquisition. (Prerequisite: 3rd year standing in a Physical Education program) (2-2)

**P E 443 (1½) ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

Nature and function of administration; management of equipment and facilities; organization and management of programs of physical education and athletics; survey of the organization in Canadian schools. (Prerequisites: 4th year standing in a Physical Education program; and authorization to register in the Faculty of Education) (3-0)

**P E 444 (1½) MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**

Use of tests and measurements in physical education; principles of test construction; test administration and interpretation of results; use of evaluating equipment in a variety of physical education tests. (2-2)

**P E 445 (1½) DEVELOPMENTAL AND ADAPTIVE PHYSICAL EDUCATION**

Methods of identifying and evaluating the atypical child and application of a physical education program to his needs; case study techniques, developmental programs; basic therapeutic exercise techniques. Field experience is required as part of this course. (3-0)

**P E 446 (1½) PHYSICAL EDUCATION IN THE INTERMEDIATE GRADES**

Methods of teaching physical education activities to intermediate grade children. Instructional techniques and curriculum development for this age group will be included. Field experience (approximately 10 hours) is required as part of this course. (Prerequisites: 147 or 149 or ED-C 747 or 3 units of Physical Education teaching area or consent of instructor; and authorization to register in the Faculty of Education) (3-0)

**P E 447 (3) COMMUNITY PROGRAMS IN HUMAN PERFORMANCE**

A study of the current programs offered through government and private agencies. The course will include a 60 hour practicum experience over the year. (Prerequisites: 4th year standing in a Physical Education program; and authorization to register in the Faculty of Education) (2-2; 2-2)

**P E 451 (1½) ADULT FITNESS AND EXERCISE MANAGEMENT**

A study of the theory and practice of adult physical fitness as it relates to health enhancement and preventive medicine. (3-0)

**P E 452 (3) INSTRUCTIONAL TECHNIQUES IN PHYSICAL EDUCATION ACTIVITIES (Secondary)**

Methods of teaching physical education activities to secondary school and related groups. Field experience is required as part of this course. (Not available for credit on a degree program for students who have already completed 350 or 450) (Prerequisites: Ten required activities from 104-125 or consent of instructor; and authorization to register in the Faculty of Education) (3-0)

**P E 454A (½) CONTEMPORARY ISSUES IN RECREATION: I**

Addresses the problems and challenges facing the recreation profession. (Prerequisites: Completion of three work terms in the Leisure Studies Program; and authorization to register in the Faculty of Education) (1-0)

**P E 454B (1) CONTEMPORARY ISSUES IN RECREATION: II**

Addresses the problems and challenges facing the recreation profession and attempts to provide a synthesis for the graduating student. (Prerequisites: Completion of 454A and four work terms in the Leisure Studies program or consent of instructor; and authorization to register in the Faculty of Education) (2-0)

**P E 461 (½) ADVANCED SKILLS AND OFFICIATING**

In depth study of skill areas selected by the student, including advanced skill performance and officiating to an approved level. (Students in a secondary program must register in three of the areas listed below at ½ unit each. A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the School.) (Prerequisite: A grade of B or higher is required in the related 100 level course. 108 is recommended for Gymnastics) (NOTE: Not every area will be offered each year. Candidates are asked to consult the School of Physical Education before registering.) (1-0; 1-0)

|      |              |      |                 |
|------|--------------|------|-----------------|
| 461A | Badminton    | 461G | Soccer          |
| 461B | Basketball   | 461J | Swimming        |
| 461C | Dance        | 461K | Tennis          |
| 461D | Field Hockey | 461L | Track and Field |
| 461E | Gymnastics   | 461M | Volleyball      |
| 461F | Rugby        |      |                 |

**P E 463 (½) COACHING**

Study of theory of coaching at a school level. The course will require practical experience in coaching in a sport of the student's choice. (Grading: INP; letter grade) (2-0)

**ED-C 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — PHYSICAL EDUCATION**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-C 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — PHYSICAL EDUCATION**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-C 494 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494V Physical Education

**ED-C 495 (1½) DIRECTED STUDIES**

(Description as for 494)

**ED-C 499 (½-3) PROFESSIONAL DEVELOPMENT — PHYSICAL EDUCATION**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.) (Grading: COM, N, or F)

**ED-C 747 (1) CURRICULUM AND INSTRUCTION IN ELEMENTARY PHYSICAL EDUCATION**

A study of the curriculum organization and techniques of instruction in elementary physical education. (Not available for credit on a degree program for those who have completed 147, 149 or 345/446) (Prerequisite: Acceptance in a professional year) (1-1; 1-1)

**ED-C 764 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — PHYSICAL EDUCATION**

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**GRADUATE COURSES**

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year. Offerings will depend upon student program needs and the availability of instructors.

Dr. M.L. Collis, Adviser

**ED-C 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES — PHYSICAL EDUCATION**

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level.

**ED-C 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — PHYSICAL EDUCATION**

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

**ED-C 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA — PHYSICAL EDUCATION**

Application of relevant theories and models to the design and development of school curricula in a specific area.

**ED-C 570 (1½) SKILL ACQUISITION IN PHYSICAL EDUCATION AND SPORT**

A review of learning theories and principles as they pertain to the acquisition and retention of motor skills; the neural mechanisms involved in the learning and control of motor patterns; information processing in human performance; detailed study of research on memory, attention, retrieval systems, and movement control.

**ED-C 571 (1½) PHYSICAL EDUCATION AND SPORT IN SOCIETY**

The following represent topics which may be studied in depth: socialization into sport; institutionalized aggression in sport; current social problems in Canadian sport; comparative sport; the social history of sport in Canada; sport and international relations; the political economy of sport; a macrosociological view of sport development; social psychology of sport (motivation, personality, attitudes, social structure, group cohesion, and leadership).

**ED-C 572 (1½) PHYSIOLOGY IN PHYSICAL EDUCATION AND SPORT**

The study of physiological basis for sport performance and fitness. The assessment of physiological status and the rationale for the prescription of exercise programs. (Prerequisite: 441 or consent of instructor)

**ED-C 573 (3) RESEARCH PROCESSES IN PHYSICAL EDUCATION AND SPORT STUDIES**

Students are introduced to the varieties of research methods used in physical education and sport studies (e.g., physiological, psychological, sociological, historical).

**ED-C 574 (1½) ADMINISTRATION OF PHYSICAL EDUCATION, RECREATION AND SPORT**

After presenting a theoretical base for administrative and organizational

theories, a link will be made to specific situations in the fields of physical education, recreation, and sport.

**ED-C 575 (1½) PSYCHOLOGICAL ASPECTS OF PHYSICAL EDUCATION AND SPORT**

A study of the interrelationships between psychological and physical factors which occur in the pursuit of physical activity and competitive sport, from birth to maturity. Topics will include aggression in sport; personality development through physical activity; attribution theory and sport; motivation in sport; behavioural modification and physical activity; affiliation and sport; skill and mental achievement.

**ED-C 590 (credit to be determined) SPECIAL PROBLEMS — PHYSICAL EDUCATION**

(May be offered in areas A through Z for credit toward a Master's degree. The student must obtain consent of the chairman of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

**ED-C 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-C 597 (0) COMPREHENSIVE EXAMINATION — PHYSICAL EDUCATION**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: COM, N or F)

**ED-C 598 (credit to be determined) PROJECT — PHYSICAL EDUCATION****ED-C 599 (credit to be determined) THESIS — PHYSICAL EDUCATION**

## DEPARTMENT OF PSYCHOLOGICAL FOUNDATIONS IN EDUCATION

### UNDERGRADUATE COURSES

#### COMMUNICATION AND COUNSELLING

Dr. R.V. Peavy, Area Adviser

**ED-D 316 (1½) VERBAL COMMUNICATION**

Study of interpersonal verbal skills and processes. Skill practice and analyzed applications to classroom, counselling, family, social work and mental health. (3-0)

**ED-D 317 (1½) NONVERBAL COMMUNICATION**

Study of nonverbal interactions: movement, posture, gesture, qualities of voice, and spacing. Analysis of implications in teaching, counselling, family relations, mental health. (3-0)

**ED-D 414 (3) GROUP PROCESSES**

Analysis of group decision making; discovery and discussion methods in group learning; study of group interaction in classrooms, family life, counselling, and mental health. First portion of course is devoted to skill development, second part to analysis, theory and research. (3-0; 3-0)

**ED-D 417 (3) HELPING RELATIONSHIPS**

Study of helping relationships in the classroom, counselling, family life, and mental health. Theories of personal effectiveness; analysis and practice of effective relating skills. The course is conducted as a participative seminar and includes skill building laboratory experience. (3-0; 3-0)

**ED-D 418 (1½) COMPUTER ASSISTED CAREER COUNSELLING**

This course is designed to provide the theory, processes, and practice necessary for effective use of computer assistance in career counselling in education. (2-2)

**ED-D 419 (3) ADULT COUNSELLING**

Theoretical and practical introduction to adult counselling, especially

educational counselling. Topics include: contexts for adult counselling; the ideology of adult counselling; adult counselling procedures; evaluation of adult counselling; supervised practice. (Prerequisite: 417 or consent of instructor) (2-2; 2-2)

**ED-D 433 (1½) PSYCHOLOGICAL EDUCATION**

A study of the concepts and practices of psychological education; examines how the school, family and community can mutually support the personal growth of individuals through educational means. (Prerequisite: 316 or 417) (3-0)

**ED-D 434 (1½) FAMILY EDUCATION AND CONSULTATION**

Topics include: current theories and practices in family life education and family counselling; school-community perspectives on family life education; use of potential resources for strengthening family life. (Prerequisites: 414 or 417 or consent of the instructor) (3-0)

**ED-D 435A (1½) PEER COUNSELLING**

An examination of the use of peers in the helping/learning process; topics include the theory and research on cross-age tutoring, peer helping, peer assisted learning, and peer counselling. Emphasis will be placed on skill-building and training expertise necessary to organize and train a variety of peer groups in educational and community settings. (Prerequisite: 417 or 414 or 316 or consent of instructor) (This course normally is not offered on campus during winter session.) (3-0)

**ED-D 435B (1½) PEER COUNSELLING: PROGRAM IMPLEMENTATION**

This course will cover the variety of strategies used to develop and implement a peer program. Topics such as initiating change, consulting with decision-makers, organizing support groups, creating an effective training curriculum and evaluation approaches will be examined. Participants will be expected to have direct access to community or education settings to implement program plans. (Prerequisite: 435A or

consent of instructor) (This course normally is not offered on campus during winter session.) (3-0)

### LEARNING AND DEVELOPMENT

Dr. H.G. Timko, Area Adviser

#### ED-D 200 (1½) INTRODUCTION TO EDUCATIONAL PSYCHOLOGY

The application of psychological principles to elementary classroom practice. (Credit toward a program cannot be granted for more than one of 200, 200A, 200B, 303 or 401.) (Grading: INC; COM. N or F.) (Prerequisite: PSYC 100) (2-0; 2-0)

#### ED-D 305 (3) PSYCHOLOGY OF CHILDHOOD

Mental, social, emotional and physical characteristics of preschool and elementary school pupils, their interests and problems; emphasis upon classroom implications. (3-0; 3-0)

#### ED-D 306 (1½) ADVANCED EDUCATIONAL PSYCHOLOGY: CHILD DEVELOPMENT DURING THE PRESCHOOL YEARS

An advanced course with special emphasis on early education; consideration of language, motor skills, and cognitive development, from birth to six years. Observation techniques, the interview, and other approaches to child study will be stressed. (Prerequisite: 305 or equivalent) (3-0)

#### ED-D 348 (PE 348) (1½) PSYCHOLOGY OF SPORT

An examination of the current findings in psychological research into sport and physical activity with special attention to personality characteristics of the performer, motivation for performance, cohesiveness, and spectator behaviour. (Prerequisite: PSYC 100) (3-0)

#### ED-D 401 (formerly 303) (1½) INTRODUCTION TO PSYCHOLOGY OF CLASSROOM LEARNING

An introduction to the psychology of learning in the secondary school. (Credit toward a program cannot be granted for more than one of 200, 200A, 200B, 303 or 401) (3-0)

#### ED-D 406 (3) PSYCHOLOGY OF ADOLESCENCE

The physiological, psychological, social, and educational aspects of adolescence. (3-0; 3-0)

### MEASUREMENT, EVALUATION AND COMPUTER APPLICATIONS IN EDUCATION

Dr. H. Taylor, Area Adviser

#### ED-D 337 (1½) EVALUATION OF STUDENT ACHIEVEMENT

The construction of classroom measures; including rating scales, self reports, check lists, performance tests, essay and objective tests, organization and use of measurement data. (Pre- or corequisite: Professional year) (3-0)

#### ED-D 338 (1½) MICROCOMPUTERS IN THE CLASSROOM

An introduction to the concepts and skills required by teachers for effective classroom microcomputer use; modes of computer aided learning; strategies for developing computer literacy. (Prerequisite: Professional year or consent of instructor) (3-2)

#### ED-D 402 (1½) ASSESSMENT FOR SPECIAL EDUCATION

A study of background factors important in selecting and administering standardized tests for the purpose of planning educational alternatives for individual students. Considerations will include test reliability, validity and norming, conditions of administration, and limits on interpretation. (Prerequisite: 337 or consent of instructor) (3-0)

#### ED-D 438 (1½) MICROCOMPUTERS AND THE CURRICULUM

Evaluation of educational software with an emphasis on integrating microcomputer use with curricula; creation of program materials; consideration of the effects of microcomputers on their users. (Prerequisite: 338 or consent of instructor) (3-2)

### SPECIAL EDUCATION

Dr. D.G. Bachor, Area Adviser

#### ED-D 400 (formerly 713) (1½) LEARNING DIFFICULTIES IN THE ELEMENTARY CLASSROOM

An introduction to the nature, scope and recognition of learning difficulties commonly encountered in the elementary grades and a consider-

ation of their treatment. Specific attention will be given to difficulties in number and reading skills. (Not available for degree credit for students who already have completed 415) (3-0)

#### ED-D 405 (3) EDUCATIONAL EXCEPTIONALITY

A consideration of the range of learning problems presented by children for whom classroom provisions may prove to be ineffective or inefficient; e.g., problems in motivation, attention, readiness, perception, response mobilization, retention, and learning rate. (Prerequisite: 200, 200A or 200B, or PSYC 100) (3-0; 3-0)

#### ED-D 409A (1½) EDUCATION OF THE EXCEPTIONAL CHILD — THE GIFTED

Identification procedures; early school admission and acceleration; setting goals for instruction; effective teaching methods; currently operating programs. (Prerequisite: Professional year) (3-0)

#### ED-D 409D (1½) EDUCATION OF THE EXCEPTIONAL CHILD — THE DISADVANTAGED

The effect of cultural disadvantages on school performance; special curricula for the disadvantaged; evaluating the effectiveness of the program. (Prerequisites: 405 or 407; professional year) (3-0)

#### ED-D 410 (formerly 409C) (1½ or 3) EDUCATION OF THE MENTALLY RETARDED

Supervised practice and/or theoretical considerations in teaching the mentally retarded. (The course is offered in two sections, as described below, and only one of these is scheduled in any given session. Consult the Department for further information.) (Pre- or corequisites: 405 or PSYC 450; professional year.) (NOTE: The professional year prerequisite is waived for students in the School of Child Care.)

ED-D 410A (1½) A consideration of objectives, methods and materials in educating the mentally retarded, and of research evidence on instructional program effectiveness. (Not available for credit on a degree program for students who have completed 410B) (3-0)

ED-D 410B (3) A consideration of objectives, methods and materials in educating the moderately and severely retarded, and practice in applying the instructional strategies recommended by research evidence. (Students enrolling in this course must reserve a morning or an afternoon each week in their timetable for the required practicum component.) (Not available for credit on a degree program for students who have completed 410A) (2-2; 2-2)

#### ED-D 411 (formerly 409E) (1½ or 3) PROBLEMS OF ATTENTION AND BEHAVIOUR

Supervised practice and/or theoretical considerations in working with children who present mild to severe problems in behaviour. (The course is offered in two sections, as described below, and only one of these is scheduled in any given session. Consult the Department for further information.) (Pre- or corequisite: Professional year) (NOTE: The professional year prerequisite is waived for students in the School of Child Care.)

ED-D 411A (1½) A consideration of objectives and methods in working with children who present mild to severe problems in behaviour. Strategies for working with individuals and groups are presented and evaluated. (Not available for credit on a degree program for students who have completed 411B) (3-0)

ED-D 411B (3) A consideration of objectives and methods in working with children who present mild to severe problems in behaviour. Strategies for working with individuals and groups are presented, evaluated and practised. Students enrolling in this course must reserve two one and a half hour periods in their timetables in either mornings or afternoons for the required practicum component. (Not available for credit on a degree program for students who have completed 411A) (2-2; 2-2)

#### ED-D 415 (3) DIAGNOSIS AND REMEDIATION OF LEARNING DIFFICULTIES

A consideration of assessment strategies and instructional methods and materials appropriate for the identification and remediation of learning difficulties. (Students in this course must reserve three one hour periods in their timetables for the required practicum. During this practicum component, the concentration is on language arts and mathematics.) (It is recommended that students take the following courses first or concurrently with this course: 405, ED-B 442, ED-E 484.) (Prerequisite: Professional year) (NOTE: The professional year prerequisite is waived for students in the School of Child Care.) (3-3; 3-3)

**ED-D 496 (1½) PRACTICUM IN SPECIFIED AREAS OF TEACHING**  
Supervised practice in teaching children who learn inefficiently or ineffectively in regular classroom settings. A post session practicum in May normally will be required. (A student may take all of the following areas; however, the maximum number of units accepted for credit on a student's degree program will be at the discretion of the Education Advising Centre.)

- 496A Teaching the gifted child.  
Pre- or corequisite: 409A; professional year
- 496C Teaching the mentally retarded.  
Pre- or corequisite: 410A; professional year
- 496D Teaching the culturally disadvantaged learner.  
Prerequisite: 409D; professional year
- 496E Teaching the child with attention or behaviour problems.  
Pre- or corequisite: 411A; professional year
- 496F Teaching the child with learning disabilities.  
Pre- or corequisite: 415; professional year

(Students anticipating enrollment in 496 should make early inquiry to the Department of Psychological Foundations in Education to determine availability of supervisory personnel and school placement. In general, course activities require a time commitment of one half day per week throughout the second term.) (Grading: INC; COM, N, or F)

### SPECIAL STUDIES

Contact individual Professors or Department Chairman for information.

#### ED-D 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — PSYCHOLOGICAL FOUNDATIONS

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

#### ED-D 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — PSYCHOLOGICAL FOUNDATIONS

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

#### ED-D 494 (1½) DIRECTED STUDIES

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

- 494B Helping Profession  
494H Educational Psychology  
494S Special Education  
494W Remedial

#### ED-D 495 (1½) DIRECTED STUDIES

(Description as for 494)

#### ED-D 499 (½-3) PROFESSIONAL DEVELOPMENT — PSYCHOLOGICAL FOUNDATIONS

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N, or F)

## GRADUATE COURSES

Dr. C.B. Harvey, Graduate Adviser

Students should consult the Coordinator of Graduate Studies in the Faculty of Education concerning the courses offered in any particular year. Offerings will depend upon student program needs and the availability of instructors.

#### ED-D 500 (1½) LEARNING PRINCIPLES

A survey of the literature on commonly stated principles of instrumental and classical conditioning, generalization, transfer, and retention.

#### ED-D 501 (1½) THEORY OF MEASUREMENT

An elaboration of the principles and theories of educational and psychological measurement with particular emphasis on interpretation of test reviews, applications to test development, and the design of research studies.

#### ED-D 502 (1½) SEMINAR IN EDUCATIONAL EVALUATION

Advanced topics in educational evaluation including: curriculum evaluation, teacher evaluation, grading and reporting.

#### ED-D 503 (1½) CURRICULUM EVALUATION

An examination of the issues, practices, and models of curriculum evaluation at the institutional and classroom levels.

#### ED-D 504 (1½) PSYCHOLOGY OF CONCEPTUAL LEARNING

An analysis of the problems, methods, theoretical formulations, and experimental evidence in contemporary concept learning research.

#### ED-D 505 (1½) BASIC CONCEPTS IN HUMAN DEVELOPMENT

A survey of a number of well known schools and theorists in human development. Topics relating to cognitive, personality, and moral development are stressed. Student needs and interests are important in determining course content.

#### ED-D 506 (1½) SELECTED TOPICS IN HUMAN DEVELOPMENT

Recent theory and research in a number of specific areas of human development. This course constitutes a closer and more detailed study of certain of the broader areas dealt with in 505.

#### ED-D 507 (1½) PSYCHOLOGY OF INDIVIDUAL DIFFERENCES

A focus on intellectual, emotional, physical and cultural differences between individuals. Emphasis is given on how individuals differ, causation theories, and implications for education.

#### ED-D 508 (1½) THEORIES OF LEARNING

A survey of psychological interpretations of learning, comparing modern Behaviourist and Cognitive approaches; historical perspective also given.

#### ED-D 509 (1½) PSYCHOLOGY OF CLASSROOM LEARNING

An in depth analysis of selected issues in classroom learning. The effects of student and teacher characteristics, pedagogical methodologies, and evaluational strategies on student learning are the major interest areas.

#### ED-D 510 (1½) PSYCHOLOGY OF GROUP DIFFERENCES

Analysis of group differences in human abilities including historical background, classification and measurement methodology, correlates and educational implications.

#### ED-D 512 (1½) MEASUREMENT IN THE AFFECTIVE DOMAIN

Problems in selecting objectives in the affective domain; constructing instruments to assess interests, attitudes, appreciations and values.

#### ED-D 513 (1½) USE OF STANDARDIZED TESTS IN EDUCATION

Advanced study of the theory, purposes, uses, administration, scoring and interpretation of group tests commonly used in schools. Includes tests of aptitudes, achievement, interests, and personality. (Prerequisite: 337 or equivalent)

#### ED-D 515 (1½) ADVANCED DIAGNOSIS OF LEARNING DISABILITIES

An individualized course for graduate students specializing in diagnosis. Supervised observation and analysis of the intellectual, emotional, and educational problems of children with learning difficulties. (Prerequisite: 402, 415, or consent of instructor)

#### ED-D 516 (1½) ADVANCED REMEDIATION OF LEARNING DISABILITIES

An individualized course for graduate students specializing in the remediation of learning problems associated with physical, language, intellectual, emotional, and perceptual dysfunction. Observation, practice, and seminar discussion will be involved. (Prerequisite: 515 or consent of instructor)

#### ED-D 517 (1½) PRACTICA IN COUNSELLING

(May be taken in areas listed below to a maximum of 6 units (1½ units each). Prior to registration, a student is required to obtain consent from the instructor of the specific practicum and from the chairman of his or her supervisory committee.)

(Except for 517A and J, grading: INC, COM, N or F)

- 517A Prepracticum in Counselling  
 517B Initial Practicum in Counselling  
 517C Practicum in Child Counselling  
 517D Practicum in Adolescent Counselling  
 517E Practicum in Adult Counselling  
 517F Practicum in Creative Arts Therapy  
 517G Practicum in Community Agency Counselling  
 517H Practicum in Family Counselling  
 517J Prepracticum in Vocational Counselling  
 (Corequisite: 519H)  
 517K Practicum in Consultation  
 (Pre- or corequisite: 519K)

**ED-D 518 (1½) SEMINAR IN COUNSELLING PSYCHOLOGY**

Origin, development and data bases for counselling. Core elements in counselling. The life cycle, developmental needs and counselling. Contemporary counselling approaches.

**ED-D 519 (1½) ADVANCED SEMINARS IN COUNSELLING PSYCHOLOGY**

(May be taken in areas listed below to a maximum of 6 units (1½ units each). Prior to registration, a student is required to obtain consent of the seminar instructor and from the chairman of his or her supervisory committee.)

- 519A School Counselling  
 519B Research in Counselling  
 519C Professional Issues in Counselling  
 519D Creative Arts Therapy  
 519E Behavioural Counselling  
 519F Existential Counselling  
 519G Relationship Counselling  
 519H Vocational and Career Counselling  
 519J Peer Counselling in Education  
 519K Consultation in Education and Counselling  
 519L Group Counselling

**ED-D 520 (1½ or 3) EDUCATIONAL RESEARCH APPRENTICESHIP**

This course is intended to provide experience for students in conducting research, prior to designing and implementing their own thesis studies. Examples might include collaboration with other students in a joint research effort; replicating earlier studies; or carrying out research principally conceptualized by, and supervised by, an individual professor.

**ED-D 560 (1½) STATISTICAL METHODS IN EDUCATION**

Probability theory; sampling theory; estimation; tests of hypotheses; the distribution; analysis of variance; analysis of covariance; nonparametric statistics; introduction to computer applications. (Offered conjointly with 561)

**ED-D 561 (1½) METHODS IN EDUCATIONAL RESEARCH**

The role of research in education; selecting the problem; reviewing the literature; research hypotheses; problems in measurement; sources of invalidity; models and designs in research; writing research proposals, communicating the results of research. (Offered conjointly with 560)

**ED-D 562 (1½) ADVANCED STATISTICAL METHODS IN EDUCATION**

Applied multiple linear regression; factor analysis; discriminant function analysis; canonical correlation; multivariate analysis of variance; advanced computer data processing. (Prerequisite: 560 or equivalent)

**ED-D 565 (1½) TASK ANALYSIS AND PRECISION TEACHING**

Task analysis models and applications; systematic description and assessment of terminal and enroute behavioural objectives; writing individual instructional plans.

**ED-D 566 (1½) SEMINAR IN SPECIAL EDUCATION**

A consideration of historical perspectives and present trends in special education services; funding policies; mainstreaming and zero rejection; training and utilization of aides and volunteers; parent participation in education planning. Preparation and defence of a major position paper on some important issue affecting special education will be required. (Grading: INC or letter grade. A grade of INC will require reregistration in the course in the following term.)

**ED-D 590 (credit to be determined) SPECIAL PROBLEMS — PSYCHOLOGICAL FOUNDATIONS**

(May be offered in areas A through Z for credit toward a Master's degree. The student must obtain consent of the chairman of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

**ED-D 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, providing the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-D 597 (0) COMPREHENSIVE EXAMINATION — PSYCHOLOGICAL FOUNDATIONS**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: COM, N or F)

**ED-D 598 (credit to be determined) PROJECT — PSYCHOLOGICAL FOUNDATIONS****ED-D 599 (credit to be determined) THESIS — PSYCHOLOGICAL FOUNDATIONS****ED-D 617 (credit to be determined) INTERNSHIP IN COUNSELLING PSYCHOLOGY**

Field work and advanced practical experience under supervision for doctoral candidates specializing in counselling psychology.

**ED-D 618 (credit to be determined) DOCTORAL SEMINARS IN COUNSELLING PSYCHOLOGY**

The doctoral seminars are organized around professional studies in counselling; counselling theory and techniques; group procedures and processes; areas of critical life choice; professional identification; ethics; and research in counselling. The seminars may be taken in Areas A through H by doctoral candidates upon consultation with the student's supervisory committee. The specific content of each area will be designated prior to registration.

**ED-D 690 (credit to be determined) SPECIAL PROBLEMS**

(May be offered in Areas A through Z for credit toward a doctoral degree. The student must obtain consent of the chairman of his or her supervisory committee and the instructor offering the area of individual study prior to registering in 690.)

**ED-D 699 (credit to be determined) Ph.D. DISSERTATION**

## DEPARTMENT OF SOCIAL AND NATURAL SCIENCES

### UNDERGRADUATE COURSES

#### MATHEMATICS EDUCATION

Dr. W. Liedtke, Elementary Adviser, Primary  
 Dr. J. Vance, Elementary Adviser, Intermediate  
 Dr. E.B. Horne, Secondary Adviser

**ED-E 443 (1½) MATHEMATICS CURRICULUM IN THE ELEMENTARY SCHOOL**

Goals of mathematics learning; evaluation and use of textbooks, supple-

mentary and enrichment materials, games, concrete aids; individualized small group, and large group instructional settings; evaluation of learning; current issues and trends. (Prerequisite: 744 or MATH 203 or equivalent; professional year) (3-0)

**ED-E 444 (1½) MATHEMATICS INSTRUCTION IN THE ELEMENTARY SCHOOL**

Teaching strategies; learning activities; classroom organization; instructional materials, their function and use; laboratory methods. (Prerequisite: 744 or MATH 203 or equivalent; professional year) (3-0)

**ED-E 484 (1½) DIAGNOSIS AND REMEDIATION IN MATHEMATICS**  
Possible causes of difficulty; teacher made diagnostic tasks and tests; analysis of common errors; remediation strategies; mini case studies. (Prerequisite: Professional year) (3-0)

**ED-E 743 (2) CURRICULUM AND INSTRUCTION IN MATHEMATICS IN THE ELEMENTARY SCHOOL**  
An examination of the mathematics curriculum and instructional procedures for teaching mathematics; scope and sequence, objectives, classroom settings, teaching strategies, manipulative aids, learning activities, and evaluation procedures. (Prerequisite: Acceptance in a professional year) (1-2; 1-2)

**ED-E 744 (1½) CURRICULUM AND INSTRUCTION IN ELEMENTARY MATHEMATICS**  
A study of the curriculum organization and techniques of instruction in elementary mathematics. (Prerequisite: Acceptance in a professional year) (1-1; 1-1)

**ED-E 761 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — MATHEMATICS**  
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

#### SCIENCE EDUCATION

Dr. J.F. Hall, Elementary Adviser  
Professor J. Sheppy, Secondary Adviser

**ED-E 145A (1½) PHYSICAL SCIENCE**  
Topics from physics as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (2-2)

**ED-E 145B (1½) EARTH SCIENCE**  
Topics from astronomy, geology, meteorology and oceanography as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (2-2)

**ED-E 145C (1½) BIOLOGICAL SCIENCE**  
Topics from biology and ecology as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (One of PE 141, 241A, or 241B is acceptable in lieu of 145C on the elementary degree program.) (2-2)

**ED-E 345 (3) SELECTED TOPICS IN GENERAL SCIENCE**  
In depth studies of scientific concepts basic to the new elementary school science curricula. (2-2; 2-2)

**ED-E 373 (formerly part of 370) (1½) ENVIRONMENTAL AND OUTDOOR EDUCATION: AN INTRODUCTION**  
The study of trends and techniques for the development of appropriate attitudes toward the outdoor environment and the development of skills to solve problems of human impact upon other living things. (2-2)

**ED-E 374 (formerly part of 370) (1½) ENVIRONMENTAL AND OUTDOOR EDUCATION IN THE ELEMENTARY SCHOOL**  
The development of an outdoor curriculum in the elementary school program; a study of methods and materials. (2-2)

**ED-E 445 (3) SCIENCE EDUCATION**  
The nature of scientific inquiry, studies of the research in science teaching, comparative curricula, contemporary thinking in science education, and preparation and use of experimental materials. (Prerequisite: Professional year) (3-0; 3-0)

**ED-E 745 (2) CURRICULUM AND INSTRUCTION IN ELEMENTARY SCIENCE**  
A study of the curriculum organization and techniques of instruction in elementary science. The course will include consideration of both the content and strategies for teaching elementary health education. (Prerequisite: Acceptance in a professional year) (1-2; 1-2)

**ED-E 769 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — SCIENCE**  
Open to students who have completed the prescribed teaching area or

who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Students with teaching areas in biology, chemistry, physics, or general science will enroll in this course.) (Grading: INC; letter grade; INP)

#### SOCIAL STUDIES EDUCATION

Dr. E.E. Owen, Elementary Adviser  
Dr. P. Thomas, Secondary Geography Adviser  
Dr. C. Goulson, Secondary History Adviser

**ED-E 346 (3) SOCIAL STUDIES IN THE ELEMENTARY SCHOOL**  
The structural character and implications for teaching of the social studies discipline; principles and practices of direct and indirect teaching; sample and patch studies as advanced organizers of resource materials; unit planning and preparation and the evaluation of procedures. (Prerequisite: Professional year) (3-0; 3-0)

**ED-E 746 (1½) CURRICULUM AND INSTRUCTION IN ELEMENTARY SOCIAL STUDIES**  
A study of the curriculum organization and techniques of instruction in elementary social studies. Examples are drawn from a variety of content areas: history, geography, anthropology, sociology, political science, economics and community services including health. (Prerequisite: Acceptance in a professional year) (2-0; 2-0)

**ED-E 755 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — GEOGRAPHY**  
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**ED-E 758 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — HISTORY**  
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**ED-E 768 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — COMMERCE**  
Offered by special permission only. Open to students who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**ED-E 770 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — HOME ECONOMICS**  
Offered by special permission only. Open to students who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

#### SPECIAL STUDIES

Contact individual professors or Department Chairman for information.

**ED-E 447 (1½) MATHEMATICS, SCIENCE AND SOCIAL STUDIES IN EARLY CHILDHOOD EDUCATION**  
A survey of mathematics, science and social studies content, materials, methods suitable for children from ages three to six. (Prerequisite: ED-B 440 or consent of instructor; professional year) (3-0)

**ED-E 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — SOCIAL AND NATURAL SCIENCES**  
Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-E 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — SOCIAL AND NATURAL SCIENCES**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0) or (3-0; 3-0)

**ED-E 494 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

|      |                       |
|------|-----------------------|
| 494M | Teaching of Geography |
| 494N | Teaching of History   |
| 494P | Social Studies        |
| 494R | Mathematics Education |
| 494U | Outdoor Education     |
| 494X | Science Education     |

**ED-E 495 (1½) DIRECTED STUDIES**

(Description as for 494)

**ED-E 499 (½-3) PROFESSIONAL DEVELOPMENT — SOCIAL AND NATURAL SCIENCES**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N or F)

**GRADUATE COURSES**

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year. Offerings will depend upon student program needs and the availability of instructors.

Dr. E.E. Owen, Graduate Adviser

**ED-E 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES**

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level. (Students may enroll in more than one of the areas listed below at 1½ units each.)

|      |                |
|------|----------------|
| 540C | Social Studies |
| 540D | Mathematics    |
| 540E | Science        |

**ED-E 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES**

Review of the literature; critical analysis of significant research; planning

curriculum research at the secondary level. (Students may enroll in more than one of the areas listed below at 1½ units each.)

|      |             |
|------|-------------|
| 541B | Geography   |
| 541C | History     |
| 541D | Mathematics |
| 541E | Science     |

**ED-E 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA**

Application of relevant theories and models to the design and development of school curricula in a specified area. (Students may enroll in more than one of the areas listed below at 1½ units each.)

|      |                |
|------|----------------|
| 558C | Social Studies |
| 558D | Mathematics    |
| 558E | Science        |
| 558H | Geography      |
| 558J | History        |

**ED-E 584 (1½) DIAGNOSIS AND REMEDIATION OF LEARNING DIFFICULTIES IN MATHEMATICS**

A compendium of theoretical and practical models; research perspectives; individual and group diagnostic skills; remediation suggestions. (Prerequisite: 484 or consent of instructor)

**ED-E 590 (credit to be determined) SPECIAL PROBLEMS — SOCIAL AND NATURAL SCIENCES**

(May be offered in areas A through Z for credit towards a Master's degree. The student must obtain consent of the chairman of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

**ED-E 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-E 597 (0) COMPREHENSIVE EXAMINATION — SOCIAL AND NATURAL SCIENCES**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: COM, N or F)

**ED-E 598 (credit to be determined) PROJECT — SOCIAL AND NATURAL SCIENCES****ED-E 599 (credit to be determined) THESIS — SOCIAL AND NATURAL SCIENCES****DIVISION OF PROFESSIONAL STUDIES**

All courses which have a practicum component are governed by the "Regulations Concerning Practica", page 14 and 137 of this calendar. No course containing school experience practica may be challenged. Students are directed to the section, "School Experience, Student Teaching and Seminars" on page 137 of this calendar. Further, students who wish to repeat 797 must appeal to the Faculty Admissions and Adjudication Committee for permission.

**SCHOOL EXPERIENCE****ED-P 197 (1½) FIRST YEAR ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE**

This course deals with communication skills and interpersonal relations in teaching. (Seminars will be held twice weekly in the First or Second Term. Normally students will be required to have a two week school experience following examinations in April. Transfer students taking 197 and 297 in the same academic year must complete ten weekly half day experiences in the schools in the fall as well as meeting the 297 school experience requirements in the spring) (Grading: INC; COM, N or F)

**ED-P 297 (1½) PREPROFESSIONAL YEAR ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE**

Weekly seminars dealing with formal analysis of teaching and acquisition of selected teaching skills, plus a minimum of 20 hours of microteaching. Skills are applied during school experience activities. A two week post session practicum following final examinations is required. (Prerequisite: 197) (Grading: INC; COM, N or F)

**ED-P 397 (1½ or 3) SPECIAL PREPROFESSIONAL YEAR ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE**

A seminar to be conducted prior to the professional year that will deal with the examination and acquisition of skills specific to the needs of special situations. The course will include experiences in the special setting. (Grading: INC; COM, N or F)

**ED-P 398 (1½) THIRD YEAR SECONDARY SEMINAR AND SCHOOL EXPERIENCE**

A program of regularly scheduled seminars in which students will receive some instruction in methodology as preparation for visits to secon-

dary school classrooms. (Students must complete ten weekly half day experiences in the schools. A two week post session practicum may be required. This requirement may be modified for students on special programs.) (Grading: INC; COM, N or F)

**ED-P 498 (1½) FOURTH YEAR SECONDARY SEMINAR**

A program of seminars and school experiences prerequisite to the secondary methodology courses. (A two week post session practicum following final examinations is required. This requirement may be modified for students on special programs.) (Prerequisite: 398) (Grading: INC; COM, N, or F)

**ED-P 777 (1½) INTRODUCTION TO TEACHING METHODS**

General introduction to curriculum and instruction in secondary school subjects. (Offered to internship students only.) (Grading: INC; COM, N or F)

**ED-P 789 (6) INTEGRATED PROGRAM IN ELEMENTARY CURRICULUM AND METHODOLOGY**

An integrated program in current curriculum developments and methods of instruction for elementary teachers who wish to update their professional training or for secondary teachers who are considering teaching at the elementary level. Credit towards a degree may be used only for updating of professional training completed more than ten years previously. Credit for this course cannot be used for elective credit on a current degree program. (Prerequisite: Consent of the Education Advising Centre) (Lectures and laboratories: hours to be arranged)

**ED-P 790 (1½) TEACHING SKILLS SEMINAR: SECONDARY**

The study, performance and evaluation of teaching skills essential to teacher performance at the secondary level. Skills will be practised and evaluated through peer interaction. (Prerequisite: Acceptance in the Secondary Post Degree Professional Program) (Grading: INC; COM, N or F) (3-0)

**ED-P 791 (1) TEACHING SKILLS SEMINAR: ELEMENTARY**

The study, performance and evaluation of teaching skills essential to teacher performance at the elementary level. Skills will be practised and evaluated through peer interaction. (Prerequisite: Acceptance in the Elementary Post Degree Professional Program) (Grading: INC; COM, N or F) (2-0)

**ED-P 792 (½) SECONDARY CAREER SEMINAR**

Forum for discussion on teaching and general class management. (Prerequisite: Acceptance in a professional year) (Grading: INC; COM, N or F) (1-0)

**ED-P 793 (1½) INTERNSHIP SEMINAR**

Seminar on teaching competencies. Topics will include teaching skills, classroom management, relationship of theory to practice, analysis of

teaching, the teacher as a professional, and education community orientation. (Prerequisite: Acceptance in a professional year) (Grading: INC; COM, N or F) (1-0; 1-0)

**ED-P 797 (3) SEMINAR AND ELEMENTARY STUDENT TEACHING**

For students registered in the professional year, elementary program. Consists of a weekly seminar and school experience to be arranged by the School Experience Office. Initial school experiences will occur during the first week of the term. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**ED-P 799A (9) INTEGRATED PROFESSIONAL PROGRAM (Regular)**

Historical and Social Foundations; Administration and Management of Education in B.C.; Measurement and Evaluation; Learning Resources; Reading in the Secondary Schools; Career Seminar. (Prerequisite: Acceptance in a professional year) (Grading: INC; letter grade) (18-0) or (9-0; 9-0)

**ED-P 799B (12) INTEGRATED PROFESSIONAL PROGRAM (Post-Degree Professional Program)**

Historical and Social Foundations; Administration and Management of Education in B.C.; Psychology of Classroom Learning; Psychology of Adolescence; Measurement and Evaluation; Media Education; Library Education; Directed Media or Library Project. (Prerequisite: Acceptance in a professional year) (Grading: INC; letter grade) (24-0 first term; practicum second term)

**SPECIAL STUDIES**

Contact the Division Director for information.

**ED-P 494 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.) 494Y Student Teaching

**ED-P 495 (1½) DIRECTED STUDIES**

(Description as for 494)

**ED-P 499 (½-3) PROFESSIONAL DEVELOPMENT — PROFESSIONAL STUDIES**

This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre. (Grading: COM, N, or F)

# FACULTY OF ENGINEERING

Leonard T. Bruton, B.Sc. (London), M.Eng. (Carleton), Ph.D. (Newcastle), F.I.E.E.E., P.Eng., Dean of the Faculty  
 George Csanyi-Fritz, P.Eng., Faculty Engineer  
 P. Lawrence Pitt, B.Sc., M.Sc. (Alberta), Cooperative Education Coordinator

## DEPARTMENT OF ELECTRICAL ENGINEERING

Andreas Antoniou, B.Sc., Ph.D. (London), F.I.E.E.E., F.I.E.E., P.Eng., C.Eng., Professor and Chairman of the Department  
 Vijay K. Bhargava, B.Sc. (Rajasthan), B.Sc., M.Sc., Ph.D. (Queen's), Professor  
 Leonard T. Bruton, B.Sc. (London), M.Eng. (Carleton), Ph.D. (Newcastle), F.I.E.E.E., P.Eng., Professor  
 James P. Duncan, B.E., M.E. (Adelaide), D.Sc. (Manchester), Part time Adjunct Professor  
 M. Shinbrot, B.A., M.A. (Syracuse), Ph.D. (Stanford), F.R.S.C, Part time Adjunct Professor (January-June 1985)  
 Geoffrey W. Vickers, Dip.Eng. (Birmingham), M.Sc., Ph.D. (Manchester), P.Eng., C.Eng., Professor  
 James S. Collins, B.Sc. (Dalhousie), B.Eng., M.Eng., (Nova Scotia Technical College), Ph.D. (Washington), P.Eng., Part time Adjunct Associate Professor (1984-85)  
 Fayez H. El Guibaly, B.Sc. (Cairo Univ.), B.Sc. (Ain Shams Univ.), Ph.D. (Brit. Col.), Assistant Professor  
 Panajotis Agathoklis, Dipl.El.Eng., Dr. Sc. Techn. (Swiss Federal Institute of Technology), Adjunct Assistant Professor (1984-87)  
 Harold Chow, B.A.Sc. (Brit. Col.), P.Eng., Electronics and Computer Engineer

The Faculty of Engineering offers B.Eng. degrees in Electrical Engineering and Computer Engineering. Both degree programs are designed to meet the accreditation requirements of the Canadian Accreditation Board of the Canadian Council of Professional Engineers. These requirements ensure that graduates of the two programs satisfy the academic requirements for registration with the provincial Associations of Professional Engineers.

Both of the above degree programs are offered in conjunction with the Engineering Cooperative Education Program in the Faculty of Engineering, details of which are to be found below under the heading Engineering Cooperative Education Program. Completion of the undergraduate baccalaureate programs involves eight academic terms and six work terms in industry where each term is of four months duration.

Graduate studies are offered by Special Arrangement with the Faculty of Graduate Studies and lead to the degrees of M.Sc. in Electrical Engineering and Ph.D. in Electrical Engineering.

## APPLICATION FOR ADMISSION

The normal procedure is to admit students into the Faculty to commence First Year Engineering in the September-December term each year.

Application forms for undergraduate admission to the Faculty of Engineering are available from Admission Services. Completed applications must be submitted to Admission Services not later than May 31. Applicants will receive written acknowledgement that their application for admission to the Faculty has been received by Admission Services and confirmation that their admission file is complete.

Application forms for graduate admission are available from the Faculty of Graduate Studies.

## INTERNATIONAL STUDENTS

The university has a primary obligation to permanent residents of Canada. Nevertheless, a limited number of international students may be admitted to the Faculty.

## RESTRICTIONS ON ADMISSION

There are restrictions on the number of students that can be admitted to First Year Engineering and to Second Year Engineering. Achievement of the minimum academic requirements may not provide assurance of admission.

Not more than 70 students will be admitted to First Year.

## REQUIREMENTS FOR ADMISSION

Applicants must meet the University of Victoria admission requirements as given under the heading General Information on pages 7-11. Additional admission requirements are given below.

Graduates of senior secondary schools in British Columbia require:

- 1) A grade of not less than B in Algebra and Physics 12, and
- 2) Chemistry 11 or Chemistry 12.

Graduates of senior secondary schools in Canadian provinces other than British Columbia require equivalent qualifications in algebra, physics and chemistry to those specified above and are advised to contact Admission Services for further information on recognition of their secondary school performance.

Applicants who have completed First Year Science at a university or college are eligible to be considered for admission.

A limited number of mature applicants may be admitted notwithstanding the fact that they might not meet the minimum requirements for admission if, in the judgment of the Faculty, compensatory experience has been obtained.

## READMISSION AFTER VOLUNTARY WITHDRAWAL

Students who have withdrawn voluntarily from the Faculty of Engineering and later reapply for admission must do so by the prescribed deadlines and will be considered in competition with all other applicants.

## TRANSFER CREDIT

The Faculty of Engineering may grant credit to applicants for courses taken in other postsecondary educational programs. Credit will be considered only for courses which are approximately equivalent to courses in the Engineering programs and in which satisfactory performance has been achieved.

Applicants who have completed First Year Science and First Year Engineering at Malaspina, Cariboo, New Caledonia, Okanagan or Selkirk College, or Simon Fraser University are eligible to be considered for admission to Second Year Engineering provided that they have obtained an overall grade point average (GPA) of not less than 2.50 on a 4.00 scale.

Graduates of technology programs will be considered for transfer credit on an individual basis.

## REGULATIONS ON ACADEMIC PERFORMANCE

### 1. Grading

The grading scheme used in the Faculty of Engineering is the same as that found under the heading General Information except for a somewhat different interpretation of the C, D and DEF grades.

A grade of C in a course implies that a basic understanding of the subject matter has been achieved.

A grade of D in a course implies marginal performance and usually insufficient knowledge to pursue subsequent courses for which the course is a prerequisite.

Grade DEF is used for courses in which a deferred examination has been granted on the basis of illness, family affliction or other similar circumstances. Please consult Section 5 of these regulations for Engineering courses and the general University regulations on page 16 for nonengineering courses.

### 2. Review of an Assigned Grade in Engineering Courses

- a) Any request for a review of a final grade must normally reach the Dean's office within 21 days after the release of assigned grades by the Dean's office.
- b) The review of a final grade shall be restricted to grade components contributed by a final examination, and to any other grade components released to the student within the last 21 days before the end of classes.

### 3. Academic Terms and Academic Years

The program consists of eight academic terms. Each of the four academic years in the Faculty of Engineering consists of two academic terms, referred to in Table I as Academic Term A and Academic Term B. These academic terms are taught in the September-December term, the January-April term, or the May-August term, with the corresponding Final Examinations for term courses occurring at the end of each term.

The timetable for academic terms and work (COOP) terms is summarized in Table I:

TABLE I

| Year | September-December | January-April    | May-August       |
|------|--------------------|------------------|------------------|
| 1    | Academic Term 1A   | Academic Term 1B | Work Term W1     |
| 2    | Academic Term 2A   | Work Term W2     | Academic Term 2B |
| 3    | Work Term W3       | Academic Term 3A | Work Term W4     |
| 4    | Academic Term 3B   | Work Term W5     | Academic Term 4A |
| 5    | Work Term W6       | Academic Term 4B |                  |

### 4. Review of Academic Performance

The following regulations are in terms of grades in single term courses offered in the September-December, January-April or May-August term.

The academic standing of each student registered in the Faculty of Engineering will be reviewed annually following the January-April term. Students will receive Satisfactory Standing, Probationary Standing or Failed Standing if they registered in at least four courses during the period under review.

Student performance is assessed on the basis of the grade point average and the number of grades of C or better accumulated over the review period.

The grade point average is calculated by adding the grade point values of all the grades awarded during the period under review and dividing the sum by the total number of grades. DEF grades will be excluded from the calculation. Grades obtained in supplemental examinations will be treated as additional grades in the recalculation of the grade point average.

The specific regulations for the Faculty of Engineering are as follows:

- Upon completion of an academic term in which the student registered for not less than four courses for the first time, that student may register for six courses in the following academic term, provided that a grade of C or better was achieved in each of at least two thirds of the courses taken by the student. The required minimum number of courses having grades of C or better is given in Table II.

Students who do not satisfy the above requirements will have their program determined by the Dean of Engineering.

- Student standings are defined as follows:

#### *Satisfactory Standing*

A grade point average of not less than 3.00 and a grade of C or better in each of at least two thirds of the courses taken by the student during the period under review with no more than one uncleared failing grade. The required minimum number of courses with grades of C or better is given in Table II.

#### *Probationary Standing*

A grade of C or better in each of at least one half of the courses taken by the student during the period under review with no more than two uncleared failing grades. The required minimum number of courses with grades of C or better is given in Table III.

#### *Failed Standing*

Failure to meet the criteria for Satisfactory or Probationary Standing or two consecutive assessments of Probationary Standing.

- Students with Satisfactory Standing may proceed in the program and must attempt to clear any uncleared failing grade during the next reviewing period.
- Students with Probationary Standing may remain in the program for a period of up to one year subject to the following conditions:
  - They must repeat all courses for which D grades were obtained during the period under review.
  - They must not register for more than six courses per term.
  - They must achieve Satisfactory Standing at the time of the next review.
- Students with Failed Standing will be required to withdraw from

the Faculty and will not be considered for readmission to the Faculty for at least one year. An application for readmission from a student who has previously been required to withdraw will be considered in open competition with other applicants for admission. On readmission, credit will not be granted for courses taken with grades of D during the review period immediately prior to withdrawal, and Satisfactory Standing must be achieved at the next review.

TABLE II

#### Minimum Criteria for Satisfactory Standing in the Faculty

|   |   |   |   |   |   |   |    |    |    |    |
|---|---|---|---|---|---|---|----|----|----|----|
| Number of Courses                             | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Minimum Number of Grades of C or Better       | 3 | 4 | 4 | 5 | 6 | 6 | 7  | 8  | 8  | 9  |
| Maximum Number of Uncleared Failing Grades: 1 |   |   |   |   |   |   |    |    |    |    |

TABLE III

#### Minimum Criteria for Probationary Standing in the Faculty

|   |   |   |   |   |   |   |    |    |    |    |
|---|---|---|---|---|---|---|----|----|----|----|
| Number of Courses                             | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Minimum Number of Grades of C or Better       | 2 | 3 | 3 | 4 | 4 | 5 | 5  | 6  | 6  | 7  |
| Maximum Number of Uncleared Failing Grades: 2 |   |   |   |   |   |   |    |    |    |    |

Maximum Number of Uncleared Failing Grades: 2

### 5. Deferred Examinations in Engineering Courses

- Where a student has been unable to write an examination owing to illness, family affliction or other similar circumstances, the Faculty may authorize the writing of a deferred examination.
- For the purpose of providing evidence to the Faculty as to the nature of illness and its effect on the student's ability to write an examination, the physician's medical report should be made on a form provided by the Faculty of Engineering, where possible. If this form is not used, the medical report should contain the information required by the Faculty of Engineering.

### 6. Supplemental Examinations in Engineering Courses

- At the discretion of the Dean of Engineering, supplemental examination privileges may be granted to students with Satisfactory or Probationary Standing, but the number of such examinations granted at any given review is limited to one.
- The grade of the supplemental examination shall replace only the grades of examinations and quizzes, and shall not compensate for or replace laboratory, project and assignment grades.
- A student who has failed to pass a specific course after a supplemental examination must repeat the course or replace it by an alternative course approved by the Dean of Engineering.

### 7. Equivalent Courses

Approval may be given, at the discretion of the Dean, for a student to replace one or more Engineering courses by other acceptable courses. Written approval must be obtained in advance. Normally, such replacement courses will be taken at the University of Victoria.

An F grade in any course taken outside of the Faculty of Engineering may be cleared by passing another acceptable course, subject to the written approval of the Dean of Engineering.

### 8. Withdrawal from Courses

Students will not be permitted to withdraw from a given course more than once.

### 9. Graduation Requirements

Students are deemed to have satisfied the graduation requirements if:

- They have completed successfully the full set of courses specified for the particular degree program with Satisfactory Standing, and
- they have completed successfully at least four work terms.

### 10. Degrees with First Class Distinction

Students who obtain a grade point average of not less than 7.00 over the last two years of their program and have no failing grades and not more than two D grades over the last two years of their program will receive the B.Eng. degree with First Class distinction.

### 11. Dean's List

Students who complete their graduation requirements with First Class distinction shall be included in the Dean's Graduation List.

## 12. Special Provisions

Notwithstanding the above regulations, the Faculty shall exercise an equitable discretion in all cases so as to achieve fairness in the application of academic regulations.

### ENGINEERING COOPERATIVE EDUCATION PROGRAM

This program is an integral and mandatory part of the degree programs for all undergraduate students in the Faculty. There are six work terms offered, according to the schedule shown in Table I under the heading Academic Terms and Academic Years.

The following regulations apply to the program:

1. The first work term (W1) is optional.
2. Each student will normally be required to take the five work terms W2, W3, W4, W5 and W6.
3. The work term performance of each student will be assessed and a Pass or Fail will be given.
4. A student must normally achieve a Pass in each work term in order to proceed to the next academic term. In exceptional circumstances, a student may receive the permission of the Chairman of the Department to proceed in the academic program after failing a work term and in such a case a replacement work term must be taken prior to graduation.
5. Students who transfer into the Engineering program with not less than 12 units of academic credit may apply for transfer credit of work terms that have been successfully completed while registered in another postsecondary institution.
6. Notwithstanding (2) above, a student must successfully complete at least four work terms prior to graduation.

The Engineering Cooperative Education Coordinator is responsible for work placements. Interviews between Engineering students and prospective employers are organized by the Engineering Cooperative Education Coordinator.

## ACADEMIC PROGRAMS

The program B.Eng. in Electrical Engineering consists of the Engineering Core, the Electrical Engineering Core, and one of three Elective Options.

The program B.Eng. in Computer Engineering consists of the Engineering Core, and a set of elective courses.

### a) Engineering Core

|           |  |
|-----------|--|
| CHEM 100  | Introduction to Chemistry                            |
| or        |  |
| CHEM 101  | Fundamentals of Chemistry: I                         |
| or        |  |
| CHEM 140  | Principles of Chemistry                              |
| CHEM 102  | Fundamentals of Chemistry: II                        |
| or        |  |
| CHEM 145  | Principles of Physical and Inorganic Chemistry       |
| C SC 110  | Computer Programming: I                              |
| C SC 160  | Introduction to Data Structures                      |
| C SC 230  | Introduction to Computer Systems                     |
| C SC 349A | Numerical Methods: I                                 |
| ELEC 216  | Fundamentals of Electrical Engineering               |
| ELEC 250  | Linear Circuits: I                                   |
| ENGR 150  | Engineering Graphics                                 |
| ENGR 240  | Technical Writing                                    |
| ENGR 245  | Engineering Fundamentals: I                          |
| ENGR 280  | Principles of Economics for Engineers and Scientists |
| ENGR 395  | Seminar  |
| ENGR 446  | Technical Report                                     |
| ENGR 447  | Social Aspects of Engineering: I                     |
| ENGR 497  | Social Aspects of Engineering: II                    |
| ENGR 498  | Engineering Law                                      |
| ENGL 115  | College Composition                                  |
| MATH 100  | Calculus: I  |
| MATH 101  | Calculus: II   |
| MATH 133  | Matrix Algebra for Engineers                         |
| MATH 200  | Calculus of Several Variables                        |
| MATH 201  | Introduction to Differential Equations               |
| STAT 254  | Probability and Statistics for Engineers             |
| PHYS 120  | Mechanics: I   |
| PHYS 125  | Fundamentals of Physics                              |

### b) Electrical Engineering Core

|          |                                     |
|----------|-------------------------------------|
| CENG 390 | Digital Design: I                   |
| CENG 440 | Digital Design: II                  |
| ELEC 220 | Electrical Properties of Materials  |
| ELEC 260 | Signal Analysis: I                  |
| ELEC 300 | Linear Circuits: II                 |
| ELEC 310 | Signal Analysis: II                 |
| ELEC 320 | Electronic Devices: I               |
| ELEC 330 | Electronic Circuits: I              |
| ELEC 340 | Electromagnetic Field Theory        |
| ELEC 350 | Communication Theory and Systems: I |
| ELEC 360 | Control Theory and Systems: I       |
| ELEC 370 | Electromechanical Energy Conversion |
| ELEC 380 | Electronic Circuits: II             |
| ELEC 270 | Engineering Fundamentals: II        |

### c) Electrical Engineering Elective Options

#### *Microelectronics and VLSI Systems*

|          |                             |
|----------|-----------------------------|
| ELEC 410 | Power Electronics           |
| ELEC 415 | Microelectronics Technology |
| ELEC 465 | Design of VLSI Systems      |
| ELEC 470 | Electronic Devices: II      |

Two electives from List A

Two electives from List B

#### *Communications and Signal Processing*

|          |   |
|----------|---|
| ELEC 400 | Random Signals                                  |
| ELEC 404 | Microwave and Optical Communication Systems: I  |
| ELEC 408 | Analog Filters                                  |
| ELEC 450 | Communication Theory and Systems: II            |
| ELEC 454 | Microwave and Optical Communication Systems: II |
| ELEC 458 | Digital Filters                                 |

One elective from List A

One elective from List B

#### *CAD/CAM, Control Systems, and Robotics*

|          |                                |
|----------|--------------------------------|
| CENG 445 | Microprocessor Systems         |
| ELEC 425 | Robotics: I                    |
| ELEC 430 | Computer Aided Design          |
| ELEC 460 | Control Theory and Systems: II |
| ELEC 475 | Robotics: II                   |
| ELEC 480 | Computer Aided Manufacture     |

One elective from List A

One elective from List B

### d) Computer Engineering Core

|          |                                     |
|----------|-------------------------------------|
| C SC 275 | File Structures for Data Processing |
| C SC 325 | Data Structures                     |
| C SC 360 | Introduction to Operating Systems   |
| C SC 365 | Software Engineering                |
| CENG 345 | Discrete Structures                 |
| CENG 390 | Digital Design: I                   |
| CENG 440 | Digital Design: II                  |
| CENG 445 | Microprocessor Systems              |
| CENG 450 | Computer Systems and Architecture   |
| CENG 455 | Real Time Computer Systems          |
| CENG 490 | Artificial Intelligence             |
| ELEC 220 | Electrical Properties of Materials  |
| ELEC 260 | Signal Analysis: I                  |
| ELEC 300 | Linear Circuits: II                 |
| ELEC 310 | Signal Analysis: II                 |
| ELEC 320 | Electronic Devices: I               |
| ELEC 330 | Electronic Circuits: I              |
| ELEC 350 | Communication Theory and Systems: I |
| ELEC 360 | Control Theory and Systems: I       |
| ELEC 380 | Electronic Circuits: II             |

### e) Computer Engineering Elective Courses

One elective from List A

One elective from List B

### f) Elective Courses

List A May-August Term

|          |  |
|----------|--|
| CENG 445 | Microprocessor Systems                         |
| C SC 275 | File Structures for Data Processing            |
| ELEC 400 | Random Signals                                 |
| ELEC 404 | Microwave and Optical Communication Systems: I |

|          |                             |
|----------|-----------------------------|
| ELEC 408 | Analog Filters              |
| ELEC 410 | Power Electronics           |
| ELEC 415 | Microelectronics Technology |
| ELEC 425 | Robotics: I                 |
| ELEC 430 | Computer Aided Design       |
| ELEC 499 | Technical Project           |

## List B January-April Term

|           |   |
|-----------|---|
| CENG 345  | Discrete Structures                             |
| CENG 485  | Pattern Recognition                             |
| C SC 330  | Programming Languages                           |
| C SC 349B | Numerical Methods: II                           |
| ELEC 450  | Communication Theory and Systems: II            |
| ELEC 454  | Microwave and Optical Communication Systems: II |
| ELEC 458  | Digital Filters                                 |
| ELEC 460  | Control Theory and Systems: II                  |
| ELEC 465  | Design of VLSI Systems                          |
| ELEC 470  | Electronic Devices: II                          |
| ELEC 475  | Robotics: II                                    |
| ELEC 480  | Computer Aided Manufacture                      |
| ELEC 499  | Technical Project                               |

Students are advised that enrollment in courses and degree programs may be limited by the availability of staff and resources.

Students who have not been admitted to the Faculty of Engineering will not be permitted to register in Engineering courses except with the prior written permission of the Dean.

## ACADEMIC SCHEDULE

## a) Terms 1A and 1B of B.Eng. in Electrical Engineering and B.Eng. in Computer Engineering.

| Term 1A                   | Term 1B            |
|---------------------------|--------------------|
| CHEM 100 or<br>101 or 140 | CHEM 102 or<br>145 |
| C SC 110                  | C SC 160           |
| MATH 100                  | ENGL 115           |
| MATH 133                  | ENGR 150           |
| PHYS 120                  | MATH 101           |
|                           | PHYS 125           |

## b) Terms 2A to 4B of B.Eng. in Electrical Engineering

| Term 2A         | Term 2B         | Term 3A   | Term 3B  |
|-----------------|-----------------|-----------|----------|
| ELEC 216        | C SC 230        | C SC 349A | CENG 390 |
| ELEC 220        | ELEC 250        | ELEC 300  | ELEC 350 |
| ENGR 240,       | ELEC 260        | ELEC 310  | ELEC 360 |
| ENGR 245        | ENGR 270        | ELEC 320  | ELEC 370 |
| MATH 200        | ENGR 280        | ELEC 330  | ELEC 380 |
| STAT 254        | MATH 201        | ELEC 340  | ENGR 395 |
| Term 4A         | Term 4B         |           |          |
| CENG 440        | ENGR 497        |           |          |
| ENGR 447        | ENGR 498        |           |          |
| Elective Option | Elective Option |           |          |

Plus ENGR 446 Technical Report to be completed during last work term.

## c) Terms 4A and 4B of B.Eng. in Electrical Engineering Elective Options

*Microelectronics and VLSI Systems*

| Term 4A                      | Term 4B                      |
|------------------------------|------------------------------|
| ELEC 410                     | ELEC 465                     |
| ELEC 415                     | ELEC 470                     |
| Two electives<br>from List A | Two electives<br>from List B |

*Communications and Signal Processing*

| Term 4A                     | Term 4B                     |
|-----------------------------|-----------------------------|
| ELEC 400                    | ELEC 450                    |
| ELEC 404                    | ELEC 454                    |
| ELEC 408                    | ELEC 458                    |
| One elective<br>from List A | One elective<br>from List B |

*CAD/CAM, Control Systems, and Robotics*

| Term 4A  | Term 4B  |
|----------|----------|
| CENG 445 | ELEC 460 |

|                             |                             |
|-----------------------------|-----------------------------|
| ELEC 425                    | ELEC 475                    |
| ELEC 430                    | ELEC 480                    |
| One elective<br>from List A | One elective<br>from List B |

## d) Terms 2A to 4B of B.Eng. in Computer Engineering

| Term 2A  | Term 2B                     | Term 3A                     | Term 3B  |
|----------|-----------------------------|-----------------------------|----------|
| ELEC 216 | C SC 230                    | CENG 345                    | CENG 390 |
| ELEC 220 | C SC 275                    | C SC 349A                   | C SC 325 |
| ENGR 240 | ELEC 250                    | ELEC 300                    | ELEC 350 |
| ENGR 245 | ELEC 260                    | ELEC 310                    | ELEC 360 |
| MATH 200 | ENGR 280                    | ELEC 320                    | ELEC 380 |
| STAT 254 | MATH 201                    | ELEC 330                    | ENGR 395 |
| Term 4A  | Term 4B                     |                             |          |
|          | CENG 440                    | CENG 450                    |          |
|          | CENG 445                    | CENG 455                    |          |
|          | C SC 360                    | CENG 490                    |          |
|          | C SC 365                    | ENGR 497                    |          |
|          | ENGR 447                    | ENGR 498                    |          |
|          | One elective<br>from List A | One elective<br>from List B |          |

Plus ENGR 446 Technical Report to be completed during last work term.

## COURSES

## ENGINEERING

## ENGR 150 (formerly ENGG 100) (1½) ENGINEERING GRAPHICS

Basic concepts of hardware and graphics software; development of graphics software; theories of perspective, orthographic and isometric projections; algorithms for 2-D and 3-D transformations and computer representation of physical shapes; elements of descriptive geometry, freehand sketching, dimensioning and sectioning. Use of CAD software packages. (Prerequisite: C SC 160 which may be taken concurrently)  
January-April (3-2)

## ENGR 240 (1½) TECHNICAL WRITING

This course will focus on searching and referencing methods used in dealing with scientific and technical literature and on the characteristics of effective technical and scientific style. The emphasis throughout will be on clarity, precision, and consistency. Students will acquire practical experience in the writing of short technical documents such as memoranda, letters and abstracts, longer forms such as reports, papers, and theses, and instructional forms such as manuals, brochures, and specifications. (Prerequisite: ENGL 115)  
September-December (3-0)

## ENGR 245 (1½) ENGINEERING FUNDAMENTALS: I

Resultant of force systems, equilibrium of particles and rigid bodies; centroids and centre of gravity, friction; moments of inertia; kinematics of particles and rigid bodies; force and acceleration; work and energy; impulse and momentum for particles. Introduction to dynamic modelling of electrical machines and robot manipulators. (Prerequisites: PHYS 120 and MATH 200 which may be taken concurrently)  
September-December (3-0)

## ENGR 270 (1½) ENGINEERING FUNDAMENTALS: II

Thermal properties of matter; thermometry; radiation laws; kinetic theory of gases and gas laws; the first and second laws of thermodynamics; principles of heat transfer. Engineering applications such as internal combustion engines, refrigerators, heat exchangers, heat pumps, and heat sinks. (Prerequisites: PHYS 125 and MATH 101)  
May-August (3-0)

## ENGR 280 (1½) PRINCIPLES OF ECONOMICS FOR ENGINEERS AND SCIENTISTS

The purpose of this course is to develop in students an understanding of economics as a social science through formal lectures, exercises, and tutorial discussions. Topics covered include decision making and choice, the price system, production costs, market structure, capital and project evaluation, efficiency in resource allocation, externalities and public goods. Examples will be drawn from engineering and science. (Prerequisites: MATH 133 and 200, STAT 254, and admission to the Faculty of Engineering)  
May-August (3-0-1)

## ENGR 395 (1) SEMINAR

The purpose of this course is to provide students with an opportunity to exercise their ability to present and to defend their thoughts on topics of

their own choice. Students will be encouraged to devote some of their discussions to such topics as continuing professional education, professional societies, organization of engineering employment, and professional ethics. The meetings will be moderated by a faculty member. (Prerequisite: Completion of terms 1A to 2B)

September-December (2-0)

#### ENGR 446 (1) TECHNICAL REPORT

All students in the B.Eng. programs must submit a technical report on entering their final term. This report is to be from 2,000 to 5,000 words in length and on a topic closely related to one or more projects undertaken during the last work term. The topic must be approved by each student's Cooperative Coordinator at least 3 months prior to submission, and the letter of approval must accompany the report. The report must represent a review of a current engineering problem or current engineering practice. The report must be suitably researched, documented, and illustrated. It must be typewritten on one side only of 8½ x 11" white paper of good quality and must be suitably bound. The original and one photocopy of the report must be submitted to the Cooperative Education Office by 4:00 p.m. on the third Monday after the beginning of the last term. (Prerequisites: 240, and completion of term 4A)

September-December

#### ENGR 447 (1½) SOCIAL ASPECTS OF ENGINEERING: I

This course introduces the student to the interaction between the person and technology. The psychological effects of technology on the person's behavior, values and well being will be considered, as will human efforts to adapt machines to individuals. The impact of technological development on the family, the community and the organization will be assessed. (Prerequisite: Completion of terms 1A to 3B or permission of the Faculty of Engineering)

May-August (3-0)

#### ENGR 497 (1½) SOCIAL ASPECTS OF ENGINEERING: II

This course introduces the student to the effects of technology on society. The ethical, environmental, economic and political issues raised by technological change will be emphasized. (Prerequisite: Completion of terms 1A to 3B or permission of the Faculty of Engineering)

January-April (3-0)

#### ENGR 498 (1½) ENGINEERING LAW

Sources and classification of law; professional engineering legislation, registration and discipline; introduction to tort law including negligence; introduction to contract law including employment law. Ethics in professional practice. (Prerequisite: Completion of terms 1A to 3B)

January-April (3-0)

### COMPUTER ENGINEERING

#### CENG 345 (1½) DISCRETE STRUCTURES

Set algebra; mappings and relations with applications in communications systems. Algebraic structures; semigroups and groups. Theory of undirected and directed graphs with applications in systems and circuit analysis. Boolean algebras, propositional logic, and introduction to the theory of automata with applications in digital design. (Prerequisites: MATH 101 and 133)

January-April (3-0)

#### CENG 390 (1½) DIGITAL DESIGN: I

Binary Boolean algebra and its application to switching circuits. Transistor gates and their practical limitations. Integrated circuit logic families, such as DTL, TTL, ECL, MOSL and CMOSL. Application of combinational MSI and LSI circuits to electronic systems and instrumentation. (Prerequisite: ELEC 330)

September-December (3-3)

#### CENG 440 (1½) DIGITAL DESIGN: II

Analysis, design, and practical limitations of flip flops. Characterization, analysis, design, and optimization of clock mode, pulse mode, and level mode sequential circuits. Practical limitations of sequential circuits and hazards. Design of registers, counters, and random access memories. Application of MSI and LSI sequential circuits to electronic systems and instrumentation. (Prerequisite: 390)

May-August (3-1½)

#### CENG 445 (1½) MICROPROCESSOR SYSTEMS

Introduction to microprocessor architecture. Instruction set, addressing mode, and programming. Memories, I/O systems, and interfacing. Developmental systems. Application to engineering systems. (Prerequisites: 440, which may be taken concurrently; C SC 230)

May-August (3-1½)

#### CENG 450 (1½) COMPUTER SYSTEMS AND ARCHITECTURE

Computer architectures and operating systems involving concurrency, parallel processing, real time processing, and computer communications. Topics covered include synchronization, deadlock, name management, resource allocation, pipelining, multiprocessors, packet switching networks, protocol design and verification, distributed systems. (Prerequisites: 445 and C SC 360)

January-April (3-3)

#### CENG 455 (1½) REAL TIME COMPUTER SYSTEMS

Application of microcomputers and minicomputers to real time systems like data acquisition and control systems. I/O devices and instrumentation for real time applications. Design and simulation of real time systems. Real time operating systems. (Prerequisites: 445, ELEC 360 and C SC 360)

January-April (3-1½)

#### CENG 485 (1½) PATTERN RECOGNITION

Parallel and sequential recognition methods. Bayesian decision procedures, perceptons, statistical and syntactic approaches, recognition grammars. Feature extraction and selection, scene analysis, and optical character recognition. (Prerequisite: C SC 325)

January-April (3-0)

#### CENG 490 (1½) ARTIFICIAL INTELLIGENCE

Philosophy of artificial intelligence. AI programs and languages, representations and descriptions, exploiting constraints. Rule based and heuristic systems. Applications to engineering. (Prerequisite: C SC 325)

January-April (3-0)

### ELECTRICAL ENGINEERING

#### ELEC 216 (1½) FUNDAMENTALS OF ELECTRICAL ENGINEERING

Electric charge, Coulomb's Law, electrostatic forces, electric field, Gauss's Law, electric potential, stored energy. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism and magnetic circuits. Time varying fields. Capacitance, resistance, inductance, and their characterization. (Prerequisite: MATH 200 which may be taken concurrently)

September-December (3-3-1)

This course is equivalent to Physics 216.

#### ELEC 220 (1½) ELECTRICAL PROPERTIES OF MATERIALS

Structure of crystals. Electrical, magnetic, dielectric and optical characteristics and their measurements. Energy levels, localized states and transport properties of solids. Device applications of metals, semimetals, semiconductors, semi-insulators and insulators. (Prerequisite: 216 which may be taken concurrently)

September-December (3-0)

#### ELEC 250 (1½) LINEAR CIRCUITS: I

Current, voltage, power and energy; resistance, inductance and capacitance; sources. Series and parallel circuits. Formulation of equilibrium equations using Kirchoff's voltage and current laws. Network theorems: superposition, reciprocity, Thevenin, Norton, maximum power transfer. Step response of simple RC, RL and RLC circuits. Sinusoidal steady state response of RLC circuits, power in ac circuits, frequency response, resonance. Coupled coils and transformers. (Prerequisites: 216 and MATH 201 which may be taken concurrently)

May-August (3-1½)

#### ELEC 260 (1½) SIGNAL ANALYSIS: I

Characteristics of continuous time signals and waveform calculations. The Fourier series and its application in the analysis of periodic signals. The impulse, unit step and other elementary functions. Resolution of signals into impulse and unit step functions. The Fourier transform and its application to special analysis. Functions of a complex variable and their derivatives. Analytic functions and Cauchy-Riemann equations. Rational, exponential, trigonometric, hyperbolic functions and the logarithm of a complex variable. Partial fractions. The Laplace transform and its application in the representation of signals. Interrelation between the Fourier and Laplace transforms. (Prerequisites: 216, and MATH 133 and 200)

May-August (3-0)

#### ELEC 300 (1½) LINEAR CIRCUITS: II

Controlled sources and ideal amplifiers. Analysis of passive and active circuits using the Laplace transform. Loop and node methods and matrix characterization of complex circuits. Application of signal flow graphs. Driving point and transfer functions. Stability of active circuits. Infinite gain controlled sources as circuit elements and their representation by means of nullators, norators, and nullors. Analysis of circuits containing nullors. Two port networks and their characterization in

terms of the h parameters and y parameters. Wave characterization and power transfer relations. Frequency response of active and passive circuits; use of Bode plots. Computer aided circuit analysis and design. (Prerequisites: 250 and 260) January-April (3-1½)

### **ELEC 310 (1½) SIGNAL ANALYSIS: II**

Discrete time and sampled data signals and their generation by means of the sampling process. The impulse, unit step, and other discrete time elementary functions. Resolution of discrete time signals into impulse and unit step functions. Complex integrals and Cauchy's integral theorem. Complex sequences and series. The Taylor and Laurent series. Integration by the method of residues. The z transform and its application in the representation of discrete time signals. Advanced properties and convergence of the Laplace and Fourier transforms. Interrelations among continuous time, sampled data, and discrete time signals. The sampling theorem. The discrete Fourier transform and its relation with the continuous time Fourier transform and the Fourier series. (Prerequisite: 260) January-April (3-0)

### **ELEC 320 (1½) ELECTRONIC DEVICES: I**

Crystal structure and valence model of pure and doped semiconductors. Mobility and electrical conductivity. Mode of operation, physical mechanisms and characteristics of pn junctions; junction capacitance; breakdown; varactor, Zener and tunnel diodes. Modes of operation, physical mechanisms, and characteristics of junction and metal oxide-silicon field effect transistors and bipolar transistors. (Prerequisite: 220) January-April (3-1½)

### **ELEC 330 (1½) ELECTRONIC CIRCUITS: I**

Modelling and application of diodes including Zener, varactor, and tunnel diodes; rectifiers, voltage regulators, and waveform shaping circuits. Biasing of unipolar and bipolar transistors. Small signal analysis and modelling of field effect and bipolar transistor amplifiers. Power and multistage amplifiers. Computer aided analysis and design of electronic circuits. (Prerequisites: 300 and 320 both of which may be taken concurrently) January-April (3-1½)

### **ELEC 340 (1½) ELECTROMAGNETIC FIELD THEORY**

Field concept, Maxwell's equations. Boundary conditions. Power and energy. Electrostatic field. Electrostatic potential. Concept of capacitance. Conformal mapping in electrostatics. Polarization. Concept of local field in matter. Magnetostatic field. Biot-Savart law. Scalar magnetic potential. Plane waves. Total internal reflection. Brewster angle. (Prerequisites: 216 and 260) January-April (3-0-1)

### **ELEC 350 (1½) COMMUNICATIONS THEORY AND SYSTEMS: I**

Principles of amplitude, frequency and phase modulation. Modulators, mixers and demodulators. Representative examples of complete transmission systems. Qualitative treatment of modulation systems in the presence of noise. (Prerequisites: 310 and 330) September-December (3-1½)

### **ELEC 360 (1½) CONTROL THEORY AND SYSTEMS: I**

Characterization of systems; linearity, time invariance, and causality. General feedback theory; time and frequency domain analysis of feedback control systems; Routh-Hurwitz and Nyquist stability criteria; root locus methods; modelling of dc servo; design of simple feedback systems; introduction to state space methods. (Prerequisites: 300 and 310) September-December (3-1½)

### **ELEC 370 (1½) ELECTROMECHANICAL ENERGY CONVERSION**

Faraday's law of electromagnetic induction, transformers and generators. Lorentz's force and Coulomb's force and their applications in industrial motors. Lumped parameter concepts of inductance and motional inductance. Energy and coenergy in the derivation of torques and forces. Structures and performance characteristics of dc, synchronous, and induction machines. (Prerequisites: 250 and ENGR 245) September-December (3-1½)

### **ELEC 380 (1½) ELECTRONIC CIRCUITS: II**

Operation, construction, imperfections and modelling of differential and operational amplifiers; frequency response and compensation. Application of operational amplifiers for the design of feedback amplifiers, logarithmic amplifiers, precision rectifiers, voltage regulators, etc. Design of analog to digital and digital to analog converters. Oscillator circuits. Computer aided analysis and design. (Prerequisite: 330) September-December (3-3)

### **ELEC 400 (1½) RANDOM SIGNALS**

Review of random variables, moments and characteristic functions;

random processes, noise model, stationarity, ergodicity, correlation and power spectrum, spectrum measurements; response of linear systems to random inputs, cross spectral densities, narrow band noise; introduction to discrete time and space processes, Markov chains and elementary queues. (Prerequisites: 310 and MAT11 254) May-August (3-0)

### **ELEC 404 (1½) MICROWAVE AND OPTICAL COMMUNICATIONS SYSTEMS: I**

Plane waves, surface waves, wave impedance, surface impedance. Two wire coaxial, and parallel plate transmission lines. Waveguide modes, cutoff frequency, dispersion, losses. Dielectric optical waveguides, surface waveguides microstrip. Principles of light transmission optics. Basic antenna theory, linear dipole, aperture, antennas, diffraction, linear arrays. (Prerequisites: 300, 310 and 340) May-August (3-1½)

### **ELEC 408 (1½) ANALOG FILTERS**

Design of stable gain amplifiers, negative impedance converters and inverters, gyrators, generalized impedance converters and frequency dependent negative resistance elements for active filter applications. Solution of the approximation problem; Butterworth, Chebyshev, and elliptic approximations. Introduction to the design of LC equally terminated filters. Low sensitivity, active filter structures. Study of filter sensitivity with respect to element variations. Tuning. Computer aided analysis and design. (Prerequisites: 310 and 380) May-August (3-0)

### **ELEC 410 (1½) POWER ELECTRONICS**

The application of electronics to energy conversion and control. Electrical thermal characteristics of power semiconductor devices: diodes, bipolar and field effect transistors, and thyristors. Magnetic circuits for energy conversion. Active and passive filtering techniques. Emphasis on device limitations, computer aided analysis and design and system control. Application samples including multipulse controlled rectifiers, high frequency induction heating, dc-dc conversion, cycloconverters, motor drives, and battery electronics. (Prerequisites: 370 and 380) May-August (3-1½)

### **ELEC 415 (1½) MICROELECTRONICS TECHNOLOGY**

Alloyed contacts, diffusion techniques, diffusion theory, four point probe, ion implantation, epitaxial growth, silicon dioxide formation, photolithography, window opening, selected metallization, diode and transistor fabrication, junction depth determination, junction capacitance for general profile, fabrication of monolithic integrated circuits, isolation, junction capacitors, diffused resistors, mask making, device mounting, thin film passive components, thick film components, integrated circuit layout, MOS gate voltage, MOS integrated circuits. (Prerequisite: 380) May-August (3-1½)

### **ELEC 425 (1½) ROBOTICS: I**

Structure and specification of robot manipulators; homogeneous transformations; kinematic equations and their solution; differential relationships, motion trajectories; dynamic models for robot manipulators. (Prerequisites: 360 and ENGR 245) May-August (3-0)

### **ELEC 430 (1½) COMPUTER AIDED DESIGN**

Basic elements of CAD and relevance to current industrial practice. Computational geometry for design and 3-D geometry. Methods for curve and surface fitting. Input and output devices for computer graphics, passive as well as active. Representation of physical surfaces and computer aided drafting. Graphical programming languages. Development of interactive 3-D computer graphics. (Prerequisites: ENGR 150, and MATH 133 and 200) May-August (3-1½)

### **ELEC 450 (1½) COMMUNICATION THEORY AND SYSTEMS: II**

Transmission and filtering of random signals, analysis of modulation systems, in particular pulse code modulation, phase shift keying, frequency shift keying, etc., introduction to noise analysis, information theory and coding. (Prerequisites: 350 and 400) January-April (3-1½)

### **ELEC 454 (1½) MICROWAVE AND OPTICAL COMMUNICATIONS SYSTEMS: II**

Circuit theory for waveguiding systems, waveguide discontinuities. Binomial and Chebyshev impedance transformer design. Electromagnetic resonators, the Fabry-Perot resonator. Periodic structures, microwave filters. Faraday rotation and ferrite devices. E.M. wave propagation in optically active media, electro-optic devices. Principles of microwave tubes. (Prerequisite: 404) January-April (3-1½)

### **ELEC 458 (1½) DIGITAL FILTERS**

Introduction of the digital filter as a discrete time system. Discrete time transfer function. Time domain and frequency domain analysis. Struc-

tures for recursive and nonrecursive digital filters. Application of digital filters for the processing of continuous time signals. Solution of the approximation problem in recursive and nonrecursive filters. Quantization effects. (Prerequisite: 408)  
January-April (3-0)

**ELEC 460 (1½) CONTROL THEORY AND SYSTEMS: II**

State space analysis and design of continuous time and discrete time systems. Controllability and observability; pole placement techniques. Luemberger observers. Linear quadratic optimal control. Introduction to nonlinear systems. Liapunov stability. (Prerequisite: 360)  
January-April (3-0)

**ELEC 465 (1½) DESIGN OF VLSI SYSTEMS**

A structured design methodology which enables a digital system designer to exploit the architectural possibilities of the silicon integrated circuit (IC) technology with only a relatively elementary knowledge of device physics or electronic circuit design. A large part of the course will be devoted to design projects leading to generated intermediate files for IC fabrication. (Prerequisites: 415, CENG 440 and C SC 230)  
January-April (3-3)

**ELEC 470 (1½) ELECTRONIC DEVICES: II**

Modes of operation, physical mechanisms, characteristics, and modeling of Schottky junctions, tunnel diodes, photovoltaic solar cells, Gunn diodes, microwave bipolar transistors, GaAs field effect transistors, and other modern semiconductor devices. (Prerequisite: 415)  
January-April (3-1½)

**ELEC 475 (1½) ROBOTICS: II**

Dynamic models of robot manipulators; position and speed control. Programming for real time computation and control. Simplification of dynamic models, trajectory generation. Programming languages for robot manipulators. Interaction with the environment using sensors. (Prerequisites: 425 and 460, which may be taken concurrently, and CENG 445)  
January-April (3-1½)

**ELEC 480 (1½) COMPUTER AIDED MANUFACTURE**

Review of common manufacturing processes and the organization of the manufacturing unit. Manufacturing processes aided by computers. Numerically controlled machine tools. Numerically controlled part programming. Machining of doubly curved surfaces. Computerized numerically controlled tools and adaptive control systems. Industrial robots. Application of CAD/CAM in engineering and medicine. (Prerequisites: 360 and 430, ENGR 245)  
January-April (3-1½)

**ELEC 499 (1½) TECHNICAL PROJECT**

The technical project provides an opportunity for each student to carry out a design project associated with one or more of the higher level courses, under the supervision of a faculty member. The nature of the project selected should be such as to require independent study of current technical literature. When feasible the design should be assessed in the laboratory. Each student is to present a complete report at the end of the term. (Prerequisite: The student must be registered in term 4A or 4B.)  
May-August. Also January-April (0-6)

# FACULTY OF FINE ARTS

Douglas G. Morton, R.C.A., Dean of the Faculty  
S. Anthony Welch, B.A. (Swarthmore), M.A., Ph.D. (Harvard), Associate Dean

The Faculty of Fine Arts comprises the Departments of Creative Writing, History in Art, Theatre, and Visual Arts and the School of Music, and offers courses leading to the degree of Bachelor of Arts, in Creative Writing, and History in Art; Bachelor of Music; Bachelor of Fine Arts, in Creative Writing, Theatre and Visual Arts.

Certain courses in the Faculty of Fine Arts carry unrestricted credit in the Faculty of Arts and Science, and other courses may be chosen in keeping with the free elective regulation of that Faculty.

Students in the Faculty of Education may register for credit in any course offered by the Faculty of Fine Arts, provided that space is available and that they have the prior approval of the Education Advising Centre.

Graduate work is offered in Music, History in Art, Theatre and Visual Arts. (See section of Calendar on Faculty of Graduate Studies for details of programs and degrees.)

## Cooperative Education Program

Please refer to page 27 of the Calendar for a general description of Cooperative Education.

In the Faculty of Fine Arts, a Cooperative Education program is offered by the Department of Creative Writing.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

Students may withdraw from the Cooperative Education Program at any time and remain enrolled in a degree program offered by the Department.

Details of the program in the Department of Creative Writing are outlined on page 180 of the Calendar.

## Qualifications for Admission

Applicants seeking admission to the Faculty of Fine Arts are governed by the regulations that appear on pages 7-11, except for the following alternative course requirements to take effect in 1986-87: successful completion of English 11, Social Studies 11, and three of the following: an approved fine arts 11 course, a language 11 course, a science 11 course, Algebra 11; applicants may include in their grade 12 courses an approved fine arts 12 course in place of one of the academic 12 courses listed on page 9, in section 1.(a)(ii).

See additional requirements for Creative Writing, Music, Theatre and Visual Arts in the chart on page 10 and in the departmental entries.

Because of limited space and resources in some programs, not all qualified candidates can be admitted; early application is therefore highly desirable.

Students from other faculties should note that enrollment in certain courses may be limited and preference given to students registered in the Faculty of Fine Arts. Consult the department or school for specific information.

## Second Bachelor's Degree

Students wishing to complete a second bachelor's degree should proceed as outlined on page 19.

## General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 14-19), apply to all students registered in the Faculty of Fine Arts. Special regulations are set out under the departmental entries.

## Academic Advice

Students entering the Faculty for the first time should consult departmental offices for advice about course planning. If possible, this should be done before registration.

All students in the Faculty of Fine Arts are required to complete a Record of Degree Program form in consultation with their department/school preferably near the beginning of their third year of studies. The purpose of this form is to ensure that proposed courses will meet the requirements for the degree program selected. A copy of this form is placed on file in the Records Office to be used as a record for graduating purposes.

All students registered in the Faculty of Fine Arts who intend eventually to enter the teaching profession should notice the admission requirements of the programs of the Faculty of Education. These requirements must be kept in mind in the choice of academic electives in all undergraduate degree programs.

Questions about academic planning in Fine Arts that do not relate to any specific departmental program can be referred to the Dean's Office in Room 192, MacLaurin Building.

## Degree Requirements in the Faculty of Fine Arts

Each candidate for a bachelor's degree is required:

- to have satisfied the University English requirement (see page 12);
- to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be University of Victoria courses;
- to include in these 60 units a minimum of 21 units of courses numbered at the 300 and 400 level; at least 18 of the 21 upper level units should normally be University of Victoria courses;
- to meet the specific program requirements prescribed by the Faculty for the student's declared degree program (see department/school for specifics).

## Interdepartmental Double Major

A student in one department in the Faculty of Fine Arts may concurrently satisfy the requirements of a program in a second department by completing the program requirements in the second area with the permission of both departments. Only one degree will be awarded. For example, a student majoring in History in Art may concurrently satisfy the requirements for the program in Visual Arts and thereby qualify for a B.A. with a Double Major in History in Art and Visual Arts. Conversely, a student majoring in Visual Arts may concurrently satisfy the requirements for the program in History in Art and thereby qualify for a B.F.A. with a Double Major in Visual Arts and History in Art. Students interested in taking a double major should consult the departments concerned.

## Interfaculty Double Honours, Major or General:

Students may arrange for an Interfaculty Double Honours, Major or General program through the Arts and Science Advising Centre. Such programs involve satisfying the Honours, Major, or General requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the students and by representatives of the academic units involved. Students on the interfaculty program will be subject to the regulations of the Faculty in which they are registered.

Only one B.A. degree with a Double Major, a Double Honours or a Joint Major/Honours will be awarded on the recommendation of the Faculty in which the student is registered.

## Credit for Studies Taken at Other Postsecondary Institutions

Students who plan to undertake work at other institutions must receive prior approval from the Dean if they wish such courses to be credited towards a degree program in the Faculty of Fine Arts. This applies particularly to courses at the 300 and 400 level and to courses which are included in the last 15 units of a degree program. Upon successful completion of such work, the student must request the Registrar of the other institution to send an official transcript of record to Records Services of the University of Victoria.

Students authorized to attend another institution who accept a degree from that institution abrogate their right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree.

## Pre-Architecture Planning

Since Canadian Architectural programs vary widely in their prerequisites for admission, undergraduates interested in future careers in architecture, urban planning, or landscape architecture are urged to write for this essential information to the School of Architecture they are interested in entering.

Generally, all programs emphasize the need for balance and diversification of academic background and for competence in English, Mathematics, and Physics; some programs require a portfolio of graphic work to demonstrate ability.

For advice on course selection, those students planning an architectural degree should consult the Associate Dean, Faculty of Fine Arts, or the Advising Centre, Faculty of Arts and Science.

## INTERDISCIPLINARY COURSES

### FA 290 (1½ or 3) FINE ARTS STUDIES OFF CAMPUS

An intensive introductory course in the artistic activities or heritage of one city or region. To be offered in the appropriate location during the Summer Studies period; this course will be sponsored by one or more academic units in the Faculty of Fine Arts and will be under the supervision of a faculty member from the Department/School or Departments concerned. The course may be taken for credit more than once as the content and locale will vary from year to year. (Prerequisite: Permission of the Course Director)

### FA 300 (3) INTERDISCIPLINARY SEMINAR

A seminar and studio course emphasizing an interdisciplinary approach to contemporary artistic concerns. In each year, course work will focus on a particular issue which can be explored from the distinctive points of view of the various artistic disciplines and can be used as the theme for participatory creative projects. Issues and themes may include the following: performance as interdisciplinary focus; technological explorations in contemporary art; art and the environment; the arts, popular culture, and mass media; chance procedures – aleatory method in creative disciplines. (Prerequisite: At least second year standing in the Faculty of Fine Arts) (3-0; 3-0)

### FA 315 (1½) CANADIAN CULTURAL POLICY

This introductory course will explore the relationship between Canadian

cultural organizations, government agencies, and those involved as practitioners or administrators of the arts. Topics common to the literary, performing, and visual arts in the areas of planning, policy, management, finance, and marketing will be examined. (As the emphasis of this course may vary from time to time, it may be taken for credit more than once.) (Prerequisite: Permission of the Dean or his designate) (3-0)

### FA 360 (1½ or 3) INTRODUCTION TO ISSUES IN ARTS CRITICISM

An introduction to selected methods and major issues in the history and practice of criticism focusing on one or more media, such as architecture, dance, film, music, theatre, and visual arts. Topics examined may include the historic and modern aims of the critic, social roles of the critic, different critical methodologies, problems in critical interpretation, and techniques of critical writing. Depending on content, this course may be taken more than once. (Prerequisite: Permission of the Faculty) (3-0) or (3-0; 3-0)

### FA 390 (1½ or 3) FINE ARTS STUDIES OFF CAMPUS

An intensive advanced course in the artistic activities or heritage of one city or region. To be offered in the appropriate location during the Summer Studies period; this course will be sponsored by one or more academic units in the Faculty of Fine Arts and will be under the supervision of a faculty member from the Department/School or Departments concerned. The course may be taken for credit more than once as the content and locale will vary from year to year. (Prerequisite: To be specified as required from year to year or permission of the Course Director)

## DEPARTMENT OF CREATIVE WRITING

William D. Valgardson, B.A., B.Ed. (Man.), M.F.A. (Iowa), Professor and Chairman of the Department

W. David Godfrey, B.C. (Iowa), M.A. (Stanford), Ph.D. (Iowa), Professor

Robin Skelton, B.A., M.A. (Leeds), F.R.S.L., Professor

Jack Hodgins, B.Ed. (Brit. Col.), Visiting Associate Professor (1983-85)

Lawrence W. Russell, B.A. (U. of Vic.), M.A. (Calif.), Associate Professor

Derk Wynand, B.A., M.A. (Brit. Col.), Associate Professor

J. Leonard Angel, B.A. (McGill), M.A., M.A., Ph.D. (Brit. Col.), Visiting Lecturer (1984-85)

### GRADUATE PROGRAM

At this time, the Department does not offer a graduate program.

### GENERAL AND MAJOR PROGRAMS

Students wishing to take a General program in Creative Writing will be required to take Creative Writing 100, English 121/122 or 115/116, and 3 units from Creative Writing 201, 202, 203, and 9 units of Creative Writing numbered 300 or above and including at least 3 units from 303A, 303B, 304A, 304B, 305A, 305B, 315A or 315B. The degree awarded will be the B.A. of the Faculty of Fine Arts.

Students wishing to take a Major Program in Creative Writing will be required to take Creative Writing 100, English 121/122 or 115/116, and 6 units from Creative Writing 200, 201, 202, 203, 205, 212, and 15 units of Creative Writing courses numbered 300 or above, including at least 3 units from 303A, 303B, 304A, 304B, 305A, 305B, and at least 3 units of workshops numbered at the 400 level. If at least 9 units of electives are chosen from courses offered by other Departments within the Faculty of Fine Arts, the degree awarded may be either the B.F.A. or the B.A. of the Faculty of Fine Arts. If fewer than nine units of electives from the Faculty of Fine Arts are chosen, then the degree awarded will be the B.A. of the Faculty of Fine Arts.

#### Interfaculty Double Major

A Fine Arts student majoring in Creative Writing may concurrently satisfy the requirements for the Major program of a Department in the Faculty of Arts and Science. Conversely, a student pursuing a Major program for the B.A. degree within the Faculty of Arts and Science may concurrently satisfy the requirements for the Major program of the Department of Creative Writing as approved for the Faculty of Fine Arts. Only one B.A. degree with a Double Major will be awarded on the recommendation of the Faculty in which the student is registered.

### ADMISSION REQUIREMENTS AND ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

#### 1. Applicants from Secondary School

Students must apply to the Admissions Office for acceptance to the University. Entrance to Creative Writing 100 will be restricted. In normal circumstances, Creative Writing 100 is prerequisite to all Creative Writing workshops. Students wishing to take the journalism course offered by the Department should pay special attention to the prerequisites for Creative Writing 205.

#### 2. Applicants from other Universities and Colleges

Students who satisfy the Department's standard by either the production of written work or the passing of courses in Creative Writing at other institutions, may be given permission to enter a Creative Writing Major program at an appropriate level.

#### 3. Applicants with Existing Degrees

Each year, a limited number of students are permitted to enter the program to work towards a second degree, B.F.A. or B.A. A minimum of two years of further study is required. Applicants who cannot produce a manuscript of sufficient quality to allow them entry into a third year workshop may require three or four years to complete their program. (See page 19, A Second Bachelor's Degree.)

### ADMISSION TO SPECIFIC COURSES

Although the programs offered by the Creative Writing Department are intended, in the main, to serve those students who have shown some ability as writers, a number of lecture courses are also included which may be of interest and value to non-Creative Writing students. The only entrance restriction to these third lecture courses (307, 308, 309, 310, 311, 312, 313 and 314) is second year standing.

Entrance to all other courses in the Department is likely to be restricted. Permission to register will be given by the Department in writing and with specific deadlines; students who have not registered by the indicated deadline will have to reapply for permission to register.

Only students majoring in Creative Writing or those whose declared 'first area of study' is Creative Writing will be allowed to register during early registration. All others must wait until September.

#### Second-year workshops:

Creative Writing 201, 202, 203. Entrance to these courses will be subject to students' performance in Creative Writing 100 and recommendation of the Department.

**Creative Writing 205:**

Written application must be made by March 1 and must include a resume, portfolio and a current transcript. Decisions will be transmitted, in writing, by June 15 and will be affected by overall grade point average as well as by the submitted material. An interview will also be required.

**Third and fourth year workshops and workshop seminars:**

Creative Writing 303, 304, 305, 306, 315, 317, 401, 402, 403, 415. Entrance to third and fourth year workshops will be limited, if necessary, to those who have performed most successfully in previous workshops.

Students not currently registered must submit a portfolio of work and a current transcript by June 1 for entrance to first term courses in September and by October 31 for entrance to second term courses in January.

No student will be permitted to take more than 6 units of workshops (poetry, fiction, drama) in any given year. Special and Directed Studies courses are designed for those teaching situations which cannot be covered in regular workshops. No writing projects which might be covered in a regular workshop will be permitted within such special courses.

Subject to the regulations relating to prerequisites, courses in the Creative Writing Program are open to any student who satisfies the Department as to ability, regardless of the faculty in which the student is registered. Preference, however, will be given to students majoring in Creative Writing and those whose 'first area of study' is Creative Writing.

## CREATIVE WRITING COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Fine Arts is described on page 178. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 27.

The Creative Writing Cooperative Program is open to students who are undertaking a program that is acceptable to the Department of Creative Writing. In general, an acceptable program will be a Major in Creative Writing or a Major or Honours program in another discipline which will include at least nine units of upper level courses in Creative Writing as electives. Six of these nine units must be in sequential workshops. In exceptional circumstances, students enrolled in a General program in Creative Writing may be considered for entry into the Coop program.

Before the first work term, students must have completed Creative Writing 205 with a grade of B+ or higher. Students are required to maintain a B average and to complete satisfactorily four work terms.

The work terms are arranged by the Department of Creative Writing and are designed to combine practical work experience with the theoretical content of course study, with evaluation by both the employer and a faculty supervisor.

Students in the Cooperative Program may withdraw from the program at any time in order to graduate in a regular program.

Students in Cooperative Education must be registered in at least five courses during each study term.

Students are advised that a Cooperative Education fee will be charged.

Further information concerning the Creative Writing Cooperative Education program may be obtained from the Department.

## COURSES

### FIRST YEAR

**\*C W 100 (3) INTRODUCTION TO CREATIVE WRITING**

This course consists of a one hour weekly lecture and a two hour weekly workshop. The lectures will present a nonhistorical survey of some of the basic structures in poetry, drama and fiction. The workshop will involve the students in the writing and criticism of compositions in all three genres. Normally, each workshop will contain not more than 15 students. (Prerequisite: Permission of the Department. corequisite: 3 units of 100 level English) Texts: To be announced September-April (1-2; 1-2)

### SECOND YEAR

**\*C W 200 (3) THE THEORY AND PRACTICE OF LITERARY CREATION**

This is a lecture course surveying the nature of the creative process and considering the many theories about it. Use will be made of authors' worksheets, both published and in the Rare Book Room of the McPherson Library. Suggested reading: Brewster Chiselin: *The Creative Process*; Anthony Ostroff: *The Contemporary Poet as Artist and Critic*; Rosemary Harding: *The Anatomy of Inspiration*; Joseph Langford: *Poet's Choice* P. Webb September-April (3-0; 3-0)

**\*C W 201 (3) POETRY WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of poetry. (Prerequisites: 100 or equivalent and permission of the Department)

R. Skelton, D. Wynand

September-April (0-2; 0-2)

**\*C W 202 (3) FICTION WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of fiction. (Prerequisites: 100 or equivalent and permission of the Department)

September-April (0-2; 0-2)

**\*C W 203 (3) DRAMA WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film, and television. (Prerequisites: 100 or equivalent and permission of the Department)

September-April (0-2; 0-2)

**\*C W 205 (3) INTRODUCTION TO JOURNALISM**

This course deals with the methods of gathering news stories and of organizing the material for writing. The writing portion of the course covers the principles of the major varieties of newspaper and magazine writing. The mechanical and editorial aspects of newspaper production as they relate to the handling of news copy, and a historical, political and economic introduction to Canadian newspapers, magazines, journalists, and owners, will be covered through lectures. (Not open to students with credit for journalism in 404) (Prerequisites: 100; ENGL 121/122; POL1 100; HIST 230; and 3 units from: PHIL 201/203 and 100 level computer science and permission of the Department)

B. Allington

September-April (0-3; 0-3)

**\*C W 212 (3) MULTIMEDIA**

An introduction to the aesthetics and techniques of film, video and taped drama. Special attention will be given to the origins, and the creative applications of the various media forms, including print, and to the mechanics and technology of sound and film. Each student will be expected to complete a creative project. Work of such writers and directors as Harold Pinter, Orson Welles, Billy Wilder, Antonioni will be studied as well as recent Canadian work by Paul Almond, David Rimmer, Image Bank and others. (Prerequisites: 100 or equivalent and permission of the Department)

(Not offered)

September-April (0-2; 0-2)

### THIRD YEAR

**\*C W 303A (formerly half of 303) (1½) POETRY WORKSHOP: I**

(Prerequisites: 201 or equivalent and permission of the Department)

R. Skelton

September-December. Also January-April (0-3)

**\*C W 303B (formerly half of 303) (1½) POETRY WORKSHOP: II**

(Prerequisites: 303A or equivalent and permission of the Department)

R. Skelton

September-December. Also January-April (0-3)

**\*C W 304A (formerly half of 304) (1½) FICTION WORKSHOP: I**

(Prerequisites: 202 or equivalent and permission of the Department)

September-December. Also January-April (0-3)

**\*C W 304B (formerly half of 304) (1½) FICTION WORKSHOP: II**

(Prerequisites: 304A or equivalent and permission of the Department)

September-December. Also January-April (0-3)

**\*C W 305A (formerly half of 305) (1½) DRAMA WORKSHOP: I**

A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (Prerequisites: 203 or equivalent and permission of the Department)

L.W. Russell

September-December. Also January-April (0-3)

**\*C W 305B (formerly half of 305) (1½) DRAMA WORKSHOP: II**

A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (Prerequisites: 305A or equivalent and permission of the Department)

L.W. Russell

September-December. Also January-April (0-3)

**\*C W 306A (formerly half of 306) (1½) INTRODUCTION TO PUBLISHING PROCEDURES**

This workshop seminar will instruct students in editorial skills which may be of use to them in either an academic or professional career. Matters dealt with will include copy editing, indexing, editing of periodicals and the basic preparation of texts and artwork for the printer. Those aspects of publishing practices determined by the technology of the printing press and by modern typesetting methods will be stressed.

(Prerequisite: Permission of the Department)  
R. Skelton September-December (2-1)

**\*C W 306B (formerly half of 306) (1½) SEMINAR IN PUBLISHING PROCEDURES**

This workshop seminar will instruct students in editorial skills which may be of use to them in a professional or academic career. Matters dealt with will include the compiling of anthologies and symposia, the collating of texts, the editing of letters and archival materials, the selection of illustrations, the arranging of appendices and footnotes and the marketing process for books and magazines in Canada. Those aspects of publishing practices affected and soon to be affected by computerization will be covered. (Prerequisites: 306A and permission of the Department) Text: Audley, *Canada's Cultural Industries*  
W.D. Godfrey January-April (2-1)

**\*C W 307 (1½) BASIC FORMS AND TECHNIQUES IN POETRY**

A lecture course surveying the structural composition and the functions of techniques in a representative group of poems. Aspects of poetics discussed will include prosody, diction, imagery, abstract form and sound patterns. (Prerequisite: Second year standing)  
(Not offered) September-December (3-0)

**\*C W 308 (1½) ADVANCED FORMS AND TECHNIQUES IN POETRY**

A lecture course surveying advanced techniques and sophisticated formal structures in poetry. Discussed will be such topics as the vilanelle, sestina, canzone, ballade, rondeau, Projective Verse and Composition by Field. (Prerequisite: 307)  
(Not offered) January-April (3-0)

**\*C W 309 (1½) BASIC FORMS AND TECHNIQUES IN NARRATIVE**

A lecture course surveying the structural composition and the function of techniques in a representative group of narrative prose works. Aspects of narrative discussed will include: theme, point of view, dialogue, scenic structure, role of narrator, metaphor, diction, plot and dialogue. (Prerequisite: Second year standing)  
(Not offered) September-December (3-0)

**\*C W 310 (1½) ADVANCED FORMS AND TECHNIQUES IN NARRATIVE**

This seminar will examine advanced and unusual forms and techniques in narrative. (Prerequisite: 309) January-April (3-0)

**\*C W 311 (1½) STRUCTURE IN STAGE DRAMA**

A lecture course surveying the structural characteristics of stage drama. (Prerequisite: Second year standing) September-December (3-0)

**\*C W 312 (1½) STRUCTURE IN CINEMA AND TELEVISION DRAMA**

A lecture course surveying the structural characteristics of screen drama, making use of published film and television plays, and of actual films. (Prerequisite: Second year standing) January-April (3-0)

**\*C W 313 (1½) RECURRENT THEMES IN LITERATURE**

A lecture course surveying recurrent themes in English Literature and in other literatures in translation. (Prerequisite: Second year standing)  
R. Skelton September-December (3-0)

**\*C W 314 (1½) CHANGING PERSPECTIVES IN LITERATURE**

A lecture course surveying the different ways in which writers have tackled similar subject matter, taking its material from English literature and other literature in translation. (Prerequisite: Second year standing)  
R. Skelton January-April (3-0)

**\*C W 315A (formerly half of 315) (1½) SEMINAR IN JOURNALISM**

After a brief refresher program in general news reporting, students will be introduced to more specialized aspects of news reporting, including municipal affairs, cultural events, court and business reporting. Students will be encouraged to initiate investigative projects and to generate their own story and feature ideas. Emphasis will be placed on written assignments, awareness of sources and basic background, and the economics and history of newspapers and magazines in Canada. (Prerequisites: 205, and permission of the Department. Corequisite: 306A)  
S. Tafler September-December (0-3)

**\*C W 315B (formerly half of 315) (1½) ADVANCED JOURNALISM WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of full length feature articles. (Prerequisite: Permission of the Department) January-April (0-3)

**\*C W 317 (1½) THE MEDIUM OF PRINT**

This workshop seminar is designed to make writing and journalism students thoroughly familiar with the medium of print; typesetting, design, layout, and binding. Students will be introduced to the major traditional lead fonts, mechanistic methods of typesetting, and the contemporary electronic methods of typesetting and layout. Design and layout will be covered from an aesthetic and practical point of view, with sufficient introduction to modern printing methods (offset, sheet feed and web) to allow the students to see some of the mechanical restrictions on design and layout. The use of photographs and the preparation of material for four colour work will also be covered. Texts will deal with both the history of this area and current innovations. (Prerequisite: 306A or one of 201, 202, 203, 205, 212)  
J. Bennett September-December. Also January-April (0-3)

**\*C W 390 (3) DIRECTED STUDIES IN CREATIVE WRITING**

Under the supervision of a staff member and with the approval of the Chairman of the Department. (Prerequisites: 6 units in Creative Writing and permission of the instructor)

**\*C W 391 (1½) DIRECTED STUDIES IN CREATIVE WRITING**

Under the supervision of a faculty member and with the approval of the Chairman of the Department. (Prerequisites: 6 units in Creative writing and the permission of the instructor)

**FOURTH YEAR**

**\*C W 401A (formerly half of 401) (1½) ADVANCED POETRY WORKSHOP: I**

(Prerequisites: 303A and 303B or equivalent and permission of the Department)  
D. Wynand September-December. Also January-April (0-3)

**\*C W 401B (formerly half of 401) (1½) ADVANCED POETRY WORKSHOP: II**

(Prerequisites: 401A or equivalent and permission of the Department)  
D. Wynand September-December. Also January-April (0-3)

**\*C W 402A (formerly half of 402) (1½) ADVANCED FICTION WORKSHOP: I**

(Prerequisites: 304A and 304B or equivalent and permission of the Department)  
W.D. Godfrey September-December. Also January-April (0-3)

**\*C W 402B (formerly half of 402) (1½) ADVANCED FICTION WORKSHOP: II**

(Prerequisites: 402A or equivalent and permission of the Department)  
W.D. Godfrey September-December. Also January-April (0-3)

**\*C W 403A (formerly half of 403) (1½) ADVANCED DRAMA WORKSHOP: I**

A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (Prerequisites: 305A and 305B or equivalent and permission of the Department)  
L.W. Russell September-December. Also January-April (0-3)

**\*C W 403B (formerly half of 403) (1½) ADVANCED DRAMA WORKSHOP: II**

A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (Prerequisite: 403A or equivalent and permission of the Department)  
L.W. Russell September-December. Also January-April (0-3)

**\*C W 404A (formerly half of 404) (1½) SPECIAL STUDIES SEMINAR**

This seminar exists for students who wish to specialize in fields outside the four main categories of Poetry, Fiction, Drama and Print Media. It will cater to students working in such areas as photojournalism, multimedia, and translation. It will be taught on a tutorial basis. (Prerequisites: 6 units of Creative Writing and permission of the Department) September-December (0-3)

**\*C W 404B (formerly half of 404) (1½) SPECIAL STUDIES SEMINAR**

This seminar exists for students who wish to specialize in fields outside the four main categories of Poetry, Fiction, Drama and Print Media. It will cater to students working in such areas as photojournalism, multimedia, and translation. It will be taught on a tutorial basis. (Prerequisites: 6 units of Creative Writing and permission of the Department) January-April (0-3)

**NOTE:** Special Studies Seminar 404A and 404B may, with the permission of the Department, be taken for credit more than once. Maximum allowed, six units.

**\*C W 405 (1½) INNOVATIONS IN 20TH CENTURY POETRY**

A lecture course surveying key works in 20th century poetry and discussing experimental writing. The material discussed will be taken from the literature of a number of countries. (Prerequisite: Third year standing) (Not offered) (3-0)

**\*C W 406 (1½) INNOVATIONS IN 20TH CENTURY FICTION AND DRAMA**

A lecture course surveying key works in 20th century fiction and drama and discussing experimental writing. The material discussed will be taken from the literature of a number of countries. (Prerequisite: Third year standing) (Not offered) (3-0)

**\*C W 415 (1½) BOOK AND MAGAZINE PUBLISHING SEMINAR**

An introduction to the financial, structural, marketing, planning and

management aspects of book and magazine publishing as they affect the writer and editor. Emphasis will be on the case study method, with due regard to the history of individuals, companies and organizations in Canada, especially in British Columbia. (Prerequisite: 205 or 3 units from 306A, 306B, 315A, 315B) (Not offered) (0-3)

**\*C W 490 (3) DIRECTED STUDIES IN CREATIVE WRITING**

Under the supervision of a staff member and with the approval of the Chairman of the Department. (Prerequisite: 9 units in Creative Writing and permission of the instructor)

**\*C W 491 (1½) DIRECTED STUDIES IN CREATIVE WRITING**

Under the supervision of a faculty member and with the approval of the Chairman of the Department. (Prerequisite: 9 units in Creative Writing and the permission of the instructor)

\* Approved for elective credit in the Faculty of Arts and Science

## DEPARTMENT OF HISTORY IN ART

Charles R. Wicke, B.A. (Virginia), M.A. (Mexico City Coll.), Ph.D. (Ariz.), Professor (Pre-Columbian History). Chairman of the Department

Alan Gowans, M.A. (Tor.), M.F.A., Ph.D. (Princeton), Professor (Architectural History)

Siri Gunasinghe, B.A. (Ceylon), D.U. (Paris), Professor (Buddhist and Hindu Art History)

Jan Hulsker, Ph.D. (Leiden), Part time Adjunct Professor (1984-85)  
S. Anthony Welch, B.A. (Swarthmore), M.A., Ph.D. (Harvard), Professor (Islamic Art History)

John L. Osborne, B.A. (Carleton), M.A. (Toronto), Ph.D. (Courtauld Inst., London), Assistant Professor

Judith Patt, B.A., B.Arch. (Stanford), M.A., Ph.D. (Calif., Berkeley), Assistant Professor

Martin J. Segger, B.A., Dip.Ed. (U. of Vic.), M.Phil. (Warburg, London), Adjunct Assistant Professor (1984-85)

Elizabeth Tumasonis, B.A. (College of William and Mary), M.A. (N.Y.U.), Ph.D. (Calif., Berkeley), Assistant Professor

### GRADUATE PROGRAM

For information on the studies leading to the M.A. Degree, see page 211; for graduate courses, see page 186.

### B.A. DEGREE PROGRAMS

#### B.A. Major Program in History in Art

The history of art is a specialized branch of historical study, differing from history proper in that, instead of relying primarily on the interpretation of written documents, it interprets architecture, painting, furniture, sculpture and other arts as evidence of how past generations lived and thought. It follows that history in art is at once a specialized discipline, demanding particular knowledge about historical art as well as ability to read its "language," and the broadest of all humanistic studies; full interpretation of historic art requires study not only of cognate arts such as literature and music and drama, but also of many related disciplines ranging from social sciences to theology and aesthetics. No undergraduate program could hope to offer an entirely adequate background in all these areas, and students should understand that the B.A. degree in History in Art represents only a sound foundation for further growth toward fuller awareness and deeper understanding of history as revealed in art, towards that "wisdom" which, as T.S. Eliot once declared, "educational institutions cannot teach because it cannot be learnt in the time or wholly in such surroundings, but which they can teach us to desire, which they can teach us how to go about acquiring." Fortunately, because art and architecture in some form surround everyone everywhere, the learning process can and should proceed through life for graduates in this field as in no other, whether or not they go on to formal graduate studies.

Within these limitations, however, the Department's program of study is intended to make this foundation as broad as feasible, its wide range of

electives providing at least an opportunity to sample the scope of possibilities within the discipline.

To graduate as a B.A. majoring in History in Art, students are required to have, in addition to the graduation requirements shown on page 18, at least 21 units in History in Art courses of which at least 15 must be at the 300 or 400 level. These 15 units must include 3 units in each of the three following areas of study: 1) Classical, European; 2) Islamic, Asian; 3) Art of the Americas, Modern art and architecture. The department recommends that Major students acquire a reading knowledge of a language other than their own.

#### Academic Art History and Museum Studies

Beginning with the third year, two areas of emphasis are possible within the program. Students may either elect to pursue broad history in art studies, with a view to possible graduate work in the discipline, or elect a narrower emphasis with a view to work in museums, art galleries, heritage societies, and historic sites: in short, the broad area known today as cultural conservation. These programs are not mutually exclusive. Both provide an adequate background for either graduate or museum work, but the knowledge of conservation and museum display techniques provided by one would obviously be more helpful in museum work than in the ordinary graduate school, and vice versa, for the introduction to scholarly research techniques provided by the other.

An important resource for the History in Art program is the Maltwood Art Museum and Gallery located at the University of Victoria. The Museum administers the Maltwood Collection (an international collection of decorative arts including special emphasis on the Arts and Crafts movement from William Morris to the 1920s) and the University Collection (an extensive collection of western Canadian contemporary art in all media). The specialized museological library, study gallery, and varied exhibition programs give students a chance to work directly with materials and have firsthand experience in the operations of a University Museum.

#### B.A. Honours Program in History in Art

The honours program provides the possibility for more intensive study in the field of History in Art, and is intended for those who wish to continue on to graduate studies in History in Art or related professional disciplines.

Students may apply to enter the honours program after the completion of a minimum of nine units of course work in History in Art with a G.P.A. in these courses of 5.00(B) or better. Normally this would be done at the end of the second year. To graduate with a B.A. Honours in History in Art a minimum of 30 units of credit in the Department will be required (out of a total degree program of 60 units). The requirements of the third and fourth years of study are as follows:

*Third Year* - 15 units to be chosen as follows:

- Three units to be selected from the field of European or Egyptian art before the modern period: 316, 317, 321, 323, 326, 328, 341, 342, 355.
- Three units to be selected from the field of Asian or Islamic art: 331, 334, 335, 351, 353, 356, 371, 372, 373, 374.

- (c) Three units to be chosen from the field of modern art or the art of the Americas: 362, 368, 375, 379, 380, 382.
- (d) Six units of approved electives, to be chosen in consultation with the Honours Adviser, of which a minimum of 3 units must be taken outside the Department.

*Fourth Year* - 15 units to be chosen as follows:

- (a) 499 (Honours Seminar).
- (b) Nine units of History in Art at the 300 or 400 level, to be chosen in consultation with the Honours Adviser. A minimum of 3 units must be taken in a nonwestern subject.
- (c) Three units of approved electives.

*Language requirement:* Before graduation each student will be required to demonstrate a reading knowledge of a language other than English appropriate to the area of special interest. This requirement may be satisfied either by completing six units of study in a language taught at the University or by successfully completing a language examination.

*Standing at graduation:* Both first and second class honours degrees are awarded. A First Class honours degree requires a graduating average of 6.50 or higher, as well as an average of 6.50 or higher in all courses taken in the Department at the 300 and 400 level. A Second Class honours degree requires a graduating average in the 3.50-6.49 range, as well as an average of 3.50 or higher in all courses taken in the Department at the 300 and 400 level. Third year students whose performance in the honours program falls below a grade point average of 3.50 will be required to transfer to the major program at the beginning of their fourth year. Fourth year students whose graduating average, or whose average in courses taken in the Department at the 300 and 400 level, is below the standard for a Second Class honours degree, but who otherwise meet the University requirements for graduation, will receive a B.A. with a Major in History in Art.

#### Diploma Program in Cultural Conservation

The Diploma Program in Cultural Conservation is a post degree program offered by the Department of History in Art. The Program serves those who are currently employed professionally in museums, art galleries, historic sites, archives, building conservation, and related settings.

The curriculum of the Diploma Program in Cultural Conservation features two areas of specialization: Museum Studies and Architectural Conservation. However, a candidate may register for courses in both areas in order to obtain credit towards the Diploma.

Through continuing education offerings, candidates may enroll in the Diploma Program for part time study. The courses are offered at the University of Victoria. The two Core courses are normally offered in alternate years as immersion courses during Summer Studies, or as regular courses during the Winter Session. The Special Topics courses are normally offered as immersion courses of two weeks duration periodically throughout the year.

#### *Academic Regulations:*

Applicants must have completed a University of Victoria Bachelor's degree or its equivalent.

The program may be completed in a minimum of one calendar year. The normal period of completion is two to three years of part time study. The program must be completed within five years.

Program: (18 units)

- (a) Core courses: 486 (3), 487 (3).
- (b) Special Topics: Nine units from 488A (1½), 488B (1½), 488C (1½), 488D (1½), 488E (1½), 488F (1½), 489A (1½), 489B (1½), 489C (1½), 489D (1½).
- (c) Directed Studies: History in Art 490 (3); or 3 units from any History in Art course numbered 300 or above.

Applicants who have received credit for any of these courses (or their equivalents) previously will be allowed to substitute up to six units of courses recommended by the Cultural Conservation Academic Advisory Committee.

Students may apply to obtain up to six units of credit in advanced standing for equivalent courses or certified training.

Students enrolled in the Diploma in Cultural Conservation may not normally apply credit for any course towards a degree program, e.g., B.A., B.F.A., M.A. Other students may register in individual courses in the Diploma Program as enrollment allows.

Please direct all inquiries to:

The Coordinator

Diploma Program in Cultural Conservation

Division of University Extension

University of Victoria

## UNDERGRADUATE COURSES

Students should consult the Department concerning courses offered in any particular year.

#### \*H A 120 (3) INTRODUCTION TO WORLD HISTORY IN ART

An introductory survey of the visual remains of the world's principal civilizations from prehistory to the present day. (Preference in registration given to first and second year students) September-April (2-0-1; 2-0-1)

#### \*H A 221 (1½, formerly 3) THE CHRISTIAN TRADITION IN WESTERN ART

An introduction to the history of Christianity in western art from the catacombs through to the present day. A selected group of major artistic and architectural monuments will be examined, with an emphasis placed on the study of Christian iconography, the continuity of imagery through a variety of historic periods, and the relationship between art and theology. (3-0)

#### \*H A 222 (1½) THE CLASSICAL TRADITION IN WESTERN ART

An introduction to the influence of Greco-Roman artistic traditions on subsequent periods of European civilization. The classical inheritance in terms of both style and iconography will be examined in a variety of selected monuments from the Middle Ages through to the 20th century. (3-0)

#### H A 231 (3) THE GREAT CULTURES OF ASIA

A survey of Asian art and architecture from 3500 B.C. to the 20th century from the Mediterranean to the Pacific. The course has several particular emphases: the major Asian religions and their arts; secular patronage by the ruling classes; the function of the arts in their societies; and the cultural interconnections between civilizations.

September-April (3-0; 3-0)

#### \*H A 260 (3) PAINTING AND SCULPTURE IN EUROPE SINCE 1750

A general introduction to European painting and sculpture from 1750 to the present day including a brief survey of related developments in North America since 1945. The course will survey such movements as Neoclassicism, Romanticism, Realism, Impressionism, Cubism, Fauvism, Expressionism, Constructivism, and Surrealism. Lectures combine formal and contextual analysis, with emphasis on cultural context.

September-April (3-0; 3-0)

#### H A 291 (1½ or 3) HISTORY OF THE MODERN WORLD IN POPULAR/COMMERCIAL ARTS

How such Popular/Commercial arts as photography, illustration, comics, animated cartoons, television, packaging, advertising, commercial design, posters and Popular/Commercial architecture, have functioned as agents to shape society and culture since ca. 1750.

September-December (3-0 or 3-0; 3-0)

#### H A 310 (ART 310) (1½ or 3) MEDIA AND METHODS

An examination of the techniques employed by artists throughout history. Areas of special emphasis may include architecture, drawing, painting, photography, printmaking, sculpture, and the various media used in the decorative arts, in western and nonwestern cultures. Historical, geographical, social and economic factors in the development of art technology are considered, together with the interrelation of ideas with material and techniques. Each course will consist of a series of lectures, demonstrations, museum and gallery visits as appropriate. Period and area of emphasis at the discretion of the instructor. (As the emphasis may vary from time to time, the course may be taken for credit more than once, with permission of the Department.) (Prerequisite: 120 or permission of the Department) (3-0) or (3-0; 3-0)

#### \*H A 316 (1½) ART AND ARCHITECTURE OF ANCIENT GREECE AND THE AEGEAN

An introduction to art and architecture in Greece and the Aegean from the Early Bronze Age through the Hellenistic period. Architecture, sculpture, and the minor arts are examined as evidence for cultural attitudes towards man, the gods, the physical world, and the exploration of form, colour, and movement. Emphasis is placed on the careful discussion of selected monuments illustrated through slides, casts, and photographs. (No prerequisites: Taught together with CLAS 371.) (Not open to students with credit in 315) September-December (3-0)

**\*H A 317 (1½) ART AND ARCHITECTURE OF THE ROMAN WORLD**

A survey of Roman art and architecture relating to the political and social development of the Roman people to their artistic expression. After an examination of Etruscan art and architecture for its formative influence on Roman attitudes, Republican and Imperial Roman art are discussed in the context of historical events. Topics include the special character of Roman art, Hellenized and Italic modes of expression, portraiture, historical reliefs, function in art, architectural space and city planning. (No prerequisites. Taught together with CLAS 372.) (Not open to students with credit in 315) January-April (3-0)

**\*H A 321 (1½) LATE CLASSICAL AND EARLY CHRISTIAN HISTORY IN ART**

An introductory survey of the art and architecture of the Mediterranean world from the origins of Christian art in the 3rd century A.D. to the onset of Iconoclasm in the 8th century. In addition to a detailed examination of surviving monuments and art objects, an emphasis will be placed on the sources of Christian iconography and the relationship between art, theology and liturgy. (Not open to students with credit in 325) September-December (3-0)

**\*H A 323 (1½) BYZANTINE HISTORY IN ART**

An introductory survey of the art and architecture of the Byzantine empire and its culturally dependent areas from the period of Iconoclasm through to the fall of Constantinople in 1453 and beyond. The emphasis will be on an examination of surviving monuments in Greece, Turkey, southern Italy, the Balkans, and Russia. (Not open to students with credit in 325) (Prerequisite: 321 or permission of the Department) January-April (3-0)

**\*H A 326 (1½) EARLY MEDIEVAL HISTORY IN ART**

An introductory survey of the arts and architecture of western Europe in the period ca. A. D. 600-1500. Topics to be considered will include Anglo-Saxon, Carolingian, Ottonian, and Romanesque history in art. (Not open to students with credit in 325) September-December (3-0)

**\*H A 328 (1½) GOTHIC ART AND ARCHITECTURE**

An introductory survey of the art and architecture of western Europe from the reconstruction of St. Denis ca. 1140 to the beginnings of Renaissance art in Florence ca. 1400. The course will focus primarily on architecture in northern Europe and on painting in Italy, with a concentration on artists from the cities of Florence, Rome and Siena. (Not open to students with credit in 325) (Prerequisite: 326 or permission of the Department) January-April (3-0)

**\*H A 331 (3) BUDDHIST ART IN INDIA**

A study of major artistic and architectural monuments of the different schools of Buddhism in India. The course will examine the beginnings of Buddhist art and its expansion in India and the neighbouring countries with emphasis on the relevant material as evidence of the major developments in Buddhist ideology and practice. (Not open to students with credit in 330 or 332) (3-0; 3-0)

**\*H A 334 (3, formerly 1½) HINDU ART**

A study of major artistic and architectural monuments of Hinduism from its beginnings to the present, including a short survey of Rajput and other traditions of miniature painting. The material will be evaluated as evidence of the evolution of Hinduism as a major Indian religion with emphasis on its significance in the social and cultural context. (Not open to students with credit in 431) (3-0; 3-0)

**\*H A 335 (formerly half of 333, 431) (1½) HINDU MINIATURE PAINTING**

A detailed study of Hindu Miniatures and other forms of painting from the 15th century including Buddhist and Jaina manuscript illustrations. Attention will also be paid to other forms of popular painting. The material will be analyzed with a view to evaluating their religious and social significance as well as their artistic value. (3-0)

**\*H A 336 (1½) ART AND ARCHITECTURE OF MODERN INDIA**

A study of Indian art and architecture since the arrival of Western powers and Western religions in the early 16th century to the present. The course will examine material relating to Christian missions, the British presence, the revivalist movement, and contemporary art. September-December (3-0)

**\*H A 341 (formerly half of 340) (1½) THE EARLY AND HIGH RENAISSANCE**

An introductory survey of painting, sculpture, architecture and art the-

ory during the European Renaissance, with emphasis on Italy and Northern Europe. Topics will include the development of realism, the classical revival, and the emergence of the artistic personality set against changing patterns of patronage and evolving art technologies.

September-December (3-0)

**\*H A 342 (formerly half of 340) (1½) THE LATE RENAISSANCE AND BAROQUE IN EUROPE**

An introductory survey of painting, sculpture and architecture in western Europe within the context of historical movements such as the counter-reformation and the rise of absolute monarchies. The course will examine topics such as mannerism, classicism, the baroque and rococo.

January-April (3-0)

**\*H A 352 (formerly half of 340) (1½) THE GENESIS OF ISLAMIC ART AND ARCHITECTURE**

An examination of the background, origins, and evolution of early Islamic art and architecture from the 7th century rise of Islam to the end of the 9th century. The course will investigate the fundamentals of Islam as a faith, Islam's relationship to the pre-Islamic past and the theoretical problem of creating a new visual culture to serve a new religion and society. September-December (3-0)

**\*H A 354 (formerly half of 351) (1½) MEDIEVAL ISLAMIC ART AND ARCHITECTURE**

The high medieval art and architecture of Islam from the 10th century to the Mongol invasions of the mid 13th century. The course will focus on the medieval ideal of Islamic unity and the historic fragmentation of Islam into different, often opposed, regional and cultural entities. Major themes will be the emergence of Turkish peoples as the dominant political rulers of the Near East and the impact of Latin and Byzantine Christendom on Islamic visual culture. January-April (3-0)

**\*H A 355 (formerly half of 350) (1½) THE ART AND ARCHITECTURE OF ANCIENT EGYPT**

A thorough survey of the art and architecture of Pharaonic Egypt from 3200 B.C. to the beginning of the Christian era. Through the examination of artifacts, monuments, and texts the course will investigate the influence of social and religious thought upon Egyptian art.

January-April (3-0)

**\*H A 356 (formerly half of 350) (1½) THE ART AND ARCHITECTURE OF THE ANCIENT NEAR EAST**

A comprehensive survey of artistic and architectural traditions in Mesopotamia, Palestine, Anatolia, Iran, and related areas from 3500 B.C. to the beginning of the Muslim era (7th century A.D.). The course will emphasize the role of religious thought and social change in shaping architecture and the arts. September-December (3-0)

**\*H A 357 (formerly half of 353) (1½) AMIRATES AND SULTANATES OF THE MUSLIM MEDITERRANEAN**

The art and architecture of Islam in the lands bordering the Mediterranean (Spain, North Africa, Egypt, Palestine, Syria, and Turkey) from the mid 13th to the 20th century. Major areas of emphasis will be the Nasrid dynasty of Spain, the Mamluk dynasty of Egypt, and the Ottoman sultanate of Turkey. Particular attention will be paid to the art of calligraphy and to cross cultural connections between Islam and Western Europe and Byzantium. September-December (3-0)

**\*H A 358 (formerly half of 353) (1½) ISLAM AND ASIA**

The art and architecture of the Muslim lands and peoples east of Mesopotamia (Iran, India, Central Asia, and Southeast Asia) from the 13th to the 20th century. Beginning with the Mongol invasions of Iran in the mid 13th century, this course will focus on the classic Islamic culture of Iran and its diffusion into Central Asia and India. The arts of the illustrated manuscripts (particularly Persian and Mughal painting) will be a major emphasis. January-April (3-0)

**\*H A 362 (3) PAINTING AND SCULPTURE SINCE 1880**

A thorough study of European painting and sculpture from 1880 to the present day, concluding with a consideration of post 1945 developments in North America. The course begins with Van Gogh, Gauguin, Cezanne, and Rodin and traces the development and influence of such movements as Cubism, Expressionism, Constructivism, and Surrealism and the careers of individual artists, i.e., Matisse, Picasso, Nolde, Malevich, Kandinsky, Mondrian, and Brancusi. Lectures combine formal and contextual analysis. September-April (3-0; 3-0)

**\*H A 364 (1½) DOCUMENTARY FILM**

An intensive study of film as document of time, place and action. Influence of social and artistic context will be considered. Attention will be largely directed to Canadian documentary films, a leader in this genre today. Films studied may include works by Flaherty, Grierson, Lorentz, Riefenstahl, Wiseman, National Film Board. (3-0)

**\*H A 365 (1½) EXPERIMENTAL AND ART FILM**

A survey of 'pure' film: film as art which exists only in the form of film. Influence of other art forms as well as technical and economic aspects will be considered. Attention will be largely directed to Canadian experimental and art film. Films studied may include works by McLaren, Brakhage, Van Der Beek, Knowlton, Lipsett, May, Eames. (3-0)

**\*H A 366 (1½) INTRODUCTION TO HISTORY IN CINEMA: I**

A general introduction to film as an art form of world importance. Film will be considered historically as a product of time and place as well as a medium influencing many aspects of our lives. There will be consideration of genres, of directors' styles, of technical aspects, and the relationship of film to other media. (Preference given to third and fourth year students) (Prerequisite: 120 and/or 362, or permission of the Department) September-December (2-2)

**\*H A 367 (1½) INTRODUCTION TO HISTORY IN CINEMA: II**

A more specialized investigation into cinema with attention to the use of myth and symbol. Significant cinema genres, selected directors and national styles, including Canadian, will be examined. (Preference given to third and fourth year students, and to those students who have completed 366) (Prerequisite: 120 and/or 362, or permission of the Department) January-April (2-2)

**\*H A 368 (3, formerly 1½) HISTORY OF CANADIAN ART**

History of the visual arts in Canada from the 16th through the 20th centuries with special emphasis on painting and sculpture. September-April (3-0;3-0)

**\*H A 371 (PACI 371) (formerly half of 370) (1½) EARLY CHINESE ART**

A comprehensive study of the rise and development of the major art forms in China from the Neolithic through the T'ang period. Areas of study will include ritual bronzes of the Shang and Chou dynasties, tomb sites, Buddhist sculpture and painting, ceramics and early secular painting, all within the social and historical background in which these forms developed. September-December (3-0)

**\*H A 372 (PACI 372) (formerly half of 370) (1½) LATER CHINESE ART**

A comprehensive study of later Chinese art, from the Sung through the Ch'ing dynasties, including ceramics, furniture and other minor arts. The major focus will be on the development of painting, including landscape painting, court styles and the literati school. January-April (3-0)

**\*H A 373 (PACI 373) (1½) EARLY JAPANESE ART AND ARCHITECTURE**

A comprehensive study of the history of Japanese art and architecture from the prehistoric period through the Kamakura period. Areas of study will include Jomon ceramics, religious and secular architecture, Buddhist sculpture and painting, and secular painting. There will be emphasis on the social and historical backgrounds of the art forms, the literature of the later periods, and on the absorption and transformation of continental influences into Japanese forms. September-December (3-0)

**\*H A 374 (PACI 374) (1½) LATER JAPANESE ART AND ARCHITECTURE**

A comprehensive study of Japanese art and architecture from the Muromachi through Tokugawa periods, including Zen architecture and painting, Ukiyoe paintings and prints and Nanga painting, all studied within their historical context. January-April (3-0)

**\*H A 375 (3) PRE-COLUMBIAN ART**

The art of the most highly developed countries of the Americas in the period before European conquest. In the fall the area covered is Mesoamerica (central and southern Mexico with northern Central America); in the spring, the Peruvian Andes and adjoining coast. Emphasis is placed upon sculpture and architecture with painting, textiles, ceramics, basketry, and featherwork also receiving attention. Areas

highly influenced by Nuclear America in Colombia, Ecuador, and Panama are included. The possibility of contacts between the two areas as well as transpacific influences is explored. The cultural and social context of the art styles is stressed. (Prerequisite: None) September-April (3-0; 3-0)

**\*H A 379 (3) HISTORY OF LATIN AMERICAN ART**

The art of Latin America from the Conquest to the present. The Colonial Period (c. 1530-1820) fuses Gothic, Renaissance, Moorish, and native American elements. The epoch of Independence movements in the 19th century is marked by the Neoclassical intellectual tradition paralleled by Romanticism. The early 20th century is influenced by European Impressionism and Modernism. Mexican muralists reflect revolutionary movements. Contemporary architecture and painting mark the advent of internationalism. The trend is reinforced by the growing importance of international corporations and foundations as patrons. (Prerequisite: None) September-April (3-0; 3-0)

**H A 385 (formerly half of 381, 481) (1½) HISTORY OF NORTH AMERICA IN ARCHITECTURE: I**

How architecture expressed and was instrumental in effecting the transplantation and development of European civilization in North America (Canada, U.S.A., Mexico) from the 16th century to approximately 1840. September-December (3-0)

**H A 386 (formerly half of 381, 481) (1½) HISTORY OF NORTH AMERICA IN ARCHITECTURE: II**

How architecture expressed and was instrumental in effecting the development of society in Canada and the U.S.A., from approximately 1840 to the present. January-April (3-0)

**\*H A 382 (1½) NORTH AMERICAN INDIAN ART**

An introduction to North American Indian art from its emergence in prehistoric times to the present. Culture areas covered are the Northwest Coast, the Arctic (Inuit and Eskimo), Northern Athabaskan, the Great Plains, Southwestern U.S. and Eastern Woodlands. Changes in art brought on by European proximity are treated. January-April (3-0)

**\*H A 420 (3) SPECIAL STUDIES IN MEDIEVAL ART**

A different aspect or period of medieval art will be selected for study each year. Emphasis will be placed on a detailed study of a limited number of works rather than a general survey. (May be taken more than once, depending on circumstances) (Prerequisites: At least two of 321, 323, 326, 328, or permission of the instructor) September-April (3-0; 3-0)

**\*H A 430 (1½ or 3) SPECIAL STUDIES IN INDIAN ART**

An intensive study of a selected aspect or area of Buddhist or Hindu art. The course may be taken for credit more than once in different areas. (Prerequisite: Any course in Buddhist or Hindu Art, or permission of the Department) January-April (3-0) or (3-0; 3-0)

**\*H A 440 (3) ITALIAN RENAISSANCE ART**

An intensive study of the painting and sculpture of Italy from 1250 to 1550. Special attention will be given to the major monuments of Florence, Rome, Siena, and Venice. The artistic achievements of these cities will be considered in terms of their historical and religious significance. (Prerequisite: 341 and 342) September-April (3-0; 3-0)

**\*H A 441 (3) NORTHERN RENAISSANCE**

An intensive survey of the painting of Northern Europe from 1300 to 1550. Special attention will be given to the major achievements of France, Germany and the Low Countries. The major monuments of these areas will be considered in terms of their historic and religious significance. (If time permits salient sculptors and their accomplishments will also be considered.) (Prerequisite: 341 and 342) September-April (3-0; 3-0)

**\*H A 450 (1½ or 3) TOPICS IN ISLAMIC ART AND CIVILIZATION**

This course will involve intensive study of some special aspect or area of Islamic civilization. Content may vary each year. (May be taken for credit more than once depending on circumstances) (Prerequisite: 352 and 354, or 357 and 358, or permission of the Department) (3-0) or (3-0; 3-0)

**\*H A 451 (1½) ISLAMIC ARCHITECTURE**

An examination of the architectural traditions of Muslim peoples from Spain to South Asia with emphasis on the historical development of Islam's architectural idiom, the geographic dispersion of its forms, the

relationship of architecture to its urban context, and the role of architectural patrons. January-April (3-0)

**\*H A 455 (1½) PERSIAN PAINTING**

A study of the history and development of painting in Iran from the 13th to the 19th centuries. The course will examine the major masters, patrons, and style of Persian miniature painting and will trace the influence of Persian painting on the arts of Mughal India and Ottoman Turkey. (3-0)

**\*H A 460 (3) SPECIAL STUDIES IN 20th CENTURY ART**

Intensive study of modern movements (e.g., Cubism, Surrealism, Expressionism) or specific problems (art and politics, critical theory) in 20th century art. Combination of topics will vary. (Prerequisite: 260 or 362 or permission of the Department) September-April (3-0; 3-0)

**\*H A 462 (HIST 462) (3) ART AND REVOLUTION**

Examines the role of the artist (mainly through painting and graphics) in the major social and political revolution of modern times. Major emphasis on the French, Russian, and Chinese revolutions but some consideration of political art in other revolutions and movements of social protest. (3-0; 3-0)

**H A 464 (3) CONTEMPORARY ART**

An intensive study of major art movements in Europe and North America since World War II. Course includes an examination of recent painting and sculpture, as well as considering less conventional art forms, such as installations, earthworks, and performance art. (Prerequisite: 260 or 362 or Art 350, or permission of the Department) September-April (3-0; 3-0)

**\*H A 470 (1½ or 3) SPECIAL STUDIES IN FAR EASTERN ART**

Intensive studies of special aspects of Chinese or Japanese art. Course content will vary. (Prerequisite: 371 and 372, or 373 and 374, or permission of the Department) (This course may be taken for credit more than once in different topics with permission of the Department) (3-0) or (3-0; 3-0)

**\*H A 475 (PACI 475) (1½ or 3) THE ART AND ARCHITECTURE OF SOUTHEAST ASIA**

An examination of the sculpture and architecture of Southeast Asia of the precolonial periods, with emphasis on those of Cambodia and Indonesia. These works will be studied within their religious, social and political contexts. (3-0)

**\*H A 485 (formerly 390) (3) WORLD HISTORY IN ART (formerly Language of History in Art)**

This course affords an opportunity for third and fourth year students to elect a basic survey of history in art on a level appropriate to their maturity. Emphasis will be on history horizontally structured across the world in given epochs, rather than on line of progress, using as data arts and artifacts interpreted in terms of social function. (Prerequisite: 120) September-April (3-0; 3-0)

**H A 486 (3) INTRODUCTION TO MUSEUM STUDIES**

Collection, organization, maintenance and presentation of museum materials. History and purpose of collections, principles of collections management and research, preservation, care and handling of collections, public presentation of exhibitions, museum organization and management. Topic emphasis at the discretion of the instructor; may involve fieldwork. Depending on instructor and areas covered, and with departmental permission, this course may be taken more than once. (Prerequisites: None) September-April (3-0; 3-0)

**H A 487 (3) INTRODUCTION TO THE CONSERVATION OF CULTURAL PROPERTY**

Care, preservation and maintenance of historic sites and buildings; the conservation of architecture within a museum and urban context; programs and practices in Canada and other countries; procedures for site examination and evaluation; materials pathology; site planning, development and management. Case studies and field work may be required. Topic emphasis at the discretion of the instructor. Depending on the instructor and areas covered, and with departmental permission, this course may be taken more than once. (Prerequisites: None) September-April (3-0; 3-0)

**H A 488 (1½) SPECIAL STUDIES IN MUSEOLOGY**

This course may be taken more than once, in different fields, at the discretion of the Department.

**H A 488A (1½) ADMINISTRATION OF MUSEUMS AND ART GALLERIES**

Topics will include: administration of collections policies; accountability, financial management, and program balance; administrative theory and practice; personnel administration; law in the museum and gallery. (3-0)

**H A 488B (1½) COLLECTIONS MANAGEMENT**

Topics include: collections policies; terminology; classification and cataloguing; accessioning and deaccessioning; loans; gifts, importing and exporting. The course may be offered with an emphasis in computers and the management of collections. (3-0)

**H A 488C (1½) EXHIBIT DESIGN AND DEVELOPMENT**

Topics include the planning, design, production, and evaluation of exhibits. Problems in installation will be considered. Students will be assigned a project in the design of scale model exhibits. (3-0)

**H A 488D (1½) CURATORIAL CARE OF ARTIFACTS**

Studies in the conservation of artifacts in metal, ceramics, wood, bone, leather, and other materials. Special emphasis is given to the analysis of environmental factors and the nature of materials. The course includes demonstrations in handling, storage, and packing techniques. Assignments normally will include the preparation of condition reports. (3-0)

**H A 488E (1½) CURATORIAL CARE OF PAPER**

Studies in the conservation of paper artifacts, particularly archival materials and works of art on paper. Topics include: the monitoring and control of environmental conditions; storage; handling; treatments. Projects involving practices in the conservation of paper will be assigned. (3-0)

**H A 488F (1½) CURATORIAL CARE OF PAINTINGS**

Studies in the conservation of paintings on panel, canvas, and other surfaces. Topics include: documentation of condition; nature of materials and historical uses of media; remedial conservation; curatorial care and maintenance of collections; connoisseurship. (3-0)

**H A 488G (1½) INTERPRETATION TECHNIQUES AND PROGRAM EVALUATION**

The course examines interpretation as a method of communicating with the public in museums, art galleries, historic sites, parks, and related settings. The theory and application of interpretation will be considered. The course emphasizes strategies for implementing program ideas, planning, setting objectives, evaluation, and the development of skills. (3-0)

**H A 489 (1½) SPECIAL STUDIES IN ARCHITECTURAL CONSERVATION**

This course may be taken more than once, in different fields, at the discretion of the Department.

**H A 489A (1½) STUDIES IN URBAN AND RURAL CONSERVATION**

Topics in the preservation and rehabilitation of historic urban and rural areas. The historical, aesthetic, economic, social, and legal aspects of heritage area planning will be considered. Case histories and planning models will be discussed. An applied studies project normally will be assigned. (3-0)

**H A 489B (1½) SURVEY METHODS IN BUILDING CONSERVATION**

An intensive examination of methods employed in surveying and recording historic architecture. Topics include: documentation; measured drawings; regular and rectified photography; scale models. (3-0)

**H A 489C (1½) EVALUATION OF HISTORIC ARCHITECTURE**

An examination of the theory and practice of evaluating historic architecture. Topics include: surveys, research methods; stylistic analysis; preparation of inventories; evaluation criteria; scoring techniques. (3-0)

**H A 489D (1½) STUDIES IN BUILDING CONSERVATION**

Theoretical and applied studies in the conservation of historic architecture. Course topics include site history, pathology, preservation and repair of materials (wood, masonry, brick, plasterwork, metalwork), chromochronology. Laboratory sessions on the examination and analysis of materials will be conducted. (3-0)

\* Approved for elective credit in the Faculty of Arts and Science.

**\*H A 490 (3) DIRECTED STUDIES**

This course may be taken more than once, in different fields, at the discretion of the Department.

Members of the Department

**H A 499 (3) HONOURS SEMINAR**

This course is intended to instruct fourth year honour students in problems and methodology of advanced research.

**GRADUATE COURSES**

Students should consult the Department concerning the courses to be offered in a particular year.

**H A 501 (1½) PROBLEMS IN HISTORY OF ART HISTORY: I**

An examination of how the discipline of art history developed, as shown in changing approaches to diverse classic or standard problems of identity and interpretation over several generations. (3-0)

**H A 502 (1½) PROBLEMS IN HISTORY OF ART HISTORY: II**

An advanced graduate seminar in art historical methodologies. (Prerequisite: 501 or permission of the instructor) (3-0)

**H A 503 (1½) SPECIAL PROBLEMS IN EAST WEST RELATIONSHIPS: I**

Parallels and contrasts among the arts of Europe, Islam, India, China, Japan, America, etc. in selected epochs of history. (3-0)

**H A 504 (1½) SPECIAL PROBLEMS OF EAST WEST RELATIONSHIPS: II**

An advanced graduate seminar in problems of cultural history. (Prerequisite: 503 or permission of the instructor) (3-0)

**H A 520 (1½) SPECIAL STUDIES IN MEDIEVAL ART HISTORY: I**

Contents of course vary yearly to fit the needs and interests of current students. (May be taken more than once, depending on circumstances) (Prerequisite: 325 or 420 or equivalent; or permission of the instructor) (3-0)

**H A 521 (1½) SPECIAL STUDIES IN MEDIEVAL ART HISTORY: II**

An advanced graduate seminar in problems of medieval art and architecture. (Prerequisite: 520 or permission of the instructor) (3-0)

**H A 530 (1½) SPECIAL STUDIES IN INDIAN ART: I**

This graduate seminar will investigate some special problem or area in the history of Indian art. Specific subject matter will vary each year according to the needs of graduate students. (May be taken more than once, depending on circumstances) (Prerequisite: 330 and 332, or 430 or equivalent; or permission of the instructor) (3-0)

**H A 531 (1½) SPECIAL STUDIES IN INDIAN ART: II**

An advanced graduate seminar in Indian art and architecture. (Prerequisite: 530 or permission of instructor) (3-0)

**H A 540 (1½) SPECIAL STUDIES IN ITALIAN AND NORTHERN RENAISSANCE ART AND ARCHITECTURE: I**

Seminar class with topics in various areas which vary according to students' background, needs and interests. (Prerequisite: 440 or 441; or permission of instructor) (3-0)

**H A 541 (1½) SPECIAL STUDIES IN ITALIAN AND NORTHERN RENAISSANCE ART AND ARCHITECTURE: II**

An advanced graduate seminar in problems in Italian and Northern Renaissance art and architecture. (Prerequisite: 540 or permission of instructor) (3-0)

**H A 550 (1½) SPECIAL STUDIES IN ISLAMIC ART AND ARCHITECTURE: I**

This graduate seminar will investigate each year some aspect of the

history of the art and architecture of the Islamic world. (May be taken more than once, depending on circumstances) (Prerequisite: 351 or 353 or 450; or permission of the instructor) (3-0)

**H A 551 (1½) SPECIAL STUDIES IN ISLAMIC ART AND ARCHITECTURE: II**

An advanced graduate seminar in Islamic art and/or architecture. (Prerequisite: 550 or permission of instructor) (3-0)

**H A 560 (1½) SPECIAL STUDIES IN MODERN ART: I**

Seminar classes with topics (Cubism, Expressionism, Surrealism, Constructivism, etc.) vary according to students' background and interests. (May be taken more than once, depending on circumstances) (Prerequisite: 362 or equivalent; or permission of instructor) (3-0)

**H A 561 (1½) SPECIAL STUDIES IN MODERN ART: II**

An advanced graduate seminar dealing with selected topics in the history of modern art. (Prerequisite: 560 or permission of instructor) (3-0)

**H A 565 (1½) SPECIAL STUDIES IN PRE-COLUMBIAN ART: I**

A graduate seminar in Pre-Columbian art. (Prerequisite: 375 or permission of instructor)

**H A 566 (1½) SPECIAL STUDIES IN PRE-COLUMBIAN ART: II**

An advanced graduate seminar in Pre-Columbian art. (Prerequisite: 565 or permission of instructor)

**H A 570 (1½) SPECIAL STUDIES IN FAR EASTERN ART AND ARCHITECTURE: I**

A graduate seminar in Far Eastern art and architecture. Course content will vary each year according to student needs. (May be taken more than once, depending on circumstances) (Prerequisite: 371 and 372, or 373 and 374, or permission of Department) (3-0)

**H A 571 (1½) SPECIAL STUDIES IN FAR EASTERN ART AND ARCHITECTURE: II**

An advanced graduate seminar in selected problems of Far Eastern art and architecture. (Prerequisite: 570 or permission of instructor) (3-0)

**H A 575 (1½) SPECIAL STUDIES IN SOUTHEAST ASIAN ART AND ARCHITECTURE: I**

A graduate seminar in Southeast Asian art and architecture. Course content will vary each year, depending on student interest and need. (Prerequisite: 231 or 475 or permission of the Department) (3-0)

**H A 576 (1½) SPECIAL STUDIES IN SOUTHEAST ASIAN ART AND ARCHITECTURE: II**

An advanced graduate seminar in selected areas of Southeast Asian art and architecture. (Prerequisite: 575 or permission of instructor) (3-0)

**H A 580 (1½) SPECIAL STUDIES IN CULTURAL CONSERVATION: I**

The detailed examination of a special topic relating to museum and gallery operations or architectural conservation. May involve museum experience or field work. (3-0)

**H A 581 (1½) SPECIAL STUDIES IN CULTURAL CONSERVATION: II**

An advanced graduate seminar in museum studies and/or problems of architectural conservation. (Prerequisite: 580 or permission of instructor) (3-0)

**H A 590 (formerly 505) (1½) DIRECTED STUDIES IN HISTORY IN ART**

Individual title will be assigned to each lettered section (A-Z) of the course, according to material covered.

**H A 599 (9-15) THESIS****SCHOOL OF MUSIC**

Paul Kling, Artist's Diploma (State Cons. of Music, Brno), Artist's Diploma (Academy of Musical Arts, Prague), Professor (violin), and Director of the School

Franklin E. Churchley, A.R.C.T., L.R.C.T. (Royal Cons. Mus.), B.Mus. (Tor.), M.A., Ed.D. (Columbia), Professor  
George Corwin, B.S. (Ithaca), M.A., D.M.A. (Rochester), Professor

Rudolf Komorous, Diploma (State Cons. of Music, Prague), Artist's Diploma (Academy of Musical Arts, Prague), Professor  
 Gordana Lazarevich, Artist and Licentiate Dip. (Tor.), B.Sc., M.Sc., (Juilliard), Ph.D. (Columbia), Professor  
 Bernard Turgeon (Opera School, Tor. Cons.), Professor (voice, opera workshop)  
 Robin Wood, F.R.A.M., LL.D. (U. of Vic.), Professor (piano)  
 Phillip T. Young, B.A. (Bowdoin), M.Mus. (Yale), Professor  
 John A. Celona, B.M., M.A. (San Fran. St.), Ph.D. (Calif., San Diego), Associate Professor  
 Richard Ely, B.M. (Montana), M.M. (Ill.), Associate Professor (french horn)  
 Jaroslav Karlovsky, Artist's Diploma (State Cons. of Music, Prague), Artist's Diploma (Academy of Musical Arts, Prague), Associate Professor (viola)  
 Michael M. Longton, B.M., M.M. (Brit. Col.), Associate Professor  
 Bruce E. More, B.Mus. (Brit. Col.), M.Mus., M.M.A., D.M.A. (Yale), Associate Professor  
 Louis D. Ranger, B.Mus. (Juilliard), Associate Professor (trumpet)  
 Jesse Read, B.Mus. (Jacksonville), M.Mus. (U. of Vic.), Associate Professor (Bassoon)  
 Erich P. Schwandt, B.A., M.A., Ph.D. (Stanford), Associate Professor  
 Thomas Dowling, B.Sc. (Temple), M.Mus. (Cleveland Inst.), Assistant Professor (clarinet)  
 William Kinderman, B.A. (Dickinson College), Ph.D. (Calif., Berkeley), Assistant Professor  
 Jean Lctourncau, Dip. (Tor.), Assistant Professor (voice, opera workshop)  
 John William MacKay, B.A., B.Mus., M.A. (McGill), Ph.D. (Calif. San Diego), Visiting Assistant Professor (1984-85)  
 Lanny Pollet, B.Mus. (Eastman), M.Ms. (U. of Vic.), Assistant Professor (flute)  
 Bruce Vogt, A.R.C.T. (Tor.), B.Mus. (W. Ont.), M.Mus. (Tor.), Assistant Professor (piano)  
 Douglas Collinge, B.Sc., M.Mus. (U. of Vic.), Lecturer  
 M. Elaine Daniels, Administrative Officer

**Part-time Lecturers (individual tuition) 1984-85 Session:**

Eugene A. Dowling, B.M. (Mich. St.), M.M. (Northwestern) (tuba)  
 Thomas G. Eadie, B.M., M.M. (Eastman) (trombone)  
 Salvador Ferreras, B.Mus. (Windsor) (percussion)  
 Lynn Greenwood, B.M., M.M. (Indiana) (saxophone)  
 Linda Houglan-Daniels, B.M., Performer's Certificate (Eastman) (cello)  
 Eva Kinderman, Performer's Diploma (Vienna) (piano)  
 Taka Kling, M.M. (Tokyo), Artist's Dip. (Vienna) (harp)  
 Suzanne Lemieux, M.M. (Mich.) (oboe)  
 Kathleen Letourneau, A.R.C.T., L.R.C.T. (Tor.) (voice and opera coach)  
 Mary Rannie, B.A. (W. Ont.) (double bass)  
 Teresa Turgeon (voice and opera coach)

**GRADUATE PROGRAMS**

For information on studies leading to the M.A., M.Mus. and Ph.D. degrees, see page 213; for graduate courses, see page 190.

**UNDERGRADUATE PROGRAMS**

For students who wish to prepare themselves for careers in music, graduate study, etc., the School of Music offers majors in Composition and Theory, Music Education, Music History and Literature, Comprehensive (formerly General) Program, and Performance, leading to the degree of Bachelor of Music.

**ADMISSION REQUIREMENTS**

Enrollment in the Bachelor of Music program is limited at the present time to approximately 160 students.

**1. Applicants from Secondary School**

Students must apply to the Admissions Office for acceptance to the University and in addition must make separate application to the School of Music for acceptance to the program. The School requires that all prospective students demonstrate ability in an accepted performance area (instrument or voice). For this purpose a personal audition is recommended; if an audition is not possible a high quality tape recording may be submitted instead. All applicants must submit two letters of recommendation from qualified musicians. Auditions are held each year beginning in late March. Students are urged to apply as early as possible

since places cannot be guaranteed for qualified applicants once positions are filled.

Audition appointments and further information may be obtained from:

Admissions, School of Music  
 University of Victoria  
 P.O. Box 1700, Victoria, B.C. V8W 2Y2  
 (604) 721-7902

**2. Applicants from Other Universities and Colleges**

The procedure is the same as that described in the preceding paragraph. The Director of Admissions will consult the School for advice on transfer credit for music courses that have been completed elsewhere. This credit and School admission procedures will determine into which year of studies the student will be accepted. No students are admitted into the final, fourth year.

**PROGRAM OF COURSES**

All B.Mus. students, regardless of their eventual choice of major, are required to take a common first year program.

| <i>Year 1</i>     |    |
|-------------------|----|
| 100A              | 1  |
| 100B              | 1  |
| 110               | 3  |
| 140               | 2  |
| 170               | 1  |
| 180*              | 1  |
| 181*              | 1  |
| English 100 level | 3  |
| Nonmusic elective | 3  |
|                   | 16 |

\* Not required for students whose principal performance area is voice.

In addition to the courses listed above, students intending to major in Composition must enroll in 105, and students wishing to major in Music Education must register in M E 101 (Secondary) or M E 106 (Elementary).

All B.Mus. students are required to demonstrate proficiency at the keyboard. Students who fail to satisfy this requirement by the end of the first year may be required to enroll in 236.

At the end of the common first year, each student will declare a choice of major and will be assigned a faculty adviser who will assist in selecting appropriate elective courses, ensure that program requirements are satisfied and oversee year to year progress. Acceptance into the major program of the student's choice and continuance in that major must be approved by the appropriate division of the School. A student whose progress is judged to be unsatisfactory may be refused permission to continue in the chosen original major.

Students who intend to pursue a career in Music Education will register in the B.Mus. program with a major in Music Education. Those completing this program will automatically qualify for admission to the Post Degree Professional Program with the same priority status as regular B.Ed. students.

Exceptions to the following program requirements can be made only in special cases and with the written approval of the Director.

**Major in Composition and Theory**

| <i>Year 2</i>     |    | <i>Year 3</i>     |    | <i>Year 4</i>     |    |
|-------------------|----|-------------------|----|-------------------|----|
| MUS 200           | 2  | MUS 300           | 3  | MUS 400           | 3  |
| MUS 205           | 3  | MUS 305           | 3  | MUS 405           | 3  |
| MUS 240           | 2  | MUS 306           | 1½ | MUS 440           | 2  |
| MUS 270           | 1  | MUS 307           | 1½ | Music elective    | 3  |
| MUS 350           | 3  | MUS 340           | 2  | Nonmusic elective | 3  |
| Nonmusic elective | 3  | Nonmusic elective | 3  |                   |    |
|                   | 14 |                   | 14 |                   | 14 |

See Ensemble Requirements below.

**Major in Music History and Literature**

| <i>Year 2</i>     |    | <i>Year 3</i>     |    | <i>Year 4</i>     |    |
|-------------------|----|-------------------|----|-------------------|----|
| Music history     |    | Music history     |    | Music history     |    |
| elective          | 3  | elective          | 3  | elective          | 3  |
| MUS 200           | 2  | MUS 300           | 3  | MUS 400           | 3  |
| MUS 240           | 2  | MUS 340           | 2  | MUS 440           | 2  |
| MUS 270           | 1  | MUS 390           | 3  | MUS 499           | 3  |
| Music or non-     |    | Nonmusic elective | 3  | Nonmusic elective | 3  |
| music elective    | 3  |                   |    |                   |    |
| Nonmusic elective | 3  |                   |    |                   |    |
|                   | 14 |                   | 14 |                   | 14 |

See Ensemble Requirements below.

**Major in Comprehensive Program**

| Year 2           |    | Year 3           |    | Year 4            |    |
|------------------|----|------------------|----|-------------------|----|
| MUS 200          | 2  | MUS 300          | 3  | MUS 400           | 3  |
| MUS 240          | 2  | MUS 340          | 2  | MUS 440           | 2  |
| MUS 270          | 1  | *Music electives | 6  | *Music elective   | 3  |
| *Music electives | 6  | **Nonmusic       |    | **Nonmusic        |    |
| **Nonmusic       |    | elective         | 3  | elective          | 3  |
| elective         | 3  |                  |    | Nonmusic elective |    |
|                  |    |                  |    | or music elective |    |
|                  |    |                  |    |                   | 3  |
|                  | 14 |                  | 14 |                   | 14 |

See Ensemble Requirements below.

\*Music electives must include:

- (a) at least 3 units of music history above the 110 level
- (b) either Music 350 or Music 356.

\*\*Nonmusic electives will normally include:

- (a) 6 units of language courses, preferably German, Italian, or French
- (b) 3 units of art history, theatre history, or classics
- (c) 3 units of philosophy, mathematics or a science.

**Major in Performance**

| Year 2            |    | *Year 3           |    | Year 4            |    |
|-------------------|----|-------------------|----|-------------------|----|
| MUS 200           | 2  | MUS 300           | 3  | MUS 400           | 3  |
| MUS 245           | 6  | MUS 345           | 6  | MUS 445           | 6  |
| MUS 270           | 1  | Music history     |    | MUS 447           | 3  |
| Music or non-     |    | elective          | 3  | Nonmusic elective | 3  |
| music elective    | 3  | Nonmusic elective | 3  |                   |    |
| Nonmusic elective | 3  |                   |    |                   |    |
|                   | 15 |                   | 15 |                   | 15 |

See Ensemble Requirements below.

\* Piano majors are advised to take Music 360 in addition to the courses listed.

**Major in Music Education – Secondary (Instrumental)**

| Year 2                      |     | Year 3   |    |
|-----------------------------|-----|--|----|
| MUS 200                     | 2   | MUS 300  | 3  |
| MUS 240                     | 2   | MUS 340  | 2  |
| MUS 270                     | 1   | MUS 356  | 3  |
| MUS 350                     | 3   | One of: MUS 330, 331,  |    |
| One of: MUS 236, 330, 331,  |     | 332, 333   | 1½ |
| 332, 333                    | 1½  | M E 216  | 1  |
| M E 201                     | 1½  | *M E 301   | 1½ |
| Music history elective      | 3   | ED-D 406   | 3  |
|                             | 14  |  | 15 |
| <i>Year 4 (Degree Year)</i> |     | <i>**Year 5 (Professional Year in Education)</i>             |    |
| MUS 400                     | 3   | See Special Music Program, page 150, for course requirements |    |
| MUS 400                     | 2   |  |    |
| One of: MUS 330 331, 332    | 1½  |  |    |
| 333                         | 1   |  |    |
| M E 316                     | 1   |  |    |
| ED-D 303                    | 1½  |  |    |
| M E 401                     | 1½  |  |    |
| Music or non-               |     |  |    |
| music elective              | 3   |  |    |
|                             | 13½ |  |    |

See Ensemble Requirements below.

**Major in Music Education – Secondary (Choral)**

| Year 2                      |     | Year 3   |         |
|-----------------------------|-----|--|---------|
| MUS 200                     | 2   | MUS 300  | 3       |
| MUS 240 (Voice)             | 2   | MUS 340  | 2       |
| MUS 270                     | 1   | MUS 319  | 1       |
| M E 300                     | 1½  | *M E 301   | 1½      |
| M E 201                     | 1½  | ED-D 406   | 3       |
| M E 219                     | 1   | MUS 356  | 3       |
| Second Teaching Area        | 1½  | (Additional units may be                                     |         |
| Music or non-               |     | taken in 2nd teaching area)                                  | 1-3     |
| music elective              | 3   |  |         |
|                             | 13½ |  | 14½-16½ |
| <i>Year 4 (Degree Year)</i> |     | <i>**Year 5 (Professional Year in Education)</i>             |         |
| MUS 400                     | 3   | See Special Music program, page 150, for course requirements |         |
| MUS 440                     | 2   |  |         |
| M E 419                     | 1   |  |         |
| ED-P 498                    | 1½  |  |         |
| ED-D 303                    | 1½  |  |         |

|                          |    |
|--------------------------|----|
| Nonmusic elective        |    |
| (2nd teaching area)      | 3  |
| MUS 320 or Music history |    |
| elective                 | 3  |
|                          | 15 |

See Ensemble Requirements below.

\* Includes school experience (equivalent of Education-P 398).

\*\* Before Year 5, an Introductory Psychology course and Theatre 150 are recommended. A grade point average of 3.00 in the upper level music courses and a grade point average of 3.00 in the immediately preceding two years (30 units) is required.

**Major in Music Education – Elementary**

| Year 2                      |     | Year 3   |     |
|-----------------------------|-----|--|-----|
| MUS 200                     | 2   | MUS 300  | 3   |
| MUS 240                     | 2   | MUS 340  | 2   |
| MUS 270                     | 1   | One of: M E 303A,                              |     |
| M E 219                     | 1   | 303B, 303C                                     | 1½  |
| M E 300                     | 1½  | M E 319  | 1   |
| M E 306                     | 3   | One of: M E 400A,                              |     |
| PSYC 100                    | 3   | 400B, 400C                                     | 1½  |
| HIST 230                    | 3   | MATH 160 (or other                             |     |
|                             |     | approved Math)                                 | 3   |
|                             |     | ED-B 430                                       | 1½  |
|                             |     | Music elective                                 | 3   |
|                             | 16  |  | 16½ |
| <i>Year 4 (Degree Year)</i> |     | <i>Year 5 (Professional Year in Education)</i> |     |
| MUS 400                     | 3   | ED-D 200A                                      | 1½  |
| MUS 440                     | 2   | ED-D 337                                       | 1½  |
| One of: M E 303A,           |     | ED-A 701                                       | 1   |
| 303B, 303C                  | 1½  | ED-E 744                                       | 1½  |
| One of: M E 400A,           |     | ED-E 746                                       | 1   |
| 400B, 400C                  | 1½  | ED-C 747                                       | 1   |
| ED-D 305                    | 3   | ED-B 748                                       | 1½  |
| ED-P 297                    | 1½  | ED-B 749                                       | 1½  |
| Music or non-               |     | EP-P 797                                       | 3   |
| music elective              | 3   | Elective                                       | 1½  |
|                             | 15½ |  | 15  |

See Ensemble Requirements below.

**ENSEMBLE REQUIREMENTS**

All students in the B.Mus. program are required to participate in ensembles as follows:

**Major in Composition and Theory**

- Year 2: 280 or 281
- Year 3: One of: 280, 380, 281, 381
- Year 4: One of: 280, 380, 480, 281, 381, 481

**Major in Music History and Literature**

- Year 2: 280 and 281
- Year 3: 380 and 381
- Year 4: 480 and 481

**Major in Comprehensive Program**

- Year 2: 280 and 281
- Year 3: 380 and 381
- Year 4: 480 and 481

**Major in Performance**

- (a) **Orchestral Instruments**
  - Year 2: 280 (Orchestra or Wind Symphony) and 281
  - Year 3: 380 (Orchestra or Wind Symphony) and 381
  - Year 4: 480 (Orchestra or Wind Symphony) and 481
- (b) **Keyboard Instruments**
  - Year 2: 280 (Chorus) and 281
  - Year 3: 381
  - Year 4: 481
- (c) **Voice**
  - Year 2: 280 and 281
  - Year 3: 380 and 381
  - Year 4: 480 and 481

**Major in Music Education – Secondary (Instrumental and Choral)**

- Year 2: 280
- Year 3: 380 and 281
- Year 4: Two of: 480

381  
Education 218

**Major in Music Education – Elementary**

Year 2: 280  
Year 3: 281  
Year 4: 380 and 381

**UNDERGRADUATE COURSES**

Not all courses can be offered every year. A list of available courses can be obtained from the School of Music each Spring.

**\*MUS 115 (3) LISTENING TO MUSIC**

A course for the nonprofessional, designed to enhance understanding and appreciation of Western music. Assignments include listening to recordings and attendance at selected University concerts. (Not open to B.Mus. students) (3-0; 3-0)

**\*MUS 215 (3) TWO COMPOSERS**

Intended for the general listener. In each term, the music of a major composer will be studied, affording comparison of two eras, styles, aesthetics and/or genres, as well as a broad view of each composer's representative works in several media. For example: Beethoven and Stravinsky; Mozart and Duke Ellington; Monteverdi and Wagner. (Prerequisite: 115) (Not open to B.Mus. students) (3-0;3-0)

**LANGUAGE OF MUSIC**

**\*MUS 100A (formerly part of 100) (1) INTRODUCTION TO LANGUAGE OF MUSIC**

The structure and basic materials of music, including notation, rudiments, elementary harmony and contrapuntal techniques, and concepts of musical form. Related keyboard skills. (Prerequisite: Evidence of musicianship acceptable to the School) (Corequisite: 170) September-December (3-0)

**\*MUS 100B (formerly part of 100) (2) LANGUAGE OF MUSIC: I**

A continuation of Music 100A, emphasizing the development of writing skills and more advanced analytical concepts. (Prerequisite: 100A or permission of the School. Corequisite: 170) September-December. Also January-April (3-0)

**\*MUS 170 (formerly part of 100) (1) AURAL SKILLS: I**

The development of basic aural skills, integrating sight singing and dictation. (Corequisite: 100A or 100B) (0-2; 0-2)

**\*MUS 200 (2, formerly 3) LANGUAGE OF MUSIC: II**

A study of the styles and structure of music from plainchant through the early 18th century. Continued development of writing, analytic and keyboard skills. (Prerequisites: 100B, 170. Corequisite: 270) (3-0; 3-0)

**\*MUS 270 (formerly part of 200) (1) AURAL SKILLS: II**

A continuation of 170. (Prerequisite: 170. Corequisite: 200) (0-2; 0-2)

**\* MUS 300 (3) LANGUAGE OF MUSIC: III**

A detailed investigation of structural principles and style in tonal music, with particular attention to the music of the late 18th and 19th centuries. Continued studies in writing, analysis, and keyboard. (Prerequisite: 200 or permission of the School) (3-1; 3-1)

**MUS 303 (3) MUSIC THEORY FOR MUSIC EDUCATORS: I**

An intensive survey of the more important harmonic, contrapuntal and formal characteristics of the music from c. 1750 to c. 1930, with related studies in sight singing, ear training, and keyboard harmony. This course is intended for students in the Master of Education in Music Education program but is open to others by permission of the School. (Not available for credit in the B.Mus. program) (Prerequisite: Permission of the School. A working knowledge of traditional harmony is expected.) (Offered in Summer Session only) (Not offered 1985)

**\* MUS 400 (3) LANGUAGE OF MUSIC: IV**

Theory, techniques, and practice of 20th century music. (Prerequisite: 300 or permission of the School) (3-0; 3-0)

**MUS 403 (3) MUSIC THEORY FOR MUSIC EDUCATORS: II**

A continuation of Music 303 emphasizing the application of theoretical skills to composition and orchestration and including a study of 20th century compositional techniques. This course is intended for students

in the Master of Education in Music Education program, but is open to others who satisfy the prerequisite.

Not available for credit in the B.Mus. program. (Prerequisite: 303) (Offered in Summer Session only) (Not offered 1985)

**COMPOSITION**

**MUS 105 (2) INTRODUCTION TO COMPOSITION**

(Prerequisite: Permission of the School) (2-0; 2-0)

**MUS 205 (3) MUSIC COMPOSITION: I**

(Prerequisite: Permission of the School) (2-1; 2-1)

**MUS 305 (3) MUSIC COMPOSITION: II**

(Prerequisite: 205) (2-1; 2-1)

**MUS 306 (1½) RECORDING TECHNIQUES**

Introduction to the use of microphones, mixers, tape recorders, and allied equipment. Practical work in recording soloists and ensembles, tape editing, and creating compositions by means of tape techniques. (Prerequisite: Permission of the School) September-December (2-4)

**MUS 307 (1½) ELECTRONIC MUSIC: I**

Introduction to electronic music. Composition with the aid of the analog synthesizer. (Prerequisite: 306 and permission of the School) January-April (2-4)

**MUS 405 (3) MUSIC COMPOSITION: III**

(Prerequisite: 305) (2-1; 2-1)

**MUS 407 (3) ELECTRONIC MUSIC: II**

Advanced work in electronic music, including study of digital and analog synthesis and computer controlled systems. (Prerequisite: 307 and permission of the School) (0-3; 0-3)

**MUSIC HISTORY AND LITERATURE**

**\* MUS 110 (3) INTRODUCTION TO MUSIC HISTORY AND LITERATURE**

A survey of music literature with emphasis on Western music from plainsong to the 20th century, in the context of general cultural history. The course assumes some experience in listening as well as familiarity with the rudiments of musical notation. (3-1; 3-1)

**MUS 311 (3) MUSIC OF THE MEDIEVAL PERIOD AND THE RENAISSANCE**

(Enrollment limited) (Prerequisite: 110) (3-0; 3-0)

**\* MUS 312 (3) MUSIC OF THE BAROQUE ERA**

A study of music from c. 1660 - c. 1750. (Enrollment limited) (Prerequisite: 110) (3-0; 3-0)

**\* MUS 313 (3) MUSIC FROM c. 1730 TO THE LATE 19th CENTURY**

(Enrollment limited) (Not open for credit to those who have taken Music 314) (Prerequisite: 110) (3-0; 3-0)

**\* MUS 320 (3) WORLD MUSIC**

An introduction to the study of music of Asia, Africa, and aboriginal America, and the relationship of this music to the Western tradition. (Enrollment limited) (Prerequisite: 110) (Not offered) (3-0; 3-0)

**\* MUS 321 (3) HISTORY OF MUSICAL INSTRUMENTS**

A survey of the development of Western European instruments from antiquity to the present day. (Enrollment limited) (Prerequisite: 110) (3-0; 3-0)

**\* MUS 322 (1½ or 3) THE COMPOSER, HIS STYLE AND MUSIC**

A study of works of a major composer in the period from the 15th to 20th centuries. Emphasis will be placed on analysis, style and performance practice. Students may register for this course more than once. (Enrollment limited) (Prerequisites: 110 and 100B) (3-0) or (3-0; 3-0)

**\* MUS 323 (1½ or 3) FORMS AND GENRES IN MUSIC**

The study of a single musical form or genre, for example, opera, symphony, sonata. (Students may register for this course more than once.) (Enrollment limited) (Prerequisites: 110 and 100B) (3-0) or (3-0; 3-0)

**\* MUS 324 (3) MUSIC IN CANADA**

The history of music in Canada from the time of Cartier (1534) to the present. (Enrollment limited) (Prerequisites: 110 and 100B) (3-0; 3-0)

**MUS 390 (1½ or 3) SPECIAL STUDIES**

With the consent of the School, a student who has demonstrated a capacity for independent work may undertake an individual project. (Prerequisite: 110) (3-0) or (3-0; 3-0)

**MUS 490 (1½ or 3) SPECIAL STUDIES**

With the consent of the School, a student who has demonstrated a capacity for independent work may undertake an individual project. (Prerequisite: 110) (3-0) or (3-0; 3-0)

**MUS 499 (3) SEMINAR IN MUSICOLOGY**

For Music History majors only. Seminar will include the graduating essay. (3-0; 3-0)

**INSTRUMENTAL AND CHORAL TECHNIQUES****MUS 236 (formerly 336) (1½) KEYBOARD**

Group instruction in piano. Students who already possess adequate keyboard skills are not permitted to register for this course. One or two terms (2-2) or (1-1; 1-1)

**MUS 330 (1½) STRINGS**

Group instruction in playing all orchestral string instruments. (Not offered) (1-1; 1-1)

**MUS 331 (1½) BRASSES**

Group instruction in playing all orchestral brass instruments. (2-2)

**MUS 332 (1½) WOODWINDS**

Group instruction in playing all orchestral woodwind instruments. (2-2)

**MUS 333 (1½) PERCUSSION**

Group instruction in playing all orchestral percussion instruments. (2-2)

**MUS 334 (1½) VOICE**

Group instruction in vocal production. (2-2)

**MUS 350 (3) ORCHESTRATION**

Study of instrumentation and orchestration. (Prerequisite: 100B) (3-0; 3-0)

**MUS 356 (3) INTRODUCTION TO CONDUCTING**

Fundamental conducting techniques as applied to instrumental and vocal music. (Prerequisite: Permission of the School) (2-1; 2-1)

**MUS 456 (3) CONDUCTING**

(Prerequisites: 356 and audition) (2-1; 2-1)

**APPLIED MUSIC**

Instruction in voice or in an instrument will be provided by the faculty of the School of Music. The courses listed below are normally available only to students registered in the B.Mus. program. B.Mus. students who fail to maintain a load of at least 9 units (12 in the case of performance majors) will be required to withdraw from any course in the 140-440 (or 145-445) series in which they are registered.

**MUS 140 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (Prerequisite: Evidence of marked musical ability demonstrated by audition) (0-6-1; 0-6-1)

**MUS 145 (3) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (Prerequisite: Recommendation of the School) (For Performance Majors only) (1-12-2; 1-12-2)

**MUS 240 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (Prerequisite: 140) (0-6-1; 0-6-1)

**MUS 245 (6) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (Prerequisite: 140 or 145, and recommendation of the School) (For Performance Majors only) (1-12-2; 1-12-2)

**MUS 340 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (Prerequisite: 240) (0-6-1; 0-6-1)

**MUS 345 (6) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (Prerequisite: 245 or permission of the School) (For Performance Majors only) (1-12-2; 1-12-2)

**MUS 360 (1½) SEMINAR IN ACCOMPANYING**

Principles of accompanying (vocal and instrumental); coaching of selected repertoire. (Prerequisite: 240 or 245, or permission of the School) (1-1; 1-1)

**MUS 440 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (Prerequisite: 340) (This course may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts. Such students may be required to participate in ensembles.) (0-6-1; 0-6-1)

**MUS 445 (6) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (Prerequisite: 345) (For Performance Majors only) (1-12-2; 1-12-2)

**MUS 447 (3) GRADUATING RECITAL**

(Prerequisite: 345) (For Performance Majors only)

**PERFORMANCE GROUPS**

**MUS 180 (1) ENSEMBLES** (0-4; 0-4)

**MUS 181 (1) CHAMBER MUSIC** (0-3; 0-3)

**MUS 280 (1) ENSEMBLES** (0-4; 0-4)

**MUS 281 (1) CHAMBER MUSIC** (0-3; 0-3)

**MUS 380 (1) ENSEMBLES** (0-4; 0-4)

**MUS 381 (1) CHAMBER MUSIC** (0-3; 0-3)

**MUS 480 (1) ENSEMBLES** (0-4; 0-4)

**MUS 481 (1) CHAMBER MUSIC** (0-3; 0-3)

180-480, Ensembles, include the University Orchestra, University Wind Symphony, University Chorus, and University Chamber Singers.

181-481, Chamber Music, include the standard chamber groups as well as Collegium Musicum, New Music Ensemble (Sonic Lab), Opera Ensemble, Jazz Ensemble, and Accompanying.

480 and 481 may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts.

**GRADUATE COURSES**

Students should consult with the School of Music concerning the courses offered in any particular year.

Apart from the following courses, graduate students are encouraged to take an active part in the performing groups and musical life of the University.

**MUS 500 (1½ or 3) SELECTED PROBLEMS IN THEORY AND ANALYSIS**

(3-0) or (3-0; 3-0)

**MUS 501 (1½ or 3) SEMINAR IN HISTORICAL MUSICAL NOTATIONS**

(3-0) or (3-0; 3-0)

**MUS 502 (3) MUSICAL AESTHETICS AND THE THEORY OF CRITICISM**

(3-0; 3-0)

**MUS 503 (1½) INTRODUCTION TO GRADUATE STUDY AND MUSIC BIBLIOGRAPHY**

(All students in musicology must register for this course in their first term of graduate study.) (3-0)

**MUS 504 (1½ or 3) SEMINAR IN PERFORMANCE PRACTICE**

(3-0) or (3-0; 3-0)

**MUS 505 (1½ or 3) HISTORY OF MUSICAL INSTRUMENTS**

(3-0) or (3-0; 3-0)

\* Approved for elective credit in the Faculty of Arts and Science.

- MUS 506 (1½) MUSICAL ACOUSTICS** (3-0)  
**MUS 507 (3) ELECTRONIC MUSIC** (0-3; 0-3)  
**MUS 540 (1) INDIVIDUAL TUITION**  
 Lessons in instrument or voice. (Approval of the student's Supervisory Committee is required.) (0-1; 0-1)
- †† **MUS 545 (4) MAJOR INSTRUMENT STUDY**  
 Individual tuition and master class. (For M.Mus. candidates in performance only) (2-2; 2-2)
- † **MUS 550 (1½) STUDIES IN PARTICULAR ERA OF MUSIC HISTORY**  
 (May be taken in areas A and B) (3-0)
- † **MUS 551 (1½ or 3) STUDIES IN PARTICULAR FORMS OR GENRES IN MUSIC HISTORY** (3-0) or (3-0; 3-0)
- † **MUS 552 (1½ or 3) STUDIES IN THE MUSIC, LIFE AND TIMES OF INDIVIDUAL COMPOSERS** (3-0) or (3-0; 3-0)
- MUS 555 (3) INDIVIDUAL TUITION IN COMPOSITION**

- \*\* **MUS 560 (1½ or 3) SEMINAR IN MUSICOLOGY** (3-0) or (3-0; 3-0)
- MUS 561 (3) SEMINAR IN COMPOSITION**
- † **MUS 580 (1½ or 3) DIRECTED STUDIES**
- †† **MUS 581 (2) ENSEMBLE COACHING AND PLAYING** (0-4; 0-4)
- MUS 597 (6) M.MUS. GRADUATING COMPOSITION(S)**
- MUS 598 (0) M.MUS. PRACTICUM**  
 Degree recital required for performance candidates in final year.
- § **MUS 599 M.A. THESIS**
- § **MUS 699 PH.D. DISSERTATION**
- \*\* All students in musicology must register for this course each year they are in attendance.
- † May be taken more than once, in different fields, at the discretion of the School.
- †† Performance candidates must register for this course in each year of study.
- § Credit to be determined.

## DEPARTMENT OF THEATRE

Michael R. Booth, B.A. (Brit. Col.), M.A., Ph.D. (London), Professor and Chairman of the Department

Murray D. Edwards, B.A. (Sask.), M.A., Ph.D. (Columbia), Adjunct Professor (1984-85)

Alan Hughes, B.A., M.A. (Tor.), Ph.D. (Birm.), Professor

Mavor Moorc, B.A. (Tor.), D.Litt. (York), Part time Adjunct Professor (1984-86)

Giles W. Hoga, B.A. (Miami), M.A., Ph.D. (Northwestern), Associate Professor

John F. Krich, A.B. (Baldwin-Wallace), M.F.A. (Yale), Associate Professor

Harvey M. Miller, B.A., M.Ed., M.A., Ph.D. (Pittsburgh), Associate Professor

Linda Hardy, B.A. (Brock), M.A. (Tor.), Assistant Professor

Irene M. Pieper, B.A. (Calif.), M.A. (San Fran. St.), Assistant Professor

Juliana M. Saxton, B.A. (Tor.), Assistant Professor

Roderick B. Menzies, M.F.A. (York), Visiting Lecturer (1984-85)

Kathryn V. Peet, B.A. (N.Y.), M.A. (Columbia), Visiting Lecturer 1984-85)

N. Bindon Kinghorn, Senior Academic Assistant and Part time Lecturer

Kazimierz Piesowocki, Senior Academic Assistant and Part time Lecturer

### GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.F.A. degrees, see page 218; for graduate courses, see page 195.

### UNDERGRADUATE PROGRAMS

The Bachelor of Fine Arts in Theatre is an extensive program intended for students who wish to continue their studies in graduate or professional schools and who wish to prepare for a career in community, educational or professional theatre. The philosophy of the Theatre Department is based on the concept that the complex art of the theatre should be studied in all aspects and that by its nature it must be studied in performance. Through all courses and productions the students learn the fundamental performing and technical skills as they study the historical, contemporary and educational practice of the theatre arts.

The Department offers the undergraduate student a choice between an Honours Program in Theatre History and a Theatre Major Program; in the latter, Comprehensive and Special options are available (see Program of Courses).

Students will be required to take part in rehearsals and performances associated with departmental projects. They must consult the Department before accepting major commitments not related directly to their course of study.

### ADMISSION PROCEDURES

Enrollment in the Bachelor of Fine Arts in theatre program is limited at the present time.

#### 1. Applicants from Secondary School

Students must apply to Admissions Services for acceptance to the University and in addition must make separate application to the Theatre Department. Details of the letter of application may be obtained from the Secretary of the Department. An interview (and therefore a campus visit) is required. Interviews are held each year, normally beginning in late March. If distance precludes a visit, tentative acceptance may be granted until requirements are satisfied in September. Students are urged to apply as early as possible since places cannot be guaranteed for qualified applicants once positions are filled.

#### 2. Applicants from Other Universities and Colleges

The procedure is the same as that described in the preceding paragraph. The Director of Admissions will consult the Department for advice on transfer credit for theatre courses that have been completed elsewhere. This credit and Department admission procedures will determine into which year of studies the student will be accepted.

## PROGRAM OF COURSES

To graduate with a B.F.A. in Theatre, students must complete 60 units of course work of which at least 30 units will be in Theatre and no fewer than 15 outside the Department. In accordance with regulations on page 19, at least 21 units must be numbered at the 300 or 400 level; in addition, at least 15 such units at 300 or 400 level must be in Theatre.

In the first year, students will be required to take Theatre 100, 105, 120 or 121 and three units of English. In subsequent years the student will be required to complete Theatre 200, 205, and at least 4½ units in the following courses: Theatre 306, 307, 308, 316, 317, 318, 410, 411, 414. Additional required courses are outlined in the Honours and Theatre Major Program below.

In second year each student will be assigned an adviser who will develop a program of studies related to the student's needs and abilities. Students may choose either a Theatre Major Program or the Honours Program in Theatre History.

### THEATRE MAJOR PROGRAM

Students who choose the Theatre Major Program must select one of two program options: 1) Comprehensive or 2) Special (Acting, Directing, Design, Production and Management, Theatre in Education, Theatre History). Acceptance and continuance in a Special Program is subject to approval by the Department.

A student in a Special Option normally must complete at least thirty-six units of Theatre course work, of which at least nine units must be in his specialization and three units in a related area as determined by the student's adviser. The thirty-six units of Theatre courses must also include the required courses listed above.

*Comprehensive Option:* Those students who wish to enroll in a course of study which will permit the exploration of a wide range of techniques and aspects of Theatre, in a generalized approach, should choose the Comprehensive Option.

*Special Option:* Those students who wish to specialize in a particular

aspect of Theatre should choose the Special Option: this permits the student to emphasize one of six specific areas: Acting, Directing, Design, Production and Management, Theatre in Education, Theatre History. Students in these Special Options will pursue a more concentrated program in their field.

Students may enter the Special Option in Acting at the beginning of the third year. Enrollment is normally limited to twelve per year by selection and is probationary for two weeks. Transfer students who signify their intent to enter this Special Option must audition, normally before the beginning of the academic year. Further regulations are listed in the Department Handbook.

A student wishing to enter the Special Option in Theatre in Education should be aware that several choices exist within the option, and that to ensure admission to the third year courses chosen it may be necessary to satisfy prerequisite requirements in the second year. All students wishing to enter the Special Option should therefore see an academic adviser before registering for second year.

Students may enter the Special Option in Production and Management at the beginning of the third year. Enrollment is limited; selection is by interview.

**Acting**

| <i>First Year</i>  |       | <i>Second Year</i> |       |
|--------------------|-------|--------------------|-------|
| 100                | 3     | 200                | 3     |
| 105                | 3     | 205                | 3     |
| 120 or 121         | 3     | 220                | 3     |
| English            | 3     | 250                | 1½    |
| Elective           | 3     | 260                | 1½    |
|                    | 15    | Elective           | 3     |
|                    |       |                    | 15    |
| <i>†Third Year</i> |       | <i>Fourth Year</i> |       |
| 306, 307, 308,     |       | 306, 307, 308,     |       |
| 316, 317, 318,     |       | 316, 317, 318,     |       |
| 410, 411, 414      | 0-4½* | 410, 411, 414      | 0-4½* |
| 320                | 3     | 420                | 3     |
| 350                | 3     | Courses from the   |       |
| 360                | 3     | following list:    |       |
| Courses from the   |       | 240, 330, 341,     |       |
| following list:    |       | 343, 383, 340,     |       |
| 240, 330, 341,     |       | 372, 430, 499      | 0-4½  |
| 342, 343, 372,     |       | Elective           | 0-6*  |
| 181, 383, 399      | 0-3   |                    |       |
| Elective           | 0-3*  |                    |       |
|                    | 15    |                    | 15    |

† Audition required

**Directing**

| <i>First Year</i> |         | <i>Second Year</i> |       |
|-------------------|---------|--------------------|-------|
| 100               | 3       | 200                | 3     |
| 105               | 3       | 205                | 3     |
| 120 or 121        | 3       | 220                | 3     |
| English           | 3       | 240                | 3     |
| Elective          | 3       | Elective           | 3     |
|                   | 15      |                    | 15    |
| <i>Third Year</i> |         | <i>Fourth Year</i> |       |
| 306, 307, 308,    |         | 306, 307, 308,     |       |
| 316, 317, 318,    |         | 316, 317, 318,     |       |
| 410, 411, 414     | (0-4½)* | 410, 411, 414      | 0-4½* |
| 330               | 3       | 430                | 3     |
| 340               | 3       | 342                | 3     |
| 341               | 3       | Elective           | 4½-9* |
| Elective          | 1½-6*   |                    |       |
|                   | 15      |                    | 15    |

**Design**

| <i>First Year</i>     |       | <i>Second Year</i>    |        |
|-----------------------|-------|-----------------------|--------|
| 100                   | 3     | 200                   | 3      |
| 105                   | 3     | 205                   | 3      |
| 120 or 121            | 3     | 240                   | 3      |
| English               | 3     | 341 or 342            | 3      |
| Elective              | 3     | Elective              | 3      |
|                       | 15    |                       | 15     |
| <i>Third Year</i>     |       | <i>Fourth Year</i>    |        |
| 306, 307, 308,        |       | 306, 307, 308,        |        |
| 316, 317, 318,        |       | 316, 317, 318,        |        |
| 410, 411, 414         | 0-4½* | 410, 411, 414         | 0-4½*  |
| One of: 340, 341, 342 | 3     | One of: 340, 341, 342 | 3      |
| 330                   | 3     | Electives             | 7½-12* |

|           |       |  |    |
|-----------|-------|--|----|
| Electives | 4½-9* |  |    |
|           | 15    |  | 15 |

**Production and Management**

| <i>First Year</i>     |       | <i>Second Year</i>    |       |
|-----------------------|-------|-----------------------|-------|
| 100                   | 3     | 200                   | 3     |
| 105                   | 3     | 205                   | 3     |
| 120 or 121            | 3     | 240                   | 3     |
| English               | 3     | 299 or elective       | 3     |
| Elective              | 3     | Elective              | 3     |
|                       | 15    |                       | 15    |
| <i>†Third Year</i>    |       | <i>Fourth Year</i>    |       |
| 306, 307, 308,        |       | 306, 307, 308,        |       |
| 316, 317, 318,        |       | 316, 317, 318,        |       |
| 410, 411, 414         | 0-4½* | 410, 411, 414         | 0-4½* |
| 305                   | 3     | 405                   | 3     |
| 395                   | 3     | 499                   | 3     |
| One of: 340, 341, 342 | 3     | One of: 340, 341, 342 | 3     |
| Electives             | 1½-6* | Electives             | 1½-6* |
|                       | 15    |                       | 15    |

† Interview and permission required.

**Theatre in Education - Elementary**

| <i>First Year</i>    |      | <i>Second Year</i>    |        |
|----------------------|------|-----------------------|--------|
| 100                  | 3    | 200                   | 3      |
| 105                  | 3    | 205                   | 3      |
| 120 or 121           | 3    | 181                   | 3      |
| Approved English     | 3    | ED-B 331              | 1½     |
| * Approved elective  | 3    | ED-P 197              | 1½     |
|                      | 15   | * Approved elective   | 3      |
|                      |      |                       | 15     |
| <i>Third Year</i>    |      | <i>Fourth Year</i>    |        |
| 306, 307, 308        |      | 306, 307, 308         |        |
| 316, 317, 318        |      | 316, 317, 318,        |        |
| 410, 411, 414        | 0-3* | 410, 411, 414         | 1½-4½* |
| 381                  | 3    | 382, 341, 342 or 383  | 3      |
| 330                  | 3    | 394                   | 1½     |
| 341 or 342           | 3    | ED-P 297 or elective  | 1½     |
| ED-D 305             | 3    | ** Approved electives | 3-7½   |
| ** Approved elective | 0-3* |                       |        |
|                      | 15   |                       | 15     |

\*\* For those wishing to take the Post Degree Professional Program (Elementary) the following courses are required:

|                                  |   |
|----------------------------------|---|
| Social Science (normally anthro- |   |
| pology, geography or sociology)  | 3 |
| Canadian history                 | 3 |
| Mathematics                      | 3 |
| Introductory psychology          | 3 |
| Laboratory science (geography    |   |
| not acceptable)                  | 3 |

**Theatre in Education - Secondary**

| <i>First Year</i> |      | <i>Second Year</i> |         |
|-------------------|------|--------------------|---------|
| 100               | 3    | 200                | 3       |
| 105               | 3    | 205                | 3       |
| 120 or 121        | 3    | Theatre elective   | 3       |
| 181               | 3    | Elective           | 3       |
| Approved English  | 3    | Elective           | 3       |
|                   | 15   |                    | 15      |
| <i>Third Year</i> |      | <i>Fourth Year</i> |         |
| 306, 307, 308,    |      | 306, 307, 308      |         |
| 316, 317, 318,    |      | 316, 317, 318,     |         |
| 410, 411, 414     | 0-3* | 410, 411, 414      | 1½-4½*  |
| 330               | 3    | 383                | 3       |
| 382               | 3    | Electives          | 7½-19½* |
| ED-D 406          | 3    |                    |         |
| ED-B 351          | 1½   |                    |         |
| ED-P 398          | 1½   |                    |         |
| Elective          | 0-3* |                    |         |
|                   | 15   |                    | 15      |

**Theatre History**

| <i>First Year</i> |   | <i>Second Year</i> |   |
|-------------------|---|--------------------|---|
| 100               | 3 | 200                | 3 |
| 105               | 3 | 205                | 3 |
| 120 or 121        | 3 | Electives          | 9 |

|          |    |    |
|----------|----|----|
| English  | 3  |    |
| Elective | 3  |    |
|          | 15 | 15 |

|                               |     |
|-------------------------------|-----|
| <i>Third and Fourth Years</i> |     |
| 306, 307, 308,                |     |
| 316, 317, 318,                |     |
| 410, 411, 414                 | 7½  |
| 490                           | 3   |
| Approved electives            | 6   |
| Electives                     | 13½ |
|                               | 30  |

\* Students are required to take a minimum of 4½ units of Theatre History from this list. Students are reminded that a minimum of 15 units of elective credit must be taken outside the Department.

## HONOURS PROGRAM IN THEATRE HISTORY

### Typical Program:

| <i>First Year</i> |    | <i>Second Year</i> |    |
|-------------------|----|--------------------|----|
| 100               | 3  | 200                | 3  |
| 105               | 3  | 205                | 3  |
| 120 or 121        | 3  | Electives          | 9  |
| English           | 3  |                    |    |
| Elective          | 3  |                    |    |
|                   | 15 |                    | 15 |

|                               |    |
|-------------------------------|----|
| <i>Third and Fourth Years</i> |    |
| 306, 307, 308,                |    |
| 316, 317, 318,                |    |
| 410, 411, 414                 | 9  |
| One of 390, 391, 392          | 3  |
| 490                           | 3  |
| Approved Electives            | 3  |
| Electives                     | 12 |
|                               | 30 |

- Students must apply at the end of their second year to enter into the Honours Program, which officially begins in their third year.
- The successful third year candidate will be permitted to enter into the fourth year program.
- No candidate for Honours can progress further in the program with less than a B+ average in his theatre history courses. The overall academic performance for such a student must be deemed satisfactory to the chairman and faculty.
- All students wishing to honour in Theatre History must demonstrate an adequate reading knowledge of a language other than English, acceptable to the Department. This requirement may normally be satisfied either by courses at the Second Year level, or by authorized translation tests.
- Honours students will be each assigned an adviser at the beginning of their third year who will help them determine their specific area of interest; students will each be expected, under the guidance of their advisers, to present papers to a colloquium of Theatre History faculty and other interested faculty and students.
- In their fourth year Honours students will continue contributing papers to the colloquium and will present a final graduating paper, upon which they will be examined orally by the faculty, who may expand the discussion to include other aspects of theatre history or criticism if deemed relevant.
- Honours students will be expected to participate in the productions of the Department.

To receive a First Class Honours degree a student must obtain a grade of at least A- in theatre history courses and have a minimum graduating average of 6.50.

To receive a Second Class Honours degree a student must obtain a minimum graduating average of 4.00 and must obtain a grade of at least B+ in theatre history courses and a minimum grade point average of 5.00 in all 300 and 400 level theatre courses.

Honours students who do not meet these requirements but complete those for a Major in theatre, may receive a Major degree in the Special (Theatre History) Program.

## UNDERGRADUATE COURSES

### THEA 150 (1½) SPEECH COMMUNICATION

A practical course designed to develop awareness of oral communication, and to improve technique in organization and presentation. (Enrollment is limited to 15 students per section. Reserved for Education

students. Others may attend the first lecture and laboratory meetings for possible admission.) (Prerequisite: 15 units of University credit)

September-December. Also January-April (1-3)

## THEATRE HISTORY

### \*THEA 100 (3) INTRODUCTION TO THE HISTORY AND LANGUAGE OF THE THEATRE

A survey of the history of western theatre from its beginnings to the closing of the English playhouses in 1642. Early forms, conventions and styles are compared with those of the contemporary theatre. Students are required to attend performances of local theatres.

September-April (2-0-2; 2-0-2)

### \*THEA 200 (3) THEATRE FROM FRENCH CLASSICISM TO THE PRESENT

A survey of theatre history in the Western tradition from the theatre of Corneille to the present day. Introduction to library research methods in theatre history. (Prerequisite: 100 or permission of the Department)

September-April (3-0; 3-0)

### \*THEA 306 (1½) STUDIES IN THEATRE OF THE ANCIENT WORLD

Theatre in ancient Greece or Rome. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 200 or permission of the Department)

(3-0)

### \*THEA 308 (1½) STUDIES IN RENAISSANCE THEATRE

The Renaissance in the theatre of Italy, France or England. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 200 or permission of the Department)

(3-0)

### \*THEA 316 (1½) STUDIES IN BAROQUE, ROCOCO AND NEOCLASSICAL THEATRE

Theatre in the 17th and 18th centuries. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 200 or permission of the Department)

(3-0)

### \*THEA 317 (1½) STUDIES IN 19th CENTURY THEATRE

Theatre in the 19th century. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 200 or permission of the Department)

(3-0)

### \*THEA 318 (1½) STUDIES IN 20th CENTURY THEATRE

Modern theatre. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 200 or permission of the Department)

(3-0)

### \*THEA 400 (3) EUROPEAN THEATRE FROM FRENCH CLASSICISM TO 1900

An examination of the late 17th, 18th, and 19th century theatre with particular emphasis on England, France, Italy and Germany. (Prerequisite: 300) (Not offered after 1985-86)

September-April (3-0; 3-0)

### \*THEA 410 (1½) SEMINAR IN THEATRE HISTORY: I

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (Prerequisites: 200 or permission of the Department)

(3-0)

### \*THEA 411 (1½) SEMINAR IN THEATRE HISTORY: II

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (Prerequisites: 200 or permission of the Department)

(3-0)

### THEA 414 (1½, formerly 3) STUDIES IN CANADIAN THEATRE

The Canadian theatre and drama. (Students should consult the Department for the topic to be considered. This course may be taken for credit more than once in different topics, with the permission of the Department.) (Prerequisite: Theatre 200 or permission of the Department)

(3-0)

\* Approved for elective credit in the Faculty of Arts and Science.

**ACTING****THEA 120 (3) ACTING: I**

First steps in movement, voice, improvisation and scene study. Elementary phonetics. (Prerequisite: Permission of the Department) September-April (0-6; 0-6)

**THEA 121 (3) INTRODUCTION TO ACTING**

A survey of scene study, improvisation, voice and movement for those who do not intend to specialize in acting. (Prerequisite: Permission of the Department) September-April (0-6; 0-6)

**THEA 220 (3) ACTING: II**

Advanced work in improvisation, characterization and scene study. (Prerequisites: 120 or 121, and permission of the Department. Corequisites: 250 and 260) September-April (0-7½; 0-7½)

**THEA 250 (1½) BEGINNING VOICE**

Basic development of the voice to prepare for speech on the stage. (Prerequisites: 120 or 121, and permission of the Department. Corequisites: 220 and 260) September-April (0-2½; 0-2½)

**THEA 260 (1½) INTRODUCTION TO STAGE MOVEMENT**

Basic development of the body to prepare for movement on the stage. (Prerequisites: 120 or 121, and permission of the Department. Corequisites: 220 and 250) September-April (0-2½; 0-2½)

**THEA 320 (3) ACTING: III**

Intensive study of acting as related to specific theatrical genres, styles or periods. (Prerequisites: 220, 250, 260 and permission of the Department. Corequisites: 350 and 360) September-April (0-7½; 0-7½)

**THEA 350 (3) SPEECH IN THE THEATRE**

Intensive work in voice and speech as related to specific theatrical genres, styles or periods. (Prerequisite: 220, 250, 260, and permission of the Department. Corequisites: 350 and 360) September-April (0-7½; 0-7½)

**THEA 360 (3) STAGE MOVEMENT**

Intensive work in movement as related to specific theatrical genres, styles or periods. (Prerequisites: 220, 250, 260, and permission of the Department. Corequisites: 320 and 350) September-April (0-7½; 0-7½)

**THEA 420 (3) ACTING: IV**

Advanced work in special problems in acting. A studio production will be mounted each year. (Prerequisites: 320, 350, 360; audition and/or interview; permission of the Department) September-April (0-7½; 0-7½)  
N.B.: This course is revived from a previous entry; see 1977-78 Calendar.

**DIRECTING****THEA 330 (3) DIRECTING: I**

Fundamental textual analysis; stage composition, movement and rhythm; methods of rehearsal procedure and basic techniques of working with the actor. (Prerequisites: 120, 121 or 181 and permission of the instructor) September-April (1-4; 1-4)

**THEA 430 (3) DIRECTING: II**

Advanced work in stage direction with particular emphasis on special problems of style. (Prerequisites: 330 and permission of the Department) September-April (1-4; 1-4)

**DESIGN AND TECHNICAL PRACTICE****THEA 240 (3) GRAPHIC TECHNIQUES FOR THEATRE DESIGNERS**

A course designed to develop rendering and delineation skills in both freehand and mechanical idioms useful to the designer for the communication of appropriate information in an appropriate form for design development of working drawings. (Prerequisite: Permission of the Department) September-April (1-4; 1-4)

**THEA 241 (3) INTRODUCTION TO COSTUME DESIGN**

A study of the principles, techniques and materials of costume design for the stage and other media. Assignments will include costume designs for Department projects. (Prerequisite: 105) September-April (2-2; 2-2)

**THEA 340 (3) SCENERY FOR THE THEATRE**

Fundamentals of three dimensional design and spatial perception in the theatre. Graphic techniques for planning, analyzing and describing plastic space for the stage. Practical problems in the design of stage settings. (Prerequisites: 105 and 240 and permission of the Department) September-April (2-2; 2-2)

**THEA 341 (3) COSTUME HISTORY AND DESIGN**

The history of costume and fashion in society and the theatre from ancient times to the present. Analysis and selected designs for a play set in each of approximately twelve periods of costume style. (Prerequisite: 241 and permission of the Department) September-April (3-1; 3-1)

**THEA 342 (3) LIGHTING FOR THE THEATRE**

Lighting design; its theory and practice. (Prerequisites: 105 and permission of the Department) September-April (2-2; 2-2)

**THEA 343 (3) TELEVISION AND THEATRE**

A theoretical and practical study of television art, giving special consideration to the aesthetic relationship between television and stage production, directing and acting. (Enrollment to be limited.) (Prerequisites: 6 units of Theatre and permission of the Department) September-April (1-2; 1-2)

**THEA 441 (1½) SPECIAL PROBLEMS IN COSTUME DESIGN**

Advanced work in a specific costume design area, such as pattern drafting, dying or accessories. The topics for consideration will change each year. (Students may take this course for credit more than once in different topics.) (Prerequisites: 241, 341 and permission of the Department) (3-0)

**THEA 444 (1½ or 3) COSTUME DESIGN FOR PRODUCTION**

Supervised design and production in the execution of costumes for theatre production. Students will work with directors on design concepts, carry out research and write reports on their findings; they will then prepare designs and see them through the construction process into production. (May be taken for credit more than once, up to a limit of six units) (Prerequisites: 105, 341 and permission of the Department) (0-3) or (0-3; 0-3)

**PRODUCTION AND MANAGEMENT****THEA 105 (3) AN INTRODUCTION TO STAGECRAFT AND TECHNICAL PRACTICE**

Elementary principles of scenery and costume construction, and of stage lighting. Students will be required to participate as production crew in Department productions. (Prerequisite: Permission of the Department) September-April (1-4; 1-4)

**THEA 205 (3) AN INTRODUCTION TO PRODUCTION AND MANAGEMENT AREAS OF THE THEATRE**

Students are instructed in the basic principles and procedures of the major production and management areas of the theatre. Intensive applications in one or more areas are studied. Students will be required to participate as production crew in Department or other designated productions. (Prerequisites: 105 and permission of the Department) September-April (1-4; 1-4)

**THEA 305 (1½ or 3) ADVANCED PRODUCTION AND MANAGEMENT**

Students are instructed and given practical experience in one or more of the major production and management areas of the theatre. These may include: costume, stage management, technical direction, sound design, lighting operation, stage carpentry, front of house, publicity. (Enrollment limited) (Prerequisites: 205 and permission of the Department) (0-6-2; 0-6-2)

**THEA 405 (1½ or 3) SPECIALIZED STUDIES IN PRODUCTION AND MANAGEMENT**

Supervised practical experience in one or two specialized areas of production and management in the theatre. (Enrollment limited) (Students may take this course for credit more than once in different topics.) (Prerequisites: 305 and permission of the Department) (0-6-2; 0-6-2)

**THEA 372 (1½) THEATRICAL MAKEUP**

The history, theory, design and application of theatrical makeup. (Pre- or corequisites: 341 or 220 and/or permission of the Department) September-April (1-1; 1-1)

**THEATRE IN EDUCATION****THEA 181 (3) AN INTRODUCTION TO THE DRAMATIC PROCESS**

A course designed for students considering a career in which presentation of self and personal communication are necessary components. Development of personal confidence, creative and communication skills through dramatic exploration of games, verbal and nonverbal signalling, role playing and improvisation. Study of texts will be required. (Prerequisite: Permission of the Department) September-April (1-4; 1-4)

**THEA 381 (3) DRAMA IN EDUCATION (Grades K-VII)**

A course designed for teachers who wish to use Drama as a method of instruction in the elementary school. A study of a dramatic approach to the teaching of language arts, mathematics and social studies; and an exploration of movement, sound, art and music. Examination of methodology, teaching strategies and unit designs. Texts: Bolton, *Towards a Theory of Drama in Education*; Stabler, *Drama in the Primary School* (Prerequisites: 181 and permission of the Department. Pre- and co-requisites: ED-B 331, ED-P 297, ED-D 305)

September-April (1-4; 1-4)

**THEA 382 (3) DRAMATIC ARTS IN THE SECONDARY SCHOOL (Grades VIII-XII)**

A course designed for those teachers who wish to teach Drama as a subject, or to use Drama as a teaching method. This course is intended to bridge the gap between dramatic exploration and dramatic presentation. Game theory, improvisation, role playing, Readers' Theatre, Story Theatre, Anthology and Docudrama. An examination of methods, teaching strategies, and curriculum design with emphasis upon theory, objectives, and extracurricular Drama. Texts: Bolton, *Towards a Theory of Drama in Education*; Courtney, *The Dramatic Curriculum* (Pre- and co-requisites: ED-B 351, ED-P 398, ED-D 406)

September-April (1-4; 1-4)

**THEA 383 (3) THEATRE FOR YOUNG AUDIENCES**

A study of the problems of producing plays for and by children with practical work in a variety of forms and media. Studio work will be required. (Prerequisites: 330 and permission of the Department)

September-April (1-4; 1-4)

**DIRECTED STUDIES**

NOTE: Directed Studies may, with the permission of the Department, be taken for credit more than once.

Students wishing to pursue a course of directed studies must, with a faculty member who is willing to supervise such a course, formulate a proposal accurately describing course content, the intended method and extent of supervision, and the method by which work will be evaluated. The proposal must then receive the approval of the Chairman of the Department.

Proposals will normally be subject to the following limitations: the student must have maintained a good G.P.A. and an average of at least B+ in courses directly related to the proposed directed studies; no more than 9 units of directed studies credit will count for credit towards the B.F.A.; no more than 6 units of directed studies will be approved in any single winter session.

**THEA 299 (1½ or 3) THEATRE LABORATORY**

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre.

September-April (2-2; 2-2)

**\*\*THEA 390 (1½ or 3) DIRECTED STUDIES IN THEATRE HISTORY**  
(Prerequisite: 200 and/or permission of the Department)**\*\*THEA 391 (1½ or 3) DIRECTED STUDIES IN THEATRE AESTHETICS**

(Prerequisite: 200 and/or permission of the Department)

**\*\*THEA 392 (1½ or 3) DIRECTED STUDIES IN THEORIES OF ACTING****\*\*THEA 393 (1½ or 3) DIRECTED STUDIES IN THEORIES OF DIRECTING**

(Prerequisite: 200 and 330 and/or permission of the Department)

**\*\*THEA 394 (1½ or 3) DIRECTED STUDIES IN CHILDREN'S DRAMA**

Individual, supervised research in children's drama culminating in the production of a specific project either written or practical.

**THEA 395 (1½ or 3) DIRECTED STUDIES IN PRODUCTION AND/OR MANAGEMENT****THEA 396 (1½ or 3) DIRECTED STUDIES IN SCENE DESIGN**  
(Prerequisites: 341, 441 and permission of the Department)**THEA 398 (1½ or 3) DIRECTED STUDIES IN LIGHTING DESIGN**  
(Prerequisites: 342 and permission of the Department)**THEA 399 (1½ or 3) THEATRE LABORATORY**

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.  
September-April (2-2; 2-2)

**THEA 490 (3) GRADUATING PROJECT**

Students may take directed studies under this number for credit more than once according to their areas of interest and with the permission of the Department.

**THEA 499 (1½-6) THEATRE LABORATORY**

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.  
September-April (2-2; 2-2)

\*\* Students in Arts and Science may take for elective credit only one of the five directed studies courses.

**GRADUATE COURSES**

NOTE: The content of courses numbered 500-590 may vary in different academic sessions. These courses may then be taken for credit more than once at the discretion of the Department. Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

**THEA 500 (1½ or 3) METHODS AND MATERIALS OF THEATRE RESEARCH****THEA 501 (1½ or 3) SEMINAR IN HISTORY AND CRITICISM OF TRAGEDY****THEA 502 (1½ or 3) SEMINAR IN HISTORY AND CRITICISM OF COMEDY****THEA 503 (1½ or 3) SEMINAR IN EUROPEAN THEATRE HISTORY****THEA 504 (1½ or 3) SEMINAR IN NORTH AMERICAN THEATRE HISTORY****THEA 505 (1½ or 3) SEMINAR IN THEATRICAL STYLES****THEA 506 (1½ or 3) SEMINAR IN CHILDREN'S DRAMA****THEA 507 (1½ or 3) SEMINAR IN CHILDREN'S THEATRE****THEA 508 (1½ or 3) SCENE DESIGN****THEA 509 (1½ or 3) LIGHTING DESIGN****THEA 510 (1½ or 3) COSTUME DESIGN****THEA 511 (1½ or 3) PRODUCTION****THEA 512 (1½ or 3) DIRECTING****THEA 513 (1½ or 3) SEMINAR IN THEATRE AESTHETICS****THEA 514 (1½ or 3) SEMINAR IN DESIGN****THEA 520 (3) ADVANCED PROBLEMS IN SCENE DESIGN****THEA 521 (3) ADVANCED PROBLEMS IN LIGHTING DESIGN****THEA 522 (3) ADVANCED PROBLEMS IN COSTUME DESIGN****THEA 523 (3) ADVANCED PROBLEMS IN DIRECTING****THEA 590 (3) DIRECTED STUDIES****THEA 598 (Credit to be determined) M.F.A. PRACTICUM****THEA 599 (Credit to be determined) M.A. THESIS**

## DEPARTMENT OF VISUAL ARTS

Roland Brener, Post Dip. A.D. (St. Martin's School of Art, London), Professor (Sculpture) and Chairman of the Department  
 Pat Martin Bates, Dip. Royale (Académie Royale des Beaux Arts, Antwerp), R.C.A., Professor (Printmaking)  
 Donald Harvey, A.T.D. (Brighton), R.C.A., Professor (Drawing and Painting)  
 Douglas G. Morton, R.C.A., Professor (Painting)  
 Mowry Baden, B.A. (Pomona), M.A. (Stanford), Associate Professor (Sculpture)  
 George W. Tiessen, B.F.A. (Mt. Allison), M.F.A. (Cornell), Associate Professor (Printmaking and Painting)  
 Gwen Curry, B.F.A., (U. of Vic.), M.F.A., (Arizona St.), Assistant Professor (Printmaking and Drawing)  
 Fred Douglas, Assistant Professor (Photography)  
 Lynda Gammon, B.A. (S. Fraser), M.F.A. (York), Visiting Lecturer (1984-85)  
 Elspeth Pratt, B.A., B.F.A. (Man.), M.F.A. (Brit. Col.), Visiting Lecturer (1984-85)  
 Gregory Pyra, B.F.A. (Sask.), M.F.A. (Calgary), Visiting Lecturer (1984-85)  
 Patrick George, B.F.A. (U. of Vic.), Senior Academic Assistant

### GRADUATE PROGRAM

For information on studies leading to the M.F.A. Degree, see page 219; for graduate courses, see page 198.

### GENERAL INFORMATION

The Department offers two undergraduate programs leading to the degree of B.F.A., Honours or Major, and a two year graduate program leading to an M.F.A.

The academic emphasis of the Department is on a fine art curriculum, rather than applied or craft training. The program is designed to provide intensive studio experience in a critical setting pertinent to the pursuit of art in our culture. Studies are enriched by visiting artists and critics and the presence of graduate students from Canada and abroad. In addition to the regular program, the Department offers several courses each summer which are staffed by notable visiting artists.

### ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

#### 1. From secondary school

Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar.

Students intending to pursue a degree program in Visual Arts should declare that intention by registering in the faculty of Fine Arts.

#### 2. Transfer from other universities, colleges, and art schools

Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar. The Director of Admission Services will consult the Department for advice on transfer credit for studio courses completed elsewhere. Enrollment is limited, and the Department will accept only the best qualified candidates in the program. Applicants should submit a folio of recent work to be evaluated by a committee of the Department. Folios may contain drawings, prints, painting, or any flat material. Three dimensional work and paintings should be submitted in the form of photographs or slides. All slides and photographs should be labeled with the candidate's name, medium, and size of work. Folios must be sent or delivered by June 30 to:

Chairman,  
 Department of Visual Arts,  
 "M" Building,  
 University of Victoria.

#### 3. From other programs at the University of Victoria

Complete the usual procedures for reregistration, as specified elsewhere in this Calendar. Applicants are urged to write to the Department Chairman or request a personal interview, if possible before June 30. Applicants wishing to submit a folio should follow the procedures listed above.

### UNDERGRADUATE PROGRAMS

Students who are working towards the B.F.A. degree have the choice of an Honours or a Major program. This permits a choice between an intensive commitment to visual arts (36 visual arts course units from a degree total of 60); or a combination of visual arts and other University offerings (as few as 28½ visual art course units from a degree total of 60). A B- average in 100 and 200 level visual arts courses is required in order to continue on the B.F.A. program.

#### HONOURS PROGRAM

Students must complete 36 units of Department offerings as specified below. Of the total of 60 units, at least 21 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. Students must maintain a B+ average in three visual arts studio courses at the 300 level, and have the permission of the Department, to enter Art 499.

| <i>First and Second Years</i> |    | <i>Third and Fourth Years</i> |    |
|-------------------------------|----|-------------------------------|----|
| 100                           | 1½ | 300-390                       | 9  |
| 101                           | 1½ | 499***                        | 12 |
| 150                           | 1½ | Outside electives             | 9  |
| 200                           | 1½ |                               |    |
| HA 120*                       | 3  |                               |    |
| Outside electives**           | 9  |                               |    |
| Art or Outside elective       | 3  |                               |    |
| 3 of 110-140                  | 4½ |                               |    |
| 3 of 210-240                  | 4½ |                               |    |

A student who passes all courses but fails to obtain a second class graduating average (3.50) will graduate in the Major Program.

#### MAJOR PROGRAM

Students must complete 28½ units of Department offerings as specified below. At least 24 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. Of the total 60 units, at least 21 must be chosen from courses numbered 300 or above.

| <i>First and Second Years</i> |    | <i>Third and Fourth Years</i> |    |
|-------------------------------|----|-------------------------------|----|
| 100                           | 1½ | 300-490                       | 15 |
| 101                           | 1½ | Outside electives             | 9  |
| 150                           | 1½ | Art or outside electives      | 6  |
| 200                           | 1½ |                               |    |
| HA 120*                       | 3  |                               |    |
| Outside electives**           | 12 |                               |    |
| Art or outside elective       | 1½ |                               |    |
| 3 of 110-140                  | 4½ |                               |    |
| 2 of 210-240                  | 3  |                               |    |

\* Students are strongly advised to include History in Art 120 in their first year program. The required 6 units of History in Art may be elected at any time during the four years.

\*\* A general University of Victoria regulation requires all students either to pass the qualifying examination in English or to complete certain English courses (see page 12).

\*\*\* Neither Art 390 nor Art 490 may be taken simultaneously with Art 499.

### COURSES

#### ART 100 (1½ formerly 3) STUDIO FOUNDATION

A course focusing on the processes and ideas associated with the creation of art. In a studio setting students will be encouraged to explore a series of related ideas, questions and problems using verbal and experimental methods. (Priority is given to students registered in the B.F.A. program in Visual Arts.) September-December. Also January-April (0-3)

#### ART 101 (formerly half of 200) (1½) DRAWING

This course is intended to increase drawing skills and to introduce drawing as a means of dealing with visual concepts and problems. (This course is required of all Visual Arts students.)

September-December (0-3)

**ART 110 (formerly half of 210) (1½) PAINTING**

A studio introduction to painting and related areas.  
September-December (0-3)

**ART 120 (formerly half of 220) (1½) SCULPTURE**

An introduction to concerns and methods in contemporary sculpture. Students will experience a broad range of studio practices as well as explore theoretical issues. Short projects and critiques are the standard format for this class.  
September-December (0-3)

**ART 130 (1½) PRINTMAKING**

An introductory course involving basic relief printmaking techniques which may include the collograph, woodcut, linocut and drypoint.  
September-December (0-3)

**ART 140 (formerly half of 240) (1½) PHOTOGRAPHY**

This course concerns the distinctive quality of the photograph. Basic darkroom procedures and camera techniques are dealt with in this context. (Students must supply their own camera.)  
September-December (0-3)

**\* ART 150 (1½) BASIC ART THEORY**

A lecture course introducing the terms and concepts necessary for an understanding of contemporary art. (Priority is given to students registered in the B.F.A. program in Visual Arts.)  
January-April (3-0)

**ART 200 (1½ formerly 3) DRAWING**

This course is intended to increase drawing skills and to introduce drawing as a means of dealing with visual concepts and problems. This course is required of all Visual Arts students. (Prerequisites: 100 and 101)  
January-April (0-3)

**ART 210 (1½ formerly 3) PAINTING**

An extension of 110. (Prerequisites: 100 and 110)  
January-April (0-3)

**ART 220 (1½ formerly 3) SCULPTURE**

A continuation of 120. Students will develop an ability to work independently in the sculpture area by the completion of this course. (Prerequisites: 100 and 120)  
January-April (0-3)

**ART 231 (1½) (formerly half of 331) SCREENPRINTING (Silkscreen)**

An introduction to screen printing; exploration of all stencil methods, including photo screen, with the aim of producing original prints. (Prerequisites: 100 and 130)  
January-April (0-3)

**ART 232 (1½ formerly 3) INTAGLIO**

An introductory studio course in the history and techniques of various intaglio processes including etching, engraving, aquatint, mezzotint, dry point and metal collage. (Prerequisites: 100 and 130)  
January-April (3-0)

**ART 233 (1½ formerly 3) LITHOGRAPHY**

An introduction to stone and metal plate lithography. (Prerequisites: 100 and 130)  
January-April (0-3)

**ART 240 (1½ formerly 3) PHOTOGRAPHY**

A continuation of 140, including both practical and theoretical aspects of photography. (Students must supply their own camera.) (Prerequisites: 100 and 140)  
January-April (0-3)

Normally before admission to any 300 level art course, Visual Arts students must have completed a minimum of 9 units of outside electives and their program requirements of 100 and 200 level art courses.

**ART 300 (3) ADVANCED DRAWING: I****ART 301 (3) ADVANCED DRAWING: II**

These courses are intended to increase further the students comprehension of mark making and its meaning. The emphasis will be on the development of a personal statement and the exploration of drawing as an art form in its own right. (Prerequisites: 100 and 200)  
September-April (0-3; 0-3)

**ART 310 (HA 310) (1½ or 3) MEDIA AND METHODS**

An examination of the techniques employed by artists throughout history. Areas of special emphasis may include architecture, drawing, painting, photography, printmaking, sculpture, and the various media used in the decorative arts, in Western and non-Western cultures. Historical,

geographical, social and economic factors in the development of art technology are considered, together with the interrelation of ideas with material and techniques. Each course will consist of a series of lectures, demonstrations, museum and gallery visits as appropriate. Period and area of emphasis at the discretion of the instructor. (As the emphasis may vary from time to time, the course may be taken for credit more than once, with permission of the Department.) (Prerequisite: HA 120 or permission of the Department)  
(3-0) or (3-0; 3-0)

**ART 311 (3) PAINTING: I****ART 312 (3) PAINTING: II****ART 313 (3) PAINTING: III**

Advanced courses in painting. (It is not necessary that these courses be taken in sequence. Concurrent registration in two of these courses is permitted.) (Prerequisites: 110 and 210)  
September-April (0-3; 0-3)

**ART 321 (3) SCULPTURE: I****ART 322 (3) SCULPTURE: II****ART 323 (3) SCULPTURE: III**

Advanced courses in sculpture. (It is not necessary that these courses be taken in sequence. Concurrent registration in two of these courses is permitted.) (Prerequisites: 120 and 220)  
September-April (0-3; 0-3)

**ART 332 (3) ADVANCED INTAGLIO**

An advanced studio course in the various intaglio methods including photo etching and mixed media, encouraging the student to develop visual acuity and concepts. (Prerequisites: 130 and 232)  
September-April (0-3; 0-3)

**ART 333 (3) ADVANCED LITHOGRAPHY**

An advanced studio course which will focus on colour and plate lithography and place more emphasis on the student's personal imagery. (Prerequisites: 130 and 233)  
September-April (0-3; 0-3)

**ART 341 (3) PHOTOGRAPHY: I****ART 342 (3) PHOTOGRAPHY: II**

An extension of 240. More advanced techniques and an emphasis on developing individual concerns. (Students in these classes must have their own camera.) (It is not necessary that these courses be taken in sequence. Concurrent registration in both is permitted.) (Prerequisites: 140 and 240)  
September-April (3-0; 3-0)

**ART 350 (3) CONTEMPORARY ART THEORY AND PRACTICE**

This course does not deal with the history of contemporary art. It aims rather at introducing the student to the contexts — social, political, economic, intellectual — in which the artist operates today. Among concepts explored are: the artist and the state, society and the artist, the economics of art, art and politics, art and philosophy, art and psychology, art and psychoanalysis, artist and critic, the education of the artist, fashions in theory (Freud, Jung, Marx, Kierkegaard, Zen, Sartre, Wittgenstein, Structuralism, etc.) (Prerequisite: 150 or permission of the Department)  
September-April (3-0; 3-0)

**ART 390 (3) DIRECTED STUDIES**

(Prerequisite: 6 units of credit in the specialized area of study or permission of the Department)

**ART 490 (3) DIRECTED STUDIES**

(Prerequisite: 6 units of credit in the specialized area of study. Normally for Major students only.)

**ART 499 (12) SENIOR PROJECT**

The senior project is the major component in the B.F.A. Honours Degree Program. Each student taking 499 works under the supervision of a faculty member. In addition to this regular contact there are two formal critiques of each student's work per semester at which three faculty members must be present. The year culminates in the 499 Graduating Exhibition which is held in April of each year and is the final accomplishment of students in the Honours Program. The senior project presents an opportunity to students who have a firm commitment to their chosen area of study and the ability to work independently under supervision. Available subjects are: Painting, Drawing, Sculpture, Printmaking and Photography. Students must have attained a B+ average in three three year visual arts courses as well as permission of the department.

\* Approved for elective credit in the Faculty of Arts and Science.

## GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

### **ART 511 (9) FIRST YEAR PAINTING**

### **ART 512 (9) SECOND YEAR PAINTING**

Over the two year period normally required for completion of the M.F.A., students are expected to complete a large body of work which reflects their personal imagery or concerns.

### **ART 521 (9) FIRST YEAR SCULPTURE**

### **ART 522 (9) SECOND YEAR SCULPTURE**

Graduate students will have access to all sculpture workshop and equipment facilities. Students will be encouraged to develop an individualistic and investigative approach to material and concepts in sculpture.

### **ART 531 (9) FIRST YEAR PRINTMAKING**

### **ART 532 (9) SECOND YEAR PRINTMAKING**

Students wishing to pursue printmaking as the major area of study will be able to choose from Intaglio Printing, Screen Printing, Relief Printing and Lithography. With departmental approval, students may work in more than one of the above printmaking fields. Students will be expected to demonstrate a high degree of professional skills and artistic integrity

in printmaking at the graduate level. They will be expected to be self motivated and have the ability to work and do research in printmaking with a minimum of supervision.

### **ART 580 (6) FIRST YEAR SEMINAR**

### **ART 581 (6) SECOND YEAR SEMINAR**

A comprehensive written statement developed over both years, dealing with problems arising from the individual student's studio work. This statement, the content of which is chosen in consultation with the student's advisor, will explicate the nature of the student's art and place it in an historical context with previous and similar cultural models.

At the end of their first year students should have explored their subject to the point where an outline is in place. The statement will be circulated in its final form to members of the examining committee two weeks before the student's degree exhibition, and it will form a part of the oral examination.

### **ART 598 (credit to be determined) M.F.A. DEGREE EXHIBITION**

This final exhibition will be the major source of evaluation for the student's attainment of the M.F.A. and should be regarded as the equivalent of the scholarly thesis of an academic discipline. The degree exhibition will be evaluated by the student's committee which will submit its decision to the Department for approval. Graduating students should be available to speak to their work and answer questions when their work is being evaluated by the examining committee.

# FACULTY OF GRADUATE STUDIES

John M. Dewey, B.Sc., Ph.D. (London), Dean of the Faculty  
 Janet Beavin Bavelas, A.B., A.M., Ph.D. (Stanford), Associate Dean  
 Cecilia C. Freeman-Ward, B.A., M.P.A. (U. of Vic.), Graduate Admissions/Records Officer

The Faculty of Graduate Studies of the University of Victoria administers programs leading to the degree of:

|                     |                                 |
|---------------------|---------------------------------|
| Master of Arts      | Master of Public Administration |
| Master of Education | Master of Science               |
| Master of Fine Arts | Doctor of Philosophy            |
| Master of Music     |                                 |

Degrees may be taken in one Department or School, or in a combination of them.

## EXECUTIVE COMMITTEE:

### Members:

John M. Dewey, B.Sc., Ph.D., Dean of the Faculty of Graduate Studies, Chairman

Janet Beavin Bavelas, A.B., A.M., Ph.D., Associate Dean of the Faculty of Graduate Studies.

### *Representing the Humanities*

Keith R. Bradley, B.Litt., Department of Classics. Term expires October 1986

### *Representing Education*

C. Brian Harvey, Ph.D., Department of Psychological Foundations in Education. Term expires October 1986

### *Representing Fine Arts*

Judith Patt., B.A., B.Arch., M.A., Ph.D., Department of History in Art. Term expires October 1985

### *Representing Human and Social Development*

James C. McDavid, Ph.D., School of Public Administration. Term expires October 1986

### *Representing the Sciences*

Walter J. Balfour, B.Sc., Ph.D., Department of Chemistry. Term expires October 1985

### *Representing the Social Sciences*

Ronald Hoppe, Ph.D., Department of Psychology. Term expires October 1985

### Secretary:

Cecilia C. Freeman-Ward, B.A., M.P.A., Graduate Admissions/Records Officer

## REGULATIONS

The regulations shown below have been approved by the Senate of the University of Victoria. Students registered in the Faculty of Graduate Studies are subject to such other general regulations of the University as the Senate or Board of Governors, on the recommendation of the Faculty of Graduate studies, may wish to apply.

### General Requirements:

The general requirements apply to all students registered in the Faculty of Graduate Studies. Special regulations are described under the headings "Special Regulations for the Master's Degree" and "Special Regulations for the Degree of Doctor of Philosophy."

### Qualifications for Admission:

The requirements for admission to the Faculty of Graduate Studies include an academic standing acceptable to the Faculty of Graduate Studies and the department or school concerned; satisfactory letters of reference; the availability within the department or school concerned of a supervisor and of adequate space and facilities. In general, an acceptable academic standing will be a baccalaureate degree, in an honours or four year program, from a recognized university, or its equivalent, with at least a B (70-74%) average in the work of the last two years leading to this baccalaureate degree. Individual departments or schools may set higher standards.

NOTE 1: Applicants for admission whose first language is not English, and who have resided in Canada or other English speaking countries for less than three years prior to the beginning of the session applied for, must take the Test of English as a Foreign Language (TOEFL) and submit scores by July 31. A score of not less than 550 on the Test of English as a Foreign Language is required for admission to the faculty.

Applicants whose first language is not English but who have resided in Canada or other English speaking countries for more than three years are not required to take the Test of English as a Foreign Language.

Applicants must designate the University of Victoria as a receiving institution for the test results. Student copies are not acceptable.

Information concerning the Test of English as a Foreign Language, and the times and places at which it is administered, may be obtained by writing to Educational Testing Service, Princeton, N.J. 08540, U.S.A. Applications are available from the University's Counselling Services.

NOTE 2: Overseas students should not make provision to travel to Canada until they have actually been admitted and have evidence of financial resources to allow them to pursue their studies. See page 200 for medical requirements (under Registration).

NOTE 3: A graduate student at the University of Victoria may not be registered concurrently in a graduate program at another institution except as stated below under Special Graduate Student (a).

### Categories of Students

Students are admitted to the Faculty of Graduate Studies in one of the following categories:

1. *Candidate for a Master's degree*
2. *Provisional candidate for the degree of Doctor of Philosophy*  
 All doctoral students are admitted as provisional candidates until they have passed their candidacy examinations, at which time they are automatically classified as candidates for the degree of Doctor of Philosophy. (See item 8 of the Special Regulations for the degree of Doctor of Philosophy.)
3. *Special Graduate Student*  
 Special Graduate Students are students who are taking graduate courses but not for credit toward a degree at the University of Victoria. In general, such students will be either:
  - (a) taking courses for credit at another university (Visiting Graduate Students) or
  - (b) students who are desirous merely of improving their academic background.

If, later, a Special Graduate Student decides to proceed to a degree at the University of Victoria, the question of graduate credit for the courses already taken will be determined by the Dean, in consultation with the department or school concerned, at the appropriate time.

Special Students under (a), above, must show that they have been to the university at which they intend to apply their credit, i.e. they must provide a letter from their home university indicating which course(s) they are permitted to take for credit towards their degree.

Special Students must meet the Qualifications for Admission listed under the heading and have the special permission of the department or school concerned.

### 4. *Qualifying Graduate Student*

A qualifying graduate student is one who is not yet a candidate for a Master's degree nor a provisional candidate for a doctoral degree. Such a student may be admitted to the Faculty of Graduate Studies on the recommendation of a department or school to a program which will normally consist of at least nine units. At the end of that program, the department or school concerned shall make a recommendation to the Faculty of Graduate Studies on the student's status. No student shall remain as a qualifying student for more than twelve months.

NOTE 1: Except as specified in items 2 and 4 above, it is the responsibility of the student's Supervisory Committee to request the Faculty of

Graduate Studies to change the student's category.

NOTE 2: A full time graduate student during any one of the fall term, spring term or summer studies is one who is either:

- (a) enrolled in courses totalling more than 4½ units of credit during such a period; or
- (b) working full time on a thesis during such a period; *and*, in either case is not employed for more than a total of 150 hours during that period.

Thesis program: a full time graduate student enrolled in a thesis program may take up to 18 units of work in a twelve month period, but not more than 9 units of course work in any fourth month term.

Nonthesis program: a full time graduate student enrolled in a non-thesis program may take up to 24 units of course work in a twelve month period, but not more than 9 units in any four month period.

NOTE 3: A student who is gainfully employed for a total of more than 150 hours in the fall term, spring term or summer studies must register as a part time student during that period.

Thesis program: a part time graduate student enrolled in a thesis program may take up to 9 units in a twelve month period, but not more than 6 units in any four month term.

Nonthesis program: a part time graduate student enrolled in a non-thesis program may take up to 12 units of course work in a twelve month period but not more than 9 units of course work in any four month term.

NOTE 4: Departments may limit students to fewer units than specified in Notes 2 and 3.

A graduate student may not be enrolled in courses such that the sum of the units for each course divided by the number of weeks over which the course extends is greater than one unit per week.

NOTE 5: Cooperative Education students undertaking alternating four month periods of full time employment and full time study will be considered full time students.

NOTE 6: A graduate student must offer at least 12 units of credit at the graduate level in a Master's program. Individual departments may require a higher number of units at the graduate level. Undergraduate courses taken for credit towards a graduate degree cannot normally exceed 6 units of a departmental regular program and must be at the 300-400 level.

NOTE 7: Students in their final year of a Bachelor's degree program who have a grade point average of at least 6.00 in the previous year's work may be permitted to register in up to 3 units of graduate courses on the recommendation of the department concerned and with the consent of the Dean of Graduate Studies. Apart from students admitted to the Faculty of Graduate Studies, no students other than those mentioned above may register in graduate courses.

#### **Application for Admission:**

Applications for admission must be submitted as early as possible on forms obtained from the Faculty of Graduate Studies. No assurance can be given that applications received after May 31 can be processed in time to permit registration in the winter session. A graduate of another university must arrange with that institution to forward two transcripts of the graduate's academic record to the Faculty of Graduate Studies at the time of application. Also, at the same time, all applicants must arrange to have two letters of recommendation sent to the Faculty of Graduate Studies on forms supplied by the Faculty.

Students who have been admitted to the Faculty of Graduate Studies by April 30 must confirm to the office of the Dean of Graduate Studies by May 31 that they intend to accept the offered place. If this is not done, then the admission may be cancelled and the place reassigned.

Three year degrees from Canadian Universities other than from Quebec are not normally considered to satisfy the degree requirements for admission to graduate studies, except where the applicant has completed 30 units (60 semester hours) of upper division courses (300-400 level), not including professional courses. Candidates seeking admission with a three year degree who have not completed the required 30 units of upper division courses must register as unclassified undergraduate students until this requirement has been met.

Five years after completion of a bachelor's degree or its equivalent, prospective students whose academic record is such that they would not normally be admissible to a University graduate program may be admitted conditionally as probationary students. Such admissions must be recommended by the relevant department, and approved by the Faculty of Graduate Studies Admission Committee and the Dean of Graduate Studies. A minimum of 9 units of senior undergraduate or graduate course work is required in the probationary period. Directed Studies courses will not normally be acceptable. Subsequent registration in a regular graduate program shall be contingent upon the candidate achiev-

ing a grade of at least B- in each course and an average of B (5.00 grade point average) or better for all courses taken during the probationary period. Courses taken during a student's probationary period may be counted towards a graduate degree, but no more than six units of undergraduate work may be included for this purpose.

#### **Graduate Programs by Special Arrangement:**

Well qualified applicants who wish to work for a Master's or Doctoral degree, between or outside existing graduate programs, may apply for admission to a "program by special arrangement". The purpose of such an arrangement is to assist a student who wishes to undertake a program, (a) in an interdisciplinary area which does not constitute a major concentration in a single department, or (b) for which the appropriate academic resources are available but for which there is no existing graduate program. Further information is available from the office of Graduate Studies or the department(s) concerned.

#### **Registration:**

All students admitted to the Faculty of Graduate Studies must normally register in person on the date specified for such registration. All students admitted to the Faculty of Graduate Studies must thereafter maintain continuous registration during the period of their programs by registering in person once a year on the annual registration date and paying the necessary fees. (See pages 19-20).

The University, through the Director of the University Health Services, may require a student to take a medical examination at any time during attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole. All students are required to have medical insurance. Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete.

#### **Due Dates for Dropping Courses:**

Students may drop First Term Courses until the last day of classes in October, and Second Term and full year courses until the last day of classes in February, provided they submit appropriate withdrawal forms to the Faculty of Graduate Studies office by the appropriate date (see Calendar Dates, pages 3 and 4). Any failure to do so will result in the student receiving a failing grade (N) for the course.

#### **Permission to Withdraw:**

Students who wish to withdraw from the Faculty of Graduate Studies, either temporarily or permanently, must first request permission from their Supervisor. Students should then apply in writing to the Dean of the Faculty with a supporting memorandum from their Supervisor.

#### **Inactive Student:**

A student who is a candidate for a degree and who does not register in courses and/or thesis/dissertation at the specified time, and who has not requested permission to withdraw from the Faculty, will be considered an inactive student. The inactive period will be counted as part of the time limit for the degree in which the student is registered.

#### **Academic Standards:**

Students registered in the Faculty of Graduate Studies must maintain a cumulative average of at least B (5.00 grade point average), computed yearly, on all graded courses taken for credit towards a graduate degree. Individual departments or schools may set higher standards.

A student's program may indicate courses for which a minimum grade is to be achieved. Every grade of C+ or lower shall be reviewed by the Supervisory Committee of the student and a recommendation made to the Dean of Graduate Studies.

A student who fails to meet these standards, or whose dissertation or thesis is not progressing satisfactorily, may be required to withdraw from the Faculty of Graduate Studies with the advice and consent of the department or school concerned through its chairman or the chairman's delegate.

#### **Final Oral Examinations:**

If, at the final oral examination, two or more members of the Examining Committee are opposed to passing the student, the student will not be recommended for the degree. A student who fails under this condition will have the right to petition the Dean of Graduate Studies within three months for a reexamination, giving reasons in writing. In those cases where the appeal is granted, the Dean, in consultation with the department, may appoint a new external examiner or examiners.

#### **Dissertation or Thesis:**

Regulations covering the format of dissertation or thesis may be obtained from the Faculty of Graduate Studies.

**Special Regulations for the Master's Degree:****1. Time Limit**

Normally, a student proceeding toward a Master's degree will be required to complete all the requirements for the degree within five years (sixty months) from the date of first registration in the Faculty of Graduate Studies. A degree will in no case be awarded in less than seven months from the time of that registration.

**2. Residence Requirements**

There are no fixed residence requirements at the University of Victoria for students proceeding to a Master's degree. However, see item 3 below.

**3. Course and Program Requirements**

The minimum requirement for a Master's degree is the equivalent of one full Winter Session of study.

NOTE: A full Winter Session of study should be regarded as equivalent to a minimum of 15 units of work.

**4. Research and Course Work**

Considerable variation is permitted in the balance between research and course work required for the degree, though most programs include a thesis based on research.

**5. Courses Taken at Other Institutions**

On the recommendation of the department or school concerned, the Faculty of Graduate Studies may accept for credit in a graduate program, courses taken at other institutions. However, the major portion of the work must be completed at the University of Victoria.

**6. Supervisory Committee**

There shall be a Supervisory Committee of at least three members approved by the Faculty of Graduate Studies, one of whom shall be from outside the department or school. The Supervisory Committee shall have a Chairman who shall ordinarily be designated as the Supervisor. The Committee shall: recommend to the Faculty of Graduate Studies a program of studies; examine the thesis if one is required; conduct a final oral examination of the candidate on the thesis or discipline, or both, the oral being chaired by the Dean or his nominee. The Committee may conduct other examinations, and shall recommend to the Faculty of Graduate Studies whether or not a degree be awarded to a candidate.

A final oral examination is required of all students. The result of the examination will be entered on the student's Permanent Record Card as "Complete" if the candidate is successful. If the candidate is not successful, the entry will be "Incomplete", and a degree will not be awarded. In the case of the M.Ed. degree, the final oral may be replaced by a written comprehensive examination.

**7. Examiner from Outside the Department or School**

The Faculty of Graduate Studies shall appoint an examiner from outside the department or school concerned, who may be the outside member of the Supervisory Committee (see item 6 above). Oral examinations for the Master's degree are open to interested members of faculty.

**8. Date of Submission of Thesis**

A thesis, where one is required, must be submitted to the department or school concerned no later than March 20 for graduation at Convocation in the Spring, and August 1 for graduation in the Fall.

**Special Regulations for the Degree of Doctor of Philosophy:**

The doctoral program requires the planning and completion of independent and original work leading to an advance in knowledge in the student's chosen field or fields of study. In addition, a broad knowledge of the field or fields of study must be demonstrated.

**1. Time Limit**

Normally, a student proceeding to the degree of Doctor of Philosophy will be required to complete all the requirements within seven years (eighty-four months) from the date of first registration in the doctoral program. A degree will not be awarded in less than two years (twenty-four months) from the time of that registration.

**2. Residence Requirement**

A student proceeding to the degree of Doctor of Philosophy must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least the equivalent of two Winter Sessions, except that a student entering the Doctoral program with a Master's degree may have this residence requirement reduced to the equivalent of one Winter Session.

NOTE: A full Winter Session of study should be regarded as equivalent to a minimum of 15 units of work.

**3. Course and Program Requirements**

The minimum requirement for the degree of Doctor of Philosophy is the equivalent of two full Winter Sessions of work beyond the Master's level or three full Winter Sessions of study beyond the Bachelor's level, and satisfactory completion of the prescribed program.

**4. Research and Course Work**

Considerable variation is permitted in the balance between research and course work required for the degree but it is expected that a major portion of the program will be devoted to a research project, culminating in a dissertation.

**5. Courses Taken at Other Institutions**

On the recommendation of the department concerned, the Faculty of Graduate Studies may accept for credit in a graduate program, courses taken at other institutions. However, the major portion of the work must be completed at the University of Victoria.

**6. Supervisory Committee**

A student's program shall be under the direction of a Supervisory Committee of at least five members, approved by the Faculty of Graduate Studies. The Chairman of the Committee shall be a faculty member under whose supervision the student is carrying out the major research of the program.

Two members of the Committee shall be chosen by the Faculty of Graduate Studies from outside the department or school in which the major research is being carried out. The Committee shall recommend the program to the Faculty of Graduate Studies.

**7. Language Other Than English**

Ph.D. programs may require a reading knowledge or one or more languages other than English. Language requirements will be prescribed for individual students by the Supervisory Committees according to departmental regulations.

**8. Candidacy Examinations**

Within two years of registration as a provisional doctoral student and *at least six months before the final examination*, a student must pass a candidacy examination in subjects relevant to the general field of the student's research and such other examinations, written or oral, or both, as may be required by the Supervisory Committee.

**9. Dissertation**

The results of the candidate's research must be presented in a dissertation satisfying the general requirements of the Faculty of Graduate Studies. The material must be of sufficient merit to meet the standards of scholarly publications. Where the research justifies it, the degree of Doctor of Philosophy may be awarded for the dissertation alone.

**10. Examining Committee**

The dissertation shall be assessed by an Examining Committee which will consist of the Supervisory Committee and at least two other examiners, one of whom shall be an external examiner selected by the Faculty of Graduate Studies in consultation with the department or school primarily concerned and who is an authority in the special field of research.

The final oral examination, based largely on the dissertation, shall be conducted by the Examining Committee, which will recommend a successful candidate for the degree of Doctor of Philosophy to the Faculty of Graduate Studies. The Dean of the Faculty of Graduate Studies or his nominee will act as Chairman at the final oral examination. Oral examinations for the degree of Doctor of Philosophy are open to members of faculty.

Notice of examination shall be communicated to all members of faculty at least fourteen days prior to the date of the examination.

**11. Date of Submission of Dissertation**

A dissertation must be submitted to the department or school concerned no later than March 13 for graduation at Convocation in the Spring, and August 1 for graduation in the Fall.

**12. Doctoral Dissertation Fee**

Doctoral dissertations submitted to the Faculty of Graduate Studies must be accompanied by a payment of \$30.00. This fee is to pay for the publication of an abstract in *Dissertation Abstracts*.

**Graduate Studies in Cooperation with Industry and Government:**

The Faculty of Graduate Studies participates in Cooperative Education at the University of Victoria. M.A., M.Ed., M.F.A., M.P.A., M.Sc. and Ph.D. students in participating departments may undertake studies involving work in industry, government or the professions as part of the degree. Students admitted to a program of this type normally spend the

first year of study in residence on course work. On completion of this aspect of the degree requirement, students enter positions in industry, government or the professions where they are employed in thesis related research projects. Periods off campus are generally for up to one year in the case of a Master's degree and longer in the case of a Ph.D. Students then return to the University to write and defend their theses.

Work positions are generally negotiated between the University and the various participating agencies and companies. While every effort is made to find suitable employment for students requesting admission to this program, the University cannot guarantee that every applicant can

be accommodated.

Students decide on a research topic and present a formal thesis proposal to their Supervisory Committees during their period of employment. The period of employment will normally begin on May 1 following registration in the previous September.

Students in a Graduate Coop program shall register, for each four month period of approved full time employment, in one course of a series of courses designated as 801, 802, etc., for Master's candidates, or 811, 812, etc., for Ph.D. candidates, e.g. Administration 801, Geography 812.

## ANTHROPOLOGY

The Department of Anthropology offers a course of study leading to the degree of Master of Arts. This program usually requires two years to complete, but in exceptional cases, the required time may be shorter.

Admission — In addition to transcripts, letters of recommendation, and application forms required by the Faculty of Graduate Studies, the department requires applicants to submit a recent sample of their work (term paper or Honours thesis). Ordinarily a B+ average for the last two years of university work is a minimum requirement for admission to the program.

The Master of Arts degree in anthropology is a general degree requiring a candidate to have a broad knowledge of the subfields of the discipline. In addition to requirements and procedures specified by the Faculty of Graduate Studies, the following general comments apply.

### 1. Program of Studies

The Department offers two programs of equal status, leading to the M.A. degree: (a) by course work and thesis; and (b) by course work only.

#### A. Thesis Option:

This program involves 12 units of course work and a 6 unit thesis.

**CORE COURSES:** A student's program will include the following core courses:

- 500, Seminar in Anthropological Theory, 3 units
- 501, Seminar in Social and Cultural Anthropology, 1½ units
- 540, Seminar in Archaeology and Culture History, 1½ units
- 550, Seminar in Physical Anthropology, 1½ units
- 560 (LING 560), Linguistic Anthropology, 1½ units.

Core courses contribute 9 units toward the 18 unit minimum requirement for the thesis option.

**THESIS:** The thesis, carrying 6 units of credit, must meet the stylistic requirements of the department and must be submitted according to a time schedule set by the department. Normally a thesis will entail specialized research on a topical area chosen in consultation with the student's supervisory committee.

**OPTIONAL COURSES:** Students may choose the remainder of their program from the departmental listings of graduate courses, and may take a maximum of 6 units of upper level undergraduate courses.

#### B. Nonthesis Option

This program involves a minimum of 18 units of course work if the student is sufficiently well prepared to complete the program in one calendar year. Most students will require 2 years to complete the program and will be required to take a minimum of 21 units of course work.

**CORE COURSES:** A student's program will include the following core courses:

- 500, Seminar in Anthropological Theory, 3 units
- 501, Seminar in Social and Cultural Anthropology, 1½ units
- 540, Seminar in Archaeology and Culture History, 1½ units
- 550, Seminar in Physical Anthropology, 1½ units
- 560, (LING 560), Linguistic Anthropology, 1½ units

**ADDITIONAL COURSES:** In addition to the core courses a student's program should include 3 units selected from a, b, c, or d below:

- (a) 510 (1½) Selected Topics in Social and Cultural Anthropology
- (b) 530 (1½) Ethnology of a Selected Area
- (c) 542 (1½) Archaeology of a Selected Area
- (d) 552 (1½) Selected Topics in Physical Anthropology plus 6 units of electives. (3 additional units of electives are required if the student completes the program in 2 years.) Students may take a maximum of 6 units of upper level undergraduate courses.

**ORAL EXAMINATION:** At the end of the program there will be a final

oral examination based on three papers prepared as part of the requirements for graduate courses. The three papers will be selected to reflect a variety of interests and approaches.

### 2. Length of Program

Most students require two years to complete the master's degree program, although it is possible for a student with a satisfactory background to complete the degree in one year. In addition to the graduate courses, students are required to have passed undergraduate courses equivalent to those comprising the Anthropology Honours Program (excluding 499) as outlined in the Calendar. Students without the equivalent of the University of Victoria Honours Program must take the appropriate undergraduate courses to satisfy the honours requirements before completing their program. The program outlined above indicates the minimal requirements for graduate students; however, it is the responsibility of the student's supervisory committee to tailor the program to individual needs.

For example, students who intend to enter the program without an undergraduate major would be advised to spend a first year in upper level undergraduate courses before entering the core program. Similarly, students who have not had courses in quantitative methods and in anthropological linguistics will be advised to elect Anthropology 416 and 417 and Linguistics 361, respectively, to correct these deficiencies.

Prospective students are urged to consult the department for guidance in planning a program of study and for more specific information about course offerings.

### Faculty and Current Areas of Interest

- |   |   |
|---|---|
| William H. Alkire, Ph.D.<br>(Illinois)  | Ethnology: cultural ecology, Micronesia and Southeast Asia  |
| N. Ross Crumrine, Ph.D.<br>(Arizona)    | Ethnology: symbolic anthropology, mythology, peasants, culture change, Latin America, Southwest North America, Philippines                |
| Leland H. Donald, Ph.D.<br>(Oregon)     | Ethnology: social organization, quantitative methods, West Africa, Northwest Coast  |
| Donald H. Mitchell, Ph.D.<br>(Oregon)   | Archaeology: ethnohistory, cultural ecology, heritage resource management, Pacific Northwest  |
| Kathleen A. Mooney, Ph.D.<br>(Michigan) | Ethnology: linguistics, economic anthropology, contemporary North American Indians, Northwest Coast                                       |
| David S. Moyer, Ph.D.<br>(Leiden)       | Ethnology: social organization, structural anthropology, law, Arctic, Indonesia, Malaysia   |
| Nicholas Rolland, Ph.D.<br>(Cambridge)  | Archaeology: technology, early man, prehistoric economy, method and theory, Mediterranean, Western Asia, Africa                           |
| Eric A. Roth, Ph.D.<br>(Toronto)        | Physical Anthropology: demography, hunter-gatherers, computer simulation, human microevolution, Subarctic and Arctic North America, India |
| Peter H. Stephenson, Ph.D.<br>(Toronto) | Ethnology: psychological anthropology, symbolism, medical anthropology, hermeneutics, communal societies, Canada, Europe                  |

## BIOCHEMISTRY AND MICROBIOLOGY

The Department of Biochemistry and Microbiology offers courses leading to the degrees of Master of Science and Doctor of Philosophy in Biochemistry or Microbiology.

The general regulations governing the granting of advanced degrees as stated in the Calendar on pages 199-202 are applicable.

1. Examinations, oral or written, are mandatory as aids in the planning of individual academic programs.
2. Applicants should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Studies with their applications. Students whose native language is not English should submit, in addition to the G.R.E., results of the T.O.E.F.L. (Test of English as a Foreign Language) with their application.
3. All graduate students are required to participate in Biochemistry 580 (seminar) or Microbiology 580 (seminar) throughout the period of registration.
4. Candidates for graduate degrees are required to complete Biochemistry 599 or Microbiology 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). In addition to the seminar and thesis or dissertation requirements, candidates for the M.Sc. degree are required to complete a minimum of 9 units of graduate course work. Candidates proceeding to a Ph.D. degree from a B.Sc. require a minimum of 15 units of graduate course work, while candidates proceeding to a Ph.D. degree from an M.Sc. require a minimum of 6 units of graduate course work.

### Applications

Requests for information regarding graduate studies in Biochemistry and Microbiology should be sent to the Chairman. Application forms are available from the office of the Faculty of Graduate Studies.

Applicants may be considered for admission at any time. Normally applicants with less than a B+ or equivalent average will not be recommended for admission.

### Faculty and Current Areas of Interest

J. Thomas Buckley, Ph.D. (McGill) Properties and functions of plasma membranes

Edward E. Ishiguro, Ph.D. (Illinois)

Biochemical and genetic studies on bacterial cell wall synthesis and antibiotic-induced autolysis; molecular basis for penicillin tolerance; molecular biology of infectious diseases of salmonid fishes.

William W. Kay, Ph.D. (British Columbia)

Genetic regulation and biochemistry of membrane transport systems in bacteria; cell surface virulence factors

Alastair T. Matheson, Ph.D. (Toronto)

Structure of archaebacterial ribosomes; structure and evolution of ribosomal proteins; structure of ribosomal protein genes; RNA-protein interactions.

Jack L. Nichols, Ph.D. (Alberta)

The structure and function of cellular ribonucleic acids; characterization of nuclear and cytoplasmic ribonucleic protein complexes

Robert W. Olafson, Ph.D. (Alberta)

Structure function relationships of proteins as related to environmental and clinical aspects of heavy metal metabolism

Terry W. Pearson, Ph.D. (British Columbia)

Immunochemistry and biochemistry of parasitic diseases; immunology of membrane antigens; immunodiagnosis of disease

Paul J. Romaniuk, Ph.D. (McMaster)

Structure and function of RNA; molecular basis of RNA protein interactions

Trevor J. Trust, Ph.D. (Melbourne)

Molecular basis for bacterial virulence and antigenicity

## BIOLOGY

The Department of Biology offers programs leading to the degrees of Master of Science and Doctor of Philosophy in the following general areas:

Marine Biology  
Terrestrial and Freshwater Ecology  
Plant and Animal Morphology  
Cellular and Developmental Biology  
Systematic Biology

### Facilities

Facilities available include herbarium, greenhouses, constant environment rooms, equipment for radioisotope analysis, an electron microscope laboratory equipped with scanning, transmission and analytical electron microscopes, and a closed circulation seawater system. Ships are available for oceanographic work, including the University's 16.4 metre marine science service vessel JOHN STRICKLAND. Marine, terrestrial and limnological environments permit field work throughout the year.

### Applications

Initial inquiries regarding graduate studies in Biology should be addressed to the Graduate Adviser, Department of Biology. Application forms may be obtained from the office of the Dean of Graduate Studies.

Consideration of an applicant is dependent on a departmental faculty member first agreeing to become the applicant's Supervisor. If the applicant is admitted, the Supervisor will recommend a list of individuals to act as a Supervisory Committee under the Supervisor's chairmanship.

Applicants to the Department of Biology should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Graduate Studies together with their application forms. Applicants whose native language is not English should, in addition to the

G.R.E., write the TOEFL (Test of English as a Foreign Language) and submit the scores to the Faculty of Graduate Studies together with their application forms and G.R.E. results.

All M.Sc. and Ph.D. candidates admitted to the Department of Biology are expected to have or to make up a background knowledge of basic biology at least equivalent to that of a B.Sc. student graduating from this department.

Applications from students with a first class academic record will be considered for recommendation at any time. Applications from students who have less than a first class average will not normally be considered until the end of February, when all such applications will be considered and evaluated together. Applicants with less than a B+ average or its equivalent in their last two years of work will not normally be recommended for admission by the Department of Biology.

### Faculty and Areas of Research

Geraldine A. Allen, Ph.D. (Oregon State)

Vascular plant systematics; evolutionary relationships in the Asteraceae

Michael J. Ashwood-Smith, Ph.D. (London)

Ultra violet photobiology and mechanisms of mutation induction; low temperature biology

Alan P. Austin, Ph.D. (Wales)

Marine and freshwater phycology and ecology; environmental impact assessment

David J. Ballantyne, Ph.D. (Maryland)

Plant physiology; mode of action of phytotoxic air pollutants

Marcus A.M. Bell, Ph.D. (British Columbia)

Vegetation and landscape ecology

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|--|---|--|--|
| Ralph O. Brinkhurst, D.Sc.<br>(London)         | Marine benthic zoology; ecology of freshwater and marine Oligochaeta                | George O. Mackie, D.Phil.<br>(Oxford)          | Neurobiology of invertebrates especially coelenterates and tunicates |
| Robert D. Burke, Ph.D.<br>(Alberta)            | Developmental biology, histology, embryology of marine invertebrates, metamorphosis | John E. McInerney, Ph.D.<br>(British Columbia) | Behaviour and physiology of fishes                                   |
| Derek V. Ellis, Ph.D.<br>(McGill)              | Marine ecology; sediment benthos; environmental impact assessment                   | John N. Owens, Ph.D.<br>(Oregon State)         | Plant anatomy; morphogenesis and reproduction of conifers            |
| Arthur R. Fontaine, D.Phil.<br>(Oxford)        | Functional morphology of marine invertebrates; echinoderms                          | John W. Paden, Ph.D.<br>(Idaho)                | Mycology; ascomycete morphology and systematics; soil microbiology   |
| Patrick T. Gregory, Ph.D.<br>(Manitoba)        | Population ecology of reptiles and amphibians                                       | Miles Paul, Ph.D.<br>(Stanford)                | Developmental biology; marine invertebrate embryology                |
| Edwin M. Hagmeier, Ph.D.<br>(British Columbia) | Terrestrial and freshwater ecology; zoogeography                                    | Robert G.B. Reid, Ph.D.<br>(Glasgow)           | Physiology of marine invertebrates                                   |
| John S. Hayward, Ph.D.<br>(British Columbia)   | Environmental physiology; temperature adaptation in homeotherms                     | Richard A. Ring, Ph.D.<br>(Glasgow)            | Physiology and ecology of insects                                    |
| Louis A. Hobson, Ph.D.<br>(Washington)         | Biological oceanography; phytoplankton ecology and physiology                       | E. Derek Styles, Ph.D.<br>(Wisconsin)          | Maize genetics; flavonoid biosynthesis                               |
| Jack L. Littlepage, Ph.D.<br>(Stanford)        | Biological oceanography; zooplankton physiology and ecology                         | Verena J. Tunnicliffe, Ph.D.<br>(Yale)         | Marine benthic ecology and structure                                 |

## CHEMISTRY

The Department offers programs of study leading to the degrees of Master of Science and Doctor of Philosophy. Research areas include the following: Organometallic chemistry; inorganic kinetics; transition metal chemistry; inorganic photochemistry; hydrides of silicon, boron, and transition metals; multinuclear NMR studies; synthetic organic chemistry; natural products; biogenesis; physical organic chemistry; photochemistry; kinetics and mechanisms; free radical chemistry; structural studies, x-ray crystallography; molecular spectroscopy; electrode kinetics; surface phenomena; solid state luminescence; electron impact phenomena; molecular orbital calculations; photoelectron spectroscopy, bioinorganic chemistry.

Amongst the many modern research instruments available are: high resolution mass spectrometer and GC/MS with chemical ionization, automated x-ray diffractometers, ESR with ENDOR and high field, multinuclear FT NMR facilities, medium and high resolution grating spectrographs, laser Raman spectrometer, infrared and ultraviolet spectrometers, gas and high performance liquid chromatographs, PAR electrochemical system, PDP11, VAX and IBM computers.

Because of the varied backgrounds of students entering graduate school, the Department requires all entering graduate students to take a set of orientation examinations soon after their arrival. Students showing deficiencies in their knowledge of fundamental chemistry will be required to make good the deficit by approved reading or by taking and passing the appropriate undergraduate courses. Failure to achieve a minimum of B- in an undergraduate chemistry course will normally result in the student being asked to withdraw.

Students for graduate degrees are required to complete Chemistry 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). They are also required to take 509 (Seminar) throughout their period of registration as well as 510 (instrumental techniques) in their first year of registration.

i) Candidates for M.Sc. degrees will normally be required to complete 3 units of graduate lecture courses and 6 units of discussion courses chosen from 522 (A-D), 630 (A-D), or 644 (A-D).

ii) Candidates for Ph.D. degrees will normally be required to complete 6 units of graduate lecture courses and 9 units of discussion courses chosen from 522 (A-D), 630 (A-D), or 644 (A-D).

Appropriate courses from this or other departments may be substituted with the permission of the Chairman.

### Faculty and Major Fields of Research

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|---|---|--|---|
| Walter J. Balfour, Ph.D.<br>(McMaster)    | Electronic spectroscopy   | Gordon W. Bushnell, Ph.D.<br>(West Indies)   | Crystallography   |
| Graham R. Branton, Ph.D.<br>(Southampton) | Photoelectron spectroscopy and electron impact phenomena; mass spectrometry and environmental chemistry | Thomas W. Dingle, Ph.D.<br>(Alberta)         | Theoretical chemistry   |
|   |   | Keith R. Dixon, Ph.D.<br>(Strathclyde)       | Transition metal and organometallic chemistry   |
|   |   | Alfred Fischer, Ph.D.<br>(New Zealand)       | Physical organic chemistry  |
|   |   | Thomas M. Fyles, Ph.D.<br>(York)             | Synthetic and physical organic chemistry; complexation and transport of ions.                                       |
|   |   | Sidney G. Gibbins, Ph.D.<br>(Washington)     | Hydrides of silicon, boron and transition metals  |
|   |   | Martin B. Hocking, Ph.D.<br>(Southampton)    | Synthetic and physical organic chemistry; pollution control   |
|   |   | Alexander D. Kirk, Ph.D.<br>(Edinburgh)      | Photochemistry and luminescence of metal complexes  |
|   |   | Alexander McAuley, Ph.D., D.Sc.<br>(Glasgow) | Inorganic kinetics and mechanisms — solvolysis and redox reactions; bioinorganic chemistry; heavy metal toxicity    |
|   |   | Reginald H. Mitchell, Ph.D.<br>(Cambridge)   | Synthesis of novel aromatic hydrocarbons and their environmental effects  |
|   |   | Robert N. O'Brien, Ph.D.<br>(Manchester)     | Electro and surface chemistry   |
|   |   | Gerald A. Poulton, Ph.D.<br>(Saskatchewan)   | Natural products  |
|   |   | Frank P. Robinson, Ph.D.<br>(Alberta)        | Organic synthesis; physical organic chemistry   |
|   |   | Stephen R. Stobart, Ph.D.<br>(Nottingham)    | Electronic structure and reactivity of binuclear transition metal complexes; organometallic chemistry and catalysis |
|   |   | Peter C. Wan, Ph.D.<br>(Toronto)             | Organic photochemistry; reactive intermediates.   |
|   |   | Paul R. West, Ph.D.<br>(McMaster)            | Electron spin resonance; organic free radical reaction mechanisms; environmental chemistry                          |

## CLASSICS

The Department of Classics offers a two year program of studies leading to the degree of Master of Arts in Classics. Course work will include both Greek and Latin language and literature, but the thesis may be written in the areas of Greek Literature, Latin Literature, Ancient History, or Classical Archaeology.

A minimum of 15 units of work from Classics Department offerings is required for the M.A. degree. In the first year of study the candidate will take a full load of course work, consisting of current offerings at the 500 level and a supplement of recommended upper level undergraduate courses. In the second year of study the candidate will write a thesis of 6 unit value and complete course work requirements at the 500 level. In exceptional circumstances a candidate may be allowed to write a thesis of 9 unit value. Candidates should note that University regulations require that at least 12 units of work at the 500 level are required for the M.A. degree, and that at least 10 units of work a year should be offered by full time students. There will be a final oral examination on the thesis. Proficiency in reading either French or German or Italian must be demonstrated. For further information please consult the Graduate Advisor of the Department and read the Department's entry in the undergraduate section of this Calendar.

### Faculty and Fields of Research

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|--|--|
| Keith R. Bradley, B. Litt.<br>(Oxford)   | Roman history, especially Late Republic and Early Empire; Roman social relations; Roman historians and historiography      |
| David A. Campbell, M.A.<br>(Oxford)      | Greek poetry   |
| John G. Fitch, Ph.D.<br>(Cornell)        | Greek tragedy, especially Sophocles; Roman tragedy, especially Seneca; post Augustan Latin literature, particularly poetry |
| John P. Oleson, Ph.D.<br>(Harvard)       | Ancient technology, maritime archaeology, Etruscan and Roman architecture  |
| Gordon S. Shrimpton, Ph.D.<br>(Stanford) | 5th and 4th century Greek history and historiography   |
| Peter L. Smith, Ph.D.<br>(Yale)          | Roman comedy; Augustan Latin poetry  |

## COMPUTER SCIENCE

The Department of Computer Science offers a graduate program leading to the degree of Master of Arts or Master of Science in Computer Science.

Potential graduate students who wish to obtain a Master's Degree in Computer Science will be required to satisfy the following requirements: The student should normally have the equivalent of a Major degree in Computer Science or in Mathematics with an emphasis in Computer Science. A student without this background may be admitted but will be required to make up any deficiency. In so doing, the student must obtain a grade of at least B (5.00) in each such makeup course, and an average of at least B+ (6.00) overall in such makeup courses.

Each graduate student must, in addition, complete a program of study consisting of a minimum of 15 units, made up of at least 10 units of course work at the 500 level and the remaining units chosen at the 400 level or higher.

Each student writing a Master's Thesis will be required to defend the Thesis in an oral examination consistent with the format given in the University Regulations. Any nonthesis student also shall have a final oral examination: the student must submit a written project report or research essay deriving from one or more of the courses taken, normally Directed Studies, Computer Science 581. This document will serve as the basis for the final oral examination, which will also cover the material in a core of three courses to be chosen by the student's Supervisory Committee in consultation with the student.

NOTE: These are minimum requirements, and additional work may be required of individual students.

A graduate student is governed by the Departmental and University regulations in force at the time of the student's initial graduate registration.

### Faculty and Fields of Research

|                                      |  |
|--------------------------------------|--|
| Leonard Bruton, Ph.D.<br>(Newcastle) | Analog and digital signal processing, image processing, digital filtering, microelectronics. |
|--------------------------------------|--|

|  |   |
|--|---|
| Ernest Chang, M.D., Ph.D.<br>(Toronto)       | Decentralized algorithms, expert systems, computer enhanced cognition, medical applications.                |
| John A. Ellis, Ph.D.<br>(Northwestern)       | Computational complexity.   |
| R. Nigel Horspool, Ph.D.<br>(Toronto)        | Compiler construction, programming languages, operating systems.  |
| Michael Levy, Ph.D.<br>(Waterloo)            | Abstract data types, programming languages, programming environments  |
| Jon C. Muzio, Ph.D.<br>(Nottingham)          | Fault detection, fault tolerant computing, multiple valued systems  |
| D. Dale Olesky, Ph.D.<br>(Toronto)           | Numerical analysis, linear algebra  |
| David L. Parnas, Ph.D.<br>(Carnegie)         | Software engineering  |
| Frank D.K. Roberts, Ph.D.<br>(Liverpool)     | Numerical analysis, operations research   |
| Alan Rosselet, Ph.D.<br>(Toronto)            | Context checking (semantic analysis)  |
| Frank Ruskey, Ph.D.<br>(Calif., San Diego)   | Combinatorial algorithms  |
| Gholamali C. Shoja, D.Phil.<br>(Sussex)      | Distributed and real time operating systems, transparent communication of tasks in local computer networks. |
| William W. Wadge, Ph.D.<br>(Calif.-Berkeley) | Dataflow, nonprocedural languages, semantics/data types, symbolic logic                                     |

## ECONOMICS

The Department of Economics offers courses of study in applied economics leading to the degree of Master of Arts. The program is designed to provide students with the analytical expertise and practical knowledge to excel in positions with research and analysis in the private and public sectors of the economy. Areas of concentration are available

in: Regional Economics, Urban Economics, Methodology of Applied Economics, International Trade, Economic Development, Public Finance, Economic History, Human Resources (including Labour Economics, Health Economics, Education Economics, the Economics of Crime), Natural Resource and Environmental Economics, Economet-

rics, Applied Mathematics in Economics, Monetary Policy, Industrial Organization and Public Policy, and other areas which may be arranged in consultation with the Department.

#### Admission

An undergraduate degree in Economics or its equivalent, with at least a B average in the last two years leading to the degree, is required for admission. Applicants must have mastered basic techniques of mathematics and statistics and have demonstrated competence in economic theory and applied areas. Students with insufficient background in economics will normally be required to complete a "qualifying year" prior to admission to the M.A. program. All students normally enroll in Economics 504A and B, Mathematical and Statistical Methods for Economists. (504A and B are offered during Registration Week and during the first week of fall classes.) The Faculty of Graduate Studies and/or the Graduate Adviser may require any student to complete the Graduate Record Exams (G.R.E.); students whose native language is not English must comply with Faculty of Graduate Studies requirements for competency in English (i.e., TOEFL may be required).

#### Program

The M.A. in Economics is a program requiring a minimum of 15 units which can normally be completed in one calendar year. Specific program requirements are as follows:

1. Successful completion of the core program (6 units), consisting of 500, 501, 545, 555, and 570 (no credit).
2. Successful completion of an additional 4½ units of courses (exclusive of 504A/B) subject to the approval of the student's Supervisory Committee. Courses are normally chosen from the graduate course offerings of the Department, but may include up to three units of courses numbered at the 400 level as well as graduate courses in other departments. Students are encouraged to apply to individual instructors for Directed Studies (595) courses.
3. Successful completion of a formal thesis prospectus.
4. Successful completion of a Master's thesis. The thesis is awarded 4½ units.

#### Cooperative Option

The cooperative education option extends the regular program to include at least eight months of work in government or industry. The option provides a unique opportunity not only to 'learn and earn' but also to gain practical experience in applied economics. The work periods are jointly supervised by the employer and the Economics Department

and are treated as an integral part of the student's program. Research undertaken during the work period is intended to provide the basis for the student's thesis.

#### Faculty and Major Areas of Research

|  |   |
|--|---|
| Kenneth L. Avio, Ph.D.<br>(Purdue)         | Monetary theory and policy; economics of crime; price theory                            |
| Robert L. Bish, Ph.D.<br>(Indiana)         | Public choice theory; subnational government organization; coastal resources management |
| Robert V. Chernoff, Ph.D.<br>(Washington)  | Macroeconomic theory; money and banking   |
| James Cutt, Ph.D.<br>(Toronto)             | Public finance; human resources policy; economic development and planning               |
| Donald G. Ferguson, Ph.D.<br>(Toronto)     | International trade; mathematical economics; comparative systems                        |
| J. Colin H. Jones, Ph.D.<br>(Queen's)      | Industrial organization; microeconomic theory   |
| Leonard Laudadio, Ph.D.<br>(Washington)    | Microeconomic theory; environmental economics; industrial organization                  |
| James J. McRac, Ph.D.<br>(Western Ontario) | Microeconomics; international trade; regional economics; transportation economics       |
| Izzud-Din Pal, Ph.D.<br>(McGill)           | International trade; economic development; microeconomic theory                         |
| Malcolm Rutherford, Ph.D.<br>(Durham)      | History of economic thought; methodology; resource economics                            |
| Joseph Schaafsma, Ph.D.<br>(Toronto)       | Statistics; public finance  |
| John A. Schofield, Ph.D.<br>(Simon Fraser) | Regional economics; benefit/cost theory   |
| William D. Walsh, Ph.D.<br>(Yale)          | Labour economics  |
| Gerald R. Walter, Ph.D.<br>(California)    | Urban economics; natural resources  |

## EDUCATION

### MASTER OF ARTS

The Faculty of Education offers programs leading to the Master of Arts degree in the following areas:

- Educational Psychology
  - Learning and Development
  - Measurement, Evaluation and Computer Applications in Education
  - Counselling Psychology in Education
  - Special Education
- Educational Administration
  - Curriculum and Instruction
  - Language Arts: Elementary and Secondary
  - Mathematics
  - Music
  - Physical Education
  - Science
  - Social Studies

In addition to the usual admission requirements of the Faculty of Graduate Studies, individual departments may require relevant professional experience.

### MASTER OF EDUCATION

The Faculty also offers programs leading to the degree of Master of Education in the following areas:

- Art Education
- Curriculum Studies
- Educational Administration
- Language Arts: Elementary and Secondary

- Mathematics
- Music
- Physical Education
- School Counselling
- Science
- Secondary Reading
- Social Studies
- Special Education

The general regulations for this degree are as follows:

- (i) The Master of Education degree will require at least 18 units of course work, of which no more than six units may be at the 300 and 400 level. A comprehensive final examination (written and/or oral) will be required. A Project in research and/or curriculum development may be required as determined by the Faculty of Education.
- (ii) The usual admission requirements of the Faculty of Graduate Studies should be met and, in addition, applicants must have had at least two years of successful relevant professional experience. However, applicants who do not meet the normal admission requirements of the Faculty of Graduate Studies may be granted conditional admission to the M.Ed. program, provided the applicant:
  - (a) holds a recognized bachelor's degree
  - (b) has successful relevant professional experience for a minimum of five years as attested to by at least two supervisors of the applicant's work
  - (c) is recommended for admission by the Faculty of Education and approved by the Admissions Committee of the Faculty of Graduate Studies.

Formal admission to the M.Ed. program for conditionally admitted

students will be granted to those who achieve a B average, with no grade less than a B- on the first nine units of work in the program.

### DOCTOR OF PHILOSOPHY

The Faculty also offers programs leading to the Ph.D. degree in Educational Psychology and Language Arts.

### ADMISSION DEADLINES

The Faculty of Education will observe the following deadlines for initial applications to all programs:

February 15:

For applicants seeking Scholarships and Fellowships. (In the event of enrollment limitations, preference will be given to applicants meeting this deadline.)

February 28:

For applicants seeking admission to the following Summer Studies.

April 30:

For applicants seeking admission in September to the following Winter Session.

October 15:

For applicants seeking admission in January of the current Winter Session. (Not all departments admit students in January.)

### Faculty and Areas of Research

|   |  |   |
|---|--|---|
| Sheilah M. Allen, Ph.D.<br>(British Columbia)       | Secondary reading, English education, teacher training   | Sports medicine, adapted and/or special physical education, human response to thermal stress  |
| Robert D. Armstrong, Ed.D.<br>(California)          | Language in the elementary school, the development of writing abilities, the teaching of grammar                     | The nature and development of language abilities, the development of word meaning, computers in education   |
| Daniel G. Bachor, Ph.D.<br>(Toronto)                | Children with learning problems, instruction for exceptional children  | Social studies education (secondary), curriculum development and implementation   |
| Robert D. Bell, Ph.D.<br>(Oregon)                   | Secondary school physical education, athletic injuries, aging and physical activity                                  | Career and vocational counselling, cross cultural counselling, gerontology and counselling  |
| Ian L. Bradley, Ed.D.<br>(British Columbia)         | Aural and visual discrimination in music, Canadian music   | Secondary history methodology, history of education   |
| I.K. Burbank, Ed.D.<br>(Utah State)                 | Methodology in teaching Mathematics, curriculum development in elementary mathematics, measurement of math attitudes | History of science, ecology and outdoor education   |
| Gerald A. Carr, Ph.D.<br>(Stellenbosch)             | Historical and comparative physical education, biochemical analysis - gymnastics and track and field                 | English education, reading education  |
| Rey A. Carr, Ph.D.<br>(California)                  | Preventive counselling, communication skills, learning styles, peer counselling                                      | Helplessness in children and adolescents, manifest needs in counsellors, learning and development   |
| J.C. Cawood, M.F.A.<br>(Gto)                        | Curriculum development in elementary art education   | Teacher education, behavioural counselling, special education   |
| David J. Chabassol, Ph.D.<br>(Alberta)              | Adolescence, attitudes, opinions and problem areas   | Art curriculum, aesthetic judgmental process  |
| Franklin E. Churchley, Ed.D.<br>(Columbia)          | Music curriculum development: elementary and secondary, early childhood music, piano in music education              | Educational administration: values and organization, theory, philosophy of administration. Philosophy: values education, policy analysis, organizational analysis |
| Betty A. Collis, Ph.D.<br>(Victoria)                | Computer applications in education, measurement and evaluation, sex role stereotyping in education                   | Sport psychology, curriculum development, children's play   |
| Martin L. Collis, Ph.D.<br>(Stanford)               | Theory and practice of physical fitness and fitness testing, human response to hypothermia and exercise stress       | Administration, psychosocial aspects of physical education, recreation and sport  |
| William K. Cross, Ed.D.<br>(Washington State)       | Social studies methodology, teacher education  | Children's literature, psycholinguistic approaches to reading instruction, reading comprehension  |
| David Docherty, Ph.D.<br>(Oregon)                   | Motor development and maturation, acquisition of motor skills, curriculum development                                | Developmental psychology, children's imaginative abilities, children's responses to life crises, gifted children  |
| John A. Downing, Ph.D., D. Lit.<br>(London)         | Psychology of reading, children's language and thought, cross cultural experiments/comparative education             | The governance of education   |
| John D. Eckerson, Ph.D.<br>(Oregon)                 |  | Elementary mathematics, early childhood education   |
| Peter O. Evans, Ph.D.<br>(Alberta)                  |  | Organization theory, supervision and evaluation   |
| Robert H. Fowler, Ph.D.<br>(Duke)                   |  | Early childhood education and language arts   |
| M. Honore France, Ed.D.<br>(Massachusetts)          |  | Choral and instrumental music, music history  |
| Cary F. Goulson, Ed.D.<br>(Toronto)                 |  | The nature and development of reading abilities, teacher education, computers in education  |
| John F. Hall, Ph.D.<br>(Oregon State)               |  | Learning, measurement, computer applications  |
| W. John Harker, Ed.D.<br>(British Columbia)         |  | Organizational change and development, organizational theory  |
| C. Brian Harvey, Ph.D.<br>(Ohio State)              |  | Personal, educational and career counselling  |
| Geoffrey G. Hett, Ph.D.<br>(Oregon)                 |  | Curriculum theory, curriculum design, development and evaluation, naturalistic modes of inquiry   |
| Geoffrey S. Hodder, M.A.<br>(Victoria)              |  | Early learning, developmental and remedial reading  |
| Christopher E. Hodgkinson, Ed.D. (British Columbia) |  | Reading, developmental and administration/supervision of the reading program  |
| Bruce L. Howe, Ph.D.<br>(Oregon)                    |  |   |
| John J. Jackson, Ph.D.<br>(Alberta)                 |  |   |
| Terry D. Johnson, Ed.D.<br>(British Columbia)       |  |   |
| Donald W. Knowles, Ph.D.<br>(Alberta)               |  |   |
| Arthur Kratzmann, Ph.D.<br>(Chicago)                |  |   |
| Werner W. Liedtke, Ph.D.<br>(Alberta)               |  |   |
| Yvonne M. Martin-Newcombe, Ph.D. (McGill)           |  |   |
| Margie I. Mayfield, Ph.D.<br>(Minnesota)            |  |   |
| R. Dale McIntosh, Ph.D.<br>(Washington)             |  |   |
| Norma I. Mickelson, Ph.D.<br>(Washington)           |  |   |
| Walter Muir, Ph.D.<br>(Alberta)                     |  |   |
| Peter J. Murphy, Ph.D.<br>(Alberta)                 |  |   |
| Joel Newman, Ed.D.<br>(Washington State)            |  |   |
| Antoinette A. Oberg, Ph.D.<br>(Alberta)             |  |   |
| Lloyd O. Ollila, Ph.D.<br>(Minnesota)               |  |   |
| Arthur V. Olson, Ed.D.<br>(Boston)                  |  |   |



|   |  |  |  |
|---|--|--|--|
| Anthony B. England, Ph.D.<br>(Yale)             | Early 18th and early 19th century<br>British literature  | Colm J. Partridge, Ph.D.<br>(Nottingham)         | 19th and 20th century American<br>literature, Commonwealth litera-<br>ture   |
| Mel D. Faber, Ph.D.<br>(Calif., Los Angeles)    | Shakespeare, literature and psy-<br>chology  | Constance M. Rooke, Ph.D.<br>(North Carolina)    | 20th century American fiction,<br>women in literature  |
| George H. Forbes, Phil. M.<br>(Toronto)         | Milton, romantic poetry  | Robert M. Schuler, Ph.D.<br>(Colorado)           | Renaissance 17th century English<br>literature, relations between litera-<br>ture and science  |
| Bryan N.S. Gooch, Ph.D.<br>(London)             | 17th and 18th century British lit-<br>erature; relationship between po-<br>etry and music            | Stephen A.C. Scobie, Ph.D.<br>(British Columbia) | Canadian literature, 20th century<br>British literature, Scottish litera-<br>ture, studies in the relationships<br>between poetry and the other arts |
| Patrick J. Grant, D.Phil.<br>(Sussex)           | Renaissance literature   | Terry G. Sherwood, Ph.D.<br>(Calif., Berkeley)   | Renaissance literature   |
| John G. Hayman, Ph.D.<br>(Northwestern)         | 18th and 19th century British lit-<br>erature  | Herbert F. Smith, Ph.D.<br>(Rutgers)             | 19th century American literature   |
| Anthony W. Jenkins, Ph.D.<br>(Calif., Berkeley) | Late medieval literature, Modern<br>drama  | Nelson C. Smith, Ph.D.<br>(Washington)           | 19th century British fiction,<br>American and Canadian litera-<br>ture, the novel  |
| Patricia Koster, Ph.D.<br>(London)              | 18th century literature  | Henry E. Summerfield, M. Litt.<br>(Durham)       | 18th and 20th century British lit-<br>erature  |
| Burton O. Kurth, Ph.D.<br>(Calif., Berkeley)    | Renaissance literature and drama   | Reginald C. Terry, Ph.D.<br>(London)             | 19th century British literature,<br>Modern drama   |
| Robert G. Lawrence, Ph.D.<br>(Wisconsin)        | Elizabethan and Jacobean drama,<br>Canadian literature   | David S. Thatcher, Ph.D.<br>(Alberta)            | Modern British literature  |
| Roy F. Leslie, Ph.D.<br>(Manchester)            | Old and Middle English literature,<br>history of the English language                                | John J. Tucker, Ph.D.<br>(Toronto)               | Linguistics and critical theory,<br>Modern and Medieval poetry   |
| Samuel L. Macey, Ph.D.<br>(Washington)          | Restoration and 18th century Brit-<br>ish literature, relations between<br>literature and technology | Bruce E. Wallis, Ph.D.<br>(Princeton)            | 18th and 19th century British lit-<br>erature  |
| Judith I. Mitchell, Ph.D.<br>(Alberta)          | Composition and technical writ-<br>ing, 19th century British literature                              | Trevor L. Williams, Ph.D.<br>(Wales)             | 20th century British literature and<br>political/historical background   |
| Victor A. Neufeldt, Ph.D.<br>(Illinois)         | 19th century British literature  |  |  |

## FRENCH LANGUAGE AND LITERATURE

The Department of French Language and Literature will consider applications for the M.A. program in French from  
(a) students having graduated with a B.A. (Major) in French;  
(b) students with equivalent qualifications.

The B.A. (Major) in French consists of a minimum of fifteen units of senior undergraduate course work in French, three of which are represented by 302 (advanced grammar and composition, introduction to stylistics) or its equivalent. Students who have not included 402 (advanced language course in modern French usage) or its equivalent in their Major must take this course in addition to the nine units of course work stipulated in (b) below. In general, students who wish to be admitted to the M.A. program will have obtained a minimum grade point average of 6.50 in the French courses numbered 302 and above, which formed the Major.

The M.A. program shall consist of a minimum of fifteen units of graduate credit:

- (a) a thesis in French of approximately twenty-five thousand words, worth six units of credit;
- (b) nine units of course work, three of which may be drawn from courses in French offered at the senior undergraduate level.

The thesis topic selected by the candidate must have the approval of both the supervisory committee and the M.A. committee of the French Department. This regulation also applies to any substantial change from the approved topic which the candidate may wish to make in the course of the candidate's research.

Candidates are required to possess a reading knowledge of English. In addition, candidates must satisfy the Department that they have a working knowledge of another approved language, in addition to French and English.

### Faculty and Areas of Interest

|   |   |
|---|---|
| Olivier M. Abrioux, Ph.D.<br>(Aberdeen)                       | 17th century French literature and<br>history of ideas; 20th century<br>French literature to 1950 |
| Jeanne E. Adam, D. de IIIe cycle<br>(Bordeaux)                | French-North African literature   |
| Barrington F. Beardsmore, Ph.D.<br>(British Columbia)         | Medieval French literature  |
| John C.E. Greene, D. de l'Univ.<br>(Grenoble)                 | 19th century French literature  |
| David A. Griffiths, D. de l'Univ.<br>(Paris)                  | 19th century French literature  |
| Elaine Limbrick, D. de IIIe cycle<br>(Poitiers)               | Montaigne; 16th century French<br>literature and history of ideas                                 |
| Jo-Ann E. McEachern, Ph.D.<br>(Toronto)                       | 18th century French literature and<br>history of ideas  |
| Danielle Thaler, Ph.D.<br>(Toronto)                           | 19th century French literature,<br>children's literature and problems<br>of translation           |
| Thuong Vuong-Riddick,<br>D. de IIIe cycle<br>(Paris-Sorbonne) | French-Canadian literature  |
| Jennifer R. Waelti-Walters, Ph.D.<br>(London)                 | Butor, Le Clézio, 20th century<br>novel and women's writing                                       |

## GEOGRAPHY

The Department of Geography offers courses of study and research leading to M.A. and Ph.D. degrees. Individual programs may be ar-

ranged in economic, urban, resources, physical and regional geography with emphasis on Canada, especially Western Canada, and the Pacific

Basin.

Admission to the Departmental graduate program is normally granted only to those students having honours or major degrees with first or second class standing in geography (at least a B average). Students from the British Isles, for example, are expected to have obtained at least an upper second class honours degree. A promising student lacking such qualifications may be allowed to make up this deficiency, being required to register as an unclassified student.

#### Program of Study

Acceptance into the graduate program requires attendance at formal courses and the presentation and defence of a thesis or dissertation. Normally 12 units of course work are required together with 15 units of thesis work to give a total of 27 units for the M.A. degree. The Department offers a flexible Ph.D. degree program based on a student's academic background and standing. Each student, however, will be required to complete a *minimum* of 14 units of graduate course credit and a dissertation assessed to a *minimum* of 24 units. Credit may, in some cases, be transferable from other graduate institutions; each case would be assessed individually. A student normally should expect to spend two years of academic work to obtain a Master's degree. Doctoral candidates are required to spend two years in attendance and normally complete the program in three years. All graduate students are required to complete Geography 500, 522, and 523 as part of their program.

The department participates in the Cooperative Education Program of the Faculty of Graduate Studies. Under this program a newly registered student spends the first year of his program on course work. The second year is spent working at a paid research related position in either industry or government. The third year the student returns to the University to complete his research, and write and defend his thesis. The coop program is open to both M.A. and Ph.D. candidates and normally extends the length of time required for the degree by one year. Given the current economic conditions, few positions are expected to be available in the coming year.

Inquiries concerning the graduate program may be addressed to the Graduate Studies Adviser, Department of Geography. Application forms for admission, which include the indication of need for financial assistance can be obtained directly from the Faculty of Graduate Studies. The attention of students is drawn to the departmental closing date for

applications, March 31. Completed applications and supporting documents must be available for consideration by the Department on, or prior to, that date.

#### Faculty and Research Interests

|   |   |
|---|---|
| Gerald M. Barber, Ph.D.<br>(Toronto)              | Urban: transportation, quantitative analysis, economic                        |
| Philip Dearden, Ph.D.<br>(Victoria)               | Resources: biogeography, recreational   |
| Michael C.R. Edgell, Ph.D.<br>(Birmingham)        | Physical: biogeography, landscape evaluation: Australia                       |
| Charles N. Forward, Ph.D.<br>(Clark)              | Urban: port functions, urban historical, Canada                               |
| Harold D. Foster, Ph.D.<br>(London)               | Physical: applied geomorphology, hydrology, natural hazards, renewable energy |
| David C.-Y. Lai, Ph.D.<br>(London)                | East Asia: Hong Kong, overseas Chinese, China, industrial, urban              |
| Malcolm A. Micklewright, Ph.D.<br>(Washington)    | Economic: regional planning and development                                   |
| Peter E. Murphy, Ph.D.<br>(Ohio State)            | Urban: community planning, tourist management, quantitative                   |
| J. Douglas Porteous, Ph.D.<br>(Hull)              | Urban planning: behavioural, humanistic, Latin America                        |
| William M. Ross, Ph.D.<br>(Washington)            | Resources: political, legal, coastal management, fisheries                    |
| W.R. Derrick Sewell, Ph.D.<br>(Washington)        | Resources: policy analysis, water, energy, behavioural                        |
| Stanton E. Tuller, Ph.D.<br>(Calif., Los Angeles) | Physical: climatology, heat balance, Japan                                    |
| Rudolf Wikkramatileke, Ph.D.<br>(London)          | Asia: South and Southeast Asia; economic and cultural                         |
| Colin J.B. Wood, Ph.D.<br>(McMaster)              | Resources: conflict resolution, economic, land                                |

## HISTORY

The Department of History offers two programs leading to the M.A. degree by: (1) thesis option, and (2) nonthesis option. Subject to the admission requirements of the Faculty of Graduate Studies, admission to either program normally requires a Bachelor's degree with a minimum overall average of B+ (75% or high Second Class), or a Bachelor's degree with a minimum average of A- (80% or First Class) in the final year's work. A candidate with background deficiencies in history may be required to register for a year as a qualifying graduate student before being admitted to a degree program.

#### Thesis Option

A student electing the thesis option will write a thesis of approximately 50,000 words, and must successfully defend this thesis in an oral examination. During the student's first year in the program, progress in the thesis will be evaluated through history 598 (3), Thesis Tutorial, which will require either a research report or bibliographic essay, as determined by the supervisory committee. The student will also be required to complete a graduate seminar in historiography (History 500). Facilities are available for thesis work in Canadian history (particularly British Columbia, Western Canadian and Canadian military history), and limited topics in other areas, such as intellectual, diplomatic, British, and Western American history. The University's McPherson Library has holdings in excess of one million volumes, and graduate students may also be granted access to the Provincial Library and Archives, which include notable manuscript collections relating to western Canada and the northwestern United States.

#### Nonthesis Option

A student electing the nonthesis option will select two fields from the following areas: American History, British History, Canadian History, European History, and Asian History. Alternatively, the two fields may be chosen thematically rather than geographically from such studies as intellectual, social, diplomatic, military, or urban history.

Two members of the Department, chosen in consultation with the Graduate Adviser, will constitute the student's "field committee" in each of two selected areas, and one of the two will serve as the supervisor in each field. Each field committee will draw up a bibliography of required readings, meet with the student periodically, and set a written field examination of three hours duration that will be graded by at least two members of the Department. Field committees will normally be established in September, and the student will write the examination in the following April.

The student will be required to meet with the field supervisor on a regular basis – at least once a month – during the winter session. Part time students may prepare one field per year but are reminded that they will be examined in both fields in the final oral examination. Students who obtain a 5.00 grade point average but who obtain less than B standing in History 500 may one time only repeat History 500.

The candidate will also be required to write an extended research paper of approximately 12,000 words. Normally this will be directed by one of the two field supervisors. The paper will be read and assessed by the supervisor giving the course and two other members of the Department.

The student's two field supervisors plus a member of the Graduate Faculty from outside the Department will comprise the student's Final Examining Committee. The outside member will be provided with copies of the required bibliographies in both fields, as well as a copy of the extended research paper. After completing all other requirements, the student will be orally examined in the student's competence in the chosen fields of history by the Final Examining Committee.

#### General

All candidates for the M.A. degree must demonstrate a reading knowledge of a second language acceptable to the Department in order to qualify for graduation. The level of proficiency expected will be equivalent to a B or better in the reading courses (such as French 300, German

390 or equivalent) offered by the respective language departments. Examinations will normally be of two hours duration and may be written with the aid of a dictionary. They will normally be administered three times a year – in September or October, March and July. New students are strongly urged to take their language examination in the fall, an examination usually scheduled for the first week of the term in order that, if necessary, students may enroll in a language course. Should a student fail a language examination, the Department may require that the student take formal language instruction in consultation with the Department supervising the exam before writing another examination.

NOTE: students will not be permitted to sit their oral examinations until they have satisfied this language requirement.

Students are normally admitted for study beginning in September and must complete all requirements by April 15 to graduate in May. Part time study is permitted, but the degree must be completed with five years of the initial registration.

Although there are no formal residence requirements, residence is recommended.

### Faculty and Major Fields of Interest

|  |   |
|--|---|
| Peter A. Baskerville, Ph.D.<br>(Queen's)       | Business history; pre-Confederation                     |
| Morris Berman, Ph.D.<br>(Johns Hopkins)        | History of science, history of mentalities              |
| Ralph C. Croizier, Ph.D.<br>(Calif., Berkeley) | Modern China  |
| Brian W. Dippie, Ph.D.<br>(Texas)              | Intellectual-cultural; 19th century U.S.                |
| Chad M. Gaffield, Ph.D.<br>(Toronto)           | Social history; quantitative methods; pre-Confederation |

|   |  |
|---|--|
| Charlotte S.M. Girard, Ph.D.<br>(Bryn Mawr)     | 20th century diplomacy; modern France; Canadian foreign policy |
| James E. Hendrickson, Ph.D.<br>(Oregon)         | British Columbia; American West                                |
| Sydney W. Jackman, Ph.D.<br>(Harvard)           | 19th century Britain   |
| G.R. Ian MacPherson, Ph.D.<br>(Western Ontario) | Modern Canada; agrarian; cooperative history                   |
| Robert J. McCue, Ph.D.<br>(Brigham Young)       | 16th century Europe  |
| Angus G. McLaren, Ph.D.<br>(Harvard)            | 19th century European social history                           |
| John Money, Ph.D.<br>(Cambridge)                | 18th century Britain   |
| Patricia E. Roy, Ph.D.<br>(British Columbia)    | Modern Canada, British Columbia                                |
| Reginald H. Roy, Ph.D.<br>(Washington)          | Military and Strategic Studies; Canada                         |
| Eric W. Sager, Ph.D.<br>(Columbia)              | Atlantic Canada, social and economic history                   |
| Donald L. Senese, Ph.D.<br>(Harvard)            | 19th and 20th century Russia                                   |
| Phyllis M. Senese, Ph.D.<br>(York)              | French Canada  |
| W. George Shelton, Ph.D.<br>(Pennsylvania)      | Intellectual history   |
| E. Patricia Tsurumi, Ph.D.<br>(Harvard)         | Modern Japan   |
| Wesley T. Wooley, Ph.D.<br>(Chicago)            | U.S. diplomatic and political history                          |

## HISTORY IN ART

The Department of History in Art offers a program leading to the degree of Master of Arts.

The M.A. program is designed to be completed in two years, although in exceptional circumstances the program may be of shorter or longer duration. In their first year students are required to complete 12 units of graduate courses in a variety of fields based on the department's offerings that year. History in Art 501/502, the basic course in methodology and the history of art history, must be taken by all students. In addition, if a student is primarily interested in Western art, he must take at least 3 units in non-Western art (Islamic, Indian, South Asian, Far Eastern or Pre-Columbian). Similarly, if a student's primary interest is in non-Western art, at least 3 units of course work must be taken in a field of Western art (Byzantine, Medieval, Renaissance, Baroque, or Modern). The M.A. thesis is the focus of the second year's work.

The Department recommends highly that entering graduate students have a reading knowledge of at least one second language, preferably French or German. If the University offers courses in a language indispensable to their M.A. program, they should be prepared to undertake language training in addition to their normal course load. All students must fulfill the department's language requirement, and will not be permitted to sit their oral examinations until they have satisfied this requirement.

### Faculty and Research Interests

|   |   |
|---|---|
| Alan Gowans, Ph.D.<br>(Princeton)                       | Architectural history; North American art and architecture; popular commercial arts; cross cultural history |
| Siri Gunasinghe, D.U.<br>(Paris)                        | Buddhist and Hindu art and architecture of South and Southeast Asia; Indian painting                        |
| John L. Osborne, Ph.D.<br>(Courtauld Institute, London) | Medieval and Byzantine art history; Byzantine mosaics   |
| Judith Patt, Ph.D.<br>(Calif., Berkeley)                | Art and architectural history of Far East and Southeast Asia  |
| Martin J. Segger, M. Phil.<br>(Warburg, London)         | British Columbia architecture; conservation and museology; Renaissance/Baroque arts                         |
| Elizabeth Tumasonis, Ph.D.<br>(California, Berkeley)    | 19th and 20th century art   |
| S. Anthony Welch, Ph.D.<br>(Harvard)                    | Iranian painting; architecture of Muslim India; Islamic art and architecture                                |
| Charles R. Wicke, Ph.D.<br>(Arizona)                    | Pre-Columbian art; Latin-American art: cross cultural studies   |

## LINGUISTICS

The Department of Linguistics offers programs of study and research leading to the degrees of Doctor of Philosophy and Master of Arts in the following areas:

1. Theoretical Linguistics, especially as this applies to grammatical theory, phonological theory, experimental phonetics, psycholinguistics.
2. Applied Linguistics, especially as this applies to Canadian English, dialectology, lexicology, English for nonnative speakers, languages of

the Pacific Rim, and indigenous languages of the Northwest.

### MASTER OF ARTS

The Department offers two programs of equal status, leading to the M.A. degree: (1) course work and thesis, and (2) course work only. Admission to either program normally requires a Bachelor's degree with a minimum overall average of B+ in the final year's work. A candidate

with insufficient preparation may be required to register for a year as an undergraduate student or spend a year as a qualifying graduate student before being admitted to a degree program. Ordinarily a student once accepted into an M.A. program can expect to take two years to complete it. For either option mentioned, a student will require a minimum of 24 units of credit. At the discretion of the Department, up to six units may be taken at the senior undergraduate level. Where deemed appropriate, up to three units may be taken in another department. All candidates are required to complete Linguistics 503, 505 and 527 (1½ units each). In order to qualify for graduation, all students must demonstrate a reading knowledge of, or fluency in, French or some other language acceptable to the Department. Students planning on continuing into a Ph.D. program are advised to complete 508 (Transformational Generative Grammar) and 510 (Phonology).

#### Thesis Option

This program involves a minimum of 15 units of course work, including 581 (1½ units), plus 9 units of thesis (599). Additional units of undergraduate courses may be required, depending on the student's background.

#### Nonthesis Option

A student electing the nonthesis option is required to take 24 units of course work, subject to the conditions detailed above. Additional units of undergraduate courses may be required, depending on the student's background. The student will be orally examined at the conclusion of his program on his knowledge of the theory of Linguistics based on a paper he has presented in 598 (Comprehensive Examination).

## DOCTOR OF PHILOSOPHY

The Department also offers a program leading to the Ph.D. degree in Linguistics. The normal expectation is that a student entering the program has an M.A. degree. All students are admitted on a provisional basis; the candidacy examination will be held upon satisfactory completion of a minimum of 9 units of 600 level courses as specified by the Department. An acceptable dissertation proposal is expected from the Linguistics 690 course. Students will normally sit for candidacy exams in April or December following their entry into a Ph.D. program. In the

case of students planning field work in the second year of the program, however, provision can be made for them to take part of their candidacy exams after such field work. In any event, the candidacy exams must be completed within 24 months of entry into the program. Students are required to take 30 units of credit (including their dissertation) beyond the M.A. degree for a Ph.D. The minimum duration for a Ph.D. program is two calendar years, but in general such a program will take at least three years to complete. In order to qualify for graduation, all students must demonstrate a reading knowledge of, or fluency in, two languages other than English acceptable to the Department; one of these will normally be French.

Inquiries concerning the graduate program should be addressed to the Graduate Studies Advisor, Department of Linguistics. Application forms for admission can be obtained directly from the Faculty of Graduate Studies.

#### Faculty and Areas of Interest

|  |   |
|--|---|
| James Arthurs, Ph.D.<br>(British Columbia)           | Romance linguistics; syntax; stylistics   |
| Barry F. Carlson, Ph.D.<br>(Hawaii)                  | Wakashan, Salishan languages, phonology   |
| John H. Esling, Ph.D.<br>(Edinburgh)                 | Applied linguistics, acoustic phonetics   |
| Barbara P. Harris, Ph.D.<br>(University of Victoria) | Canadian English, English grammar, Chinook jargon                                   |
| Thomas M. Hess, Ph.D.<br>(Washington)                | Western Canadian Indian languages; applied linguistics; Pacific northwest mythology |
| Thomas E. Hukari, Ph.D.<br>(Washington)              | Grammatical theory, phonology, and Western Canadian Indian languages                |
| Joseph F. Kess, Ph.D.<br>(Hawaii)                    | Psycholinguistics, Austronesian languages; sociolinguistics                         |
| Geoffrey N. O'Grady, Ph.D.<br>(Indiana)              | Phonology; historical linguistics; Australian languages                             |
| Henry J. Warkentyne, Ph.D.<br>(London)               | Dialectology, applied linguistics, acoustic phonetics, and Japanese                 |

## MATHEMATICS

The Department of Mathematics offers graduate programs leading to the degrees of Master of Arts and Master of Science in Pure Mathematics, Applied Mathematics, and Statistics.

Potential graduate students who wish to obtain a Master's degree in Mathematics will be required to satisfy the following requirements:

The student should normally have the equivalent of an honours degree in Mathematics in one of the emphasis areas as listed in the Mathematics entry for the Faculty of Arts and Science. A student without this background will be required to make up any deficiency. In so doing, the student is expected to obtain a grade of at least a B (5.00) in each such makeup course, and an average of at least B+ (6.00) overall in such makeup courses.

Each graduate student must, in addition, complete a program of study consisting of a minimum of 15 units, made up of either

- at least 12 units at the 500 level or higher, and the remainder at the 400 level or higher, or
- a thesis and 8 units at the 500 level or higher, and the remainder at the 400 level or higher.

It should be emphasized that this is a minimum requirement, and additional work may be required of individual students.

It is possible, under certain circumstances, with the approval of the Graduate Committee, for a student to take directed studies (Math 581) under the supervision of a faculty member.

A graduate student is governed by the Departmental regulations in force at the time of the student's initial graduate registration.

For each graduate student there shall be a Supervisory Committee of at least three members approved by the Faculty of Graduate Studies, one of whom shall be from outside the Department. The Committee shall recommend to the Department Chairman and then to the Faculty of Graduate Studies a program of studies. For a thesis candidate the Committee shall examine the thesis and conduct a final oral examination of

the candidate on the thesis. For a nonthesis candidate the Committee shall conduct both a written and an oral examination of the candidate on the discipline. In both cases, the final oral will be chaired by the Dean of Graduate Studies or his nominee. The Committee may conduct other examinations. The Department Chairman and the Committee shall recommend to the Faculty of Graduate Studies that a degree be awarded to a successful candidate.

The student is responsible for becoming familiar with other regulations as outlined in the University Calendar and the Brochure of the Faculty of Graduate Studies.

#### Faculty and Fields of Research

|   |   |
|---|---|
| Stanley R. Clark, Ph.D.<br>(Manchester)             | Simulation  |
| Ernest J. Cockayne, Ph.D.<br>(British Columbia)     | Combinatorics   |
| Roger R. Davidson, Ph.D.<br>(Florida State)         | Statistics  |
| William R. Gordon, Ph.D.<br>(Calif., Santa Barbara) | Linear and multilinear algebra  |
| W. Keith Hastings, Ph.D.<br>(Toronto)               | Statistics  |
| Denton E. Hewgill, Ph.D.<br>(British Columbia)      | Partial differential equations  |
| Lowell A. Hinrichs, Ph.D.<br>(Oregon)               | Geometry, topology  |
| Albert Hurd, Ph.D.<br>(Stanford)                    | Nonstandard analysis, dynamical systems, partial differential equations |

|   |   |  |  |
|---|---|--|--|
| Bruce R. Johnson, Ph.D.<br>(Oregon)                         | Mathematical statistics, probability      | William J. Reed, Ph.D.<br>(British Columbia) | Statistics, mathematical bio-economics                               |
| Walter P. Kotorynksi, Ph.D.<br>(Toronto)                    | Differential equations                    | James Riddell, Ph.D.<br>(Alberta)            | Number theory  |
| David J. Leeming, Ph.D.<br>(Alberta)                        | Approximation theory                      | Earl D. Rogak, Ph.D.<br>(Michigan)           | Functional analysis, partial differential equations, optimal control |
| Charles R. Miers, Ph.D.<br>(Calif., Los Angeles)            | Functional analysis                       | Marvin Shinbot, Ph.D.<br>(Stanford)          | Functional analysis, differential equations, applied mathematics     |
| Donald J. Miller, Ph.D.<br>(McMaster)                       | Algebra, graph theory                     | H. Paul Smith, Ph.D.<br>(Montana)            | Mathematics education, combinatorics, finite geometry                |
| Gary G. Miller, Ph.D.<br>(Missouri)                         | Topology                                  | Ahmed R. Sourour, Ph.D.<br>(Illinois)        | Functional analysis, operator theory                                 |
| Charles E. Murley, Ph.D.<br>(Washington)                    | Homological algebra, Abelian group theory | Hari M. Srivastava, Ph.D.<br>(Jodhpur)       | Analysis, applied mathematics, mathematical physics                  |
| Robert E. Odeh, Ph.D.<br>(Carnegie Institute of Technology) | Statistics                                | Pauline van den Driessche, Ph.D.<br>(Wales)  | Applied mathematics, differential equations                          |

## MUSIC

All Master's programs in the School of Music require a minimum attendance of two winter sessions and at least 24 units of course credit.

### M.A. AND PH.D. IN MUSICOLOGY

#### Admission

Applicants are requested to send, along with official transcripts of previous college study, examples of their work in the field of music history, such as honours papers or Master's thesis, which will be returned.

#### Language requirement

M.A. A *good* reading knowledge of German and French is required *before* admission. Applicants with a reading knowledge of another foreign language may be accepted provisionally, but must demonstrate their proficiency in German and French to the School by December of their first year of graduate study at the University of Victoria. A reading knowledge of other foreign languages may be required if necessary to the applicant's intended field of specialization. Courses taken to fulfill this requirement are considered remedial, and units earned thereby will not be counted toward the course requirements.

Ph.D. Same requirements as above upon entering, but the student must also pass a reading examination in French and German before December of the second year of attendance.

A reading knowledge of other foreign languages may be required if necessary to the applicant's intended field of specialization.

#### Comprehensive examinations

Comprehensive examinations in Theory, History and Musicology may be taken in December or April of each year. Full time M.A. students are required to complete these to the School's satisfaction by the end of their first year in the program. Part time M.A. students will be advised during their first year in the program when they should expect to complete these examinations.

#### Ph.D. dissertation prospectus

A prospectus will be required for submission to the student's supervisory committee and should include (1) a description of the research situation in the chosen field of study, including detailed, specific references to existing published studies, their scope and limitations; (2) a precise statement of the research problem or problems upon which the dissertation is to focus, and a summary of the proposed plan of study; (3) a description of the state of the primary source materials and their immediate availability; and (4) as an appendix, a selected but comprehensive bibliography (preferably annotated) of *directly* relevant books and articles.

#### M.A. Thesis

The thesis should be completed during the last term of residence.

#### Ph.D. dissertation

This should be a significant contribution to original musicology research.

### \* M.MUS IN COMPOSITION

An applicant for admission to the M.Mus. program in Composition should send, at the earliest possible date, copies of scores and tapes of recent work, together with an official transcript of previous study and two letters of reference.

Upon admission, an individual course of study will be arranged, including private instruction in composition, and theoretical and historical studies. Opportunities are available to work in the School's well equipped electronic music studio and to take part in solo and ensemble performance.

Candidates for the degree will be required to complete an extensive original composition for instruments, voices, or mixed media. This work normally will be performed during the final year of graduate study.

### \* M.MUS. IN PERFORMANCE

It is preferable for applicants to visit the School for an interview and audition in their performance medium. When that is impractical, a high quality tape recording must suffice. This should be at least thirty minutes duration and present solo playing of two or more works in contrasting style. Acceptance via tape is always provisional pending audition in person upon arrival in September.

Acceptance for the M.Mus. in Performance requires specialization at advanced level in a specific performance medium (for example, trumpet, piano, voice). Further growth as a soloist and ensemble participant is a degree requirement, formal evidence of which is demonstrated through the candidate's degree recital.

The candidate's individual program is devised to accomplish this and to complement it with study in related areas, e.g., conducting, performance practices, composition, theory, music history, theatre, history in art, languages.

\* Students enrolled in a program leading to the M.Mus. degree in composition and performance are required to take an oral examination reflecting on the students' composition or repertoire respectively. For details, see the School of Music graduate handbook.

#### Faculty and Areas of Interest

|  |  |
|--|--|
| John A. Celona, Ph.D.<br>(Calif., San Diego)                           | Composition, theory  |
| Thomas Dowling, M.Mus.<br>(Cleveland Inst.)                            | Clarinet, chamber music  |
| Richard Ely, M.M.<br>(Illinois)  | Horn, chamber ensembles  |
| Jaroslav Karlovsky, Artist's Dip.<br>(Academy of Musical Arts, Prague) | Viola, chamber music   |
| William Kinderman, Ph.D.<br>(Calif., Berkeley)                         | History, analysis and criticism of 19th century music, Beethoven's sketches and compositional pro- |

|   |  |  |   |
|---|--|--|---|
|   | cess, later 19th century German tonal practice | Louis D. Ranger, B.Mus. (Juilliard)                  | Trumpet, brass chamber music                                    |
| Paul Kling, Artist's Diploma (Academy of Musical Arts, Prague)      | Violin   | Jesse A. Read, M.Mus. (University of Victoria)       | Bassoon, wind ensemble, baroque and classical music, conducting |
| Rudolf Komorous, Artist's Diploma (Academy of Musical Arts, Prague) | Composition, theory                            | Erich Schwandt, Ph.D. (Stanford)                     | Music history, musicology                                       |
| Gordana Lazarevich, Ph.D. (Columbia)                                | Music history, musicology                      | Bernard Turgeon (Opera School, Toronto Conservatory) | Voice and opera   |
| Michael M. Longton, M.M. (Brit. Col.)                               | Theory, computer generated music               | Robin Wood, L.L.D. (University of Victoria)          | Piano   |
| Bruce E. More, D.M.A. (Yale)  | Theory, oral skills, choral conducting         | Phillip T. Young, M.Mus. (Yale)                      | Musical instrument history                                      |

## PHILOSOPHY

The Department of Philosophy offers a program of graduate study leading to the degree of Master of Arts. Students will concentrate mainly on the writing of a thesis, under the supervision of a member of the Department. Topics may be taken from the areas of metaphysics, epistemology, ethics, philosophy of religion, philosophy of mind, philosophy of language, social philosophy and political philosophy. Normally a candidate is assigned no course work; however, from time to time a supplement of course work, fitted to individual needs and interests, might also be prescribed. Usually this would not exceed two courses. Admission to the M.A. Program is restricted to those with an equivalent of First Class Honours standing in the Honours Philosophy Program at the University of Victoria.

### Faculty

|                                       |  |
|---------------------------------------|--|
| Rodger G. Beehler, Ph.D. (Calgary)    | Moral, legal, and political philosophy, philosophy of education. |
| Charles B. Daniels, D. Phil. (Oxford) | Philosophy of mind, ethics, aesthetics, ontology                 |

|  |   |
|--|---|
| Alan R. Drengson, Ph.D. (Oregon)         | The British Empiricists, Kant, Eastern philosophy, moral psychology, philosophy and the environment |
| Eike-Henner W. Kluge, Ph.D. (Michigan)   | Medical ethics, medieval philosophy, metaphysics, theory of perception                              |
| Monika Langer, Ph.D. (Toronto)           | European philosophy, existentialism, history of philosophy and social/political issues              |
| John M. Michelsen, Ph.D. (Washington)    | Greek philosophy, phenomenology and existentialism  |
| Charles G. Morgan, (Ph.D) (John Hopkins) | Philosophy of science, logic  |

## PHYSICS

The Department of Physics offers programs of study and research leading to the degrees of M.Sc. and Ph.D. The graduate courses offered are listed on pages 118 and 120.

Close contact is maintained with the Defence Research Establishment Pacific, the Dominion Astrophysical Observatory, the Dominion Radio Astrophysical Observatory, the Pacific Geoscience Centre, and the Patricia Bay Institute of Ocean Sciences. University of Victoria belongs to a consortium of universities which operates the meson facility TRIUMF.

The Climenhaga Observatory is an integral part of the Department, and major equipment associated with the Observatory includes an image processing system, a 0.5 metre telescope, an iris photometer, a microdensitometer, and a laboratory spectrograph.

A VAX 11-750 is located in the Department.

### Cooperative Education Program

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement Physics graduate students may participate in a Cooperative Education program as described in the Faculty of Graduate Studies section of this calendar.

Further information may be obtained from the Chairman of the Physics Department Graduate Committee.

### Astronomy and Astrophysics

Observational and theoretical studies, which may be carried out in conjunction with the Dominion Astrophysical Observatory.

### Condensed Matter Physics

NMR studies of molecular properties in solids and liquids.

### Geophysics

Electromagnetic induction, geomagnetism, space physics, upper

atmosphere physics.

### Nuclear and Particle Studies

Intermediate and high energy physics with TRIUMF and other accelerator facilities.

### Physics of Fluids

Plasma studies, shock waves studies, acoustic remote sensing in the ocean in conjunction with the Institute of Ocean Sciences.

### Theoretical Physics

General relativity, nuclear and particle physics.

### Faculty and Major area of Research

|  |   |
|--|---|
| Alan Astbury, Ph.D. (Liverpool)                | Experimental nuclear and particle physics |
| George A. Beer, Ph.D. (Saskatchewan)           | Experimental nuclear and particle physics |
| J. Anthony Burke, Ph.D. (Harvard)              | Astronomy and astrophysics                |
| Reginald M. Clements, Ph.D. (Saskatchewan)     | Plasma studies                            |
| Fred. I. Cooperstock, Ph.D. (Brown)            | General relativity and astrophysics       |
| John M. Dewey, Ph.D. (London)                  | Experimental gas dynamics                 |
| Harry W. Dosso, Ph.D. (British Columbia)       | Geomagnetism and space physics            |
| Gerhart B. Friedmann, Ph.D. (British Columbia) | Biophysics                                |

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|--|--|--|--|
| E David A. Hartwick, Ph.D.<br>(Toronto)        | Astronomy and astrophysics                       | Harbhajan S. Sandhu, Ph.D.<br>(British Columbia)             | Nuclear magnetic resonance in solids and liquids |
| Robert E. Horita, Ph.D.<br>(British Columbia)  | Geomagnetism and space physics                   | Colin D. Scarfe, Ph.D.<br>(Cambridge)                        | Astronomy and astrophysics                       |
| Richard K. Keeler, Ph.D.<br>(British Columbia) | Experimental nuclear and particle physics        | Harry M. Sullivan, Ph.D.<br>(Saskatchewan)                   | Upper atmosphere physics                         |
| Donald E. Lobb, Ph.D.<br>(Saskatchewan)        | Beam transport systems and magnetic studies      | Jeremy B. Tatum, Ph.D.<br>(London)                           | Astronomy and astrophysics                       |
| Grenville R. Mason, Ph.D.<br>(Alberta)         | Experimental nuclear and particle physics        | Don A. Vandenberg, Ph.D.<br>(Australian National University) | Astronomy and astrophysics                       |
| Howard E. Petch, Ph.D.<br>(British Columbia)   | Nuclear magnetic resonance in solids and liquids | Arthur Watton, Ph.D.<br>(McMaster)                           | Nuclear magnetic resonance in solids and liquids |
| Charles E. Picciotto, Ph.D.<br>(California)    | Theoretical nuclear and particle physics         | John T. Weaver, Ph.D.<br>(Saskatchewan)                      | Geomagnetism and space physics                   |
| Christopher J. Pritchett, Ph.D.<br>(Toronto)   | Astronomy and astrophysics                       | Chi-Shiang Wu, Ph.D.<br>(Western Reserve)                    | Theoretical nuclear physics                      |
| Lyle P. Robertson, Ph.D.<br>(British Columbia) | Experimental nuclear and particle physics        |  |  |

## POLITICAL SCIENCE

The Department of Political Science offers courses of study leading to the degree of Master of Arts. Candidates are required to complete 18 units, in accordance with the following program:

1. Required courses: All M.A. students are required to take seminars in Political Concepts and Analysis (Political Science 505), Research Methods and Design (506), Public Policy Analysis (507), and Political Comparisons (508), except that students enrolled in the Legislative Internship Program may substitute another course at the 500 level for 508.
2. Optional courses: Regular M.A. students are required to complete 6 additional units of course work. Up to 3 of these units may be taken from reading courses (590), up to 3 units may be taken from undergraduate courses at the 300 or 400 level, and up to 3 units may be taken from courses offered by another Department. Students enrolled in the Legislative Internship Program may take any course available in the Department at the 500 level (including a reading course) in place of 508.
3. Legislative Internship Program: Students who have been accepted as M.A. candidates in this Department and who subsequently participate in the Provincial Legislative Internship Program may obtain 6 units of credit upon completion of a comprehensive Intern Report and examination.
4. Thesis: All students are required to submit a thesis worth 6 units of credit.
5. Length of program: Full time students will normally be expected to complete the M.A. degree within 24 months of first enrollment.

### Faculty and Current Research Interests

|  |   |
|--|---|
| Howard L. Biddulph, Ph.D.<br>(Indiana) | Policy making, political integration, regionalism, and dissent in the U.S.S.R. and Eastern Europe; Marxist-Leninist political thought |
| Anthony H. Birch, Ph.D.<br>(London)    | British politics and government; political integration and minority nationalist movements; theories of representation and democracy   |

|   |   |
|---|---|
| Warren Magnusson, D.Phil.<br>(Oxford)         | The political theory of local government; liberal and Marxist theories of the state; comparative urban politics   |
| J. Terence Morley, Ph.D.<br>(Queen's)         | English-Canadian political culture; British Columbia pressure groups; political parties in the Canadian provinces; trade union organization and behaviour; government of the legal profession in Canada; non-Marxist socialist thought; the political role of religious denominations in the Canadian state |
| Richard J. Powers, Ph.D.<br>(Claremont)       | International politics and international relations theory; international law and international organization; comparative foreign policy   |
| Norman J. Ruff, Ph.D.<br>(McGill)             | B.C. provincial politics; policy formation and public administration; public sector personnel and financial management; Canadian federalism and intergovernmental relations   |
| Robert B.J. Walker, Ph.D.<br>(Queen's)        | Contemporary political and social thought; theories of ideology and culture; philosophy of social science; international political theory; concepts of space and time in political thought  |
| R. Jeremy Wilson, Ph.D.<br>(British Columbia) | British Columbia politics and government; environmental and natural resources policy; elections and public opinion  |

## PSYCHOLOGY

The Department of Psychology offers programs leading to the degrees of Master of Arts, Master of Science and Doctor of Philosophy.

Training leading to the Ph.D. degree is offered in Human Neuropsychology, as well as in various areas of Experimental, Developmental, and Social Psychology. Apart from the Neuropsychology program, the Department offers no formal clinical training beyond some limited courses and practicum opportunities.

### Program Requirements

*Undergraduate Competence:* All regular incoming graduate students must without exception fulfill this requirement, ordinarily in their first year of study. The undergraduate competence requirement is designed to assure that all first year students will have had at least a basic exposure to major areas of psychology. At the present time, students will have satisfied the requirement if they have in the past, or will have after their first

year of graduate studies, been credited with the equivalent of those courses currently required in the third and fourth year programs of this Department's own undergraduate honours students with the exception of the honours thesis.

*Thesis:* A thesis is a requirement in all degree programs.

In addition to the above requirements, and unit requirements set by the Faculty of Graduate Studies, students must satisfy a methodology requirement involving 400 and 500 level courses in statistics and methods, and, in the case of Master's students, participate in their first year in a Research Apprenticeship which is generally overseen by the student's supervisor. Other departmental requirements are specific to particular programs or supervisors. A Master's degree involves a minimum of one year of full time study, while the Ph.D involves a minimum of two additional years, at least one of which must be as a full time student.

Requests for information on graduate program and application procedures, as well as application forms for admission and financial support, may be obtained from the Faculty of Graduate Studies. Specific inquiries may be addressed to the Director of Graduate Admissions, Department of Psychology.

#### Faculty and Major Areas of Research

|   |   |   |  |
|---|---|---|--|
| Loren Acker, Ph.D.<br>(Calif., Los Angeles)                       | Child behavioural development; behaviour modification; general behaviour analysis | Ronald Hoppe, Ph.D.<br>(Michigan State)                   | Psycholinguistics; social facilitation   |
| Janet Beavin Bavelas, Ph.D.<br>(Stanford)                         | Social interaction; verbal and nonverbal communication; methodology               | Mark L. Howe, Ph.D.<br>(Western Ontario)                  | Cognition/cognitive development; mathematical models of learning and memory      |
| Michael E. Corcoran, Ph.D.<br>(McGill)                            | Neuropsychopharmacology; neurobiology   | David F. Hultsch, Ph.D.<br>(Syracuse)                     | Life-span development and aging; memory and cognition; stress and adaptation     |
| Louis D. Costa, Ph.D.<br>(Teacher's College, New York)            | Human neuropsychology and clinical psychology                                     | Michael Hunter, Ph.D.<br>(Simon Fraser)                   | Developmental psychology; statistics and research design                         |
| Pam Duncan, Ph.D.<br>(Wisconsin)                                  | Clinical; developmental psychology  | Michael E.J. Masson, Ph.D.<br>(Colorado)                  | Cognitive psychology; natural language processing                                |
| Robert D. Gifford, Ph.D.<br>(Simon Fraser)                        | Environmental; social-personality   | Richard B. May, Ph.D.<br>(Claremont)                      | Learning; memory; cognitive development  |
| Bram Goldwater, Ph.D.<br>(Bowling Green)                          | Human psychophysiology; conditioning  | G. Alexander Milton, Ph.D.<br>(Stanford)                  | Socialization; social development  |
| Roger E. Graves, Ph.D.<br>(Massachusetts Institute of Technology) | Human neuropsychology: clinical and experimental                                  | Robert W. Payne, Ph.D.<br>(London)                        | Experimental psychopathology; clinical psychology; statistics                    |
| Gordon N. Hobson, Ph.D.<br>(Alberta)                              | Motivation; drugs and behaviour   | Clare K. Porac, Ph.D.<br>(New School for Social Research) | Visual perception; cognitive processes   |
|   |   | Donald E. Read, Ph.D.<br>(McGill)                         | Human neuropsychology; language comprehension; memory; cognitive rehabilitation  |
|   |   | Lorne Rosenblood, Ph.D.<br>(Ohio State)                   | Attitude theories; social affiliation research design                            |
|   |   | Ronald W. Skelton, Ph.D.<br>(British Columbia)            | Neurophysiology; learning and memory   |
|   |   | Frank Spellacy, Ph.D.<br>(Victoria)                       | Human neuropsychology; clinical psychology                                       |
|   |   | Otfried Spreen, Ph.D.<br>(Frieburg)                       | Human neuropsychology; developmental and language disorders; auditory perception |
|   |   | Esther H. Strauss, Ph.D.<br>(Toronto)                     | Neuropsychology; developmental psychology  |
|   |   | Charles Tolman, Ph.D.<br>(Washington)                     | Experimental psychology; theory and methods                                      |

## PUBLIC ADMINISTRATION

### MASTER OF PUBLIC ADMINISTRATION PROGRAM

The School of Public Administration offers a program of interdisciplinary studies leading to the degree of Master of Public Administration. The course is designed for men and women preparing for analytical or management positions in public or private organizations, and for experienced practitioners who wish to examine and integrate the more advanced aspects of policy formulation and administration with the aid of modern insights and technology.

#### Admission

Candidates will have a four year baccalaureate degree from a recognized university, or equivalent qualifications, with an academic standing acceptable to the School and the Faculty of Graduate Studies. In general, this would mean a high second class standing or better in the final two years of the undergraduate degree. In exceptional cases the School, with the agreement of the Dean of the Faculty of Graduate Studies, may waive this requirement on the presentation of other evidence, such as professional experience, which indicates that the candidate will complete the program successfully.

Because the M.P.A. program is open to students from a broad range of disciplines, the School anticipates applications from persons with widely varied undergraduate backgrounds. Although there is no formal requirement with respect to the specific nature of undergraduate courses, makeup course work may be required where lack of an adequate background is judged to be a handicap for the student. In particular, mastery

of high school mathematics (at the level of the University of Victoria noncredit course Mathematics 012 or Algebra 12) is essential. In particular, students should be familiar with the language of sets, logarithms, exponential functions, and the sum of geometric series. Completion of one economic principles course (University of Victoria Economics 201 or equivalent) with a grade of B or better, is also required for entry to the course Administration 503 listed below. Such makeup courses cannot be counted for credit towards the M.P.A. degree; they may be taken during an unclassified year prior to admission to the M.P.A. program. In some cases, satisfactory completion of upper level undergraduate courses during an unclassified year may permit waiver of the requirement for a corresponding course in the M.P.A. program.

Where the quality of an applicant's undergraduate record is marginal, the applicant may be admitted *Conditionally* to the degree program, and be required to satisfy the School as to suitability for full degree candidacy, based on the initial course work taken. If this initial course work is completed satisfactorily, it may become a part of the overall study plan for the M.P.A. degree.

Applicants are encouraged to take the Graduate Management Aptitude test or the Graduate Record Exam if they feel their application will be strengthened by this additional information. Applicants may also wish to submit whatever other evidence of suitability for admission they feel is relevant.

Candidates will normally be expected to arrange an interview with the Director or his designate as part of the admission process.

Students completing an undergraduate degree in preparation for entry

to the M.P.A. program are urged to consult the School for advice as to an appropriate program of study. Normally courses in economics, mathematics, political science, and English (including report writing) will be recommended. In addition, undergraduate preparation in French is strongly encouraged.

Candidates will apply for admission to the M.P.A. program as either full time or part time students. The School seeks to maintain an appropriate balance within its student body between full time and part time students, and the approval of the Dean of Graduate Studies must be obtained before a student may change from full time to part time status, or the reverse. This applies both to the situation where students wish to change their status during the session in which they are currently registered and to the case where the change is to be made at the time of re-registration for a new session.

## PROGRAM OF STUDIES

Each candidate for the degree of Master of Public Administration will design a program of study in consultation with the Director of the School or his designate to ensure that the student is fully prepared for entry into the professional courses and that the study plan reflects both academic and career goals. The degree is awarded on satisfactory completion of the study plan, which may include the internship requirement as described below.

The regular degree program consists of 30 units, including 15 units of required Administration courses numbered 500-516, 9 units of electives numbered 522 and above, followed by 519 (1½) and either 520A (1½) or 520B (1½), and the Report requirement, 598 (3 units). As described below, mid career applicants or entering students with a directly relevant undergraduate background may be granted advanced standing for up to 12 units of course work. Thus, individual programs of study may differ widely, but in no case will the M.P.A. degree be awarded on the basis of fewer than 18 units of study (including the report requirement) accepted for graduate credit at the University of Victoria, of which 12 units must be 519 or above, and must include 519, 598, and either 520A or 520B.

A student in the regular degree program courses must display competence in all required courses numbered 500-516 (15 units), either by completing each course with an acceptable grade, or by passing a challenge examination, or by being granted advanced standing as a result of having previously completed appropriate courses with a grade of B or better. Up to four courses (6 units) numbered 500-516 can be taken as part of the required minimum of 18 units for the degree.

Students with at least ten years of work experience in positions carrying substantial administrative or management responsibilities may be accepted in the mid career program and receive advanced standing for up to 12 units of academic work within the normal degree requirement of 30 units.

A full time student with little relevant prior academic work experience will normally need 20 months to complete the requirements for the degree. One who is extremely well prepared in either or both of these areas may require only 12 months of full time study. The program also may be undertaken on a part time basis.

A student without significant previous work experience, and not engaged in the cooperative program, will be required to complete a four month internship, to take place usually between the first and second years of the program. Arrangements for the internship require the prior approval of the School.

### The Report Requirement (Administration 598):

The report is expected to be a substantial analysis of a significant policy issue or management problem. It is to be prepared individually by the student in consultation with an adviser, who shall be a member of the School faculty. The adviser will review the first draft, and approve a final version for submission to the Oral Examination Committee which will include the adviser, another member of the School faculty, a member of the Faculty of Graduate Studies from outside the School, and at least one professional administrator.

### Performance Requirements:

Performance requirements are identical for the various course content categories, and are consistent with those of the Faculty of Graduate Studies at the University of Victoria.

All candidates must maintain a cumulative average of at least B (grade point average 5.00), computed yearly.

### Cooperative Education:

The Cooperative Education option within the M.P.A. program provides an opportunity for Public Administration students to obtain relevant work experience while completing their degree requirements. Experience in the University of Victoria and in other Canadian universi-

ties has demonstrated that Cooperative Education develops graduates who are well motivated and of a high academic and professional calibre. Students who successfully complete three Work Terms and satisfy the academic requirements of the M.P.A. degree program offered by the School of Public Administration will receive a notation to this effect on their transcripts at graduation.

Applications for admission to the Cooperative Program should be submitted not later than the end of the second week of the student's first term in the M.P.A. program. Decisions on admission are normally made by the fifth week of classes. The Cooperative Education option is only available to full time students; part time students may apply for admission on the understanding that they will be required to change to full time status for the remainder of their program.

## GRADUATE COURSES AND REQUIREMENTS

Although M.P.A. students are normally expected to complete all requirements numbered 500-516 before proceeding further, some flexibility is desirable to permit part time students to take some professional seminars early in the program. For this reason, minimum prerequisite requirements are presented for the following seven groupings of courses, as shown. (Individual courses may have additional prerequisites.) Exemptions may be permitted with the consent of the instructor.

For detailed information on courses, see page 230.

**General Policy Analysis** Prerequisites: 500, 501, 504, 510, 512, 514, 515 and 516. Corequisites: 503 and 507.

519 Seminar in Responsible Administrative Behaviour

520A Seminar in Policy Analysis

520B Seminar in Administration

523 Contemporary Topics in Administration

533 Public Sector Marketing and Policy Implementation

**Personnel and Industrial Relations** Prerequisites: 500, 504, 507, 510, 514 and 516. Corequisite: 503.

525 Labour Relations and Collective Bargaining

529 Organizational Development

531 Personnel Management

**Political and Legal Analysis** Prerequisites: 500, 504, 510, 514 and 516. Corequisite: 507.

551 Administrative Law

556 The Machinery of Government

566 Management Systems of the B.C. Government

**Policy Fields** Prerequisites: 500 to 516.

522 Seminar on Public Transportation Issues

534 Seminar on Energy Issues

535 Regulatory Activity

545 Local Government Organization, Operation and Finance

546 Issues in Management of Local Government

549 Processes and Problems in the Formation of Economic Policy

564 Seminar on Social Policy Issues

565 Health Service Delivery Systems

567 Health Information Systems

575 Coastal Resource Use, Law and Management

**Management Science** Prerequisites: 500, 501 and 503. Corequisite: 514.

521 Inventory Control and Equipment Maintenance

524 Information Systems: Theory and Practice

527 Decision and Risk Analysis

528 Project Management

**Financial Analysis** Prerequisites: 500, 501, 503 and 512. Corequisite: 510.

540 Public Sector Accounting and Financial Management

541 Budgeting, Control and Auditing in the Public Sector

542 Cost Accounting in the Public Sector

**Planning and Evaluation** Prerequisites: 500, 501, 503, 514, 515 and 516.

537 Program Evaluation

562 Evaluation or Planning Practicum

563 Aspects of Research Design

### Faculty and Areas of Interest

Robert L. Bish, Ph.D.  
(Indiana)

Local government; coastal resource management; theories of public choice

J. Barton Cunningham, Ph.D.  
(Southern California)

Shift scheduling; quality of working life; organizational theory; organizational effectiveness; fatigue and stress; decision making and motivation

|  |  |  |  |
|--|--|--|--|
| James Cutt, Ph.D.<br>(Toronto)                                     | Public sector finance and accounting; evaluation of public policy                                      | James N. MacGregor, Ph.D.<br>(Victoria)    | Organizational behaviour; human information processing   |
| A. Rodney Dobell, Ph.D.<br>(Massachusetts Institute of Technology) | Formation and evaluation of public policy; methods of policy analysis; management of the world economy | James C. McDavid, Ph.D.<br>(Indiana)       | Urban administration; program evaluation; statistical methods  |
| Thomas A. Lambe, Ph.D.<br>(Stanford)                               | Application of quantitative methods, with particular regard to urban transportation systems            | James J. McRae, Ph.D.<br>(Western Ontario) | Economic analysis of public policy; regulation and transportation policy   |
| John Langford, Ph.D.<br>(McGill)                                   | Public administration; crown agencies  | Denis J. Protti, M.Sc.<br>(Manitoba)       | Management information systems; health information systems; health care costing; security and confidentiality of information |
| Eric S. Lee, Ph.D.<br>(Victoria)                                   | Management information systems; office automation; organization theory                                 | Hartmut J. Will, Ph.D.<br>(Illinois)       | Accounting, information, control and audit systems   |

## SOCIOLOGY

The program leading to the Master of Arts degree in sociology, while containing a core of theory, research methods, quantitative techniques and participation in the departmental seminar, is designed to provide flexibility for students as well as to reflect the diversity which characterizes the discipline. Individual programs beyond the core are designed to fit students' interests and to supplement areas in which they may require additional work, insofar as faculty resources and specializations permit.

### 1. Program of Studies

All students are required to complete a minimum of 15 units of prescribed Calendar listings. Of these, 12 units must be at the graduate level. Other than in exceptional cases, only 3 of these graduate units will represent the student's thesis; the remaining being drawn from departmental listings in the Calendar. All students are required to demonstrate competence in sociological theory (SOC1 500), the methodology of sociological research design (511) and data analysis, as well as quantitative/statistical techniques (510). Ordinarily such competence shall be demonstrated by successful course completion; however, the abilities and prior performances of entering students shall be considered in the planning of their programs – both in terms of particular courses and the unit values required. In addition, students are required to enroll in a Departmental seminar (505) as part of their degree program.

Other listings are designed to facilitate the range of interests displayed by traditional and contemporary sociological inquiry (530, 535, and 590). These may capitalize on the University's computer facilities; the Library's Human Relations Area Files holdings; the Department's small groups laboratory; and the British Columbia Provincial Archives. The range of such interests is illustrated by the current area of interests declared by the sociology faculty (see below).

### 2. Length of Program

The department expects full time students to spend two years com-

pleting the Master's degree, although it is possible for outstanding students to complete the degree in twelve months.

### Faculty and Current Areas of Interest

|  |  |
|--|--|
| Paul M. Baker, Ph.D.<br>(Minnesota)    | Small groups; methodology; statistics; and aging                               |
| William K. Carroll, Ph.D.<br>(York)    | Political economy; Canadian society; methods and statistics; social psychology |
| C. David Gartrell, Ph.D.<br>(Harvard)  | Theory; social psychology; methods, and statistics                             |
| Robert Hagedorn, Ph.D.<br>(Texas)      | Formal organizations; industrial sociology; social psychology                  |
| R. Alan Hedley, Ph.D.<br>(Oregon)      | Industrialization; work; methods; comparative                                  |
| Daniel J. Koenig, Ph.D.<br>(Illinois)  | Criminology/deviance; political sociology; methods                             |
| Richard Ogmundson, Ph.D.<br>(Michigan) | Stratification; political sociology; collective behaviour                      |
| Jean E. Veevers, Ph.D.<br>(Toronto)    | Family; demography; sex roles  |
| T. Rennie Warburton, Ph.D.<br>(London) | Canadian society; religion; critical social theory                             |
| Roy E.L. Watson, Ph.D.<br>(Toronto)    | Social welfare institutions; occupations                                       |
| Stephen D. Webb, Ph.D.<br>(Tennessee)  | Urban; criminology; methodology  |

## THEATRE

### 1. Programs in Graduate Studies

The Department offers five programs in graduate studies:

- M.A. in Theatre History
- M.A. in Theatre in Education
- M.F.A. in Directing/Production
- M.F.A. in Design/Production

Well qualified applicants may be admitted to a program leading to a Ph.D. in Theatre History by Special Arrangement.

2. Applicants for admission to any of the above programs must send a letter to the Theatre Department Graduate Adviser with a statement of purpose, a detailed resume of their educational background, theatre experience, and teaching experience if applicable.
3. Participation in Production  
All graduate students will be expected to work in Department productions. Areas of activity will be assigned by the graduate faculty in consultation with the student.
4. Faculty Supervisors  
Each student will be assigned a faculty supervisor who will assist the student in the development of the thesis or practicum.

## MASTER OF ARTS

All candidates are required to complete a minimum of 12 units of graduate course work (as described in the separate entries below) and a thesis of 6 units. The residence requirement is one year.

### M.A. in Theatre History: Requirements

- (a) A knowledge at the B.F.A. level of Theatre History, Directing and Design.
- (b) 6 units – Theatre History
- (c) 3 units – to be chosen from the graduate areas of Theatre-in-Education, Design or Directing
- (d) 3 units – to be chosen from a related discipline, to be approved by the Graduate Adviser
- (e) 6 units – Theatre 599, M.A. Thesis. The candidate will submit his thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

NOTE: A candidate may apply to transfer to the Ph.D. program by Special Arrangement after one year of study. If the application is granted,

the complete year of courses and residence will be applied to the requirements for the Ph.D.

#### **M.A. in Theatre-in-Education: Requirements**

- (a) A knowledge at the B.F.A. level of Theatre History, Directing and Design.
- (b) Practical teaching experience.
- (c) 6 units – Theatre 506 and 507.
- (d) 3 units – To be chosen from the graduate areas of Theatre History, Design or Directing.
- (e) 3 units – To be chosen from a related discipline, to be approved by the Graduate Adviser.
- (f) 6 units – Theatre 599, M.A. Thesis. The candidate will submit his thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

### **MASTER OF FINE ARTS**

The programs normally require a minimum of two years in residence. Applicants must have practical theatre experience and normally, prior to admission, will be required to take a diagnostic examination. Any deficiencies will represent additional requirements for the student and must be eliminated before the student may enroll in the graduate level courses in that area. All admissions are conditional on the diagnostic examination.

Candidates are required to write comprehensive examinations before proceeding to the practicum. Details are provided in the Department Handbook.

#### **M.F.A. in Directing/Production: Requirements**

- (a) A knowledge at the B.F.A. level of Lighting, Costume and Scene Design, Theatre History and Directing. The student's knowledge will be assessed by the diagnostic examination (see above).
- (b) 6 units – Directing and Advanced Directing.
- (c) 3 units – either Lighting, Costume or Scene Design (other than Theatre 514).
- (d) 3 units – Theatre History.
- (e) A written comprehensive examination must be passed no later than the spring term of the second year and prior to commencing work on the practicum production. The comprehensive examination will emphasize the practical areas of the theatre but will include Theatre History. This examination will be given in two parts over a two day period and will be approximately four hours for each part.
- (f) 6 units – Theatre 598, M.F.A. Practicum
  - (i) A full length production to be decided upon in consultation with the student's supervisor and the Department's graduate faculty.
  - (ii) An oral defense of the practicum production is part of the requirements of the Faculty of Graduate Studies.

#### **M.F.A. in Design/Production: Requirements**

- (a) A knowledge at the B.F.A. level of Lighting, Costume and Scene Design, Theatre History, Directing and Art History. The student's knowledge will be assessed by the diagnostic examination (see above).

- (b) A good general knowledge of, and interest in, the visual arts, particularly European and North American architecture, painting, sculpture and minor arts.
- (c) 12 units – Four courses in theatre design other than Theatre 514.
- (d) 3 units – One course in theatre other than the design area.
- (e) A written comprehensive examination must be passed no later than the spring term of the second year and prior to commencing work on the practicum production. The comprehensive examination will emphasize the practical areas of the theatre but will include Theatre History. This examination will be given in two parts over a two day period and will be approximately four hours for each part.
- (f) 6 units – Theatre 598, M.F.A. Practicum
  - (i) The nature of the practicum will be determined in consultation with the student's supervisor and the Department's graduate faculty.
  - (ii) An oral defense of the practicum production is part of the requirements of the Faculty of Graduate Studies.

### **DOCTOR OF PHILOSOPHY**

Ph.D. in Theatre History by special arrangement with the Department. Applicants should apply directly to the Department, and depending on the area of research selected may be permitted to work on a Ph.D. by special arrangement.

#### **Faculty and Major Fields of Interest**

|   |  |
|---|--|
| Michael R. Booth, Ph.D.<br>(London)         | 19th and 20th century British theatre, experimental theatre  |
| Giles W. Hogle, Ph.D.<br>(Northwestern)     | Lighting design, directing, children's theatre, creative dramatics   |
| Alan Hughes, Ph.D.<br>(Birmingham)          | 18th and 19th century British theatre, Shakespeare in Performance, Elizabethan theatre, Greek theatre, directing (particularly period plays) |
| John Krich, M.F.A.<br>(Yale)                | Acting, directing, popular entertainment (circus, carnival, hippodrama), theatrical styles and conventions                                   |
| Harvey M. Miller, Ph.D.<br>(Pittsburgh)     | Directing, acting, Elizabethan theatre production, the American theatre  |
| Irene Pieper, M.A.<br>(San Francisco State) | The history of costume, ethnic costume; costume design, theatrical make-up   |
| Juliana M. Saxton, B.A.<br>(Toronto)        | Drama in education, theatre in education, production, promotion, administration and tour management  |

### **VISUAL ARTS**

The Department of Visual Arts offers a program leading to the degree of Master of Fine Arts.

The normal length of time for the completion of the M.F.A. is two years of full time study, although a student may be advised, or permitted upon Departmental recommendation, to delay the final exhibition for a period of not more than twelve months.

Acceptance in the M.F.A. in Visual Arts is conditional upon submission of an extensive folio of work; this should be presented in the form of slides and photographs with a detailed description of the original works. Normally a student is expected to attend an interview, but this may be waived in difficult circumstances, in which case a statement of intent will be required. Students who have not previously completed the equivalent of twelve units of art history, six of which must be at the 300 or 400 level, will be required to take the necessary additional courses at the University of Victoria before the granting of the M.F.A.

Students with a B.F.A. from the University of Victoria will be encouraged to seek their master's degree elsewhere.

The program encompasses the three areas of Painting, Printmaking, and Sculpture, and the student is expected to specialize in one of these areas. Provided that evidence is shown of emphasis and major concentration in the area chosen, the student will be encouraged to pursue other interests which are acceptable and feasible within the limitations of facilities and faculty.

At the end of the first year students must take part in a group show with colleagues in their first year. This exhibition will be evaluated by faculty members in the Department, in order to determine the advisability of a student continuing to the second year. Art 512, 522 and 532 will culminate in a one man show, normally at the end of the second year of study. This final exhibition (598) will be the major source of evaluation for the student's attainment of the M.F.A., and will therefore form the main component of the final oral examination. The other component of the oral examination will consist of the statement required for 581.

Notwithstanding the art history requirement, a student must complete the following courses:

one two year sequence; 511 and 512, or Art 521 and 522, or 531 and 532; in addition to 580, 581 and 598.

The student will be expected to meet on a regular basis with his faculty supervisor(s) for constructive critiques and seminars dealing with his work.

**Faculty and Areas of Interest**

Mowry Baden, M.A.  
(Stanford)

Sculpture

Pat Martin Bates, Dip. Royale,  
(Académie Royale des  
Beaux Arts, Antwerp), R.C.A.

Printmaking

Gwen Curry, M.F.A.  
(Arizona)

Printmaking

Roland Brener, Post Dip. A.D.  
(St. Martin's School of Art, London)

Sculpture

Donald Harvey, A.T.D.  
(Brighton) R.C.A.

Painting

Douglas G. Morton, R.C.A.

Painting

George W. Tiessen, M.F.A.  
(Cornell)

Painting

# FACULTY OF HUMAN AND SOCIAL DEVELOPMENT

Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), Ph.D. (Brandeis), Dean of the Faculty.

The Faculty of Human and Social Development comprises the Schools of Child Care, Nursing, Public Administration and Social Work and the Health Information Science Program, and offers undergraduate programs leading to the degrees of Bachelor of Arts in child care, Bachelor of Science in Nursing, Bachelor of Science in health information science, Bachelor of Social Work, and to the Diploma in Public Sector Management; and a graduate program leading to the degree of Master of Public Administration.

## Admission and Registration

See pages 7-11 inclusive of the Calendar. Probability and Statistics 12 is recommended for undergraduate admission to the Faculty of Human and Social Development. Mature students who do not have Mathematics to the Grade XI level are encouraged to take a refresher course prior to undertaking their studies. See additional requirements under each program.

## Application for Admission

Applicants for the professional schools in the Faculty of Human and Social Development are required to complete a separate application for the School of interest *in addition to* the application to the University.

## General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 14-19) apply to all students registered in the Faculty of Human and Social Development. Special regulations are set out under the appropriate area.

## Regulations Concerning Practica

Students should give special attention to the Regulations Concerning Practica (see page 14).

## English Requirement

All four year baccalaureate programs in the Faculty of Human and Social Development will normally include 3 units of English, chosen in consultation with the Department of English.

## Academic Advice

Academic advice about the professional schools in the Faculty of Human and Social Development is available from faculty members of the appropriate school, on an appointment basis.

## Course Work at other Universities

Students who plan to undertake upper level course work at another university must normally receive prior approval from the Dean and the Director of the School in which the student is registered if they wish such course work to be credited toward a degree program or diploma program in the Faculty of Human and Social Development. Upon successful completion of such course work it is the student's responsibility to request the Registrar of the other university to send an official transcript of record to the Records Office of the University of Victoria.

## Cooperative Education Program

Please refer to page 27 of the Calendar for a general description of Cooperative Education.

In the Faculty of Human and Social Development, a Cooperative Education program is offered by the School of Public Administration at the graduate level and by the Health Information Science Program at the undergraduate level.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

Students may withdraw from the Cooperative Education Program at any time and remain enrolled in a degree program offered by the school.

Details of the program in the School of Public Administration are outlined on page 217 and on page 224 for Health Information Science.

## Advisory Committee

Programs in the Faculty of Human and Social Development receive the benefit of advice and guidance from advisory committees whose members are drawn from professionals engaged in various private agencies or Government departments. Further information is available from each school or program.

## SCHOOL OF CHILD CARE

Penny A. Parry, B.A. (McMaster), Ph.D. (McGill), Associate Professor and Director of the School

Roy V. Ferguson, B.A., Ph.D. (Alta.) Associate Professor

Frances A.S. Ricks, B.A. (Ore.), M.Sc. (Indiana), Ph.D. (York), Associate Professor

James P. Anglin, B.A. (Carleton), M.S.W. (Brit. Col.), Assistant Professor  
Richards G. Arnot, M.D. (Alta), F.R.C.P. Can., Part time Adjunct Assistant Professor (1984-85)

Carey J. Denholm, S.B.St.J., Dip. Teach. (Tas.) Dip.Ed. Deaf, M.Ed. (Brit. Col.), Assistant Professor

Robert J. Klassen, B.A., LL.B. (Brit. Col.), Part time Adjunct Assistant Professor (1983-1985)

Alan R. Pence, B.A., M.S. (Portland St.), Ph.D. (Ore.), Assistant Professor

Ms. Julianna Saxton, Department of Theatre

Mr. David Taylor, Member at Large

Mr. Deryck Thomson, Executive Director, G.R. Pearkes Clinic for Handicapped Children

Mr. Dave Watkins, District Secondary Supervising Principal of Special Education, School Board of Greater Victoria

Mr. Peter Whalen, Program Analysis and Evaluation, Corrections Branch

Dr. Brian Wharf, Dean, Faculty of Human and Social Development

Dr. Colin Williamson, Acting Director, Children's Mental Health, Ministry of Health

## PROGRAM

The School of Child Care offers a program of academic study and field work practice leading to a B.A. with an emphasis in Child Care.

## BACHELOR OF ARTS WITH AN EMPHASIS IN CHILD CARE

The B.A. with an emphasis in Child Care is awarded following successful completion of 60 units of university recognized credit. Students enter the program upon completion of a minimum of 12 units of university credit or its recognized equivalent, e.g., transfer from a community college. (See Admission Procedures below.)

The subsequent program of study includes core and elective courses as outlined in the "basic program" section below. Within this program students have considerable freedom in course selection. Students with professional child care experience who may be eligible to challenge non-practicum courses upon admission to the School of Child Care should consult with their Program Advisor. Practicum courses are not open to

## PROFESSIONAL ADVISORY COMMITTEE

Dr. Basil Boulton, Medical Coordinator, Child and Family Ambulatory Unit, Victoria General Hospital

Ms. Jennifer Charlesworth, B.C. Child Care Services Association

Dr. Katie Cooke, Chairperson, Federal Task Force on Child Care

Ms. Gayle Davies, Child Care/Education Consultant, Ministry of Health

Mr. Tony Gascoyne, Member at Large

Mr. Larry Haberlin, Supervisor, Child Care Workers' Services, Vancouver School Board

Dr. Eric Jones, Director of Residential Services, The Maples, Vancouver

Mr. Neil Murphy, Director of Human Service Program, Camosun College

Mr. John Noble, Deputy Minister, Ministry of Human Resources

Mr. Del Phillips, Investigator, Office of the Ombudsman

Dr. Roger Ruth, Chairman, Dept. of Psychological Foundations, Faculty of Education

challenge; students are placed in practicum settings in accordance with their professional background and current learning needs. The practicum courses include Child Care 210 and 410 and carry academic credit. Students enrolled in 210 (A and B) and 410 will be assigned to a children's service agency and are required to engage in a minimum of 6 hours of direct service per week and 1 hour seminar per week. Students should give special attention to the Regulations Concerning Practica (see page 14).

## ADMISSION PROCEDURES

Enrollment in the School of Child Care is limited. To be eligible to apply to the School a student must have completed a minimum of 12 units of university study or equivalent recognized transfer credit. Of these units, 3 units of 100 level psychology and 3 units of 100 level English are required. A minimum grade point average of 3.00 (UVic C+) in the immediately preceding 12 units of study is required.

Students who have completed a human services training program at a college may be eligible to receive additional credit from the School.

Students are selected on the basis of personal suitability as well as academic standing. An interview is normally required as part of the application process. Paid or volunteer experience with special needs children and adolescents is considered.

Applicants to the program who are transferring from other postsecondary institutions must submit to the Director of Admission Services by March 31: (1) an Application for Admission to the University, (2) a School of Child Care Application Form, (3) Letter of Intent outlining the applicant's past experience and career objectives, (4) two copies each of any pertinent academic transcripts and diplomas or certificates.

Applicants to the program who are transferring from another faculty within the University of Victoria must submit to the Director of Records Services by March 31: (1) a School of Child Care Application Form, (2) Letter of Intent outlining the applicant's past experience and career objectives.

After having completed one or more years in the School of Child Care, a student may apply to the School for leave of absence. The student must consult the School of Child Care concerning possible problems as a result of the leave of absence. Students should not assume that readmission to the program is guaranteed.

## STANDING

Students whose sessional grade point average falls below 3.00 may be required to withdraw from the program.

The School of Child Care reserves the right at any time to require any student to withdraw from the School where it believes on consideration of scholarship, professional fitness or professional conduct that the student is unsuited for the child care profession.

## BASIC PROGRAM

The following academic program is designed to provide a basic liberal arts education together with specialized practical training. There is considerable flexibility in choice of electives; however, students are required to complete 7½ units of electives in a focused area of interest approved by their program advisor. Upon admission to the School of Child Care (Second year), students are expected to consult with their program advisor on course selection prior to course registration.

Core courses are normally restricted to students in Child Care and may be taken by students outside the School with permission of the instructor.

### First Year (introductory year prior to admission to School of Child Care):

#### Required:

Three units of English in consultation with the English Department. (Students usually select from ENGL 115, 116, 121, 122)

Three units of introductory psychology (normally PSYC 100 or its equivalent)

#### Electives

9 units of courses

Child Care 201 is strongly recommended as a first year elective course. For further suitable first year electives see examples listed under Second Year.

### Second Year:

#### Required:

CC 200A, 200B, 210A, 210B

Three units of child development. These are normally PSYC 235 and either 335 or 336, or Education-D 305

#### Electives:

6 units selected in consultation with program adviser.

Examples of suitable First Year and Second Year general electives are:

#### Arts and Science

ANTH 100 or 200 level course

MICR 101

BIOC 201

BIOL 150, or any 200 level course

CSC 100

ENGL — a 200 level course

HIST 205, 349

LING 100, 250, or 370

MATH 151 and 102

PHIL 100 or 269

POLI 100, 202

PSYC 200, 220, 230, 240, 250, or 311A, 311B and 312

SOCI 100, 200

#### Education

AE 100

ED-D 200

ME — a 100 or 200 level course

PE — a 100 or 200 level course

#### Fine Arts

MUS 100 or 200

THEA 181 or other 100 or 200 level course

ART 100 or 200 level course

#### Human and Social Development

SOCW 200B

### Third Year

#### Required:

CC 301

CC/SOCW 352

#### Electives:

7½ units in consultation with program advisor

### Fourth Year:

#### Required:

CC 410

CC 420

#### Electives:

9 units in consultation with program advisor

In the selection of electives in third and fourth years, students are reminded that they must have a minimum of 7½ units in a focused area of interest. Areas of interest, with specific examples for student choice, include:

Age Groups — infancy, early childhood, preadolescence, adolescence

Development Needs — physical, emotional, intellectual/cognitive, social adaptation, family functioning

Child Care Settings — preschool/day care\*\*\*, school, recreation, hospital, community based programs in family/home.

Professional Issues — ethics, communication skills, self awareness, knowledge of social services, professionalism

\*\*\* Students can include in their program of electives all courses necessary for licensing as a Preschool Day Care Supervisor. Students interested should contact the Community Care Facilities Licensing Board of the Provincial Government to ensure appropriate selection of courses.

The following is a list of courses which relate to the areas of interest mentioned above. This list is meant to serve as a guide for the selection of electives. It is not meant to be exclusive. Students are encouraged to review the full range of university offerings.

## Arts and Science

ANTI 312, 322, 335, 336,  
339A, 339B  
PSYC 250, 311A, 311B, 312, 313,  
315, 415, 430, 436, 450  
PHIL 331  
SOCL 301, 335, 445

## Education

ED-B 331, 339, 341, 440, 441; ED-D 306,  
406, 410, 411, 414, 415, 417, 433, 434

Human and Social  
Development

CC 460, 475, 485, 486  
HINF 215A, 240  
SOCW 350, 351, 453, 460

## PROGRAM DEVELOPMENT COMMITTEES

Students in the School of Child Care have made, and are expected to continue to make, through their participation in Program Committees, significant contributions to Program Development and the field of Child Care. All School registrants are urged, wherever possible, to reserve Wednesday, 12:30-1:30 p.m. for committees and other planning purposes.

## COURSES

**CC 200A (formerly half of 200) (1½) CORE CONCEPTS IN CHILD CARE: I**

Emphasis will be placed on several relevant theories which relate to the assessment, understanding and management of children's behaviour. (Restricted to students in the School of Child Care or by permission of the Director) September-December (3-0)

**CC 200B (formerly half of 200) (1½) CORE CONCEPTS IN CHILD CARE: II**

Specific strategies and techniques of child management and problem-solving will be introduced. Students will critically assess a current issue in Child Care utilizing professional reporting formats. Values and ethics will be explored in relation to Child Care practice. (Restricted to students in the School of Child Care, or by permission of the Director) January-April (3-0)

**CC 201 (1½) INTRODUCTION TO CHILD CARE**

A survey of the history of development of Child Care and the role of the professional Child Care Worker. This course is designed for first and second year students who may be considering entering the profession of Child Care Work or who want to learn about child and family care. September-December. Also January-April (3-0)

**CC 210A (formerly half of 210) (1½) SUPERVISED PRACTICUM: I**

Students are required to work directly with children in a supervised practice situation. Emphasis is placed on observing children, developing observation and recording skills, understanding the structure and functioning of a children's service agency, and fostering the student's awareness of his or her functioning in relation to children and other agency workers. (Enrollment restricted to students in the School of Child Care.) (Pre- or Corequisite: 200A) September-December (1-6)

**CC 210B (formerly half of 210) SUPERVISED PRACTICUM: II**

Students are required to work directly with children in a supervised practice situation (in most cases continuing the placement begun in Child Care 210A). Emphasis is placed on building relationships with children, developing child management skills, and focusing the student's awareness on his or her strengths and weaknesses as a practising Child Care Worker. Attention will also be given to developing beginning level case planning, intervention and case presentation skills with both a one to one and a group focus. (Enrollment restricted to students in the School of Child Care) (Prerequisite: 210A) January-April (1-6)

**CC 290 (1½ or 3) DIRECTED STUDIES IN CHILD CARE**

This course allows for research projects, additional course work or directed reading in a specified area and is intended primarily to assist students transferring from other institutions or programs. Courses may be chosen only in consultation with the Director of the School.

**CC 301 (4½, formerly 3) PROFESSIONAL CHILD CARE PRACTICE: THEORY AND APPLICATION**

This course integrates theory and practice in the application of Child Care by focussing on issues and techniques in assessment, case planning and intervention with children; major therapeutic approaches and their associated philosophies, goals, strategies and techniques; practical models for case consultation, presentation and evaluation. Students will demonstrate competency in these professional practice areas, real or simulated, and analyze the relationship between professional knowledge, skills, values and styles. (Prerequisite: 200A and 200B) September-April (3-1-2; 3-1-2)

**CC 350 (SOCW 350) (3) LAW AND SOCIAL SERVICES**

The objective is to provide students in Child Care and Social Work with an understanding of the Law as an expression of social policy, and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts, with special reference to laws affecting children; the organization of legal services and the legal accountability and liabilities of social workers, child care workers, and others in the social service field. September-April (3-0; 3-0)

**CC 352 (SOCW 352) (3) INTERPERSONAL COMMUNICATION**

This course has a number of interrelated objectives; to introduce students to the literature on interpersonal communication; to afford an opportunity for a critical review of various approaches to interpersonal helping; to assist students in developing a personal commitment to, and philosophy of, the art of interpersonal helping; and to involve students in simulated practice experiences. September-April (1-0-2; 1-0-2)

**CC 390 (1½ or 3) DIRECTED STUDIES IN CHILD CARE**

Research projects, directed readings, or additional course work in a specified area. Courses may be chosen only in consultation with the Director of the School.

**CC 410 (3) ADVANCED SUPERVISED PRACTICUM**

Supervised practicum focusing on the student's chosen area of specialization. Six hours per week in the practicum setting and one hour per week in a seminar. Restricted to Child Care students in their fourth year of study. (Prerequisites: 301 and 352 (SOCW 352), or equivalent) September-April (1-6; 1-6)

**CC 420 (3, formerly 1½) RESEARCH IN CHILD CARE**

This course is an introduction to research and research methods appropriate to the child care field. It is designed to provide students with an understanding and appreciation of basic issues, models, designs and statistical techniques suitable for child care research and program evaluation. (Enrollment restricted to Child Care students in their fourth year of study) September-April (3-0; 3-0)

**CC 460 (1½ or 3) SPECIAL TOPICS IN CHILD CARE**

This course provides an opportunity to examine selected current issues in child and family care. (Restricted to students in their third or fourth year of study and may, with approval of faculty adviser, be taken more than once for credit) (3-0) or (3-0; 3-0)

**CC 475 (1½) WORKING WITH CHILDREN AND ADOLESCENTS IN GROUPS: AN INTRODUCTION TO CHILD GROUP PRACTICE**

Theoretical approaches and techniques relating to the planning and management of children's groups. Content focuses on developing practical skills required to organize and conduct groups with children and adolescents. (Restricted to fourth year students in the School of Child Care or by permission of the Director. Students will participate in the organization and management of a group.) September-December. Also January-April (3-0)

**CC 485 (SOCW 485) (1½) SYSTEMS APPROACH TO THE FAMILY: I**

This course focuses on family systems theory and the application of systems constructs in working with the child in the context of the family. Restricted to students in their fourth year of study.

September-December (3-0)

**CC 486 (SOCW 486) (1½) SYSTEMS APPROACH TO THE FAMILY:**

II

This course provides a laboratory learning environment which allows the students to observe, demonstrate and discuss family systems theory, constructs and interventions. (Restricted to students in their fourth year of study) (Prerequisite: 485 (SOCW 485) or equivalent)

January-April (3-2)

**CC 490 (1½ or 3) DIRECTED STUDIES IN CHILD CARE**

Research projects, directed reading, or additional course work in a specified area. Courses may be chosen only in consultation with the Director of the School.

**HEALTH INFORMATION SCIENCE PROGRAM**

Denis J. Protti, B.Sc. (Alta.), M.Sc. (Man.), Professor and Director  
Kenneth R. Thornton, B.Sc., M.B.Ch.B. (Leeds), Part time Adjunct Professor

Paul S. Dubas, B.A. (Tor.), D.P.A., M.A. (Carleton), Part time Adjunct Associate Professor

Richard M. McFadden, Cooperative Education Coordinator

**COMMUNITY ADVISORY COUNCIL**

Mr. G. Clements, Director of Legal Services, Ministry of Health, Victoria

Mr. S. Dubas, Senior Assistant Deputy Minister, Management Operations, Ministry of Health, Victoria

Dr. J.W. Dutton, Cardiovascular Surgeon, Victoria

Mr. A. Fitzpatrick, Health Care Manager, IBM Canada Ltd., Vancouver

Mr. G. Frith, Executive Director, Nanaimo Regional General Hospital

Mr. K. Fyke, President, Greater Victoria Hospital Society

Mr. C.W. Grierson, Executive Director, G.F. Strong Rehabilitation Centre, Vancouver

Mr. M. Halkett, Director, Hospital Planning, Capital Regional District, Victoria

Ms. M. Hall, Executive Director, Continuing Care Division, Ministry of Health, Victoria

Mrs. L.A. King, Administrative Assistant, (Quality Assurance), Victoria General Hospital

Mrs. L.A. Lambert, Director of Medical Records, Riverview Hospital, Vancouver

Mr. W. Lawrence, Director of Research and Evaluation, Ministry of Health, Victoria

Dr. G. Martin, Chief, Clinical Pathology Service, Royal Inland Hospital, Kamloops

Mr. P. McAllen, Assistant Executive Director, Member Support Services, B.C. Health Association, Vancouver

Mr. R. McDermit, President, Health Sciences Centre, University of British Columbia, Vancouver

Mr. C. Rowe, Senior Vice-President, Royal Jubilee Hospital, Victoria

Mr. T. Wharton, Executive Director, Medical Services Administration, Workers Compensation Board, Richmond

**PROGRAM**

Health Information Science is the study of the nature of information and its processing, application and impact within a health care system. The Bachelor of Science in Health Information Science is a four year Cooperative Education program consisting of an introductory first year, followed by three years in the Program itself. Students may be formally admitted to the Health Information Science Program upon successful completion of 15 units of appropriate university level credit. Further information is available by contacting the Director.

**ADMISSION REQUIREMENTS**

Prospective students are encouraged to consult the Director prior to or during their first year of University studies.

Applicants transferring from postsecondary institutions must submit an Application for Admission to the University and a Health Information Science Application Form to the Director of Admission Services by March 31. Forms are available from Admission Services.

University of Victoria students (those seeking admission from another faculty and those previously enrolled in the Program) must submit an Application for Reregistration and a Health Information Science Application Form to Records Services by March 31.

Admission to the Health Information Science Program is limited to approximately 30 students per year. Students are selected on the basis of grades, a personal written submission and an interview. A second class average in the immediately preceding 15 units of university level studies is normally required for admission into the program.

Credit for previous postsecondary studies may be granted as appropriate. Applicants seeking advanced placement are advised to read the minimum degree requirements on page 18 of the Calendar.

**STANDING**

Students in the Health Information Science Program must maintain a sessional grade point average of 3.50 or better. Students who do not meet this requirement will normally be required to withdraw from the Program.

The Director reserves the right at any time to require any student to withdraw from the program where the Program's faculty believe on consideration of scholarship, professional fitness or professional conduct that the student is unsuited for the Health Information Science profession. Avenues of appeal and redress can be found on page 13 of the Calendar.

A student in the Health Information Science Program should inform the Director of any intended prolonged absence. Students should not assume that readmission to the Program is guaranteed.

**COOPERATIVE EDUCATION**

Please refer to page 27 of the Calendar for the general description of Cooperative Education.

The distinguishing feature of the Cooperative Education approach is the inclusion, as an integral part of the degree, of four Work Terms of approximately thirteen weeks in length. These Work Terms begin the student's Second Year and normally alternate with formal academic terms in Health Information Science. Students with prior relevant work experience may, on admission, apply for exemption from one Work Term.

During a Work Term, students are employed in a full time, health care related job in either the public or private sector. For all practical purposes, Cooperative Education students on Work Terms are regular employees and receive salary and benefits in accordance with the employer's policy. Both the employer and the University evaluate the student's performance on each Work Term. Each Work Term is recorded on the student's Official Transcript of Academic Record (as COM, N, or F). Details of Work Terms are recorded on the Record of Work Terms which is attached to the Academic Record.

**PROGRAM REQUIREMENTS**

To meet the requirements of a major in this program, students must complete 60 units which include a core of 37½ units, a minimum of 6 units selected from one of the Areas of Concentration I-IV, a minimum of 1½ units from each of two other Areas of Concentration, 13½ units of electives, and a minimum of four Work Terms (students with prior relevant work experience may be required to complete less). Students are normally expected to select an Area of Concentration in their Second Year of studies. Any previous 15 units of appropriate university credit is sufficient to apply to enter the program. A suggested pattern would be as follows:

**First Year (Pre-Health Information Science Year):**

- |                          |      |   |
|--------------------------|------|---|
| (a) CSC 110/115          | (3)  | Computer Programming: I and II                  |
| (b) MATH 102/151         | (3)  | Calculus and Finite Mathematics                 |
| or MATH 100/101          | (3)  | Calculus: I and II                              |
| (c) Any 3 units from:    |      |   |
| ECON 201/202             | (3)  | Principles of Microeconomics and Macroeconomics |
| CHEM 100                 | (1½) | Introduction to Chemistry                       |
| CHEM 101                 | (1½) | Fundamentals of Chemistry: I                    |
| CHEM 102                 | (1½) | Fundamentals of Chemistry: II                   |
| MICR 101                 | (1½) | Essentials of Microbiology and Immunology       |
| MICR 200                 | (1½) | Introductory Microbiology                       |
| (d) English              | (1½) | English 115 or any other first year course      |
| (e) HINF 160             | (1½) | Introduction to Health Information Science      |
| (f) 3 units of electives |      |   |

## NOTES:

- Both Economics and Chemistry are recommended.
- Students wishing to take further courses in biochemistry, biology, chemistry or microbiology must take 3 units of first year chemistry.

## Second Year:

- (a) STAT 250/BIOL 250 (1½) Statistics: I or Biometrics: I  
STAT 251/BIOL 304 (1½) Statistics: II or Biometrics II
- (b) CSC 275 (1½) File Structures for Data Processing
- (c) HINF 240 (1½) Introduction to Health Care Delivery
- (d) HINF 270 (1½) Medical Methodology: I
- (e) English (3) A second English course and ENGL 225
- (f) Electives (4½)

## First and Second Year Electives:

Suggested electives in First and Second Year include:

- BIOC 200 (1½) Introductory Biochemistry
- BIOL 200 (1½) Introduction to Cell Structure and Function
- CHEM 231 (1½) Introductory Organic Chemistry
- CHEM 232 (1½) Organic Chemistry for Health and Biological Sciences
- CHEM 235 (1½) Organic Chemistry
- COMM 120 (1½) Principles of Organizational Behaviour
- COMM 251 (1½) Fundamentals of Financial Accounting: I
- MATH 222 (1½) Discrete Mathematics
- PE 141 (1½) Introductory Human Anatomy
- PE 241/241b (3) Cell and Systemic Physiology
- PHIL 331 (1½) Issues in Biomedical Ethics
- POLI 100 (3) Canadian Government and Politics
- POLI 250 (1½) Public Policy Formulation in Canada
- SOCI 100 (3) Introduction to Sociology
- THEA 150 (1½) Speech Communications

## Third and Fourth Year:

The Third and Fourth Years of the Program will not be offered until September 1984 and September 1985 respectively. The following core courses or their equivalents are required to be completed:

- (a) CSC 375 (1½) Introduction to Systems Analysis
- HINF 300 (1½) Health Information Systems
- (b) HINF 360 (1½) Health Data Generation and Classification
- HINF 410 (1½) Administrative Support Systems
- (c) HINF 380 (1½) Epidemiology: I
- HINF 480 (1½) Epidemiology: II
- (d) HINF 440 (1½) Health Care Systems
- NURS 450 (1½) Administration in Health Services
- or
- SOCW 450 (1½) Administration in the Human Services
- (e) HINF 325 (1½) Fiscal Management in Health Services
- HINF 460 (1½) Quality Assurance and Ethics

Four Areas of Concentration are identified in the Third and Fourth Years. Students normally select a minimum of 6 units from one of the Areas of Concentration and at least 1.5 units from each of two other Areas of Concentration.

## Area of Concentration I — Administration:

- ADMN 406 (1½) Organizational Analysis
- ADMN 431 (1½) Personnel Management in the Public Sector
- ADMN 437 (1½) Public Sector Program Evaluation
- ANTH 312 (1½) Medical Anthropology
- HINF 415 (1½) Patient Care Support Systems
- HINF 445 (1½) Distributed Processing in Health Care
- PSYC 334A (1½) Personnel and Organizational Psychology
- PSYC 334B (1½) Workplace and Consumer Psychology
- SOCI 445 (1½) Sociology in Health and Medicine

## Area of Concentration II — Computing Science:

- CSC 230 (1½) Introduction to Computer Systems
- CSC 250 (1½) Introduction to Computer Organization
- CSC 325 (1½) Data Structures
- CSC 375 (1½) Introduction to Systems Analysis
- CSC 470 (1½) Database: I

## Area of Concentration III — Biomedical Principles and Statistics:

- BIOL 300 (1½) Genetics
- BIOL 320 (1½) Genetics and Evolution
- BIOL 401 (3) Application of Genetic Principles
- HINF 370 (1½) Medical Methodology: II
- STAT 354 (1½) Sampling Techniques
- STAT 453 (1½) The Design and Analysis of Experiments

## Area of Concentration IV — Economics:

- ECON 302 (1½) Intermediate Microeconomic Theory
- ECON 303 (1½) Intermediate Macroeconomic Theory
- ECON 416 (1½) Cost Benefit Analysis: Principles and Application
- ECON 445 (3) Econometrics

## Third and Fourth Year Electives:

The remaining courses required to complete the 60 unit requirement may be drawn from courses in any Faculty or School.

## COURSES

Courses in the Health Information Science Program are open to students from other Schools and Faculties. If enrollment restrictions are necessary, preference will be given to students registered in the Faculty of Human and Social Development.

**HINF 160 (formerly 260) (1½) INTRODUCTION TO HEALTH INFORMATION SCIENCE**

An introduction to the knowledge bases and skills expected of a professional working in the field of Health Information Science. The basic concepts of the field are established, the methodologies used are investigated, and the disciplines involved and their organizational settings are introduced. The flow and use of data and information within the Canadian health care system is highlighted.

September-December. Also January-April (3-0)

**HINF 240 (1½) INTRODUCTION TO HEALTH CARE DELIVERY**

An overview of the organization, operation and administration of the Canadian health care delivery system which provides the student with an understanding of how the multiple components and inter-relationships are integrated.

September-December. Also January-April (3-0)

**HINF 270 (1½) MEDICAL METHODOLOGY: I**

The process of clinical decision making in diagnosis, treatment planning, and prognosis. Alternate models for clinical decision making using subjective and objective data and information. Integrates the principles of physiology and pathophysiology.

January-April (3-0)

**HINF 290 (1½) DIRECTED STUDY**

An opportunity to study, only under special circumstances, a particular area leading to the development of a project approved by the Director.

**HINF 300 (1½) HEALTH INFORMATION SYSTEMS**

The study of General Systems Theory, particularly as it applies to the information required in the management of systems. The importance of structuring and managing data using database management technology. The application of these principles to information systems in varying health care organizations. (Prerequisite: Health Information Science 160 or permission of the Director.)

September-December (2-2)

**HINF 325 (1½) FISCAL MANAGEMENT IN HEALTH SERVICES**

An examination of the systems and financial reporting required to support management decision making in health care delivery. Topics include institutional accounting and budgeting, provincial and federal government requirements, clinical program budgeting. (Prerequisite: 240 or permission of the Director)

May-August (3-0)

**HINF 360 (1½) HEALTH DATA GENERATION AND CLASSIFICATION**

The sources, collection, classification, storage, retrieval, utilization and control of health data. Topics include: alternative methods of obtaining information; volume, accuracy, completeness and standardization issues; types of nosologies and record systems. (Prerequisite: 160 or permission of the Director)

May-August (2-2)

**HINF 370 (1½) MEDICAL METHODOLOGY: II**

The application of clinical decision making principles for the major categories of disease including cardiovascular and geriatric disease. (Prerequisite: 270)

May-August (2-2)

**HINF 380 (1½) EPIDEMIOLOGY: I**

An introduction to the principles of epidemiological investigation in the monitoring of disease occurrence, disease control, and health program evaluation. (Prerequisite: 270)

May-August (2-2)

**HINF 410 (1½) ADMINISTRATIVE SUPPORT SYSTEMS**

The application of scientific evaluation methodologies in the study and analysis of clinical and management information systems. Topics include: Problem formulation, selection of research design, data and organizational analysis, and interpretation. (Pre- or corequisite: 325) September-December (2-2)

**HINF 415 (1½) PATIENT CARE SUPPORT SYSTEMS**

Provides a broad understanding of the role and impact computers have had in direct patient care support and shows the potential for continued integration. Specific medical computer languages are introduced. Topics include: laboratory systems, image processing, ambulatory systems and telemedicine. (Pre- or corequisite: 410 or permission of the Director) January-April (2-2)

**HINF 440 (1½) HEALTH CARE SYSTEMS**

An examination of the structure and function of the current health delivery system, particularly from the point of view of how information flow influences health care trends and policy formulation. Emphasis is on community, regional, provincial and national information flows. (Prerequisite: 240)

**HINF 445 (1½) DISTRIBUTED PROCESSING IN HEALTH CARE**

A management perspective to data communications technology, networks, and distributed processing. Emphasis is on examining the impact of emerging communications microcomputer technology on information systems in varying sectors of the health care delivery system. January-April (2-2)

**HINF 460 (1½) QUALITY ASSURANCE AND ETHICS**

Provides an in depth assessment of the quality, interpretation and use of health data in the area of direct patient care. Students analyze the data elements and the methodologies used to assess such factors as quality, social impact and clinical significance. The ethical and confidentiality issues encountered are examined. (Prerequisite: 360) September-December (2-2)

**HINF 480 (1½) EPIDEMIOLOGY: II**

Application of epidemiological principles to the study of acute and chronic diseases. Epidemiological research methods will be studied, from problem conceptualization and design to analysis. (Prerequisite: 380) January-April (2-2)

**HINF 490 (1½ or 3) DIRECTED STUDY**

Students wishing to pursue a course of directed reading should, together with a faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Director.

**HINF 491 (1½) TOPICS IN HEALTH INFORMATION SCIENCE**

Through this course the Program offers advanced topics in various areas of Health Information Science. Information on the topics available in any given year will be available from the Director. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. September-December (3-0)

## SCHOOL OF NURSING

Dorothy J. Kergin, B.S.N. (Brit. Col.), M.P.H., Ph.D. (Mich.), Professor and Director of the School  
 Jessie Mantle, B.N. (McGill), M.S.N. (Calif., San Francisco), Professor  
 Mary L. Richmond, B.N. (McGill), M.A. (Columbia), Part time Visiting Professor (1984-85)  
 Carolyn Attridge, B.Sc.N. (McMaster), M.N. (Wash.), M.A.Ph.D. (Tor.), Associate Professor  
 Jean Isobel Dawson, B.Sc.N. (McGill), M.Sc.N. (St. Louis), M.A., Ph.D. (Tor.), Associate Professor  
 W.H. Dyson, B.Sc. (Moravian), M.A., Ph.D. (Kansas), M.D. (McMaster), Part time Adjunct Associate Professor  
 Susan Astill-McNish, B.Sc. (W. Michigan Univ.), Part time Adjunct Assistant Professor  
 Heather F. Clarke, B.N.Sc. (Queen's), M.N. (Wash.), Assistant Professor  
 Elaine M. Gallagher, B.Sc. (Windsor), M.Sc. (Duke), Assistant Professor  
 Marilyn F. Jackson, B.N. (Man.), M.Ed. (Tor.), Assistant Professor  
 Dawn E. McDonald, B.N. (McGill), M.S.N. (W. Ont.), Part time Adjunct Assistant Professor  
 E. Brigid Peer, B.Sc.N. (Ottawa), M.Sc.N. (Florida), Part time Adjunct Assistant Professor (1984-85)  
 Susan P. Smith, B.A., M.H.Sc. (McMaster), Assistant Professor

### PROGRAMS OFFERED

1. Baccalaureate Program for Secondary School Graduates: a four year program leading to the degree of Bachelor of Science in Nursing (B.S.N.). (Subject to funding)
2. Baccalaureate Program for Registered Nurses: a two year program (33 units at third and fourth year level) leading to the degree of Bachelor of Science in Nursing (B.S.N.).

The basic purpose of both B.S.N. programs is to prepare students with the knowledge, skills, methods, and values necessary to practise nursing with individuals and groups wherever nursing takes place, such as community health agencies, acute and extended care hospitals and a variety of other settings. The programs are also intended to provide the basic competencies to permit graduates to develop the additional skills needed to work in highly specialized situations and to move into leadership positions.

### ADMISSION REQUIREMENTS

1. B.S.N. for Secondary School Graduates:
  - a) University of Victoria admission requirements, normally with an overall B average in subjects taken in Grade 12, including a B average in the following three subjects or their equivalents:

Chemistry 11  
 Algebra 11  
 Biology 12

Chemistry 12 and Algebra 12 are strongly recommended.

2. B.S.N. for Registered Nurses:

- a) Active registration as a Registered Nurse in British Columbia.
- b) Normally, a minimum of two years work experience in Nursing and two references indicating a competent standard of nursing practice.
- c) Demonstrated academic proficiency, e.g. a score of 500 on the Canadian Nurses Association Testing Service Examinations and/or successful completion of university level course work.

NOTE: Since enrollment in both programs is limited, all applicants are individually assessed by the School of Nursing.

### PROGRAM REQUIREMENTS

#### General:

For both B.S.N. programs, applicants must meet the general university requirements on pages 7-19 of this Calendar. Of special note are the following regulations:

1. All students must meet the English requirements as set forth on page 12 of the Calendar.
2. Normally, in both programs, at least 30 units must be in courses completed at this University.
3. All students must obtain a sessional grade point average of 3.50. Students failing to do so may be required to withdraw from the School. In addition, the School is responsible for the safety of nursing practice and therefore reserves the right to ask a student to withdraw when ethical, medical or other reasons interfere with satisfactory clinical practice.
4. Students in the B.S.N. programs for Registered Nurses must complete 33 units, 30 of which must be at the 300 level or higher. Three units may be at the 200 level. Normally, students must undertake one year of full time study (minimum 12 units, September to April).
5. Registered Nurse candidates for the B.S.N. degree, may be permitted with the approval of the Dean of Human and Social Development, to present up to 12 units of courses completed through institutions other than the University of Victoria. These courses normally must have been completed within the three years prior to admission to the B.S.N. Program, or must be completed within six years from the date of admission to the Program. Three units of such courses may be the required three units of electives at the 200 level or above, taken outside the School and approved as equivalent to University of Victoria courses. The remaining nine units may consist of 300 or 400 level

- courses within or outside nursing, approved as equivalent to University of Victoria courses. Applicants are advised to ensure the acceptability by the School of any courses in advance of enrolling in them.
6. Students in the B.S.N. program for Secondary School Graduates must complete 65 units as described below.
  7. Normally all students, in both programs, must complete the final 15 units of courses at the University of Victoria, (see page 14.)
  8. Both programs must normally be completed in six calendar years from the date of admission.

#### Part Time and Off Campus Studies:

Some required courses are offered through the Division of University Extension in the evening during the Winter Session (September-April) and in the daytime or late afternoon during May-June and July-August. Courses may also be offered via satellite (Knowledge Network) or other media. Certain required courses may be undertaken from the Open Learning Institute with permission (see paragraphs 4 and 5 above).

#### Practica:

Applicants are advised that clinical experience in health care agencies, in and outside of Victoria, is an essential part of both Nursing programs. Students must provide their own transportation. Applicants are referred to page 14 of the Calendar for regulations concerning practica.

NOTE: Registrants entering the B.S.N. program for Secondary School Graduates should note the summer work experience between the third and fourth program years described below.

#### Baccalaureate Program for Secondary School Graduates

NOTE: Upper level Nursing courses (Year 2, 3 and 4) are subject to change pending detailed program development.

##### Year 1 (not offered)

Each student must complete:

|                  |      |
|------------------|------|
| PSYC 100         | (3)  |
| SOCI 100         | (3)  |
| PE 241           | (3)  |
| MICR 101         | (1½) |
| BIOC 101         | (1½) |
| CHEM 103         | (1½) |
| *ENGL 121 or 115 | (1½) |

\* Choice of course depends on results of English Placement Test.

##### May-June, Year 1 (not offered)

|                   |      |
|-------------------|------|
| †101              | (1½) |
| †102              | (1½) |
| **ENGL 116 or 112 | (1½) |

##### Year 2 (not offered)

Each student must complete:

|                        |      |
|------------------------|------|
| 201                    | (3½) |
| 202                    | (3½) |
| 203                    | (4½) |
| PSYC 235               | (1½) |
| Elective (non nursing) | (3)  |

##### Year 3 (not offered)

Each student must complete:

|                           |      |
|---------------------------|------|
| 304                       | (5)  |
| 305                       | (5)  |
| SOCI 371                  | (1½) |
| †† Elective (non-nursing) | (3)  |

\*\* Choice of course depends on whether enrolled in English 115 or 121 above.

† To progress into NURS 101 and 102 students must obtain a 3.50 grade point average over the Year 1 (September-April) courses. This average normally must be maintained to progress into Year 2 and subsequent years of the program.

†† Elective must be at third or fourth year level.

##### Summer Studies (Work Experience) (not offered)

|     |      |
|-----|------|
| 409 | (1½) |
|-----|------|

##### Year 4 (not offered)

Each student must complete:

|     |      |
|-----|------|
| 412 | (4)  |
| 413 | (4)  |
| 401 | (1½) |
| 404 | (1½) |
| 414 | (1)  |

The student has the option of completing one of the following:

|     |      |
|-----|------|
| 490 | (1½) |
| 402 | (1½) |
| 450 | (1½) |

#### Baccalaureate Program for Registered Nurses

##### Year 3

Each student must complete:

|                            |     |
|----------------------------|-----|
| 301                        | (3) |
| 302                        | (3) |
| 303                        | (3) |
| † Developmental Psychology | (3) |
| * Sociology 305            | (3) |

##### Year 4

Each student must complete:

|   |      |
|---|------|
| 401   | (1½) |
| 402   | (1½) |
| 404   | (1½) |
| 410   | (3)  |
| 411   | (3)  |
| 450   | (1½) |
| * SOCI 371  | (1½) |
| * Elective(s) Any course(s), at the 200 level or above outside the School | (3)  |

One of the following:

|            |      |
|------------|------|
| * SOCI 445 | (1½) |
| * PHIL 331 | (1½) |
| * ANTH 312 | (1½) |

† PSYC 335, 336, 337, 338, 339, 435, or 436. Developmental Psychology must ordinarily be taken at the 300 or 400 level. Alternative courses to meet these requirements may be chosen in consultation with the Director of the School or a designated faculty representative.

\* Alternative courses to meet these requirements may be chosen in consultation with the Director of the School or a designated faculty representative.

## COURSES

Courses offered by departments other than the School of Nursing are described under the appropriate heading in the Calendar. Students should note carefully any departmental prerequisites for courses. If prerequisites cannot be met, students are advised to consult with the appropriate chairman.

All courses are open to Nursing students only unless otherwise noted in the course description. Course challenges are not available for nursing courses.

#### NURS 101 (1½) INTRODUCTION TO NURSING: PART I

An introduction to the basic concepts of nursing: its goals and methods, its parameters and place in the Health Care System, the characteristics of its patients/clients, and the settings in which it takes place. (Registration limited to students enrolled in the B.S.N. program for Secondary School Students. Others by permission of Instructors) May-June (5-0)

#### NURS 102 (1½) INTRODUCTION TO NURSING: PART II

A clinical experience in laboratory, community, and hospital settings with predominantly healthy individuals and families. Emphasis is placed on the development of therapeutic communication skills, health assessment skills and other psychomotor skills of various kinds. The focus is on health and/or minor disabilities. (Pre- or corequisite: 101) May-June (0-15)

#### \*NURS 201 (3½) NURSING OF FAMILIES — CLINICAL STUDIES: I

An investigation of the child bearing process and its impact on families. Students learn to assist family members through this crucial phase of family development. Health education as a tool of nursing is stressed. Current clinical experience in hospital and community is provided. (Prerequisites: 101 and 102. Pre- or corequisite: 203)

September-December; also January-April (3-12)

#### \*NURS 202 (3½) NURSING OF FAMILIES — CLINICAL STUDIES: II

Students continue their study of young families. They learn to promote conditions which foster the healthy development of children and to nurse children of various age groups who are ill. The impact of illness and hospitalization on child and parent is explored and the nurse's role

in reducing these in a variety of hospital and community settings is provided. (Prerequisites: 101 and 102. Pre- or corequisite: 203)

September-December; also January-April (3-12)

### **NURS 203 (4½) HEALTH SCIENCES**

This course will examine further human physiology and will provide an overview of basic pathological processes and their medical and pharmacological management. Problem based learning experience will also be provided. (Registration is restricted to students enrolled in Nursing and Health Information Science. Others by permission of instructor. Program credit cannot be given for both 203 and 303.) (Prerequisites: PE 241, MICR 101, BIOC 101, CHEM 103) September-April (4-2; 4-2)

### **NURS 290 (3) DIRECTED STUDIES**

This course provides an opportunity to study an area of special interest leading to the development of a project approved by the Director. Students must consult with the Director prior to registration.

### **NURS 301 (3) THEORIES AND CONCEPTS IN NURSING**

The course explores selected theories and concepts related to man's behaviour in health and illness. Emphasis is on the integration of these theories and concepts in the discipline of nursing.

September-April (3-0; 3-0)

\* Due to clinical space limitations some students may take nursing 201 and nursing 202 in reverse order.

### **NURS 302 (3) CLINICAL STUDIES IN NURSING**

This course provides the student with an opportunity to apply the theoretical base of 301 in selected settings, including institutional and community care. (Pre- or corequisite: Nursing 301)

September-April (0-6; 0-6)

### **NURS 303 (3) HEALTH SCIENCE**

This course will provide a comprehensive overview of the science necessary to understand the functioning of the human body in health and disease. Important aspects of anatomy, cell biology, biochemistry, physiology and nutrition are combined to facilitate the understanding of chronic disease states. (Restricted to Registered Nurse students in the B.S.N. program. Other students require the permission of the instructor. Program credit will not be granted for both 203 and 303.)

September-April (3-0; 3-0)

### **\*\* NURS 304 (5) NURSING OF ADULTS — CLINICAL STUDIES: III**

The application of key theoretical concepts to the nursing of adults with acute and chronic illness and disability problems. Students will continue their examination of concepts such as crisis intervention, coping and adaptation, chronicity, loss, etc. and explore their implications for nursing interventions with families and individuals. Particular emphasis will be placed on the health problems associated with the aging process. Concurrent clinical experience will be provided in a variety of settings including acute and extended care, psychiatric units, various community settings and homes. (Prerequisites: 201, 202, 203)

September-December (3-1-21)

### **\*\* NURS 305 (5) NURSING OF ADULTS — CLINICAL STUDIES: IV**

Further application of key theoretical concepts of nursing. (Prerequisites: 201, 202, 203)

January-April (3-1-21)

### **NURS 390 (1-3) DIRECTED STUDIES**

This course provides an opportunity to study an area of special interest leading to the development of a project approved by the Director. Students must consult the Director prior to registration.

### **NURS 401 (1½) NURSING RESEARCH**

This course is designed to introduce the student to the field of research in nursing, building upon an introductory level knowledge of statistics. Discussion of research design and its application to nursing, development of a design for research study in an area of interest, and critical analysis of selected nursing research studies by students comprise three components of the course. Teaching methods include lecture, seminar, individual student advisement. (Prerequisite: Introductory course in Statistics, e.g. SOCI 371, PSYC 300, or other course approved by instructor)

September-December. Also January-April (3-0)

### **NURS 402 (1½) THE TEACHING-LEARNING PROCESS IN HEALTH CARE**

This course is designed to enable health professionals to recognize and

take advantage of teaching opportunities in various health care environments. Emphasis is upon the selection and adaptation of teaching techniques to a variety of patients/clients/others and environments and the establishment of criteria for behavioural assessment of teaching effectiveness. (Open to students in Nursing and, with the instructor's permission, to other health professionals.)

September-December. Also January-April (3-0)

### **NURS 404 (1½) PROFESSIONAL ISSUES IN NURSING AND HEALTH CARE**

This seminar course focuses on professional issues in nursing, including the role of individual nurses and the professional organizations in changing the health care delivery systems and in functioning with those systems. (Open to third or fourth year Nursing students only. Pre- or corequisites: SOCI 445, PHIL 331, ANTH 312 or alternate course approved by Director)

January-April (3-0)

\*\* Due to clinical space limitations some students may take Nursing 304 and Nursing 305 in reverse order.

### **NURS 409 (1½) NURSING FIELD PRACTICE**

Students will be required to become employed in appropriate nursing related positions in hospitals or community for at least 12 weeks of the summer between the third and fourth year program years. It is expected that such employment will acquaint them with work world reality as well as provide them with additional clinical experience.

### **NURS 410 (3) COMMUNITY HEALTH NURSING THEORY**

This course focuses on theory and skills required for Community Health Nursing. Nursing theories and relevant concepts from public health and the social sciences form the basis for a population focused approach to nursing care. Emphasis is placed on the promotion of health and prevention of disease and disability in families and groups within the community. Normally 410 and 411 are taken together. (Prerequisite: 301, 302, and 303)

September-April (3-0; 3-0)

### **NURS 411 (3) COMMUNITY HEALTH NURSING PRACTICE**

In this course students practice the theory and skills of 410. Students work with field guides in a variety of community agencies to provide nursing care to families and groups in ways that consider course, student, agency and patient goals. Opportunities for both concurrent and block field experience are available. (Prerequisites: 301 and 302; Pre- or corequisite: 410)

September-April (0-6; 0-6)

### **†† NURS 412 (4) ADVANCED CLINICAL STUDIES: I**

This course provides an opportunity for students to apply in practice the concepts and skills hitherto learned in theory and clinical courses. Students must choose either an acute care or extended care setting in which to practice. (Prerequisites: 304, 305, 409 and Work Experience)

September-April (2-21)

### **†† NURS 413 (4) ADVANCED CLINICAL STUDIES: II**

Students continue to apply in practice the concepts and skills learned hitherto in theory and clinical courses. They also choose an area of specialization to develop further and to refine these. Alternatives for specialization are community health, acute and extended care, ambulatory care or, where appropriate, a particular clinical experience to meet the student's own educational needs and interests. (Prerequisites: 304, 305 and 409 and Work Experience)

January-April (2-21)

### **NURS 414 (1) THE NURSE AND THE HEALTH CARE SYSTEM**

Students examine the nature of health care organizations, roles of various health disciplines, ways of organizing the delivery of nursing care and the impact of setting factors on nursing practice. Some administrative and leadership theory will be included. Students will have an opportunity to practise leadership roles including delegation of responsibility, priority setting and performance evaluation using the clinical component of 412 and 413. (Corequisite: 412 or 413)

September-December. Also January-April (2-0)

### **NURS 450 (1½) ADMINISTRATION IN HEALTH SERVICES**

The course examines various concepts in organization and management theory: the managerial process, the structure of organizations, the management of conflict and change. These are discussed in relation to service organizations. (This course will normally be restricted to students in the

fourth year of Nursing, and to students with at least fourth year standing in other professional programs with the permission of the Director of the School of Nursing. Students may take SOCW 450 with the permission of the instructor of that course.)  
September-December (3-0)

### NURS 490 (1½ or 3) DIRECTED STUDIES

This course provides an opportunity to study in depth an area of special interest leading to the development of a project approved by the instructor.

†† Due to clinical space limitations, some students may take 412 and 413 in reverse order.

## SCHOOL OF PUBLIC ADMINISTRATION

James Cutt, M.A. (Edin.), M.A., Ph.D. (Tor.), Professor and Director of the School  
Robert L. Bish, A.B. (S. Calif.), A.M., Ph.D. (Indiana), Professor  
Desmond M. Connor, B.Sc. (Tor.), M.Sc., Ph.D. (Cornell), Part time Visiting Professor (1984-85)  
A.R. Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T.), Part time Adjunct Professor  
John Langford, B.A. (Carleton), M.A. (Oxon.), Ph.D. (McGill), Professor  
Stanley H. Mansbridge, Part time Adjunct Professor  
D. Brian Marson, B.A., M.A. (Brit. Col.), M.P.A. (Harvard), Part time Adjunct Professor  
Thomas K. Shoyama, B.A., B.Com. (Brit. Col.), Part time Visiting Professor (1984-85)  
Hartmut J. Will, Dipl.-Kfm (Frec U., Berlin), Ph.D. (Illinois), Professor  
J. Barton Cunningham, B.A. (Brigham Young), M.P.A., Ph.D. (S. Calif.), Associate Professor  
Peter Z. Finkle, B.A. (Vanderbilt), LL.B. (Boston), M.A. (N.Y.), Ph.D. (Tor.), Part time Adjunct Associate Professor (1984-85)  
Thomas A. Lambe, B.A.Sc. (Brit. Col.) M.S., Ph.D. (Stanford), Associate Professor  
James C. McDavid, B.A., M.A. (Alta.), M.A., Ph.D. (Indiana), Associate Professor  
James J. McRae, B.A. (U. of Vic.), M.A., Ph.D. (W. Ont.), Associate Professor  
Frank Cassidy, B.B.A. (C.C.N.Y.), M.A., Ph.D. (Stanford), Visiting Assistant Professor (1984-85)  
Eric Lee, B.A., M.A., Ph.D. (U. of Vic.), Assistant Professor  
James N. MacGregor, M.A. (Glasgow), M.Sc., Ph.D. (U. of Vic.), Assistant Professor  
Mervyn N. Brockett, B.A. (Oxon.), Ph.D. (Cornell), Administrative Officer  
Mark K. Loken, B.A. (Concordia Coll.), M.A. (Calgary), Ph.D. (Duke), Cooperative Education Coordinator

courses with a grade of C or better. In addition to academic background, all applicants should have had a minimum of three years experience in dealing with issues characteristic of the public sector. A limited number of students not formally admitted to the program may register for individual courses, with the permission of the Director of the School of Public Administration. Students should check which courses are being offered at the regional centre nearest them. Inquiries about the program should be forwarded to: The Director, School of Public Administration, University of Victoria, Box 1700, Victoria, B.C. V8W 2Y2.

### Program of Studies:

The Diploma Program in Public Sector Management will be available on a decentralized part time study basis. Students will, therefore, be limited in their choice of courses to what is being offered in the centre nearest them. Completion of the 18 units will normally take three to four years, although some courses will be run as intensive summer institutes in residence at the University of Victoria, which will accelerate progress towards the diploma.

Students may be permitted to complete up to 4½ units of credit towards the Diploma in Public Sector Management by taking appropriate courses offered through other departments of the University of Victoria or at other universities. Prior approval must be obtained from the Director of the School of Public Administration.

Students may be granted approval to exceed 4½ units of transfer credit in cases where the credit has been (or will be) obtained for graduate level courses taught through the School of Public Administration at the University.

A typical program of studies would include:

4½ units: Core courses (310, 311, 312)

3 units: Social/Applied sciences (400, 406)

7½ units: Managerial theory (420, 421, 424, 425, 431, 437, 451, 529\*)

3 units: Policy areas (423, 466, 470, 490, other courses to be developed in the future dealing with health administration, human services administration, environment, transportation, etc.)

\* Admission to this course is subject to the regulations of the Faculty of Graduate Studies.

## GRADUATE PROGRAMS

For information on studies leading to the M.P.A. Degree, see page 216; for graduate courses, see page 230.

## UNDERGRADUATE PROGRAM

### DIPLOMA PROGRAM IN PUBLIC SECTOR MANAGEMENT

The School of Public Administration offers a part time off campus program of studies leading to the Diploma in Public Sector Management which is available at a number of regional centres in the province. The diploma will be awarded upon successful completion of 18 units of course work with an overall grade point average of at least 2.00. The program is intended for practising or prospective managers in the public sector who wish to acquire the skills and background necessary for effective and responsible management, and who are interested in broadening their understanding of the administrative process.

#### Admission:

Courses will be taught at a level which is consistent with other third and fourth year undergraduate courses offered at the University of Victoria, and applicants will be required to demonstrate that they possess the academic proficiency necessary to benefit fully from the program. Students without a bachelor's degree will normally be expected to have the equivalent of at least the first two years of university obtained from institutions such as BCIT, the Community Colleges, or other recognized professional associations. Candidates without formal post-secondary qualifications but with demonstrable experience at senior levels of responsibility may be admitted as conditional students, with continuation in the program subject to performance in the first two

## UNDERGRADUATE COURSES

### ADMN 310 (formerly 403) (1½) PUBLIC SECTOR APPLICATIONS OF MICROECONOMIC ANALYSIS

A review of the principles of microeconomics, including: theories of demand, production and cost, the firm, income distribution, and welfare economics; the application of microeconomics to selected social issues such as pollution of the environment, education, health and welfare, crime and punishment. (Not open for credit to students who have taken or are taking ECON 300, 302 or 304A; or ADMN 503 prior to 1984)

### ADMN 311 (formerly 404) (1½) POLITICAL ANALYSIS: CANADIAN GOVERNMENT AND POLITICS

An investigation of the political and institutional framework within which public administrators at the provincial and federal levels operate. Topics to be examined include the Constitution, federalism, Canadian political culture, the party and electoral systems, pressure groups, the legislature, cabinet government, line departments and agencies, and administrative responsibility. (Credit will not be given for both 311 and 504.)

### ADMN 312 (1½) PRINCIPLES OF ADMINISTRATION: CONCEPTS AND PROCESS

An investigation of the process of administration, the sequence and cycle of events that are integral to this process. In particular, the key processes of planning, organizing, implementing and evaluating will be examined.

### ADMN 400 (1½) QUANTITATIVE ANALYSIS

The applications and limitations of quantitative analysis for decision

making in the public sector. Topics will include: the use of input-output models, descriptive statistics, and probability theory. (Credit will not be given for both 400 and 500.)

#### **ADMN 406 (1½) ORGANIZATIONAL ANALYSIS**

An introduction to theories of individual and group behaviour in the context of complex social systems. Topics will include: the history of organization and management theory; concepts of socialization, leadership, communication, conflict, decision making, and motivation. (Credit will not be given for both 406 and 506.)

#### **ADMN 410 (1½) (formerly 300) THE IMPACT OF GOVERNMENT**

An introduction to the costs, benefits, and rationale behind the growth of government involvement in society. Topics will include: government intervention in the allocation of resources, stabilization policies, the impact of government on the capital markets, the 'make or buy' dilemma in government procurement; government regulatory activity, the means for determining public choice, and the social effects of welfare and environment policy.

#### **ADMN 415 (formerly 302) (1½) ISSUES IN PUBLIC ADMINISTRATION**

An analysis of the background and substance of current dilemmas and controversies concerning the role and practice of government administration. Topics will include: modes of public sector organization, and the formal structure of government administration in Canada; concepts of decentralization and delegation, and the relations between central agencies and line departments; decision making in the administrative process, the theory of incrementalism, and the administrator as specialist or generalist.

#### **ADMN 420 (1½) THE PUBLIC POLICY PROCESS**

An introduction to the policy process as it is analysed in modern theoretical literature, and as it may be examined through case studies from Canadian and non-Canadian contexts. Topics will include: policy formulation, the structural aspects of policy execution, and the human dimension of implementation and coordination.

#### **ADMN 421 (1½) BUDGETING AND MANAGEMENT SYSTEMS**

The use of budgeting systems in the planning and control functions of management. Topics will include: line item budgeting; management by objectives; planning, programming, budgeting; performance measurement; zero base budgeting.

#### **ADMN 423 (1½) LOCAL GOVERNMENT**

Analysis of the legislative framework, organization, operation and finance of local government in British Columbia. (Credit will not be given for both 423 and 545.)

#### **ADMN 424 (1½) MANAGEMENT INFORMATION SYSTEMS**

A review of data and information processing concepts and procedures, with consideration of the costs and benefits of different information systems which can be developed to meet the informational needs of public sector managers for functions such as planning, budgeting, control and evaluation. (Credit will be given for both 424 and 524.)

#### **ADMN 425 (1½) LABOUR RELATIONS IN THE PUBLIC SECTOR**

An examination of the development and functioning of collective bargaining in the provincial public service. Special attention will be given to the legislation regulating bargaining, the institutions that do the bargaining, determination of bargaining units, exclusions, bargainable issues, content of collective agreements, arbitration, and dispute resolution. (Credit will not be given for both 425 and 525)

#### **ADMN 431 (1½) PERSONNEL MANAGEMENT IN THE PUBLIC SECTOR**

The course will examine various aspects of the personnel function within government, and will compare current theory and practice in such areas as: manpower planning, recruitment, and selection; performance evaluation, compensation, benefits, and promotion; career planning, and staff development; labour relations, discipline, and control structures. Considerable emphasis will be placed on the detailed analysis of the relevant legislation. (Credit will not be given for 431 and 531.)

#### **ADMN 437 (1½) PUBLIC SECTOR PROGRAM EVALUATION**

An introduction to the organizational, methodological and conceptual issues that are involved in understanding how programs are evaluated. The course will focus on developing a practical understanding of the

range of program evaluations conducted in the public sector. Attention is paid to effectiveness evaluation techniques as well as benefit cost applications to evaluations. (Credit will not be given for both 437 and 537.)

#### **ADMN 451 (1½) ADMINISTRATIVE LAW**

An introduction to the principles of administrative law, paying particular attention to the relationship between the administrator and the public. Issues such as the requirement of fairness and natural justice in decisions affecting the public, appeals from administrative decisions, public participation in the decision making process, and political accountability and control of boards and independent agencies will be discussed. (Credit will not be given for both 451 and 551.)

#### **ADMN 466 (1½) PROVINCIAL GOVERNMENT POLICY AND ADMINISTRATION**

An examination of the legislative structure, cabinet committees, ministries, central agencies, and Crown corporations of the B.C. Government. Attention will be focused on the major government programs, and the administrative processes underlying the formation of public policy as well as the management systems employed in the implementation and evaluation of government programs. (Credit will not be given for both 466 and 566.)

#### **ADMN 470 (1½-3) CONTEMPORARY TOPICS IN ADMINISTRATION**

A study of selected topics drawn from the current literature and practices in Public Administration or related fields. Students may be permitted to enroll in ADMN 470 more than once for credit, provided the course content is different from that previously taken.

#### **ADMN 490 (1½) DIRECTED STUDIES**

Directed reading and/or a research project under the supervision of a Faculty Member. (Open to students only with the permission of the Director)

### **GRADUATE COURSES**

(Administration 500 through 516 have graduate course credit only for M.P.A. students. All seminars 522 and above are offered subject to enrollment and the availability of faculty; not all will be offered every year.)

#### **ADMN 500 (1½) QUANTITATIVE ANALYSIS: I**

Application of elementary mathematical methods for analyzing decisions under uncertainty. Includes concepts of sets, functional notation, probability theory, random variables, optimization, decision criteria and differentiation. Emphasis on examples and applications drawn from the public sector. (Entry into the course requires successful completion of MATH 012, S.P.A. Math Workshop or equivalent.)

#### **ADMN 501 (1½) QUANTITATIVE ANALYSIS: II**

An introduction to the theory and application of statistical methods to data related to decisions in the public sector, with particular regard to the Binomial, Poisson, Normal, Student's t, Chi-square and F distributions. The use of computer based analysis will be introduced.

#### **ADMN 503 (1½) ECONOMIC METHODS IN POLICY ANALYSIS**

A selective, accelerated review of microeconomic principles and modes of reasoning used by economists to analyze problems of resource allocation and the economic role of government in the economy. Issues in the general area of taxation, regulation, fiscal federalism, cost-benefit analysis, and social welfare programs will be investigated from an economic policy point of view. Entry into this course requires successful completion of Economics 201 or equivalent. (Prerequisite: 500) (NOTE: Credit will not be given for both 503 and ECON 302)

#### **ADMN 504 (1½) POLITICAL ANALYSIS**

An examination of the modes of reasoning used by political scientists to analyze the political and institutional framework within which public administrators operate. Illustrative material will be drawn largely from Canadian federal and provincial systems. (NOTE: cannot be taken for credit in addition to POLI 470)

#### **ADMN 507 (1½) ORGANIZATIONAL BEHAVIOUR**

The history of organization and management theory, analyses of organizational behaviour and general systems theory.

#### **ADMN 510 (1½) CANADIAN PUBLIC LAW**

The basic framework of the constitutional and administrative law of Canada. The course will examine the role of law in contemporary soci-

ety, particularly as it relates to government. It will deal with the basic principles of the supremacy of Parliament, delegation of power, the role of the Courts, civil liberties, the impact of a federal system, and the division of powers between the federal and provincial governments.

#### **ADMN 512 (1½) FINANCIAL MANAGEMENT AND ACCOUNTABILITY**

An introduction to financial and cost accounting in the public sector: the nature of financial statements, the classification of transactions and the derivation of financial statements, the analysis of financial statements, valuation theory and the alternatives to historical cost accounting, cost allocation, capital budgeting, social accounting, human resource accounting, energy accounting.

#### **ADMN 514 (1½) RESEARCH METHODS**

An introduction to the range of skills necessary to conduct applied research in the public sector. The course covers the design of research projects, measurement issues, sampling, qualitative research methods, data coding, and includes an introduction to the use of computing techniques to process research information.

#### **ADMN 515 (1½) PUBLIC SECTOR MANAGEMENT SYSTEMS**

Case studies in public administration designed to link the academic topics and fields covered in the M.P.A. program to a variety of administrative activities: planning processes; budgetary cycles; human resource planning and personnel management cycles; performance measurement, evaluation, audit and compliance review processes; financial management mechanisms; legislative planning and review; appraisal of organizational structures and the machinery of government.

#### **ADMN 516 (1½) WRITTEN AND ORAL COMMUNICATIONS IN PUBLIC ADMINISTRATION**

Advanced skills in written and oral presentation of material for public sector analysis and decision making. Preparation of briefing notes, discussion papers, Cabinet memoranda, Treasury Board submissions, interministry and intraministry correspondence, speeches, and press releases.

#### **ADMN 519 (1½) SEMINAR IN RESPONSIBLE ADMINISTRATIVE BEHAVIOUR**

An examination of various value and rule systems which affect the role and conduct of public servants, and the interplay of these systems in decision making situations. (Prerequisites: 500 through 516)

#### **ADMN 520A (formerly half of 508) (1½) SEMINAR IN POLICY ANALYSIS**

An integrative seminar based upon the study of cases in policy analysis. Students will be expected to prepare and present a number of individual papers. (Prerequisites: 500 through 519)

#### **ADMN 520B (formerly half of 508) (1½) SEMINAR IN ADMINISTRATION**

An integrative seminar based upon the study of cases in administration or management. Students will be expected to prepare a number of individual papers. (Prerequisites: 500 through 519)

#### **ADMN 521 (1½) INVENTORY CONTROL AND EQUIPMENT MAINTENANCE**

Problems in the procurement and storage of large stocks of materials by public agencies will be studied, including demand forecasting, establishing order quantities, setting re-order levels, acceptance quality control, the allocation of storage space, and the measurement of the costs of stock shrinkage and obsolescence. The management of plant and machinery will be reviewed with particular attention to the analysis of the economic life of equipment. (Not open to students with credit in 570 or 571)

#### **ADMN 522 (1½) SEMINAR ON PUBLIC TRANSPORTATION ISSUES**

This course investigates policy questions related to the technical, economic and political aspects of the major transportation systems in Canada.

#### **ADMN 523 (1½-4½) CONTEMPORARY TOPICS IN ADMINISTRATION**

A study of selected topics drawn from the current literature in Public Administration or related fields. Students may be permitted to take Administration 523 more than once for credit, provided the course content is different from that previously taken.

#### **ADMN 524 (1½) INFORMATION SYSTEMS: THEORY AND PRACTICE**

This course focuses on management and user issues in the design and implementations of information systems. Students are familiarized with data and information processing concepts and procedures.

#### **ADMN 525 (1½) LABOUR RELATIONS AND COLLECTIVE BARGAINING**

Familiarization with the problems and procedures encountered in collective bargaining in the public sector. Among the topics covered are: management's rights, bargainable issues, dispute resolution, arbitration, behaviour in negotiation and contract administration.

#### **ADMN 526 (1½) INFORMATION TECHNOLOGY & MANAGEMENT**

The purpose of the course is to provide students with a variety of exposures to office automation, and with the analytical skills necessary for the selection, design, implementation and evaluation of new office systems. The course will emphasize hands on experience with software related to management, including word processing, spreadsheet, database management and graphics programs. An introduction to programming in BASIC will be provided.

#### **ADMN 527 (1½) DECISION AND RISK ANALYSIS**

Application of decision analysis within the public sector will be considered with particular regard to the use of elementary Bayesian and cardinal utility theory. Among topics to be included are: the representation of uncertainty in terms of probability, the use of data to reduce uncertainty, the characteristics of risk aversion, the value of information, and the use of sequential decisions in data gathering and analysis.

#### **ADMN 528 (1½) PROJECT MANAGEMENT**

The coordination of manpower and equipment by governmental agencies will be analyzed in terms of project design, systems layout and simulation, work load scheduling, quality control and performance sampling.

#### **ADMN 529 (1½) ORGANIZATIONAL DEVELOPMENT**

An examination of the contemporary experience with organizational development and change in public institutions, action research, team building, sociotechnical design, survey feedback, process consultation. Attention will be paid to: organizational diagnosis, organizational change, overcoming resistance to change.

#### **ADMN 530 (1½) ORGANIZATION AND JOB DESIGN**

Approaches to improving the quality of working life: job enrichment, job enlargement, industrial democracy, quality work circles, alternative scheduling arrangements. (Prerequisites: 500 through 516, or permission of the School)

#### **ADMN 531 (1½) PERSONNEL MANAGEMENT**

Human resource management. Topics to be included: recruitment; selection; training; scheduling; motivation; manpower utilization; assessment and compensation.

#### **ADMN 532 (1½) THE MANAGEMENT OF CHANGE**

This course focuses on managing change in organizations, including strategies and principles of change and problems of power and conflict.

#### **ADMN 533 (1½) PUBLIC SECTOR MARKETING AND POLICY IMPLEMENTATION**

This course applies the main elements of the marketing process to public sector issues. Topics include: relationships amongst various publics; similarities and differences between public and private sector marketing; market research and segmentation; marketing mix and implementation.

#### **ADMN 534 (1½) SEMINAR ON ENERGY ISSUES**

An interdisciplinary examination of contemporary energy issues using the case study approach. Cases may include: the Mackenzie Valley Pipeline Decision; nuclear power reactor decisions; oil sands development; research and development budgeting in the energy field; investment decisions in renewable energy.

#### **ADMN 535 (1½) REGULATORY ACTIVITY**

Government regulatory activity will be examined from legal, economic, political and organizational perspectives. Regulatory issues in telephone, electric utilities, banking and insurance, air and rail transportation, taxes and energy.

**ADMN 537 (1½) PROGRAM EVALUATION**

This course focuses on the design and conduct of program evaluations. Emphasis is placed on the acquisition of skills necessary to model public sector programs, design appropriate evaluations of them, measure key variables, and collect and analyze information. Students are exposed to a range of actual evaluations and are expected to design a program evaluation by the end of the course. Experience with mainframe computers is required. (Prerequisites: 501 and 514 or their equivalents)

**ADMN 540 (formerly 513) (1½) PUBLIC SECTOR ACCOUNTING AND FINANCIAL MANAGEMENT**

The public sector accounts of Canada and British Columbia; accounting for the nonprofit sector; the financial cycle in government accounting; budgeting: line item; performance; program; zero-based. Management control; auditing (financial; efficiency; effectiveness). The aggregation of accounts of both public and private sectors in a set of national accounts, accounting for international transactions; the Canadian Balance of International Payments.

**ADMN 541 (1½) BUDGETING, CONTROL AND AUDITING IN THE PUBLIC SECTOR**

A detailed treatment of the various concepts and theories of public sector budgeting, control and auditing, with particular emphasis on the various levels of accountability and the range of analytical support procedures required to sustain these levels. Case studies in the Government of Canada, and in selected provincial and municipal governments. (Prerequisite: 540)

**ADMN 542 (1½) COST ACCOUNTING IN THE PUBLIC SECTOR**

Alternative concepts and theories of cost; standard costs for direct material and direct labour, the control of overhead costs, absorption costing and direct costing, the analysis of variances, cost allocation, responsibility accounting, joint-product and by-product costs, capital budgeting. (Prerequisite: 540)

**ADMN 545 (1½) LOCAL GOVERNMENT ORGANIZATION, OPERATION AND FINANCE**

Examination of all forms of local government in relation to functions performed, decision processes, finance and relations among local governments and between local governments and the provincial and federal government. Emphasis will be placed on the relationship between structure and performance in different environments, including urban, rural and environmentally sensitive coastal areas in British Columbia.

**ADMN 546 (1½) ISSUES IN MANAGEMENT OF LOCAL GOVERNMENT**

The examination of topics in local government management: labour-management relations, growth management, cutback management, technologies of local government service delivery, budgeting processes, land use management and planning. Some emphasis may be placed on quantitative analyses of local government related research data.

**ADMN 549 (1½) PROCESSES AND PROBLEMS IN THE FORMATION OF ECONOMIC POLICY**

Macroeconomic reasoning as applied to public issues, policies, and programs; the formation of monetary and fiscal policy; incomes policies; assessment of the overall economic effects of government regulation or intervention in industrial activities; federal-provincial conflicts and interagency differences in the development of economic policy. (Prerequisite: ECON 303, or consent of the instructor)

**ADMN 551 (formerly 511) (1½) ADMINISTRATIVE LAW**

An examination of the basic principles of administrative law, emphasizing the functioning of administrative tribunals and judicial control of administrative action.

**ADMN 556 (1½) THE MACHINERY OF GOVERNMENT**

An examination of the structures, systems and processes of modern bureaucratic government at the federal and provincial levels. Topics may include the organization and management of priority setting, policy making, resource allocation, service delivery, regulation and public ownership.

**ADMN 562 (1½) EVALUATION OR PLANNING PRACTICUM**

With the cooperation of the municipal, provincial or federal government, students will conduct an evaluation or prepare a policy plan around a social or economic program. The emphasis will be on gaining practical experience.

**ADMN 563 (1½) ASPECTS OF RESEARCH DESIGN**

Problem solving in administrative contexts: the development process by which an administrative concern may be formed into a research project which is feasible, and whose findings may have administrative utility.

**ADMN 564 (1½) SEMINAR ON SOCIAL POLICY ISSUES**

An examination of objectives of social policy, methods of analysis, and links between analytical and administrative concerns. Topics and cases will be selected from the literature in areas such as health, education, welfare and social security, immigration, language rights, and consumer affairs. (NOTE: credit not given for both 564 and 523A)

**ADMN 565 (1½) HEALTH SERVICE DELIVERY SYSTEMS**

Social indicators useful in assessing community health status: the demand for health care — measurement forecasting and control, the supply of health care; forms of health care and health care delivery systems; objectives and performance measures for health care delivery systems; the implementation of health care delivery systems; alternative delivery systems; the financing of health care; alternative approaches to financing; the evaluation of health care delivery systems.

**ADMN 566 (1½) MANAGEMENT SYSTEMS OF THE B.C. GOVERNMENT**

A review of the systems employed by the central agencies, departments, and crown agencies of the B.C. Government to make and implement decisions in all functional areas of management.

**ADMN 567 (1½) HEALTH INFORMATION SYSTEMS**

A study of the information base which supports a health care delivery system, particularly those in hospitals, physicians' offices, government departments and other related health organizations. Emphasis will be placed on information systems which use computing technology. The security and confidentiality of automated health records will be examined. Basic computing concepts and information theory will be presented to serve as a foundation for discussion of the role of information systems in health care decision making.

**ADMN 575 (1½) COASTAL RESOURCE USE, LAW AND MANAGEMENT**

Examination of coastal resources and the decision processes through which uses are determined in British Columbia. Specific treatment of the characteristics of resources, rationing and enhancement processes, the legal framework, and the role of governments and political decision making within an integrated framework, drawing on concepts from economics, political science, geography and law. (Credit cannot be given for both 575 and Geography 555.)

**ADMN 590 (1½ or 3) DIRECTED STUDIES****ADMN 598 (3) REPORT REQUIREMENT**

A substantial analysis of a significant management problem or policy issue, prepared individually in consultation with a School faculty adviser.

## SCHOOL OF SOCIAL WORK

John Cossom, B.A. (W. Ont.), B.S.W., M.S.W. (Tor.), Associate Professor and Director of the School

Andrew Farquharson, B.A. (Bishop's), M.S.W. (McGill), M.Ed., Ed.D. (Tor.), Professor

Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), Ph.D. (Brandeis), Professor

Marilyn J. Callahan, B.A., B.S.W., M.S.W. (Brit. Col.), Associate Professor

Wilson A. Head, B.S. (Tuskegee Inst.), M.S.W. (Atlanta), Ph.D. (Ohio State), Visiting Associate Professor (1984-85)

Wesley J. Shera, B.A. (Regina), M.A. (Calgary), Ph.D. (Penn. State), Associate Professor

Marjorie D. Martin, B.A., B.S.W., M.S.W. (Brit. Col.), Assistant Professor

Ronald F. Pollard, B.A., B.S.W., M.S.W. (Brit. Col.), Visiting Assistant Professor (1984-85)

David T. Turner, L.L.B. (Sheffield), Dip.S.W. and Admin. (Oxon.), Assistant Professor  
Barbara Whittington, B.A., M.S.W. (Brit. Col.), Assistant Professor

## BACHELOR OF SOCIAL WORK

The School of Social Work offers a program of studies leading to the degree of Bachelor of Social Work (B.S.W.). This program is fully accredited by the Canadian Association of Schools of Social Work. Admission to this program requires completion of the first two years (30 units) of an undergraduate program at the University of Victoria with an overall average of at least second class (a grade point average of 3.50) or better, or the equivalent at another university or a community college, which will normally include 3 units of English. Candidates for a B.S.W. degree must comply with the minimum degree requirements for a Bachelor's degree outlined in this Calendar. Applicants with a baccalaureate degree but without professional work experience should refer to the section of the Calendar which deals with a Second Bachelor's Degree.

Students in the School of Social Work must maintain a sessional grade point average of 3.50 in both third and fourth years, otherwise they may be required to withdraw from the School.

The purpose of the B.S.W. program is to prepare students for the general practice of social work in rural communities, small towns and northern settings in Canada. This requires that graduates be skilled in working with individuals, families and small groups to resolve personal and familial troubles. It also means that graduates are expected to have an understanding of community life and a competence to intervene with a view to improving social conditions and addressing social issues. General practice in small communities also calls for a graduate who is able to cooperate with other professionals and who can recognize the potential, and promote the development of self help and mutual aid groups in resolving social problems.

This program is also available on a limited part time basis in Victoria. It is also offered on a distance education basis in the Cariboo, Kootenay and Okanagan regions of the Province. However, a minimum of two years work experience is required for admission into the off campus program. Up to a total of 80 students can be admitted to the off campus B.S.W. program.

### The Post Baccalaureate B.S.W. Program:

This is a 24 unit B.S.W. program for persons with a baccalaureate degree and a minimum of two years work experience. This program is offered on a part time basis and, in order to reinforce the School's emphasis on rural social work, will be available in the Cariboo, Kootenay and Okanagan regions of the Province. This program is identical in content to the four year B.S.W. except that post baccalaureate students are exempted from one practicum, Social Work 304, and two elective courses. Social Work 200A and 200B or their equivalents are required for entry into the program.

The objective of the off campus program is to enable social workers who are or who have been employed to obtain a B.S.W. degree.

## ADMISSION PROCEDURES

Students transferring from other postsecondary institutions must submit an application for admission to the University to the Director of Admission Services by February 28.

Returning students who are in or who have already completed second year at the University of Victoria must make an application for entry into the B.S.W. program to Records Services by February 28.

Approximately 50 students will be admitted to the on campus B.S.W. program in 1985. The precise number will depend on the resources available to the School and the number of qualified applicants. Preference will be given to students who have gained experience in the social services field on a paid or volunteer basis and who have demonstrated interest in social work practice in rural areas. Selection of the group admitted to the School will be made on the basis of grades, a personal written submission and an interview.

Applicants are advised that a field work placement in a rural area is required for all students. Normally not more than ten placements may be arranged in Greater Victoria each year. A student wishing to be considered for one of these placements should indicate this at the time of admission.

## PROGRAM REQUIREMENTS

### First and Second Year:

Social Work 200A and 200B are required for entry into the B.S.W. program and are normally taken in second year. 200A and 200B are open to any student who has completed first year satisfactorily but carry credit in the Faculty of Arts and Science only as a free elective (see page 31 of the Calendar: Other Courses Outside the Faculty of Arts and Science).

Students meeting all requirements for admission except 200A and 200B can apply for conditional acceptance and enroll in 200A and 200B in Summer Studies.

A 1½ unit introductory statistics course is a prerequisite to 401, a required fourth year course. Students are strongly advised to take this statistics course prior to admission, although it may also be selected as an elective in third year. STAT 250, SOCI 371 or PSYC 300 are possible courses. This requirement will apply to students admitted to the School for the 1985-86 academic year.

The following courses or their equivalents are strongly recommended to students considering admission to the School:

PSYC 235 and one of 335, 336, 337, 339  
SOCI 200  
One of: SOCI 371, PSYC 300 or STAT 250

Other appropriate courses in first and second year are listed below. Students should consult the calendar for information regarding prerequisites. Second year students wishing to take upper level courses should consult with the appropriate department and the courses listed under Third and Fourth Year.

Appropriate first and second year courses include:

ANTH 100A, 100B, 200  
BIOC 201  
BIOL 150  
CC 200A, 200B (carry credit in the Faculty of Arts and Science only as free electives)  
C SC 100  
ECON 100, 201, 202  
ENGL 115, 116, 121, 122, 225, 250  
GEOG 101A/B, 205A/B  
HIST 230, 234, 242  
PHIL 100, 201, 203, 211, 222A/B, 232, 233, 269  
POLI 100, 202, 210, 220, 230, 250  
PSYC 100, 240, 250, 300  
SOCI 100, 202, 209  
THEA 181  
WS (Women's St.) 200

### Third and Fourth Year:

In the third year students will take 303, 304, 350, 351, 352, and 3 units of electives chosen in consultation with the Director (unless special permission is received from the Director to omit a course or courses from this group). Total units: 21.

304 is a practicum course taken during the summer months in a social agency in a nonmetropolitan area. Precise locations and details are developed with students after their admission.

In the fourth year students will take 401, 402, 450 and 452 and 3 units of electives chosen in consultation with the Director (unless special permission is received from the Director to omit a course or courses from this group). Total units: 15

Total units for Third Year and Fourth Year: 36.

Appropriate third and fourth year electives include any of the above first and second year courses and the following third and fourth year courses:

ADM 404, 466  
ANTH 322, 335, 336, 339A/B, 406, 418, 419  
CC 301  
GEOG 330, 346, 347, 349, 361A/B, 443  
ECON 301, 315, 321, 410A/B  
ED-B 336, 360; ED-D 406, 414  
ENGL 301, 302, 400  
ES (Environ. Studies) 300  
HIST 344, 346A/B, 348, 349, 354, 355, 464  
PHIL 331, 333  
POLI 350, 360, 361, 404, 450, 456A, 465, 466, 470  
PSYC 300, 331, 334, 335, 336, 337, 338, 345, 350, 435, 436, 450  
SOC W 390, 453, 454, 460, 485, 486, 490  
SOCI: all third and fourth year courses are recommended

Total Units for the program: 66.

## COURSES

Third and fourth year courses except 304 and 402 may be taken by students outside the School with the permission of the Director. 303, 350, 351, 352, 401, and 452 may be of particular interest to students in Child Care, Nursing, Law, Education, and Public Administration. Students in other faculties wishing to take these courses should consult the appropriate advising service.

### **SOC W 200A (formerly half of 200) (1½) AN INTRODUCTION TO SOCIAL WORK PRACTICE**

An introduction to the general practice of social work with particular emphasis on practice in rural communities and with emphasis in interdisciplinary approaches and the roles of consumer and self help groups in the helping process. This course reviews the knowledge bases and skills of social work practice, and assists students to evaluate their interests and capacities for entering the profession of social work.

September-December (3-0)

### **SOC W 200B (formerly half of 200) (1½) AN INTRODUCTION TO SOCIAL WELFARE IN CANADA**

An introduction to and analysis of major social policies and programs in Canada. Emphasis will be given to policies in income security, corrections, health, family and children, and housing and will include an examination of the role of the social worker in formulating policy.

January-April (3-0)

### **SOC W 303 (3) SOCIAL WORK PRACTICE AND PLANNED CHANGE**

The objective of this course is to introduce students to the generic approach to social work practice by using major concepts and theories concerned with the planning of change.

September-April (1½-0-1½; 1½-0-1½)

### **SOC W 304 (6) SOCIAL WORK FIELD PRACTICE**

In the third year field placement, students are assigned a wide range of responsibilities at the individual, group and community level. Precise objectives will be established on a contract basis between students, faculty and the agency. (Prerequisites: 303 and 352)

### **SOC W 350 (C C 350) (3) LAW AND SOCIAL SERVICES**

The objective is to provide students in Child Care and Social Work with an understanding of the Law as an expression of social policy and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts with special reference to laws affecting children; the organization of legal services; and the legal accountability and liabilities of social workers, child care workers and others in the social services field.

September-April (1½-0-1½; 1½-0-1½)

### **SOC W 351 (3) HUMAN DEVELOPMENT AND THE RURAL COMMUNITY**

The objectives of this course are (1) introduce students preparing for the helping professions to concepts and models of how human behaviour is acquired, maintained and modified, in interaction with family and community systems, (2) analyze community structures and problems and (3) review various approaches to community work practice in human service agencies.

September-April (1½-0-1½; 1½-0-1½)

### **SOC W 352 (formerly 301) (C C 352) (3) INTERPERSONAL COMMUNICATION**

This course has a number of interrelated objectives; to introduce students to the literature on interpersonal communication; to afford an opportunity for a critical review of various approaches to interpersonal helping; to assist students in developing a personal commitment to, and philosophy of, the art of interpersonal helping; and to involve students in simulated practice experiences.

September-April (1-0-2; 1-0-2)

### **SOC W 390 (1½ or 3) DIRECTED STUDIES**

Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

### **SOC W 401 (1½) ASSESSMENT OF SOCIAL WORK PRACTICE**

The objectives of this course are: to ensure that students gain an understanding of the contribution research can make to practice; to enable

students to conduct exploratory and descriptive research projects; to extend their knowledge of a particular field of service. This course will complement 402 — Field Work Practice. (Entry into this course will normally be restricted to fourth year students in the School of Social Work, and to students with at least fourth year standing in other professional programs with the permission of the Director of the School of Social Work. Prerequisite: A 1½ unit introductory statistics course, such as STAT 250, or SOCI 371. This requirement will apply to students admitted to the School of Social Work for the 1985-86 academic year.)

September-April (1-0-2\*; 1-0-2\*)

\* Lectures and tutorials on alternate weeks.

### **SOC W 402 (6) SOCIAL WORK FIELD PRACTICE**

The intent of this course is to refine intervention skills at the individual, family, group and community level. Precise objectives will be established on a contract basis between students, faculty and the agency. Relevant conceptual material will be provided in a concurrent seminar. Entry into this course will be restricted to fourth year students in the School of Social Work. (Prerequisite: 304)

### **SOC W 450 (1½) ADMINISTRATION IN THE HUMAN SERVICES**

This course examines various concepts of organization and management theory, the design of organizational structures, the managerial/administrative process, the social structure of an organization, the specific applications of management science, the interaction between the organization's technological and social systems, the theory and method of job design, and the management of conflict and change. The intent is to consider applications of these concepts of service organizations. This course will normally be restricted to students in the fourth year of Social Work and to students with at least fourth year standing in other professional programs with the permission of the Director of Social Work. (Students may take NURS 450 instead of this course with the permission of the Nursing instructor.)

September-December (3-0)

### **SOC W 452 (3) EDUCATIONAL STRATEGIES IN SOCIAL WORK: CONTENT AND PROCESS**

This course focuses on the use of adult education as a strategy for individual and social change. The course uses the medium of student selected professional topics presented in one or two day workshops, to achieve its objective of developing skills and knowledge for planning and delivery of educational programs. May be taken once only for credit. (Entry into this course is normally restricted to fourth year students in the School of Social Work and to students with at least fourth year standing in other professional programs with the permission of the Director of the School of Social Work.)

September-April (3-0; 3-0)

### **SOC W 453 (1½) POLICY IN THE HUMAN SERVICES**

The principal objectives of the course are to provide an introduction to the policy making process, and to develop skills in the analysis of policies in the human services. This elective is intended for fourth year students in the Faculty of Human and Social Development. (Offered as resources permit)

September-December (3-0)

### **SOC W 454 (1½) HUMAN SERVICES AND NATIVE PEOPLE**

The course will critically examine a variety of intervention strategies and their appropriateness for working with native Indian people. The strategies will include counselling on an individual, family and group basis, self help groups and community development. (Offered as resources permit)

January-April (3-0)

### **SOC W 460 (1½) SPECIAL TOPICS IN SOCIAL WORK AND SOCIAL WELFARE**

This is a variable content course that will deal with special issues in social welfare and approaches to social work practice. Restricted to students in the third or fourth year of study. May be taken more than once for credit to a maximum of three units. (Offered as resources permit)

September-December or January-April (3-0)

### **SOC W 485 (C C 485) (1½) SYSTEMS APPROACH TO THE FAMILY:**

This course focuses on family systems theory and the application of systems constructs in working with the child in the context of the family.

September-December (3-0)

**SOC W 486 (C C 486) (1½) SYSTEMS APPROACH TO THE FAMILY:**

**II**

This course provides a laboratory learning environment which allows the students to observe, demonstrate and discuss family systems theory, constructs and interventions.

January-April (3-0)

**SOC W 490 (1½ or 3) DIRECTED STUDIES**

Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

# FACULTY OF LAW

- Lyman R. Robinson, Q.C., B.A., LL.B. (Sask.), LL.M. (Harvard), of the Bar of British Columbia, Professor and Dean of the Faculty
- Ronald I. Cheffins, Q.C., B.A., LL.B. (Brit. Col.), LL.M. (Yale), of the Bar of British Columbia, Professor
- Gerard A. Ferguson, B.A. (St. Patrick's), LL.B. (Ottawa), LL.M. (New York), of the Bar of Ontario, Professor
- F. Murray Fraser, Q.C., B.A., LL.B. (Dalhousie), LL.M. (London), of the Bar of Nova Scotia, Professor
- Neil Gold, B.A. (York), LL.B. (Tor.), LL.M. (York), of the Bars of British Columbia and Ontario, Professor
- Keith B. Jobson, B.A., B.Ed. (Sask.), LL.B. (Dalhousie), LL.M., J.S.D. (Columbia), of the Bar of British Columbia, Professor
- H. David Kirk, B.S. (City Coll. of New York), M.A., Ph.D. (Cornell), Part time Adjunct Professor
- Johann W. Mohr, B.S.W., M.S.W. (Tor.), Ph.D. (Graz), Visiting Professor (January-June 1985)
- William A.W. Neilson, B.Com. (Tor.), LL.B. (Brit. Col.), LL.M. (Harvard), of the Bars of British Columbia and Ontario, Professor
- Diana M. Priestly, B.A., LL.B. (Brit. Col.), M.L.L. (Wash.), Professor and Law Librarian
- Donovan W.M. Waters, B.A., B.C.L., M.A. (Oxon.), Ph.D. (London), F.R.S.C., Barrister-at-Law, Lincoln's Inn and the Bar of British Columbia, Professor
- David R. Williams, B.A., LL.B. (Brit. Col.), Part time Adjunct Professor, of the Bar of British Columbia
- Terry J. Wuester, B.A. (Bethany Nazarene Coll.), M.A. (Missouri), J.D. (Kansas), LL.M. (Yale), of the Bars of British Columbia, Saskatchewan and Kansas, Professor and Associate Dean
- Richard M. Brown, LL.B. (Queen's), LL.M. (Harvard), Associate Professor
- Donald G. Casswell, B.Sc. (Tor.), LL.B. (York), LL.M. (Tor.), of Bar of Ontario, Associate Professor
- Hamar Foster, B.A. (Queen's), M.A. (Sussex), LL.B. (Brit. Col.), of the Bar of British Columbia, Associate Professor
- Sandra K. McCallum, B. Juris, LL.B. (Monash), LL.M. (Brit. Col.), of Bar of British Columbia, Associate Professor
- Donald R. Munroe, LL.B. (Brit. Col.), Bar of British Columbia, Part time Adjunct Associate Professor
- R.M. John Orr, B.A., LL.B. (Brit. Col.), Dip. International Law (Cantab.), of the Bar of British Columbia, Visiting Associate Professor — Faculty Director, Clinical Program (1984-85)
- T. Murray Rankin, B.A. (Queen's), LL.B. (Tor.), LL.M. (Harvard), of the Bar of British Columbia, Associate Professor
- Mary Anne Waldron, B.A. (Brandon), LL.B. (Man.), LL.M. (Brit. Col.), of the Bar of British Columbia, Associate Professor
- James L. Cassels, B.A. (Carleton), LL.B. (W. Ont.), LL.M. (Columbia), of Bar of British Columbia, Assistant Professor
- Robert G. Howell, LL.B. (Well.), LL.M. (Illinois), Assistant Professor
- John R. Kilcoyne, LL.B. (U. of Vic.), LL.M. (Osgoode), of the Bar of British Columbia, Visiting Assistant Professor (1984-85)
- James M. MacKenzie, B.A., LL.B. (Queen's), LL.M. (Brit. Col.), Bar of British Columbia, Part time Adjunct Assistant Professor (1984)
- Maureen A. Maloney, LL.B. (Warwick), LL.M. (Tor.), Bar of British Columbia, Assistant Professor
- J. Bruce McKinnon, B.A., M.A., LL.B. (U. of Vic.), LL.M. (Cantab.), Visiting Assistant Professor, of the Bar of British Columbia (1984-85)
- Andrew J. Pirie, B.A. (Waterloo), LL.B. (Dalhousie), LL.M. (Well.), Bar of Ontario, Assistant Professor
- Michael I. Wylie, B.A. (Calgary), B.C.L. (Oxon.), LL.B. (Dalhousie), Bar of Alberta, Assistant Professor
- Garry R. Charlton, B.A. (U. of Vic.), Administrative Assistant

The Faculty of Law offers a three year program leading to the Bachelor of Laws (LL.B) degree. The Faculty has been granted the status of 'an approved law school' by the governing bodies of the legal profession in the various common law provinces. This accords the Bachelor of Laws degree of the University of Victoria the same status as that of other common law schools in Canada.

## APPLICATION FOR ADMISSION

Application forms for first admission to the University or for re-

registration, and application packages for admission to the Faculty of Law are available from the office of the Dean. All applications must be submitted by March 31.

## REQUIREMENTS FOR ADMISSION TO THE FIRST YEAR PROGRAM

### Regular Applicants

The Faculty of Law may admit a candidate who:

1. presents proof of having received, with standing satisfactory to the Faculty of Law, a degree from the University of Victoria or an equivalent degree from a recognized university; or
2. presents proof of having completed, with standing satisfactory to the Faculty of Law, at least the first three years (forty-five units) of a program leading to a degree at the University of Victoria, or the equivalent at a recognized university.

In addition, each applicant must submit a Law School Admission Test score and satisfy such other requirements as may be prescribed from time to time.

NOTE: Since the number of candidates who meet the minimum requirements for eligibility far exceeds the number of places available, it should be understood that eligibility does not guarantee admission. Admission is decided on a competitive basis taking into account, principally, a candidate's prelaw academic record and Law School Admission Test scores.

### Mature Applicants

A limited number of Mature Applicants will be accepted for admission in any one year notwithstanding that they do not possess the minimum requirements for admission as Regular Applicants. This category is not open to applicants who have met the requirements for admission in the Regular Applicant category.

Applications will be considered from individuals who:

- (a) are residents of British Columbia, the Yukon or Northwest Territories;
- (b) are 26 years of age or older;
- (c) do not possess the minimum requirements for admission as Regular Applicants; and,
- (d) have five or more years of work experience.

Applicants will be selected for admission on the basis of:

- (a) the academic record, and the ability of the applicant to handle college or university level studies and to be successful in the study of law;
- (b) the competence of the applicant in reading, writing, speaking and the ability to reason and analyze;
- (c) the work record, including the capacity and ability to make a disciplined effort over periods of time;
- (d) the potential of the applicant to make a contribution to the legal profession and the community; and,
- (e) the Law School Admission Test scores.

Applicants will be required to submit letters of reference; an interview may be required.

### Special Applicants

A limited number of Special Applicants will be accepted for admission in any one year from applicants who possess the minimum academic requirements for Regular Applicants and who, by virtue of their experience and background, may be expected to make a particular contribution to the public or interdisciplinary aspects of law.

Applications will be considered from individuals who:

- (a) are residents of British Columbia, the Yukon or Northwest Territories;
- (b) are 26 years of age or older;
- (c) possess the minimum academic requirements for admission as Regular Applicants; and,
- (d) have five or more years work experience in a profession or other field of endeavour.

Applicants will be selected for admission on the basis of:

- (a) the academic record, and the ability of the applicant to be successful in the study of law;

- (b) the capacity of the applicant to make a special contribution to the law and the legal profession through public law or its interdisciplinary aspects; and,  
 (c) the Law School Admission Test scores.

#### Native Applicants

The Faculty of Law is anxious that the number of people of Indian, Metis and Inuit backgrounds among the ranks of the legal profession increase substantially and, accordingly, encourages inquiries and applications from Native people.

Applications from Canadian Native people will be considered on an individual basis taking into account such factors as academic performance, results of the Law School Admission Test, employment history, potential for personal growth, personal interviews and letters of reference.

If an applicant's academic background makes it appropriate, the Admissions Committee may make any offer of admission conditional upon successful completion of the Program of Legal Studies for Native People conducted by the Native Law Centre at the University of Saskatchewan. The Faculty fully endorses this 'head start' program, and considerable weight is placed upon the evaluation submitted by its Director. It should be noted that all Native applicants of registered status and a limited number of nonstatus Native or Metis applicants are eligible for governmental financial assistance throughout both the Saskatchewan program and the LL.B. program at a Canadian Law School. This will cover tuition fees, books and other classroom materials, plus a modest living allowance. For more complete information concerning the Program of Legal Studies for Native People, interested applicants should write to:

The Director  
 Program of Legal Studies for Native People  
 Native Law Centre  
 University of Saskatchewan  
 Saskatoon, Saskatchewan  
 Canada S7N 0W0

#### Part Time Students

A limited number of students will be considered for admission in any one year from applicants who meet the admission criteria and admission standards of full time applicants in the Regular Applicant, Mature Applicant, Special Applicant and Native Applicant admission categories and who demonstrate to the satisfaction of the Faculty that they are unable to attend on a full time basis because of health or physical disability, or exceptional family or financial hardship.

### TRANSFER AND VISITING STUDENTS

Applications may be considered from students who wish to attend the Faculty of Law of the University of Victoria as Transfer Students or as Visiting Students. The Faculty of Law is not obliged to accept applications from students in these categories. The number of applications which are accepted will be limited in order to ensure that the size of the class which these students will be entering is not significantly altered.

#### A. Transfer Student Applications

Applicants who seek to transfer to the Faculty of Law must complete a minimum of two years of legal education in the Faculty of Law in order to obtain a Bachelor of Laws degree from the University of Victoria.

Applications shall be accompanied by:

- (a) The academic record of the applicant, and  
 (b) The applicant's reasons and motivation for seeking to transfer to the Faculty of Law of the University of Victoria;  
 and will be considered if:

- (i) The applicant meets all of the eligibility requirements for admission to the First Year Program of the Faculty of Law, and  
 (ii) The law courses which have been completed by the applicant are compatible with the curriculum of the Faculty of Law.

Preference will be given to students who are academically outstanding or who have the potential to make a unique contribution to the academic program of the Faculty of Law and to students who have applied on compassionate grounds. Students who have undertaken their previous legal education at a Canadian Law School will be given preference over applicants whose previous legal training has been undertaken outside Canada.

#### B. Visiting Students (Students with a Letter of Permission)

Applications from Visiting Students from another University may be accepted subject to the discretion of the Dean and their course programs being approved by the Deans of both Law Schools.

### REGISTRATION

Inquiries relating to registration in the Faculty of Law should be addressed to the Administrative Assistant to the Dean of the Faculty of Law. The mailing address is: Faculty of Law  
 University of Victoria  
 P.O. Box 2400  
 Victoria, B.C.  
 V8W 3H7

#### Completion of Registration

In addition to completing the procedures mentioned under the heading Requirements for Admission, all students are required to register at the times announced by the Faculty of Law. All new students, by their Letter of Admission and all returning students, by their Authorization to Reregister, will be informed of the time and place for registration. Students registering in the first year of the program are required to register in person.

All Letters of Admission or Authorizations to Reregister that are not used to register in the term or session to which they apply, have no further validity.

#### Registration in Any Course is Not Confirmed Until:

- (a) all course prerequisites have been met;  
 (b) the required registration procedures have been completed;  
 (c) all required fees have been paid (see Payment of Accounts, page 19);  
 and  
 (d) classes in the course have begun and the student is in attendance.

The Faculty reserves the right to cancel the registration in a course of any student who fails to attend that course within seven calendar days of the commencement of the term, or of any student who is not able to demonstrate that all course prerequisites have been met.

A student who for medical or compassionate reasons is unable to attend a course during the first seven calendar days of the term may apply to the Dean within that time to confirm registration in that course and the Dean may confirm the registration.

#### Student Responsibility:

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, all students are responsible for the completeness and accuracy of their registration. They must ensure that there is no discrepancy between the program they are following and the approved program recorded in the Dean's Office of the Faculty of Law, and that all changes in address and telephone number, are reported promptly to the Dean's Office of the Faculty which in turn will notify Records Services. Students may not take courses for which they have not registered, and may not drop courses without permission. Students who register in a course for which they have previously received credit or for which they have received equivalent credit on transfer, must indicate this by entering DUP (duplicate) on their registration forms.

A letter mailed to a student's address as currently on record in the Dean's Office of the Faculty of Law or Records Services will be deemed adequate notification to the student for all matters concerning the University.

#### Late Registration:

The period for late registration in the Winter Session is the first five days of classes; in the Summer Studies, the first two days of classes.

#### Registration For Both Terms in Winter Session:

Students planning to undertake studies in both terms of the Winter Session must register in September for all courses they intend to take, including single term courses beginning in January.

#### Changes in Registration:

- Students may add and drop courses during the first eight days of law classes in the First Term and during the first eight days of the Second Term upon submission of the appropriate change form to the Dean's Office of the Faculty of Law which in turn will notify Records Services.
- Students may drop First Term courses until the last day of classes in October and Full Year and Second Term courses until the last day of classes in February provided that the student's program still meets the requirements of Regulations 4 and 5 pertaining to an approved program and provided they submit the academic change form to the Dean's Office which in turn will notify Records Services. Failure to notify the Faculty of Law by the specified date will result in the student receiving a failing grade for the courses.
- Any student, who after registration decides to drop all courses, is withdrawing from the University and must notify the Dean's Office of the Faculty of Law in writing, which will in turn notify Records Services.

### Concurrent Registration in Courses at Other Faculties of Law

With the approval of the Dean, or the Dean's nominee, students are permitted to register in a course(s) in the Faculty of Law at the University of British Columbia concurrently while enrolled in the Faculty of Law at the University of Victoria. Courses satisfactorily completed at the University of British Columbia will be granted credit towards their degree at the University of Victoria.

### Temporary Withdrawal and Reregistration

Upon successful completion of an academic year and/or term, a student may on a single occasion elect not to continue in the LL.B. program for a single period not exceeding two academic years. With the permission of the Dean and/or Faculty, a student may be permitted to reenroll in either the First or Second Term of the Winter Session after such a stop out within the two year period. A student who does not reenroll in the LL.B. program within two academic years must reapply for admission to the Faculty.

When a student stops out after completing the First Term of Winter Session, the Regulations which are normally applicable to an academic year, including regulations for achieving standing in a year, shall be applied to a program consisting of the term completed prior to stopping out and the next term which the student completed after reenrollment.

If the student is enrolled in a course which spans both the first and second terms, the student will not be permitted to withdraw and retain credit unless the student has completed courses in the First Term which are worth at least 7 units. In no case may a student retain partial credit for a full year course which has not been fully completed.

When a student stops out after the completion of an academic year and the student reenrolls in the Second Term of Winter Session, regulations which are normally applicable to an academic year including regulations for achieving standing in a year, shall be applied to a program consisting of the term completed prior to stopping out and the next term which the student completed after reenrollment.

### Registration in the Common Law-Civil Law Exchange Program

Students registering in and successfully completing the Civil Law/Common Law Summer Exchange Program may receive 2 units of credit towards their Law Program at the University of Victoria upon submission of official documentation confirming successful completion of the program. This credit will be applied to the year immediately following the completion of the Summer Program.

## GENERAL INFORMATION

### 1. Academic Studies

The academic session in the Faculty of Law extends for approximately thirty effective teaching weeks exclusive of examination periods.

### 2. Grading

|                  | Grade         | Grade Point Value |                              |
|------------------|---------------|-------------------|------------------------------|
| Passing Grades   | A+            | 9                 | First Class                  |
|                  | A             | 8                 |                              |
|                  | A-            | 7                 |                              |
|                  | B+            | 6                 | Second Class                 |
|                  | B             | 5                 |                              |
|                  | B-            | 4                 |                              |
|                  | Failing Grade | C+                | 3                            |
| C                |               | 2                 |                              |
| D                |               | 1                 | Complete (pass)              |
| *COM             |               | N/A               |                              |
| F                |               | 0                 |                              |
| *N               | 0             |                   |                              |
| Temporary Grade: | *DEF          | N/A               | Deferred examination granted |

\* COM — Used only for courses designated by the Senate. Such courses are identified in the course listings.

\* N — In exceptional circumstances, the Faculty may authorize the removal of an N grade and the replacement of it by another grade. In accordance with Senate Regulations, an instructor shall advise students at the beginning of term of the circumstances under which they would be assigned a final grade of N.

\* DEF — Used only for courses in which a deferred examination has been granted because of illness or other special circumstances.

### 3. Review of an Assigned Grade

Students are referred to the general University regulations given on page 17 and to the regulations adopted by the Faculty of Law. The following regulations apply to students in the Faculty of Law.

- Any request for a review of a final grade must normally reach the Dean's office within 21 days after the release of grades by the Dean's Office.
- Where a final grade is based wholly or in part on any written materials other than an examination paper, such materials shall, for the purpose of these procedures, be treated as if they are examination papers.

### 4. First Year Program

All courses in the First Year Program are compulsory.

Full time students must enroll in all courses in the First Year Program.

In the first academic year of attendance, part time students must enroll in courses amounting to not less than 7 units of courses including 104 (2) The Law, Legislation, and Policy; 106 (1) Legal Process; and 110 (1) Legal Research and Writing. In the second academic year of attendance, part time students must complete the remainder of the compulsory First Year program.

### 5. Second and Third Year Programs

- The Faculty of Law may designate courses as compulsory, prerequisite, or recommended courses.
- In each of the second and third years of the program, a student shall enroll in a course program which has been approved by the Dean or his nominee.
- An approved program for a full time student under paragraph (b) is one in which a student is enrolled in courses totalling not less than 14½ units and not more than 16½ units over the academic session (that is, during the thirty week period). An approved program for a part time student under paragraph (b) is one in which a student is enrolled in courses totalling not less than 7 units and not more than 14½ units, over the academic session (that is, during the thirty week period).
- Without the permission of the Dean or his nominee, a full time student may not carry less than 7 units or more than 8½ units in one term per session (that is, during the fifteen week period). Without the permission of the Dean or his nominee, a part time student may not carry less than 3 units or more than 7 units in one term per session (that is, during the fifteen week period).
- In order to complete the requirements of the Program, a student must enroll in approved programs for the Second and Third Year which amount in the aggregate to not less than 29 units.

### 6. Standing

- Standing in First, Second or Third Year shall be granted when,
  - a student passes all of the courses in the student's approved program for the year and does not have any N or DEF grades in any course, and,
  - a student obtains a grade point average of at least 3.00 in the courses not graded on a pass/fail (COM, N, or F) basis.

In addition to satisfying the requirements of the preceding paragraph part time students in Second Year or Third Year must satisfy the following requirements at the end of each academic session. In order to proceed to the next academic session a part time student must pass all of the courses in the student's approved program for the academic session and attain a grade point average of at least 3.00 in the courses for the academic session.

- Standing in the Program shall be granted when a student achieves Standing in each of the First, Second and Third Years and completes a research paper on an approved subject of not less than 7,500 words during either the Second or Third Year upon which the student has received a grade of C+ or better. The requirement may be satisfied in the context of existing courses.

### 7. Supplemental Examinations

- Where a full time student does not achieve standing under Regulation 6 above, but attains a grade point average of at least 2.00, the student shall be permitted to write supplemental examinations in not more than
  - two courses (including Private Law Process), or
  - two separate components of Private Law Process, or
  - one course (except Private Law Process) and one component of Private Law Process
 representing not more than six units, in order to obtain the

standing required. Where a part time student does not achieve standing or satisfy the requirements under Regulation 6 above, but attains a grade point average of at least 2.00 the student shall be permitted to write one supplemental examination.

- (b) Where a student, enrolled in a clinical program or other course exclusively for a term (15 weeks), fails to meet the grade requirement of Regulation 6, the matter shall be referred to the Faculty Committee on Studies. The Committee may recommend to the Faculty that the student may write supplemental examinations including the completion of such assignments, papers or tests as may be appropriate, or, where the student's performance in the course has been extremely unsatisfactory, that the student be required to withdraw from the Faculty.
- (c) Subject to paragraph (d), supplemental examinations shall not be written in courses or Private Law Process components where a student has attained a grade of C+ or better.
- (d) If a student elects to write a supplemental examination in the Private Law Process course, the student shall write all three components whether or not a grade of C+ or better has been obtained in one or more components. However, an overall grade of C+ or better in the Private Law Process course shall not bar a student from electing to write a supplemental examination in a separate component of Private Law Process where the student has not obtained a C+ or better.
- (e) The grade point value for supplemental examinations shall be determined in accordance with the grading scale contained in the Regulations of the Faculty of Law. The original sessional grade point average and a revised sessional grade point average, taking into account the supplemental examination results, shall be recorded on a student's transcript.

#### 8. *Special Examinations*

- (a) Subject to subsections (b) and (c), the Faculty may authorize the writing of Special Examinations to achieve standing under Regulation 6 where the Faculty determines that a student's ability to write or to complete an examination or other academic requirement has been affected by illness, family affliction or other special circumstances.
- (b) A request for a Special Examination under subsection (a) must be made in writing to the Dean within five days after the date on which the original examination was written or was to be written, or within five days after the date on which the other academic requirement was due, and the student must provide a physician's report or other substantiating document as soon as possible.
- (c) For the purposes of providing evidence to the Faculty as to the nature of the illness and the effect of that illness upon the student's ability to complete an examination or other academic requirement, the physician's medical report should be made on the form approved by the Faculty of Law for that purpose wherever possible. Where the form provided by the Faculty of Law is not used, the medical report should contain the kinds of information sought on that form.
- (d) Where a student has written an examination, a request for a Special Examination under (b) shall be confirmed or withdrawn by the student within ten days after marks have been released by the Dean's Office. Where the request is not confirmed within that ten day period, it shall be deemed to have been withdrawn.
- (e) Special Examinations for the year are normally written in early August.
- (f) Students will be advised in writing with respect to procedures to be followed in such cases.
- (g) The mark obtained on a Special Examination or other academic requirement written pursuant to this regulation will replace only the mark the student had or would have had on that component of the course.

#### 9. *Credit for Courses Outside the Faculty*

- (a) A student may, in the second and third year, take courses in other departments and schools in the University, but not Summer Studies courses, for credit in the Faculty of Law;
- (b) A student may take up to 3 units of such courses over the two academic years;
- (c) A student must obtain the approval of the Dean of Law or his nominee and the outside instructor in advance of registration for any such course. The approval of the Dean or his nominee is based upon criteria set out in Faculty regulations.

#### 10. *Repetition of a Year*

A student who fails to obtain standing in any Year may apply to the Faculty for permission to repeat the Year.

#### 11. *Special Provision*

Notwithstanding anything contained in these regulations, the Faculty shall exercise an equitable discretion in a particular case so as to achieve a fair and reasonable result.

#### 12. *Other Academic Regulations*

Students registered in the Faculty are subject to such other general academic regulations of the University as the Senate, on the recommendation of the Faculty, may wish to apply.

#### 13. *Part Time Students*

A student who is admitted as a part time student may not become a full time student until the student has achieved standing in First Year.

In order to continue as a part time student after achieving standing in First Year, a student is obliged to demonstrate to the Faculty at the beginning of each academic session that he continues to be unable to attend on a full time basis because of health or physical disability, or exceptional family or financial hardship.

A student who achieved standing in First Year as a full time student, may apply to continue his studies as a part time student. The Faculty may allow a limited number of these students to enroll as part time students upon being satisfied that a student is unable to continue as a full time student because of health or physical disability, or family or financial hardship.

## COURSES

Students should consult the Faculty concerning courses to be offered in any particular year.

### LAW 100 (3) THE CONSTITUTIONAL LAW PROCESS

This course deals with the basic framework of the Canadian constitutional system and illustrates that the constitution is the skeletal framework within which the legal system functions. The function of a constitution, the main characteristics of constitutions and Constitutional Law, entrenchment, amendment, the nature and structure of the B.N.A. Act, the division of powers, concurrency in a federal state, the sources of Canadian Constitutional Law, executive power, legislative authority, delegation, the role of the judiciary, civil liberties, developing issues in Constitutional Law. (Full year course 75 hours)

### LAW 102 (2) THE CRIMINAL LAW PROCESS

The course is an introduction to Criminal Law and its process as a means of sanctioning prohibited conduct. Attention is directed to the following matters:

1. The reporting of crime including some discussion of the common characteristics of offenders and offences.
2. The role of the police and the prosecutor in the pretrial portion of the process including such matters as arrest, search and seizure, and the discovery of evidence.
3. The aims and purposes of the Criminal Law and the role of the lawyer in the Criminal Law process.
4. The substantive Criminal Law including the ingredients of criminal offences and the application of the various defences which are available.
5. Theories of punishment and practices of disposition and sentencing of offenders.

Students may be asked to spend up to ten hours in a field experience either in the courts, with police, or in corrections. Students are required to keep a journal in connection with this part of the course.

(Full year course 60 hours)

### LAW 104 (2) THE LAW, LEGISLATION AND POLICY

Students are given an historical introduction to the doctrine of parliamentary sovereignty and an overview of the development of responsible government at the Provincial and Federal levels. The course examines judicial approaches to statutory interpretation including the canons, rules and presumptions and introduces students to the development of elementary legislative drafting skills. The preparliamentary stages of legislation, the institutions involved in law making and the sources of policy in both federal and provincial governments will be studied. The parliamentary stages of legislation and some aspects of parliamentary procedure will be examined together with criticisms of the parliamentary system and proposals for reform. (Full year course 60 hours)

### LAW 106 (1) THE LEGAL PROCESS

The Legal Process seeks a perspective of the processes of decision mak-

ing throughout the legal system by examining its major institutions and the function of substantive and procedural law within them. It attempts to provide first year students with a transactional "overview" of their new discipline in its totality. It also provides a background for courses in the second and third year program. This course introduces students to the institutional structure of the Canadian legal system and, at the same time, provides an analysis of the role of law in society. The course will have a variety of components, namely historical, institutional, procedural and philosophical. The role of law in society, the function of the legal profession, the development of the legal system, the reception of English Law in Canada, the contemporary legal system in British Columbia, the structure of the courts, problems of fact finding and evidence *stare decisis*, sources of law, the legislative process, administrative tribunals, an introduction to jurisprudential concepts, future trends with respect to the role of law in society, including law reform, legal services, the legal profession, access to the law. (Grading: COM, N, or F.)  
(Full year course 30 hours)

#### **LAW 108 (6) THE PRIVATE LAW PROCESS**

These courses concentrate upon some of the basic rules or processes which regulate the relationships between private citizens. There is an attempt to integrate and interrelate many of the basic concepts normally covered in Contracts, Property, and Torts.

108A (2 units) Contracts (full year)  
108B (2 units) Property (full year)  
108C (2 units) Torts (full year)

(Full year course 200 hours)

#### **LAW 110 (formerly half of 106) (1) LEGAL RESEARCH AND WRITING**

The purpose of the course is to acquaint the first year student with the variety of materials in the Law Library and to provide a knowledge of basic legal research techniques. The use of various research tools, including the computer, is considered. Through a variety of written assignments, the students will become familiar with accepted principles pertaining to proper citation in legal writing and will develop a degree of proficiency in legal writing and research. (Full year course 30 hours)

*Some of the following courses have not yet been offered but have been approved and will be offered when resources permit. Some of these courses are offered in alternative years.*

#### **LAW 301 (2) THE ADMINISTRATIVE LAW PROCESS**

This course will seek to investigate the nature and function of the administrative process with particular reference to the development of tribunals and agencies with a wide variety of disparate functions and interactions with private life. Similarly, the course will investigate the way in which tribunals and courts interact, with specific reference to the judicial arsenal available for the control of administrative behaviour. (4-0)

#### **LAW 302 (1½) CRIMINAL LAW: II**

This course builds naturally upon the first year course in the Criminal Law Process with specific reference to defences and offences. In depth study of such matters as conspiracy, attempts, counselling, as well as the substantive offences of homicide, fraud, and contempt of court, will be carefully analyzed. Major defences, including double jeopardy, insanity, automatism and self defence will be scrutinized. (3-0)

#### **LAW 303 (1½) CRIMINAL PROCEDURE**

Procedural protections pervade the area of Criminal Procedure. It is crucial that an advocate intending to act on behalf of a client in a criminal matter be aware, not only of the specific mechanics of criminal procedure, but of its underlying philosophy and goals. Hence the course will undertake a study of such matters as jurisdiction, election and reelection, particulars, discovery, the indictment, plea bargaining, abuse of process, juries, the trial and appellate processes. (3-0)

#### **LAW 304 (5½-7½) CRIMINAL LAW TERM.**

This course will provide students with a comprehensive understanding of the criminal process from its inception through the trial process and the corrections system. It is an intensive immersion program which will consider criminal procedure, sentencing and corrections, substantive criminal law, trial process and the law of evidence. Through a flexibly-designed program, students will consider all the major issues confronting the administration of criminal law. (11-0) to (15-0)

#### **LAW 307 (1½ or 2) CIVIL PROCEDURE**

This course will be founded upon an inquiry into the functions of a modern procedural system with specific reference to the development of a process which considers the extent to which the specific system under study aids in the achievement of just, speedy and economic resolutions of justiciable conflicts on their merits. Students will be introduced to the basic structure of a civil action and major items for consideration throughout the development of civil litigation. In the result, such matters as the expenses of litigation, jurisdiction, initial process, pleadings, amendment, joinder, discovery, disposition without trial and alternatives to adjudication will be discussed. (1½ units or 2 units depending upon whether the course includes a concentration in drafting)

307A (1½) Regular programs (3-0)

307B (2) Concentration in drafting (4-0)

#### **LAW 309 (2) THE LAW OF EVIDENCE**

This course will examine the objective structure and content of the law governing proof of facts in both civil and criminal trials, as well as before administrative tribunals. Rules of evidence respecting burdens of proof and presumptions, competence and compellability of witnesses, corroboration, hearsay, character, opinion evidence and a variety of other topics will be critically examined in the light of objectives of the legal process. (4-0)

#### **LAW 311 (1 or 1½) ADVANCED ADMINISTRATIVE LAW**

This course is concerned with the nature of regulations as well as the preparation and presentation of cases before administrative tribunals with special emphasis on the substance of administrative procedure, administrative evidence and public law advocacy. (Two or three hours per week depending upon whether or not the student undertakes a clinical placement in conjunction with the course: 1 unit without placement; 1½ units with placement) (2-0) or (3-0)

311A (1 unit) Advanced Administrative Law (2-0)

#### **LAW 312 (1½) DEBTOR AND CREDITOR RELATIONS**

The course will discuss legal aspects of the collection of judgments; use and problems of mechanic's liens; fraudulent transactions, both under provincial and federal law; creditor's arrangements; debtor assistance programs; and bankruptcy. (3-0)

#### **LAW 313 (1) LEGAL ACCOUNTING**

The course will deal with introduction to accounting principles; including a basic understanding of modern bookkeeping principles and an understanding of certain methods of preparation and analysis of balance sheets and financial statements, concentrating principally upon definition of terms. The course will also spend some time in discussion of specific rules and problems relating to lawyer's trust accounts. (2-0)

#### **LAW 314 (1) SALE OF GOODS**

This course involves the study of the law pertaining to the sale of goods including an examination of the Sale of Goods Act, the Trade Practices Act and the Consumer Protection Act. (This course is not open for credit to students who have credit for 316 prior to 1981-82.) (2-0)

#### **LAW 315 (2½) BUSINESS ASSOCIATIONS**

This course will analyze and discuss various legal forms for carrying on trade. The course recognizes that the corporation is one of immense commercial and legal significance as an organizational form and will hence stress legislation and materials respecting the modern company. Students will, however, be exposed to the sole proprietorship, partnership and related agency principles. (5-0) or (2-0; 3-0)

#### **LAW 316 (2, formerly 2½) SECURED TRANSACTIONS AND NEGOTIABLE INSTRUMENTS**

An examination of various forms of chattel security; chattel mortgages, conditional sales, assignment of book debts, debentures, s.178 of the Bank Act; personal guarantees; the law of negotiable instruments. (4-0)

#### **LAW 317 (2) REAL PROPERTY TRANSACTIONS**

This course will adopt a transactional perspective and analyze the development of a real property transaction from its inception to post completion problems. Specific reference will be had to listing the property for sale and the responsibilities and obligations of the agent under the Real Estate Act, specific matters relating to the interim agreement, financing of the purchase and assessment of title, as well as preparation of the file for closing. Brief consideration will be given to condominium law and landlord and tenant relations. (4-0)

**LAW 318 (1½) REMEDIES**

This course seeks to highlight the interaction between the various substantive areas of private law: torts, property, contract and restitution. Additionally, the interaction between the common law and equity systems will be developed conceptually and historically. The course will concern itself with questions regarding damages, specific remedies, restitution, as well as analysis for alternative methods of remedial action through compensation schemes. (3-0)

**LAW 319 (1½) TRUSTS**

This course concerns the trust as a mode of disposition of property for the benefit of successive or single beneficiaries, and the contrast is made with absolute dispositions. Comparison is made with other concepts of obligation and property holding. The creation, administration, variation and termination of express trusts are examined, and also the theory and applicability of resulting and constructive trusts. (3-0)

**LAW 320 (1½) SUCCESSION AND ESTATE PLANNING**

This course involves the study of testate and intestate succession. The principles of the law of wills, both common law and statutory, and the statutory provisions for the devolution of intestate estates, will be examined. The drafting of wills is a feature of this course. Estate planning involves a general examination of the disposition of assets in life and on death against the background of income, inheritance and gift taxes. (3-0)

**LAW 321 (1½) COMPETITION LAW**

This course will trace the development of competition law from the common law doctrines of restraint of trade through the areas of trademarks and statutory regulation of competitive practices contained in anticompetitive and competition law, with an examination of the policy and theory underlying government regulation of restrictive trade practices. (3-0)

**LAW 322 (1½) FAMILY LAW**

This course will consider the institution of the family, both in its social and legal contexts. Specific reference will be had to law relating to marriage, divorce, custody, matrimonial property and the role of the lawyer in the resolution of family problems. This is a course which is ideally suited to interdisciplinary team teaching in order that the course may helpfully illustrate the impact of legal decision making on the social unit of the family. (3-0)

**LAW 324 (1) CHILDREN AND THE LAW**

Considering such questions as adoption, affiliation, child protection, juvenile delinquency, custody and access, this course will focus upon the impact of law and legal institutions on children and their relations in society. The course will attempt to bring the knowledge and expertise of specific, related disciplines to bear upon the development of law and the legal institutions in this area. (2-0)

**LAW 326 (2) EMPLOYMENT LAW**

This course offers an introduction to three legal regimes bearing upon the employment relationship:

- (1) the common law;
- (2) collective bargaining law; and
- (3) regulatory schemes in such fields as employment standards, human rights and occupational health and safety.

A major theme of the course is the relative strengths and weaknesses of these three regimes and the legal institutions charged with their administration. (Not open for credit to students who have credit for 326 prior to 1985-86) (4-0)

**LAW 327 (1½) JURISPRUDENCE**

A wide variety of topics may be considered in this course in order to develop a theoretical framework for the purpose and function of law in society. Various schools of jurisprudential thought will be analyzed, including the Natural Law school, the Positivist school, Pure Theory school, the Sociological school, the American and Scandinavian Realist schools as well as Historical and Anthropological Jurisprudence. (3-0)

**LAW 328 (1) MUNICIPAL LAW**

This course is designed to provide students with an introduction to Municipal Law and provide a basis for the discussion of problems arising out of development and continued urbanization. Specific reference will be had to problems of bureaucratization, financing and urban reorganization, housing and development, elections, and the inter-relationship between federal, provincial and municipal governments. (2-0)

**LAW 329 (1½) ENVIRONMENTAL LAW**

The course builds upon courses in Torts, Property and Administrative Law. Certain aspects of the land use planning and resource laws are pertinent. The various legal techniques to contain environmental disruption will be critically examined, including common law liability rules and various statutory models which have evolved, including prohibition, licensing, economic incentives, effluent charges and compensation systems. Environmental impact assessment legislation will also be studied. (2-0)

**LAW 330 (1½) INTERNATIONAL LAW**

Public International Law is concerned with the legal relations of states and the individuals who compose them. The course seeks to explore the way in which sovereign powers choose to govern their interrelationships and analyzes problems which confront them. Topics will include an examination of the international legal system, modes of international law creation and law enforcement as well as the process of international adjudication. (3-0)

**LAW 331 (1½) COASTAL AND MARINE LAW**

This course considers various problems in coastal and marine law. Topics covered may include maritime liens, salvage, tug and tow, charter parties and other commercial documents, marine insurance, regulation of commercial fisheries, protection of and planning in the marine environment. (3-0)

**LAW 333 (1½) SOCIAL WELFARE LAW**

The course is an introduction to the statutory framework of social welfare law. Topics include Workers' Compensation, Social Security, Unemployment Insurance, Welfare and Health Care legislation. (3-0)

**LAW 336 (1) COLLECTIVE AGREEMENTS: NEGOTIATION AND ARBITRATION**

A study of the negotiation and administration of collective agreements in the private sector. Topics will include labour negotiation theory, bargaining structure, grievance resolution, contract interpretation, individual rights and the role of the Labour Relations Board. (2-0)

**LAW 339 (1½) LEGAL THEORY WORKSHOP**

This seminar explores the interdisciplinary nature of legal studies by considering the contributions of 20th century social theory to legal thought. Topics which will be canvassed include analyses of law and legal systems from sociological, economic and philosophical perspectives. (3-0)

**LAW 340 (1½) SELECTED PROBLEMS IN CONSTITUTIONAL LAW**

The Canadian constitution was drafted over 100 years ago. It nevertheless may be analyzed from a variety of perspectives as a vital, living document which maintains flexibility and a sense of purpose in directing modern Canada. This course will consider, among others, questions relating to civil liberties, the judiciary in Canadian constitutionalism, provincial constitutions, comparative constitutional law and many other topics, in order to evaluate the success of the Canadian constitution's operation and posit suggestions for its reform. (3-0)

**LAW 343 (1-2) CONTEMPORARY ISSUES IN LAW**

This course is concerned with legal issues which are contemporary and problematic. Each issue will be examined in the light of existing legal rules, social and related implications, the legal process, and possible reform. (The unit value of the course may vary from 1, to 1½, to 2 units per term. Students may take the course for credit more than once to a maximum of 4½ units of credit. May be offered in areas A through Z.) (2-0) to (4-0)

**LAW 345 (2) TAXATION**

The course will strive to cover the basic principles of income tax law including such issues as taxable income, residence income from employment, business or property, and capital gains. It will also deal in a general way with policy underlying certain aspects of the Income Tax Act and will provide an introduction to certain specific provisions of that Act, concentrating primarily on personal income tax law. (2-0) or (3-0) or (4-0)

**LAW 346 (1) ADVANCED TAXATION**

This course builds upon the concepts studied in Taxation (345) and is concerned primarily with the Income Tax treatment of business organizations, particularly corporations and partnerships, and their investors. (2-0)

**LAW 350 (5½-7½) CLINICAL TERMS**

Clinical legal education is predicated upon the assumption of a recognized role within the legal system by the law student. The experience gained from the participation in the role becomes the focus for reflection and examinations of substantive legal rules, procedural and strategic positions, and introspective critical analysis of the role of the lawyer in the legal process. This requires a carefully supervised program with manifold opportunities for one to one instructor student supervision and regular group sessions. Programs envisaged would take place in a community law office or a public interest law office. (With the approval of the Faculty of Law, a student may enroll in more than one of the areas listed below.)

350A (7½) Community Law-Legal Aid Clinic (Grading: COM, N or F)

350C (5½-7½) Public Interest Law Clinic

(11-0) to (15-0)

**LAW 351 (5½-7½) PUBLIC LAW TERM**

This course will provide a forum for the development of a comprehensive understanding of the nature of policy formulation and decision making in governmental departments and agencies as well as the role of the lawyer in the context of the administrative and legislative processes. The course will focus on selected areas of governmental activity and will examine the evolution of public law and the conflicting values involved in the regulation of contemporary society, the emerging dominance of the executive branch of the government and the professional responsibility of the lawyer as advocate, legislator, counsellor, lobbyist, administrator and policy adviser. A clinical placement may be arranged for each student.

(11-0) to (15-0)

**LAW 352 (5½-7½) SOLICITORS' PRACTICE TERM**

This is an intensive course. It examines several advanced areas of law which pertain to a solicitor's practice with particular reference to areas of corporate and commercial law. The subjects are studied from a transactional perspective.

(11-0) to (15-0)

**LAW 355 (2) LEGAL SKILLS**

The course uses materials from substantive law to examine and develop the skills of the lawyer in interviewing, counselling and negotiating.

(Grading: COM, N, or F)

(4-0)

**LAW 356 (2) ADVOCACY**

This course will involve a critical analysis of the trial process including the demonstration and evaluation of various techniques of advocacy and their relationship to the law of evidence and procedure. In particular, the objectives and techniques of pretrial motions, examinations for discovery, examination and cross examination of witnesses, exhibits, and the presentation of legal argument will be considered.

(Grading: COM, N, or F)

(4-0)

**LAW 357 (2) ADVANCED LEGAL RESEARCH AND WRITING**

This course is designed to give instruction in advanced research techniques for Canadian Commonwealth and American legal materials. The assignments will be designed to improve the student's skills in legal research and writing, and to develop an ability to analyze critically legal writing and legislation.

(Not offered)

(4-0)

**LAW 358 (1) THE ADMINISTRATION OF TRUSTS AND ESTATES**

This course is designed to relate the conceptual doctrines of the law to the solution of the practical problems which occur in law practice through an

examination of a selection of areas in trust administration and the administration of deceaseds' estates. (2-0)

**LAW 359 (1½) CIVIL LIBERTIES**

This course will examine the relationship between government and the individual. The major emphasis will be upon the development and protection of civil liberties of human rights in Canada, with reference to international agreements for comparative purposes. (3-0)

**LAW 360 (1½) THE LEGAL PROFESSION**

This course is designed to provide students with insights and perspectives into the organization and operation of the legal profession as a vital institution in the legal process. The class will be asked to consider the legal profession in its social context, its formal organization, its ethical procedures, and the role of the lawyer throughout the legal process. It appears to many that the role of the professions in general is changing. A consideration of this issue is focused upon the legal profession. (3-0)

**LAW 361 (1½) EVOLUTION OF COMMON LAW**

In the 250 years following the Norman Conquest of England in 1066, the Norman genius for administration combined with a number of native institutions to produce the Common Law. This course will trace that process against the background of the general history of the times, and will assess the impact of the conquest on government and the legal system. The first part of the course will be concerned primarily with legal institutions, the second with the development of the substantive law itself. The emphasis throughout will be on the different ways in which the legal system has responded to social change. (3-0)

**LAW 363 (1½) CONFLICT OF LAWS**

This course seeks to illustrate problems arising out of the interaction of laws and legal systems. Such important questions as choice of law, recognition of foreign judgments, doctrines of domicile and renvoi will be investigated in order to develop an understanding of the choices and values inherent in decision making in this area. (3-0)

**LAW 364 (1½) LEGISLATION AND LAW REFORM**

Specific subject matter may vary from year to year with topics being chosen for their timeliness and usefulness in law reform projects. Students will be required to determine the status of existing law and defects contained in it, as well as ascertaining the way in which the law affects different groups. Thereafter, they will be required to define objectives in policies which may ultimately be translated into statutory form. (3-0)

**LAW 365 (1-2) LEGAL MOOTING**

A student may be awarded credit in the second and third years of the student's program to a maximum of 2 units in either year and 2½ units in the student's entire program for supervised participation in inter-university mooting competitions designated by the Dean.

(Grading: COM, N, or F)

(2-0) to (4-0)

**LAW 399 (1½-4) SUPERVISED RESEARCH AND WRITING**

During either of the second or third years of a student's program, a student may undertake a substantial research and writing project on a legal subject approved by a member of the Faculty of Law who agrees to supervise the project. With the approval of the Dean or his nominee, a student may be awarded credit for two separate supervised research papers provided that the total credit does not exceed 4 units and each paper is started and completed in separate terms. With the approval of the Dean or his nominee, this course may be extended over two terms.

# FINANCIAL AID

## GENERAL REGULATIONS

All enquiries concerning material in this section should be directed to the Student Financial Aid Services Office, University of Victoria, Box 1700, Victoria, B.C. V8W 2Y2.

All bursaries adjudicated by the University of Victoria are administered by the Senate Committee on Awards. Grants, loans and work-study positions are administered by the Student Financial Aid Services staff.

To be eligible for a bursary offered by the University, students must take an appropriate number of units in the Winter Session, normally 15. If, however, students can demonstrate that they are carrying the maximum course load possible in the circumstances, exceptions can be made to this stipulation. All students who are taking fewer than 15 units during the Winter Session and who wish to be considered for a bursary must have an interview with an adviser from the Student Financial Aid Services Office.

Where applications are necessary, the deadline for submission of application forms is specified for each bursary.

Except where the donor directs otherwise, the proceeds of bursaries issued by or through the university will be applied towards the total fees for the academic year. If the amount of the bursary or bursaries exceeds the unpaid total fees for the academic year, the excess balance will be paid

to the student. Proceeds from government loans, grants and work study are paid directly to the student.

Any awards may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of award; withdrawal from the University; withdrawal of the award by donor.

If for any reason the original recipient becomes ineligible, the allocated funds may be reassigned to other students.

## DEFINITIONS

- (a) An award based on financial need is any bursary, grant, loan or work study position.
- (b) A bursary is a nonrepayable monetary award based on financial need and reasonable academic standing, as determined by the Senate Committee on Awards.
- (c) A grant is a nonrepayable monetary award based on financial need as determined by the office or agency mentioned in the award.
- (d) A loan is a repayable monetary award based on financial need.
- (e) A work study position is a subsidized job on campus, paid for by the Ministry of Education of the Province of British Columbia.

## SECTION 1

### THE UNIVERSITY OF VICTORIA TUITION ASSISTANCE BURSARY FUND FOR ALL STUDENTS

This fund was established by the Board of Governors in 1965, who at that time expressed concern that qualified students could not attend the University of Victoria because of serious financial difficulties. Specifically, the Board indicated:

- (a) that the Fund is intended to assist students who are in serious financial difficulty;
- (b) that applicants be interviewed by an officer of the University;

- (c) that students should not normally expect to receive assistance unless they meet the need criteria established by the B.C. Student Loan Committee. Where there are special circumstances, appropriate consideration will be given, and each case will be judged on its own merits.

Application forms are only available after registration from the Student Financial Aid Services Office, Second Floor, University Centre. Completed application forms are to be submitted by November 15 in the First Term, and by February 15 in the Second Term. Forms should be submitted in person so that an appropriate time for an interview may be arranged.

## SECTION 2

### ENTRANCE BURSARIES REQUIRING APPLICATION

#### A. ENTRANCE BURSARIES ADMINISTERED BY THE UNIVERSITY OF VICTORIA

Application forms for the following bursaries may be obtained from the Student Financial Aid Services Office, University of Victoria, Box 1700, Victoria, B.C. V8W 2Y2, and must be returned by June 30, unless otherwise indicated. Names of winners will be released in August.

\* **SARA AND JEAN MACDONALD BURSARY FUND** — This fund provides five bursaries valued at \$450 each for worthy and deserving women students entering the University of Victoria from secondary schools. Selection is to be made by the Committee on Awards on the basis of financial need and recommendations from secondary schools.

**PACIFIC COAST FISHERMENS MUTUAL MARINE INSURANCE COMPANY BURSARY** — Bursaries of \$600 are offered by Pacific Coast Fishermen's Mutual Marine Insurance Company to sons, daughters and legal wards of past and present members of this insurance company. They are open to students entering the University from Grade XII. The application must be accompanied by a letter describing the family fishing history in general terms and detailing types of fishing and boat names. Selection will be made by the Committee on Awards in consultation with officials of the Company.

\* **THE WILF SADLER MEMORIAL BURSARY FUND** — A bursary of four hundred dollars (\$400) will be allocated annually to a needy student from the Greater Victoria area who is entering the university from the secondary school system. Preference will be given to students who can demonstrate significant involvement in amateur sports. Selection will be made by the Senate Committee on Awards in consultation with representatives from local secondary schools.

#### B. ENTRANCE BURSARIES ADMINISTERED BY THE UNIVERSITY OF BRITISH COLUMBIA

Application forms for the following bursaries may be obtained from the Scholarship and Bursary Committee, the University of British Columbia, 2075 Westbrook Place, Vancouver, B.C. V6T 1W5, and must be returned by July 1, unless otherwise indicated. Since some changes may have been made after this calendar went to press, you are urged to refer to the U.B.C. Calendar.

**THE EDWARD JAMES ASHMORE MEMORIAL BURSARY** — A bursary in the amount of \$1,000 is offered annually by the Hospital Employees' Union Local 180, in memory of the late Brother E.J. Ashmore who was 2nd Vice-President of the Union's Provincial Executive Committee. The bursary will be offered to students who are proceeding in the fall from Grade XII to a full program of studies at the University of British Columbia, the University of Victoria, Simon Fraser University, or any regional college in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the British Columbia Institute of Technology. To be eligible an applicant must be the son/daughter of an active member of the Union ("active" being interpreted as on staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of the award but since superannuated). The information given in the application form must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the University (in consultation with the Union) is best qualified in terms of financial need.

\* Administered by the University of Victoria Foundation.

**BRITISH COLUMBIA FOREST PRODUCTS LIMITED BURSARIES** — Bursaries to a total of \$10,000 are offered by British Columbia Forest Products Limited to qualified legal dependents of employees who, by June 30 of the year in which the award is made, have or will have served with the Company for at least one year. The awards are open to students beginning or continuing studies in the fall in a full undergraduate program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. Winners of the company's Entrance Scholarships will not be permitted to simultaneously hold a British Columbia Forest Products Limited Bursary. Applications must contain the necessary detail of family service with the company.

**THE HOSPITAL EMPLOYEES' UNION (PROVINCIAL EXECUTIVE) BURSARIES** — A bursary in the amount of \$500 is offered by the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the University (in consultation with the Union), is best qualified in terms of financial need.

**THE HOSPITAL EMPLOYEES' UNION (ROYAL JUBILEE UNIT) BURSARY** — A bursary in the amount of \$350 is offered by the Royal Jubilee Unit, Victoria, of the Hospital Employees' Union, Local 180. The award is available to students who are proceeding in the fall from Grade XII to a full program at the University of British Columbia, the University of Victoria, Simon Fraser University or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma of technology at the British Columbia Institute of Technology. To be eligible, an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1st of the year of award but since superannuated). The information given on the application must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the university (in consultation with the Union), is best qualified in terms of financial need.

**THE HOSPITAL EMPLOYEES' UNION (VANCOUVER GENERAL UNIT) BURSARIES** — Two bursaries of \$350 each are offered annually by the Vancouver General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. The bursaries will be awarded to the two candidates who, in the opinion of the University (in consultation with the Union), are best qualified in terms of financial need.

**THE HOSPITAL EMPLOYEES' UNION (VICTORIA GENERAL UNIT) BURSARY** — A bursary of \$350 is offered by the Victoria General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the University (in consultation with the Union), is best qualified in terms of financial need.

**RETAIL, WHOLESALE AND DEPARTMENT STORE UNION, LOCAL 470 BURSARY** — One bursary of \$250 is offered by the Retail, Wholesale and Department Store Union, Local 470 to active members, or sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade XII to begin studies at the University of British Columbia, the University of Victoria, or Simon Fraser University, or to a regional college, in a full program leading to a degree in any field, or leading to a Diploma in technology at the British Columbia Institute of Technology. To be eligible for consideration a candidate must have a satisfactory academic standing (normally an overall average of at least 65% in Grade XII). In the selection of the winner, the basic factors will be the financial need of the candidates and their families. The winners will be selected in consultation with the Union.

**THE RETAIL, WHOLESALE AND DEPARTMENT STORE UNION, LOCAL 580 BURSARIES** — A bursary of \$500 is offered by the Retail, Wholesale and Department Store Union, Local 580 to active members, sons, daughters and legal wards of active members of the Union in good standing. They are open in competition to applicants who are proceeding from Grade XII to studies at the University of British Columbia, the University of Victoria or Simon Fraser University in a full program leading to a degree in any field. To be eligible for consideration a candidate must have satisfactory standing (normally an overall average of 65% in Grade XII). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winners will be selected in consultation with the Union.

#### **VAN-TEL CREDIT UNION BURSARIES**

##### **(a) The Leo Morris Memorial Bursary:**

To honour the memory of Leo Morris, late treasurer of Van-Tel Credit Union, a bursary of \$500 will be awarded to the sons, daughters and legal dependents residing in British Columbia, of members of Van-Tel Credit Union. It is open to competition to students proceeding from Grade XII into a full program of studies at the University of British Columbia, University of Victoria, Simon Fraser University, or any accredited postsecondary Institute within the Province of British Columbia. To be eligible for consideration a candidate must have an average of at least 70%. The winner will be selected by the University of British Columbia in consultation with Van-Tel Credit Union. From those who so qualify, in the final selection, a major factor will be the financial circumstances of the applicants and their families. Applications and further information may be obtained from the Awards Office at the University of British Columbia, Vancouver, B.C. V6T 1W5. Applications must be received by U.B.C. on or before July 1.

##### **(b) The Les King Memorial Bursary:**

To honour the memory of Les King, late President of Van-Tel Credit Union, a bursary of \$500 will be awarded to the sons, daughters and legal dependents residing in British Columbia, of members of Van-Tel Credit Union. It is open to competition to students proceeding from Grade XII into a full program of studies at the University of British Columbia, University of Victoria, Simon Fraser University, or any accredited postsecondary Institute within the Province of British Columbia. To be eligible for consideration a candidate must have an average of at least 70%. The winner will be selected by the University of British Columbia in consultation with Van-Tel Credit Union. From those who so qualify, in the final selection, a major factor will be the financial circumstances of the applicants and their families. Applications and further information may be obtained from the Awards Office at the University of British Columbia, Vancouver, B.C. V6T 1W5. Applications must be received by U.B.C. on or before July 1.

**WHITE SPOT LIMITED BURSARY** — One bursary, having a total value of \$1,000, is provided by White Spot Limited and its subsidiary companies for their employees, and sons and daughters of their employees who have served the firm for at least two years. The bursary is paid in annual amounts of \$250 each and is open in competition to eligible students proceeding from Grade XII of secondary school to a full program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. For purposes of qualification "employees" shall include students having part time employment with the Company while attending secondary school, and who are still employed. The decision as to qualification by employment shall rest with the Company. In all other matters, winners will be selected by the Awards Committee of the University of British Columbia on the basis of academic standing and need for financial assistance. To be eligible, a candidate must have clear standing in the year's work most recently taken with

an overall average of at least 65%. Winners will be considered for renewals of the bursary for their second, third and fourth years of University attendance (up to graduation). Renewals each year, however, are not automatic and will be made only to those who file a new application, pass all subjects with a minimum overall average of 65%, need financial assistance, and who still qualify as employees of, or dependents of employees, at White Spot.

#### C. ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

**THE BOBBY BAUER MEMORIAL AWARD** — The Bobby Bauer Memorial Foundation makes one or more awards annually to students demonstrating outstanding proficiency in hockey who qualify for admission to a full time undergraduate course at a Canadian university. Application should be made prior to August 31 on forms provided by the Foundation. A letter of reference from a person actively involved in hockey must accompany each application. Inquiries and each application should be sent directly to: Bobby Bauer Memorial Foundation, 60 Victoria Street North, Kitchener, Ontario.

**B.C. ASSOCIATION OF SOCIAL WORKERS, NORTHERN BRANCH, BURSARY** — This \$500 bursary is available for a student who is:

- 1) accepted for study in a recognized School of Social Work and enrolled in a program leading to a B.S.W. or M.S.W. degree
- 2) a resident of the Northern Branch B.C.A.S.W. area (essentially regions 5, 7 and 8 of the Ministry of Human Resources)
- 3) has a need of financial assistance.

Application must be made by June 30 to Mr. Verne Dallamore, Chairperson, Bursary and Grants Committee, Northern Branch, B.C.A.S.W., P.O. Box 271, Prince George, B.C. V2L 4S2.

**THE B.C. INDIAN ARTS SOCIETY MEMORIAL BURSARY** — Two bursaries of \$150 each will be awarded annually by the B.C. Indian Arts Society in memory of those Indian Canadians who gave their lives in either World War. Native Indians or nonstatus Indians who apply, must be from the Province of British Columbia and must be planning to enter one of the established Universities or Colleges in British Columbia, or some recognized Technical School or other training centre. The award will be made by the Executive Committee of the B.C. Indian Arts Society. If no application is received from a student entering the first year of university, then the bursary may be awarded to a student enrolled in any of the senior years. Applications must be in the hands of the Secretary by August 15. Letters of application should be directed to: The Honorary Secretary, B.C. Indian Arts Society, #212-701 Esquimalt Rd., Victoria, B.C. V9A 3L5.

**CAL CALLAHAN MEMORIAL BURSARY** — The Pipe Line Contractors Association of Canada offers a bursary, or bursaries, to the total of \$1,000 per annum, to be awarded annually, to sons, daughters or legal wards of persons who derive their principal income from the Pipeline Industry and whose employers are members of the Association. The purpose of these bursaries is to give the financial assistance to students who are beginning undergraduate studies in a full program leading to a degree or certificate in any field, at a recognized University or College in Canada. Selection will be made by the Executive Committee of the Association from applicants, based upon scholastic record and financial need, provided that they otherwise qualify. Applications may be obtained from the Association's Executive Office, Suite 400, 698 Seymour Street, Vancouver, British Columbia, V6B 3K7 and must be returned by not later than September 30, accompanied by a receipt or other proof of enrollment.

**CARLING O'KEEFE BURSARIES** — There are 24 of these bursaries worth five hundred dollars each. These will be available on a basis of two to each province and the Yukon and Northwest Territories. This award program has been established by Carling O'Keefe Breweries with the cooperation of the Canadian Labour Congress, to assist the children of trade union members in their pursuit of knowledge at the post-secondary level. The bursaries are being offered to the sons and daughters of members who are in good standing in any union affiliated to or chartered by the Canadian Labour Congress. The awards are open only to Canadian students. The student must be graduating from a secondary school and intending to go on to higher education in an approved institution, i.e., a university, technological institute, community college or CEGEP, teachers' college, nursing school, etc. These are entrance bursaries; they are not renewable for those entering their second year of studies. The successful applicant will be required to submit proof of academic standing as well as registration at one of the institutions indicated above. Official application forms may be obtained from Carling O'Keefe Breweries, 79 St. Clair Avenue East, Toronto, Ontario M4T 1M6. The application form will, among other things, require a complete outline of the candidate's record in school, an essay on a subject relevant to the labour movement, and a recommendation from teacher, principal or other person in the community. The selection of successful applicants will be made by a committee appointed by the Canadian Labour Congress. In the case of a tie, the applicant's relevant need will be investigated. In the case of a tie where need is equal, the award will be equally divided. Application forms may be requested at any time. Completed application forms must be postmarked no later than March 15, 1985. Awards will be made in time for the commencement of semesters in the fall of 1985.

**THE I.W.A. LOCAL 1-80 BURSARY** — The International Woodworkers of American Local 1-80 offers a bursary in the amount of \$400 in open competition to all I.W.A. Local 1-80 members or a wife, son, or daughter of an I.W.A. Local 1-80 member, or to a person who is wholly supported by a member in good standing of Local 1-80. For the purpose of eligibility in applying for a bursary, the wife, son, or daughter of a deceased I.W.A. Local 1-80 member in good standing at the time of decease, or a member who is retired and was a member of good standing of Local 1-80 at the time of retirement, shall also be eligible. In making the award, the bursary committee will be guided by the following: the average marks obtained by the Grade XII student during the school term; indication of need; all applicants must be in the university program proceeding to any degree granting university, the B.C. Institute of Technology, or other accredited vocational or technical school to complete a course leading to establishing a career. All those desiring to compete must notify the Financial Secretary of I.W.A. Local 1-80, 351 Brae Road, Duncan, B.C. by a letter not later than June 21. The I.W.A. Local 1-80 reserves the right to withhold the bursary if no candidate makes sufficiently high standing.

**ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARY/SCHOLARSHIPS** — The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursary/scholarships are awarded on the basis of academic standing, financial need and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled or other veterans, but applications from other worthy students are also considered. The deadline date for applications is May 31. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2.

## SECTION 3

### UNDERGRADUATE BURSARIES FOR WHICH NO APPLICATION IS NECESSARY

The bursaries listed in this section are open only to students who attended the University of Victoria in the regular Winter Session specified in this Calendar. They are awarded automatically and applications from students are not required. Students in specific disciplines may wish to discuss their potential eligibility with representatives from the Faculty, School or Department.

#### General Bursaries

**BETA SIGMA PHI SORORITY ELIZABETH FORBES BURSARY** — An award of two hundred dollars (\$200) to be awarded annually to a promising and deserving woman entering third or fourth year Arts and Science or Education at the University of Victoria.

**THE BRITISH COLUMBIA TELEPHONE COMPANY BURSARY** — A bursary valued at six hundred dollars (\$600) will be awarded to a student in any undergraduate discipline who has completed first year,

and is proceeding directly to second year, at the University of Victoria. Selection will be made by the Senate Committee on Awards on the basis of financial need and reasonable academic achievement.

**THE NELS GRANEWALL BURSARY FUND** — One or more awards are made to students in any undergraduate discipline entering their graduating year who demonstrate a need for financial assistance. Preference will be given to students with family responsibilities whose permanent residence is outside of Greater Victoria. The Awards are made available through the donation of the 1984 Graduating Class to commemorate the Twenty-First Birthday of the University of Victoria.

**THE UNIVERSITY OF VICTORIA FACULTY BURSARIES** — Approximately 25 bursaries of \$500 are awarded annually on the basis of financial need and reasonable academic standing. The fund for these awards was established by donations of University of Victoria faculty members and professional librarians. Selection of the recipients will be made by the Student Financial Aid Services Office.

\* **SUTRO BANCROFT** — A bursary of six hundred dollars (\$600) will be awarded by the Senate Committee on Awards to a deserving and promising student continuing studies at the University of Victoria.

\* **THE WEBER MEMORIAL BURSARY** — Two hundred and seventy-five dollars (\$275) to be awarded annually in memory of Mr. and Mrs. E. Weber, to the most deserving student in the third year. Academic standing, citizenship and need are all to be taken into consideration.

#### **Undergraduate Awards Listed by Course or Area of Study**

##### **Biology**

**THE HOWARD ENGLISH BURSARY** — The Victoria Fish and Game Protective Association will present a bursary in the amount of three hundred dollars (\$300) annually to a student entering fourth year in Biological Sciences and who shows demonstrated interest in conservation, especially as applied to aquatic ecology (biology). Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

**THE SAMUEL SIMCO BURSARIES** — Two Samuel Simco Bursaries of four hundred dollars (\$400) each, established by the Victoria Natural History Society out of funds bequeathed for this purpose by the late Mr. Samuel Simco, will be awarded annually by the Society to students entering the third and fourth year of any undergraduate program in the field of Natural History or any year of a graduate program in the same area of study, who have good academic standing and are in financial need. If the circumstances warrant, the recipient may receive an award for two successive years. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Biology.

##### **Child Care**

\* **THE WINNIFRED M. CLARK BURSARY** — A bursary established by the Capital Region Association for the Mentally Handicapped will be awarded annually to a needy student entering the fourth year of the Child Care program specializing in the study of mental retardation. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Child Care.

##### **Creative Writing**

\* **THE PATTI BARKER BURSARY IN CREATIVE WRITING** — A bursary is awarded annually to a student in a first or second year Creative Writing course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Creative Writing.

##### **Economics**

**B.P. CANADA BURSARY** — An award of one thousand dollars (\$1000) is offered annually to a student continuing studies at the University of Victoria in either Economics or Engineering. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and the Department of Economics.

##### **Education**

\* **THE G. CLIFFORD CARL MEMORIAL BURSARY** — Six hundred dollars (\$600) awarded to a deserving student entering third, fourth, or fifth year or in the undergraduate certification program in the Faculty of Education and specializing in Biological Sciences or Outdoor Education. Selection will be made by the Senate Committee on Awards upon the recommendation of the Scholarship Committee of the Faculty of Education.

\* **THE CLEARIHUE BURSARY** — Eight hundred and fifty dollars (\$850) awarded annually to a promising and deserving student in the Faculty of Education, who shows promise and who has at least a good second class average.

\* **THE MADGE HOGARTH BURSARY FUND** — One or more bursaries totalling approximately \$1,000 are awarded annually to students entering the Professional Year, including the Post Degree Professional program, in the Faculty of Education. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

\* **THE CORALIE L. LOMAS MEMORIAL CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION BURSARY** — Two hundred and fifty dollars (\$250) is awarded annually to a student who has completed first year and is proceeding toward a B.Ed. degree with a teaching area in Physical Education. Applicants should demonstrate a need for assistance, and show evidence of a particular interest and aptitude in Physical Education plus general proficiency in academic work. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Greater Victoria Branch of C.A.H.P.E.R.

\* **THE TAYLOR EDUCATION BURSARIES** — Annual awards will be made to fourth year students showing outstanding ability and interest in Education and needing financial assistance. If no qualifying students are enrolled in fourth year, the bursaries may be awarded the next year or be presented to qualified students of the fifth year, at the discretion of the Faculty of Education. The award commemorates the interest in Education by the Taylor family of Victoria.

##### **Engineering**

**B.P. CANADA BURSARY** — An award of one thousand dollars (\$1000) is offered annually to a student continuing studies at the University of Victoria in either Economics or Engineering. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and the Department of Economics.

##### **French**

\* **THE MAJOR KEITH W.A. MACDOUGALL MEMORIAL BURSARY** — A bursary of \$250 will be awarded annually to a deserving undergraduate student in need of assistance who is majoring in French and who is interested in continuing studies in the field. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of French Language and Literature.

##### **History**

\* **CANADIAN DAUGHTERS' LEAGUE, ASSEMBLY NO. 5 — GERTRUDE M. RALSTON MEMORIAL BURSARY** — Two hundred and seventy-five (\$275) awarded to a deserving student, preferably one in Canadian history.

##### **Italian**

**THE ITALIAN ASSISTANCE CENTRE BURSARY** — Two hundred and fifty dollars (\$250) to be granted annually to two needy students who have shown proficiency in the Italian language and who will be returning to the University of Victoria for further studies in Italian. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

##### **Law**

\* **THE LIFE UNDERWRITERS ASSOCIATION OF CANADA EDUCATIONAL FOUNDATION BURSARY IN LAW** — This bursary is awarded annually to a student in the Faculty of Law who demonstrates financial need. The recipient will be chosen by the Senate Committee on Awards on the recommendation of the Faculty of Law.

**THE MICKEY MORAN MEMORIAL BURSARY** — A bursary of \$350 is awarded annually on the basis of financial need and the student's contribution to and achievement in courses related to litigation and criminal law. The award, sponsored by the Kootenay Bar Association, honours the late Mickey Moran, Q.C. for his achievements in the practice of criminal law. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **THE JEAN MARIE SHERWIN BURSARY IN LAW** — A bursary of \$500 is awarded to a student in the first or second year of the Law program who has demonstrated superior ability, enthusiasm and aptitude in the study of Law and is in need of financial assistance to continue his studies. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE HUGH STEPHEN BURSARY** — A bursary of \$500, established by Mr. Hugh Stephen, is awarded annually to a student in the Faculty of Law who needs financial assistance to complete his or her legal studies. An applicant's contribution to the activities of the Faculty and academic record may be considered when applications for the bursary are evaluated. The selection of the recipient of the bursary will be made by the

Senate Committee on Awards upon the recommendation of the Faculty of Law.

#### Music

\* **THE ST. JUDE BURSARY** — One or more awards are made annually to student(s) pursuing a Bachelor of Music degree with a performance major in voice. The student(s) must demonstrate financial need and display vocal and academic excellence. The recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music's Performance faculty.

#### Nursing

**BRITISH COLUMBIA LUNG ASSOCIATION — CHRISTMAS SEAL SOCIETY BURSARY** — A bursary of five hundred dollars (\$500) will be awarded annually by the British Columbia Lung Association - Christmas Seal Society to a needy student entering the final year in the Nursing Program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

\* **THE LILY HARRIS MEMORIAL BURSARY** — A bursary of \$500 has been established in memory of Miss Harris who was a teacher of nursing in China for many years. The award will be made annually to a needy female student in the School of Nursing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

\* **MAYO SINGH-JOGINDER KOUR MAYO SAROYA MEMORIAL BURSARY** — A bursary of \$250 will be awarded annually to a needy student in the School of Nursing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

**THE HAROLD AND MYRA THOMPSON MEMORIAL BURSARIES** — Two bursaries of \$450 will be awarded annually to needy students achieving an acceptable standing in Nursing 301 and 302, and demonstrating an interest in chronic and/or long term nursing. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

#### Pacific and Oriental Studies

**THE CHINA EXCHANGE BURSARY** — In order to encourage student exchanges between the University of Victoria and East China Normal University, a bursary of \$500 will be awarded to a student from the University of Victoria attending the East China Normal University, or to a student from the East China Normal University attending the University of Victoria. Should unforeseen circumstances arise whereby no exchange is possible in a given year, the bursary may be awarded to a University of Victoria student who is enrolled in a program within the Centre for Pacific and Oriental Studies and who has demonstrated financial need, reasonable academic standing and an interest in the study of China. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Centre for Pacific and Oriental Studies.

#### Political Science

\* **THE SCOTT WALLACE BURSARY** — A bursary of four hundred dollars (\$400) will be awarded annually to a needy third year student majoring in Political Science who has demonstrated a sense of community responsibility and awareness of an obligation to serve society through active membership in various campus or community organizations. Although applications are not required for this bursary, students

who consider themselves eligible for it are invited to communicate with the Chairman or Secretary of the Department. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Political Science.

#### Social Work

\* **THE ARTHUR C. ABRAHAMSON MEMORIAL BURSARIES** — One bursary of \$250 will be awarded to a student in the Post Baccalaureate Bachelor of Social Work Program. The intent of the bursary is to assist students who encounter severe financial difficulties in returning to full or part time studies. The bursary is awarded in memory of Arthur C. (Art) Abrahamson who, as a consultant to the School of Social Work in its early years, was a source of immense help to students and faculty. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

**THE JACK BARRACLOUGH BURSARY** — This bursary has been established by the Sara Spencer Foundation to honour devoted volunteer service to the Victoria Community by Jack Barraclough. The bursary will be made annually to a student entering fourth year in the School of Social Work, who is in financial need and who has shown evidence of skillful and innovative social work practice in the third year practicum. The selection will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

\* **THE JEAN MARIE SHERWIN BURSARY** — A bursary of five hundred dollars (\$500) is awarded to the student in the School of Social Work who has completed third year, is proceeding to fourth year and whose need for financial aid is such that the usual sources of assistance are not sufficient. Preference will be given to students with family responsibilities and whose permanent residence is outside Greater Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

**THE SARA SPENCER FOUNDATION BURSARIES** — Four bursaries valued at tuition fees for 15 units each, will be awarded to third year students in the School of Social Work whose need for financial aid is such that the usual sources of assistance will not suffice. Preference will be given to students with family responsibilities and students whose permanent residency is outside Greater Victoria. Selection will be made by the Senate Committee on Awards in consultation with members of the School of Social Work.

#### Theatre

\* **THE FINLAYSON BURSARY** — A bursary of \$600, made available by Mr. Albert Winkel of Victoria, is offered to a second or third year student in the Department of Theatre who can show evidence of financial need and outstanding ability in the area of technical theatre and who is continuing his studies in the Department. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

#### Visual Arts

**VICTORIA CENTRAL LIONS CLUB — MILLARD H. MOONEY FINE ARTS BURSARY** — Three hundred dollars (\$300) awarded annually to a worthy and talented student registered in the Department of Visual Arts in the Faculty of Fine Arts in first, second or third year on condition that the student return to the University of Victoria the following year.

\* Administered by the University of Victoria Foundation.

## SECTION 4

### UNIVERSITY BURSARIES REQUIRING APPLICATION

#### A. UNDERGRADUATE BURSARIES FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA

The bursaries listed in this section are open only to students who attended the University of Victoria in the Winter Session specified in this calendar. Application for these bursaries must be made before April 30, unless otherwise indicated, on forms available from the Student Financial Aid Services Office, Second Floor, University Centre. Names of recipients will be announced in August.

**THE BIRKS FAMILY FOUNDATION** — The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian Universities for the creation of the Birks Family Foundation Bursaries. The Bursaries are awarded by the Foundation on the recommendation of the University Scholarship Committee and are not restricted to the faculty or year and may be renewed. The number and amount of such awards may vary annually, depending upon the funds available for this purpose from the foundation.

**THE DANIEL JACOB MEMORIAL BURSARY** — Through the generosity of the Alma Mater Society, a special fund has been established to commemorate Daniel Jacob, a student who died accidentally in Novem-

ber, 1981. The purpose of the fund is to assist financially students who may otherwise be forced to postpone or discontinue their academic career. All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. If the circumstances warrant, bursaries may be granted for more than one year. Students may inquire about this fund at the Student Financial Aid Services Office.

**\* THE JUBILEE YEAR GRADUATING CLASS BURSARY FUND** — A bursary valued at four hundred dollars (\$400) will be awarded annually to a student enrolling in the graduating year and carrying a full course load. Students with an academic standing of second class or better will be considered if they demonstrate genuine need. The award is made available through the generous donations of graduating classes at the University. The 1978 Graduating Class has made a significant contribution to commemorate 75 years of higher education in Victoria.

**THE CHARLES CHAN KENT GOLDEN WEDDING ANNIVERSARY BURSARY** — A bursary of \$450, the gift of The Charles Chan Kent Foundation, is offered to students who are proceeding to a degree in any field, having successfully completed at least one year at the University of Victoria and in need of financial assistance. The bursary will be awarded to a student of Chinese extraction.

**\* THE DR. DOUGLAS H. TAYLOR LEE MEMORIAL BURSARY** — Five hundred and twenty-five dollars (\$525) awarded annually to a second or third year student planning a career in medicine with overriding preference given to a female student with first class honours standing. Selection of the recipient will be made by the Senate Committee on Awards, and the applicant must be studying in the general area of the basic medical sciences, on a premedicine program.

**PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY** — A bursary of six hundred dollars (\$600) is offered by Pacific Coast Fishermen's Mutual Marine Insurance Company to sons, daughters and legal wards of past and present members of this Company. Applicants must apply on the University Scholarship Form. The application must be accompanied by a letter describing the family fishing history in general terms and detailing types of fishing and boat names. Selection will be made by the Committee on Awards in consultation with officials of the Company.

**VANCOUVER FOUNDATION** — Educational aid is offered through the Vancouver Foundation to a limited number of deserving students at institutions of higher learning in British Columbia. Applications will be judged on the basis of (a) academic standing; (b) contributions to the university, school or community; (c) financial need which cannot be satisfied through the usual avenues. Students who live in communities where MacMillan Bloedel has operations, as well as students in Music, Nursing, Health Information Sciences and handicapped students, are invited to apply for assistance from Funds specifically designated for them. Further information may be obtained by enquiring at the Financial Aid Office of the University of Victoria. Inquiries must be made before September 30.

**THE VICTORIA MEDICAL SOCIETY BURSARY** — One thousand dollars (\$1,000) to be awarded annually to a second year student of outstanding merit and promise, who has a high general academic standing and qualities of character indicating worthiness to hold the bursary. Selection of the student will be made by the Senate Committee on Awards, and preference will be given to a needy student studying in the general area of the basic medical sciences, on a premedicine program.

**THE VICTORIA REAL ESTATE BOARD AWARDS** — \$750 awarded annually as a scholarship and \$750 awarded annually as a bursary, to students registered at the University of Victoria who are dependents of members of the Victoria Real Estate Board. Students registered at the University of Victoria who find that they must transfer to another university in order to complete their chosen program are eligible to apply for these awards. Selection of the recipients will be made by the Senate Committee on Awards.

**VICTORIA SOCIETY OF REAL ESTATE SALESMEN'S FOUNDATION BURSARY** — A bursary of five hundred dollars (\$500) has been established to recognize 1981 as the International Year of the Handicapped. The bursary will be allocated to a handicapped student within the immediate family of a member of the Victoria Real Estate Board. In the absence of a qualified candidate in the above category, the bursary will be allocated to a handicapped student from within the county of Victoria. In the absence of a qualified candidate in either of the above two categories, the bursary will be allocated to a handicapped student from the Province of British Columbia. Undergraduate students must apply by April 30th and entering students must apply by June 30. Selection will be made by the Senate Committee on Awards.

**\* THE CHRISTOPHER E. WILKS MEMORIAL BURSARY FUND** — This fund was established by Mr. Harry Wilks in memory of his beloved son, Christopher, who died accidentally in December 1974. The purpose of the fund is to financially assist deserving students to pursue an academic career who otherwise may be forced to postpone or discontinue their studies. All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. Should circumstances arise where more students apply for assistance than available funds will cover, the decision as to which students will receive assistance will be governed by the areas of study, with preference given to studies in the Humanities. If their financial circumstances continue to warrant such assistance, bursaries may be granted to the same students in subsequent years while attending the University of Victoria.

**THE FRANK WING MEMORIAL BURSARIES** — Four awards of \$1,000 each will be given annually to students of Native Indian ancestry who demonstrate financial need. The awards, donated by Caroline S. Chan, are available to students entering or continuing studies at the University of Victoria. Selection will be made by the Senate Committee on Awards. Band affiliation must be documented. Application must be made before September 30.

#### **B. UNDERGRADUATE BURSARIES ADMINISTERED BY THE UNIVERSITY OF BRITISH COLUMBIA**

Application forms for the following bursaries may be obtained from The Scholarship and Bursary Committee, the University of British Columbia, 2075 Wesbrook Place, Vancouver, B.C. V6T 1W5, and must be returned by July 1, unless otherwise indicated. Students competing for bursaries on the basis of attendance at the University of Victoria must forward an official transcript of their academic record preferably accompanying the application. Since some changes may have been made after this calendar went to press, you are urged to refer to the U.B.C. Calendar.

**BRITISH COLUMBIA FOREST PRODUCTS LIMITED BURSARIES** — Bursaries to a total of \$10,000 are offered by British Columbia Forest Products Limited to qualified legal dependents of employees who, by June 30th of the year in which the award is made, have or will have served with the Company for at least one year. The awards are open to students beginning or continuing studies in the fall in a full undergraduate program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. Winners of the Company's Entrance Scholarships will not be permitted to simultaneously hold a British Columbia Forest Products Limited Bursary. Applications must contain the necessary detail of family service with the Company.

**THE GLADYS LEDINGHAM AWARD** — A cash award of \$100, gift of the Victoria and District Parent-Teacher Council, is offered to students who are enrolled at the University of Victoria, the University of British Columbia or Simon Fraser University. It will be awarded to a student selected by the School of Librarianship, the University of British Columbia, who has been accepted for the Master of Library Science degree. The winner will be selected on the basis of need and scholastic ability.

**THE GRAND LODGE MASONIC BURSARIES** — The Grand Lodge of Ancient Free and Accepted Masons of British Columbia annually offers bursaries in the range of \$200 and \$600 each with a preference to the sons, daughters and legal wards of active members of Masonic Lodges in British Columbia or of deceased workers who at the time of their death were active members of those Lodges. The purpose of these bursaries is to give assistance to students who, without financial aid, would find it impossible or difficult to continue their education at the postsecondary level. Selection of winners will be made by the University of British Columbia in conjunction with the Board of Trustees from applicants with satisfactory academic standing who are beginning or continuing undergraduate studies at any British Columbia University, the British Columbia Institute of Technology or a British Columbia Regional College, leading to a degree or certificate in any field. First preference will be given to applicants entering the University or College from Grade XII, and then to undergraduates in the further years of study. In order to be considered, a candidate must obtain from the University Awards Committee, University of British Columbia, a bursary application form. The completed application must be received by the University not later than July 1. The application must be accompanied by a letter from the Secretary of the Lodge indicating the applicant's association with the Lodge. Since a special committee considers applications for these bursaries, those who wish to apply for other bursaries should

\* Administered by the University of Victoria Foundation.

submit a separate application form for them. Each application must be accompanied by a transcript of the student's academic record at the academic institution most recently attended. If the Grade XII record is not immediately available it must be forwarded at the first opportunity.

**THE VICTORIA HOME ECONOMICS AND DIETETIC ASSOCIATION BURSARY** — This bursary of \$325, the gift of the Victoria Home Economics and Dietetic Association, will be awarded annually to a woman student whose home is in Victoria or some centre on Vancouver Island, and who is entering the second, third or fourth year in the Department of Home Economics at the University of British Columbia. The award will be made on the basis of financial need to a student of good academic standing.

#### C. UNDERGRADUATE BURSARIES ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

Application forms for the following bursaries are obtained by writing directly to the donor at the address provided in the terms of reference for the bursary. Deadlines for submitting completed application forms are also provided.

**THE INDEPENDENT ORDER OF FORESTERS HIGH COURT OF BRITISH COLUMBIA AND ALASKA** — A series of bursaries, to a maximum of \$500 each are offered to members in good standing for not less than two years, or the dependent thereof, of the Independent Order of Foresters. Applicants must reside in the jurisdiction of the High Court of British Columbia and Alaska (Province of British Columbia; State of Alaska).

Requests for application forms must be made to:

Mr. G.A. Francey  
High Secretary  
High Court of British Columbia and Alaska  
1902 London Street  
New Westminster, B.C.  
V3M 3E5

Completed application forms must be returned to the High Secretary no later than August 31 of the current bursary year.

**THE CANADIAN ARMY WELFARE FUND BURSARY PROGRAM** — The Canadian Army Welfare Fund has established an Educational Bursary Program to encourage and assist dependents of former members of the Canadian Army (Regular) or Canadian Army Special Forces (Korea), who served between October 1, 1946 and January 31, 1968. Selection of recipients is based on financial need, scholastic ability, and length of service in the Canadian Army.

Bursaries are granted for full time tuition at a Canadian university, college or at a community college or technical institute requiring not less than two years, leading to a certificate, diploma or baccalaureate degree. No assistance is provided for graduate studies. Applicants must not be older than 25 years of age, single, and able to provide details of their parents' Army service, i.e. rank, service number and length of service. Applications must be received by the bursary committee before July 1 in the year of application to be eligible for consideration. For applications write to the Manager, Bursary Program, Canadian Army Welfare Fund, P.O. Box 719, Postal Station B, Ottawa, Ontario K1P 5P8.

**THE INDEPENDENT ORDER OF ODD FELLOWS BURSARIES** — Six bursaries of three hundred dollars (\$300) each, provided by the Grand Lodge of British Columbia, I.O.O.F., the Grand Encampment, and the Rebekah Assembly are available annually for students in any year of any faculty. The awards will be made by a joint committee consisting of two representatives from each of the Grand Bodies. All applicants must have direct connection with one or more branches of the Order, through parents, grandparents, or close relatives. Special consideration will be given to applicants with financial need. Full details of the awards and application forms may be obtained from the Secretary of any Odd Fellows Lodge or Rebekah Lodge by May 1 so that they may be received by the Committee not later than May 15. All applications must be sponsored by an Odd Fellows Lodge, Rebekah Lodge, or Encampment. The above Committee will award annually an additional bursary of \$200 to a student in a recognized theological college of university

status. This bursary will be known as the Dr. A.M. Sanford Memorial Bursary. Applicants will follow the same procedures as for all other I.O.O.F. bursaries, except the family connections with the I.O.O.F. will not be required.

**LEONARD FOUNDATION AWARDS** — The Leonard Foundation allocates each year a number of awards for which students at the University of Victoria are eligible. The awards are primarily intended to assist children of the clergy to attend University. Application forms, available from the Student Financial Aid Services Office, should be forwarded to the Honorary Secretary of the Foundation, Canada Permanent Trust Co., 320 Bay Street, Toronto, not later than March 31 of each year. Whenever possible these applications should be filed in February. The awards are made at the annual meeting of the General Committee on the fourth Friday in May.

**PROVINCE OF BRITISH COLUMBIA INTERNATIONAL YEAR OF DISABLED PERSONS BURSARIES** — In recognition of the International Year of Disabled Persons, these bursaries were created to financially assist students with disabilities and will be awarded on merit and the basis of financial need. Several annual bursaries of \$500 each will be available. To be eligible, the disabled student must be a resident of B.C., a Canadian Citizen or Landed Immigrant. Application forms can be obtained by contacting the Grant Coordinator, B.C. Paraplegic Foundation, 780 S.W. Marine Drive, Vancouver, B.C. V6P 5Y7.

**THE ROBINSON AND BUCKLAND MEMORIAL BURSARY** — The Robinson and Buckland Memorial Bursary is sponsored by the Canadian National Institute for the Blind. Captain Merrill C. Robinson, blinded since 1917, was the Director of the Canadian National Institute for the Blind, B.C. - Yukon Division, from 1929 to 1964. His contribution towards the development of CNIB and services to the blind of B.C. - Yukon will long be remembered. Donald Channing Buckland, a graduate and distinguished faculty member of the University of British Columbia, was himself overtaken by blindness a few years before his death. Bursaries are issued a maximum of two times to applicants enrolled in a four year program and once to those enrolled in a two year program. The student must be registered with the CNIB. Application forms are available from the CNIB, and are to be submitted no later than August 15th, to the Executive Director, CNIB, 350 East 36th Avenue, Vancouver, B.C. V5W 1C6.

**THE ROYAL ARCH BURSARIES** — Several bursaries, up to \$500 each, have been established by the Royal Arch Masonic Order to give assistance to children of members in good standing, or of deceased members, of Chapters of the Order of British Columbia and Yukon Territory, who need assistance to continue their education by attendance at a recognized University, the B.C. Institute of Technology, a regional or community college in B.C., or any other B.C. technical or vocational school, including approximately equal proportions to students entering their first year, those entering their second year, and those entering higher years. Applications must be made on the form to be obtained from the office of the Grand Chapter of Royal Arch Masons of British Columbia and the Yukon, Room 104, West 8th Avenue, Vancouver, B.C. V6H 1C9, or from secretaries of the Chapters in British Columbia and the Yukon, and must be completed and returned to the Grand Chapter office by July 15. The application must indicate clearly (a) the applicant's relationship to a member of the Royal Arch Masonic Chapter in B.C. or the Yukon, giving the name of the chapter and attaching a letter from the secretary of the chapter confirming this fact, and (b) the applicant's financial circumstances and that of his or her immediate family, including information as to the parent's income. Qualifying candidates will be required to have good academic standing. A transcript of the academic record must be submitted. However, consideration will be based primarily on the need of the applicant and secondarily on relative academic achievement.

**ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARY/SCHOLARSHIPS** — The Legion (Pacific Command) offers annually a number of awards for students proceeding from high school to university, and some awards for students entering second, third and fourth year. These bursary/scholarships are awarded on the basis of academic standing, financial need, and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled or other veterans, but applications from other worthy students are also considered. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2. The deadline date for application is May 31.

## SECTION 5

### LOANS AND WORK-STUDY

#### A. LOANS FOR ELIGIBLE STUDENTS

**PROVINCE OF BRITISH COLUMBIA LOANS** — The Government of the Province of British Columbia provides loans to assist students who are residents of this province to commence or continue an acceptable program, such as a first degree at the undergraduate or equivalent level, while registered in at least 80% of a regular full-time program. This is considered to be 12 units during the Winter Session (September to April) and 6 units during the Summer (May to August).

The Provincial Loan Plan is administered in conjunction with the Canada Student Loan Plan and the two plans are known as The British Columbia Student Assistance Program (B.C.S.A.P.). Similar plans are in effect in other Canadian Provinces for students who are not considered to be residents of British Columbia.

The purpose of B.C.S.A.P. is to assist students whose resources are insufficient to provide the cost of full-time (80%) studies. Assistance under the program is awarded when the financial resources available to students from parents, summer work or other sources are insufficient to meet estimated educational costs. Application forms for B.C.S.A.P. are available from the Student Financial Aid Services Office after April 1st, and should be returned by June 30th for the Winter and by March 15th for the Summer. Students who have not submitted their loan applications by September 1 can not expect to have their loans processed in time to meet fee payment deadlines and will not be exempt from paying any penalty charged for late payment or to be reinstated after having their registration cancelled.

**CANADA STUDENT LOANS PLAN** — The Government of Canada introduced this plan in 1964 to assist students who would be unable to pursue full time (60%) postsecondary studies without loan assistance. Currently the maximum amount of loan funds available is \$105 per week of study. Thus, a student studying for one 16 week semester may obtain a maximum loan of \$1680, while a student studying 40 weeks on a P.D.P.P. course may obtain a loan of \$4200.

No payments are made while the borrower is a full time (60%) student nor for six months thereafter. Interest during this period is paid to the bank by the Federal Government on behalf of the student. Payments commence six months after the borrower ceases to be a full time (60%) student. Borrowers are required to repay principal and interest by regular monthly instalments.

In no case may the repayment period exceed 9½ years from the date upon which you become liable to repay your debt.

Need for loan assistance is determined by Provincial Loan Authorities in accordance with administrative criteria established for use throughout Canada. In B.C., that authority is the British Columbia Student Loan Committee, Student Services Branch, #308-617 Government Street, Victoria, B.C. V8V 2M4.

A parental contribution table is an integral part of the criteria and is applied in all cases where the student has not established financial independence as defined under the plan. Students are expected to save a substantial amount of any income from summer employment. A student contribution table is used when net income from the summer exceeds \$2910.

As noted above, the Canada Student Loan Plan is administered in conjunction with the Province of British Columbia Loan Plan, known collectively as the British Columbia Student Assistance Program (B.C.S.A.P.). Application forms for B.C.S.A.P. are available from the Student Financial Aid Services Office after April 1, and should be returned by June 30 for the Winter and by March 1 for the Summer.

**B.C. YOUTH FOUNDATION LOANS** — Students who do not qualify for Canada Student Loans because of high family income can inquire at the Student Financial Aid Services Office to determine their eligibility for assistance from this foundation. Loans are available to young persons up to 30 years of age who are residents of B.C. and who are able to obtain guarantors for the loans satisfactory to the Board of Directors of the B.C. Youth Foundation.

**P.E.O. SISTERHOOD EDUCATION LOAN FUND** — Women students in any year of a University course who do not qualify for Canada Student Loans, or who may find that their loan is not adequate for all their costs, may request a loan from this philanthropic organization at any time. Since the fund is administered from the U.S., prospective applicants should be prepared to wait up to three months before obtaining money.

Fourth year and graduate students may be granted the maximum amount of loan, which is \$2,000, in one year. Undergraduates may apply

for and be granted the maximum loan of \$2,000 for two or more years of study but may draw only \$1,000 of the loan in one academic year. First year students must complete one term's work satisfactorily before making application. A loan may be considered for summer school.

Loans are made for periods of up to five years. Interest at the rate of 6% is to be paid annually, and the student is expected to begin repayment of the principal as soon as she is out of University and employed.

Students interested in finding out more about this loan fund are advised to make appointments with an adviser from the Student Financial Aid Services staff.

**THE UNIVERSITY OF VICTORIA EMERGENCY LOAN FUND** — The University of Victoria, through the Student Financial Aid Services Office, has a loan fund to assist students requiring financial assistance in emergency situations. The loans are interest free and therefore must be repaid as soon as possible. This loan fund is not designed to meet general education costs faced by all students but rather specific emergency items such as expenses involved in travelling to visit sick relatives. As a general rule adult guarantors are required to cosign the loan application, but this may be waived if the student leaves a postdated cheque for the full amount as security, or if the student is waiting for a government grant cheque which covers the loan. Students applying for an emergency loan must be interviewed by an adviser from the Student Financial Aid Services staff and must sign a loan agreement.

Contributions to the University loan fund have been made through the generosity of the following donors:

|   |          |
|---|----------|
| The University of Victoria President's Fund               | \$17,500 |
| The Peter Cubis Memorial Fund (Donated by A.M.S.)         | 9,000    |
| The Alma Mater Society                                    | 5,000    |
| The University Challenge Team Loan Fund                   | 3,500    |
| The Milva Reid Revolving Loan Fund                        | 500      |
| The University Extension Association Centennial Loan Fund | 400      |
| The John C. Lort Revolving Loan Fund                      | 250      |

The donors and the University share the hope that students who have had help from this fund will themselves help others as their means may allow, either by contributing to one of the above funds, or by establishing similar funds.

#### B. WORK STUDY (This program is currently under "review".)

The Work Study Program is a component of the British Columbia Student Assistance Program (B.C.S.A.P.). It is designed to provide on campus work experience for students requiring financial assistance. Students at the University of Victoria demonstrating financial need and British Columbia residency, under the terms specified by B.C.S.A.P., will be considered for the Work Study Program.

The objectives of the program are to:

- (i) Aid students in reducing indebtedness incurred while pursuing post-secondary studies.
- (ii) Assist students in meeting additional costs that are not usually covered by the loan component of B.C.S.A.P.
- (iii) Assist in meeting shortfall of funds caused by the absence of expected students savings or expected parental/family contributions.
- (iv) Provide students with career related job experiences wherever possible.

The number of positions available to the University of Victoria are limited and therefore there is no guarantee of job placement for any student. Jobs under the program are administered according to internal policies and procedures established by the University of Victoria and may differ from policies established at other institutions.

Students wishing to be considered for a Work Study position must begin by completing an application for B.C.S.A.P. and submitting the form to the Student Financial Aid Services Office, Second Floor, University Centre. Financial need will be assessed and a loan award may be recommended. The money earned from a Work Study job may then be used either to reduce loan indebtedness, or to supplement the loan where additional need is demonstrated.

At the University of Victoria, a prospective Work Study applicant who has submitted a B.C.S.A.P. application will request an interview with a staff member of the Student Financial Aid Services Office. If the student is eligible and is prepared to fulfill the obligations incurred with the program, the applicant will be sent to the Canada Employment Centre on Campus for appropriate placement. The final decision on hiring will be made by the project supervisor.

It is recommended that prospective applicants wait until they have worked out their timetable for the year before applying for a Work Study position.

# SCHOLARSHIPS, MEDALS AND PRIZES

## GENERAL REGULATIONS

All inquiries concerning material in this section should be directed as follows:

- Undergraduate Entrance Awards: Administrative Registrar
- Undergraduate Awards: Administrative Registrar
- Graduate Awards: Faculty of Graduate Studies

### Undergraduate Awards:

All undergraduate awards adjudicated by the University of Victoria are administered by the Senate Committee on Awards.

To be eligible for a scholarship offered by the University, an undergraduate student must take a full year's program. This is defined as 15 units of credit work of which 13½ units must be graded. The President's Scholarship for Part Time Undergraduate Students is the exception to this requirement. The standing of students who are registered in more than 15 units of courses will be determined on the basis of the grades of the best 15 units of courses. Physically handicapped students whose course load has been reduced on medical advice to fewer than 15 units are eligible to compete for awards administered by the University of Victoria on the basis of reduced course load. Applications should be made to the Administrative Registrar.

Except where terms and conditions of an undergraduate award specifically state otherwise, award winners must return to the University of Victoria in the next regular session and must enroll in a full program.

Where applications are necessary for undergraduate awards, the deadline for submission of application forms is April 30, unless otherwise stated.

### Graduate Awards:

All graduate awards are administered by the Faculty of Graduate Studies. To be eligible for graduate awards offered by the University, a graduate student must satisfy the terms and conditions established for individual awards by the Faculty of Graduate Studies.

Where applications are necessary for graduate awards, students should contact the Faculty of Graduate Studies to determine the relevant deadline dates.

### Regulations Governing All Awards:

The University reserves the right to limit the amount of money awarded to any student and, if necessary, to reassign awards to other students by reversion.

Except where the donor directs otherwise, the proceeds of awards issued by or through the University will be applied towards the total tuition fees for the academic year. If the amount of the award or awards exceeds the unpaid fees for the academic year, the excess balance will be paid to the student.

Other awards, such as medals or book prizes, if not presented directly by the donors or their agents, will be forwarded to the winners upon receipt.

Any award may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of the award; withdrawal from the University; withdrawal of the award by the donor.

## DEFINITIONS

- (a) An award is any scholarship, fellowship, bursary, medal or prize.
- (b) A scholarship or fellowship is a monetary award based on academic merit or excellence in the area to which the award pertains.
- (c) A medal is an award based on academic merit or excellence in the area to which the award pertains.
- (d) A prize is an award in the form of cash or of some tangible object such as a book, based on academic merit or excellence in the area to which the award pertains.

NOTE: Except where noted in the terms of reference, none of these above awards requires that the student discharge any duties for the University or any other agency. This applies to awards administered by the University of Victoria only.

## LIST OF AWARDS

The sections of the Calendar which follow show awards grouped under certain headings:

### Section 1: Entrance awards:

- A. Administered by University of Victoria. (See this page.)
- B. Administered by The University of British Columbia. (See page 253.)
- C. Administered by the Association of Universities and Colleges of Canada. (See page 254.)
- D. Administered by other institutions and organizations. (See page 255.)

### Section 2: Government of British Columbia Awards. See page 257.

### Section 3: Undergraduate awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See page 258.

### Section 4: Undergraduate awards for which application must be made to the Senate Committee on Awards. See page 269.

### Section 5: Undergraduate awards administered by the University of British Columbia and other institutions and organizations. See page 270.

### Section 6: Awards for graduate study. See page 273.

## SECTION 1

### ENTRANCE AWARDS

**The following scholarships are open to students who have completed University Entrance and are proceeding to the University of Victoria directly from Grade XII or a regional college in British Columbia.**

#### A. ENTRANCE AWARDS ADMINISTERED BY UNIVERSITY OF VICTORIA

Application forms for the following areas may be obtained from the Office of the Administrative Registrar, University of Victoria, Victoria, B.C., and must be returned by June 30, unless otherwise indicated. Names of winners will be released early in September.

**PRESIDENT'S ENTRANCE SCHOLARSHIPS** — Ten scholarships of one thousand dollars (\$1000) each for British Columbia secondary school graduates who are entering the University of Victoria in September. Awards will be based upon very high standing in matriculation record of students and the British Columbia Scholarship Examinations. Recipients will be selected by the Committee on Awards and awards will be announced after the release of the examination results in the summer.

**PRESIDENT'S REGIONAL ENTRANCE SCHOLARSHIPS** — Four

scholarships of six hundred and fifty dollars (\$650) are awarded annually within each college region in British Columbia to students with high academic standing and broad interests who are entering the University of Victoria directly from British Columbia secondary schools or regional colleges. Normally one of the four scholarships in a region is reserved for a college student. The assessment of the academic standing of the secondary school students will be based on both secondary school course and Provincial Scholarship Examination results.

The assessment of regional college students will be based on college course results. A student may become a candidate for a scholarship either by applying in writing directly to the University of Victoria Senate Committee on Awards or by nomination solicited annually by the University from the principals of the secondary schools and community colleges in British Columbia. Recipients will be selected by the Senate Committee on Awards, and they will be announced after the release of the Provincial Scholarship Examination results in the summer.

In order to increase the identification of each scholarship with a particular college region and to honour a person of regional historical significance, the scholarships are named after men and women who contributed to the advancement and development of the region and its people and who were highly respected members of their community. The following list identifies the scholarships for each region.

## Camosun College:

- The Lim Li Bang Memorial Scholarship
- The Martin Grainger Memorial Scholarship
- The Sophie Theresa Pemberton Memorial Scholarship
- The Sister May Providence Memorial Scholarship

## Capilano College:

- The Cates Family Memorial Scholarship
- The William and Cathrine Keene Memorial Scholarship
- The Andy Paull Memorial Scholarship
- The Alfred Wallace Memorial Scholarship

## Cariboo College:

- The Joseph and Judge Henry Castillou Memorial Scholarship
- The Louis Le Bourdais Memorial Scholarship
- The Norman Lee Memorial Scholarship
- The Doctor Masajiro Miyazaki Memorial Scholarship

## College of New Caledonia:

- The Chief Kwah Memorial Scholarship
- The John McInnis Memorial Scholarship
- The Peter Skene Ogden Memorial Scholarship
- The Dr. Ross Stone Memorial Scholarship

## Douglas College:

- The Arthur Wellesley Gray Memorial Scholarship
- The Thomas Haney Memorial Scholarship
- The Judge Frederic William Howay Memorial Scholarship
- The Ernie Winch Memorial Scholarship

## East Kootenay College:

- The Honourable Frederick Aylmer Memorial Scholarship
- The Feuz Memorial Scholarship
- The Chief Isadore Memorial Scholarship
- The Tom Uphill Memorial Scholarship

## Fraser Valley College:

- The Captain Lewis Nunn Agassiz Memorial Scholarship
- The John Alexander Catherwood Memorial Scholarship
- The Allen Casey Wells Memorial Scholarship
- The York Family Memorial Scholarship

## Kwantlen College:

- The Thomas Kidd Memorial Scholarship
- The Alexander Dougal Matheson Memorial Scholarship
- The Steves Family Memorial Scholarship
- The William Templeton Memorial Scholarship

## Malaspina College:

- The Mark Bate Memorial Scholarship
- The John Newell Evans Memorial Scholarship
- The Major Charles Ferguson Hoey Memorial Scholarship
- The Mayo Singh Memorial Scholarship

## Northern Lights College:

- The Miss E.M. Claxton Memorial Scholarship
- The Doctor George Dawson Memorial Scholarship
- The Grant McConachic Memorial Scholarship
- The Hector Tremblay Memorial Scholarship

## Northern Island College:

- The Eric Duncan Memorial Scholarship
- The Roderick Haig-Brown Memorial Scholarship
- The Chief Mungo Martin Memorial Scholarship
- The Chief Pasala Memorial Scholarship

## Northwest College:

- The Dr. John Antle Memorial Scholarship
- The Jean Jacques Caux "Cataline" Memorial Scholarship
- The Margaret Hankin Loring Memorial Scholarship
- The Alice Tomlinson Memorial Scholarship

## Okanagan College:

- The Susan Allison Memorial Scholarship
- The Father Charles Pandosy Memorial Scholarship
- The Francis Xavier Richter Memorial Scholarship
- The Honourable Forbes George Vernon Memorial Scholarship

## Selkirk College:

- The Randolph William Diamond Memorial Scholarship
- The H.W. (Bert) Herridge Memorial Scholarship
- The John Fred Hume Memorial Scholarship
- The Reverend Henry Irwin "Father Pat" Memorial Scholarship

## Vancouver Community College:

- The Won Alexander Cumyow Memorial Scholarship
- The David Oppenheimer Memorial Scholarship

The Tsutae and Hanako Sato Memorial Scholarship  
The Mildred Valley Thornton Memorial Scholarship

\* THE L. AND G. BUTLER SCHOLARSHIPS FOR THE DISABLED — Two awards of five hundred dollars (\$500) are made annually on the basis of academic performance to disabled students attending the University of Victoria. The recipients may be newly admitted or returning students. Students interested in this scholarship should refer to the paragraph on undergraduate scholarship eligibility in the General Regulations, above. Application forms may be obtained from the Office of the Administrative Registrar and must be submitted by April 30. Selection of the recipients will be made by the Senate Committee on Awards.

CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS — The C.U.P.E. will provide annual scholarships of \$250 each to five promising and deserving students who will register in the First Year at the University of Victoria. Students must have obtained first class or a good second class standing on their Senior Secondary statement of marks issued for graduation. These scholarships are open only to sons or daughters of members of contributing locals of the Canadian Union of Public Employees of the Greater Victoria area. Recipients will be selected by Committee on Awards in consultation with officials of the C.U.P.E. Scholarship Fund.

THE C.H. DOWLING MEMORIAL AWARD — An award of \$500 is made annually to a native Indian student who is a resident of British Columbia and is entering the University of Victoria directly from Grade 12 or a regional college. Selection will be made by the Senate Committee on Awards on the basis of scholastic achievement; preference will be given to a student entering a program in the Humanities or the Social Sciences. The award may be renewed.

ALDYEN HAMBER IODE ENTRANCE SCHOLARSHIP — Five hundred dollars (\$500) awarded annually to a deserving woman student entering the first year at the University of Victoria. Applicants must write the British Columbia Scholarship examinations. Selection of the recipient will be made by the Senate Committee on Awards after consultation with the donor.

THE HARBORD COMPANY SCHOLARSHIP — Five hundred dollars (\$500) awarded annually to the most promising scholar leaving School District No. 61, entering the Faculty of Fine Arts at the University of Victoria and intending to specialize in Music. Selection of the winner will be made by the Committee on Awards after consultation with the appropriate officials of School District 61 and the Department of Music.

\* THE WILLARD E. IRELAND ENTRANCE SCHOLARSHIP — A scholarship of approximately \$925 will be awarded annually to an outstanding student entering the School of Music at the University of Victoria. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

LABATT BREWERIES OF BRITISH COLUMBIA LIMITED SCHOLARSHIP — A scholarship of five hundred dollars (\$500) is provided by Labatt Breweries of British Columbia Limited to be available for students who are resident in British Columbia and who are proceeding directly from Grade 12 to a full course study at the University of Victoria. The winner will be selected by the Senate Committee on Awards on the basis of scholastic standing, character and participation in school and community affairs. Candidates must be eligible in all respects to compete for Government scholarships and must write the Government scholarship examinations, conducted by the Ministry of Education.

MADAM SOONG CHING LING MEMORIAL SCHOLARSHIP — An Award of \$5000 is made annually to a student from the People's Republic of China who is studying at the University of Victoria. The selection of the recipient will be made by the Chinese People's Association for Friendship with Foreign Countries.

N.B.: i) The student must satisfy the usual university admission requirements in terms of academic standards and English language ability.

ii) The award can be renewed; the Association will decide annually whether to renew the award or to recommend a new recipient.

\* T.S. McPHERSON SCHOLARSHIPS — Up to ten T.S. McPherson Scholarships to commence in September of each year will be awarded to students of exceptional promise entering the University of Victoria directly from British Columbia secondary schools or community col-

\* Administered by the University of Victoria Foundation.

leges; normally two of the ten scholarships will be reserved for community college students. Eight of the scholarships will have an annual value of \$2500. The other two will have an annual value of \$4000 and will be reserved for the two candidates the Committee feels are the most outstanding each year. If a student maintains a grade point average of 7.5 or higher, the scholarship will be automatically renewed for each year of a student's full time study (15 units) until completion of a first degree or for a maximum of five years, whichever is the shorter period. A student whose grade point average falls between 7.0 and 7.49 may file a written appeal with the Senate Committee on Awards to seek special consideration for renewal of the scholarship. No renewal will be considered if a student's grade point average falls below 7.0. A student holding a T.S. McPherson Scholarship may not hold concurrently any other award administered by the University having a value greater than \$50. In extenuating circumstances a student may, upon application to the Senate Committee on Awards, defer the acceptance of the initial scholarship or may defer the renewal of a scholarship for a maximum of one year. Candidates must have a very high academic record in their last two years at secondary school and/or community college. Secondary school candidates must have achieved outstanding scores on the British Columbia Provincial Government Scholarship examinations. Approximately fifteen candidates will be selected by the University of Victoria Senate Committee on Awards for personal interviews during May and June on the basis of their results in academic courses and recommendations by the principals of their schools and colleges as to their academic excellence, breadth of interests and leadership qualities. The final selection will be made by the Senate Committee after all grades are available.

A student may become a candidate for the Scholarship either by applying in writing directly to the University of Victoria Senate Committee on Awards giving the name of his or her school together with the principal's name or by nomination solicited annually by the University from the principals of the secondary schools and community colleges in British Columbia. Applications for the scholarship must be received by the University no later than April 1, and nominations must be received no later than April 15. Normally the awards will be announced by May 31.

**\* PERFORMANCE SCHOLARSHIP IN MUSIC** — One or more awards are made annually to student(s) for outstanding achievement in performance. The recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music's Performance faculty.

**B. ENTRANCE AWARDS, ADMINISTERED BY THE OFFICE OF AWARDS AND FINANCIAL AID, THE UNIVERSITY OF BRITISH COLUMBIA, 2075 WESBROOK PLACE, VANCOUVER, B.C. V6T 1W5**

*Some changes in the following awards may have been made after this Calendar went to press. Please refer to the University of British Columbia Calendar.*

**Entrance Scholarships which must be applied for, on the appropriate U.B.C. form, by July 1 unless otherwise stated.**

**BRITISH COLUMBIA FOREST PRODUCTS LIMITED ENTRANCE SCHOLARSHIPS** — Ten scholarships in the amount of \$750 each are offered by British Columbia Forest Products Ltd., to qualified legal dependents of employees who by June 30 of the year in which the award is to be made have had not less than one year of service with the Company. The awards are open to students proceeding in the fall from Grade 12 to a full course of studies at the University of Victoria, University of British Columbia or Simon Fraser University. The awards will be based on the student's high school transcript. No award will be made to an applicant with an overall average of less than 70%. The scholarship may be deferred for a period of one year, but only for certified medical reasons. Application for deferment must be made to the University Awards Office at the time the award is made.

**THE THOMAS STANLEY MEMORIAL SCHOLARSHIP** — The Telecommunications Workers Union offers a scholarship of \$750 to sons and daughters of members (with at least twelve months continuous service) or of deceased members (with the same service). It is open in competition to students proceeding in the fall from Grade XII of secondary school to a full program of studies at the University of British Columbia, University of Victoria, Simon Fraser University, B.C.I.T., or any accredited regional college in B.C. To be eligible for consideration a candidate must have an overall average of at least 70% in the subjects of the grade in which the candidate is registered. Candidates will be considered on the basis of either standing received by high school graduation or in the January or June scholarship examination conducted by the Minis-

try of Education. The winner will be selected by the University of British Columbia, in consultation with the Union, from those who so qualify. In the final selection, a major factor will be the financial circumstances of applicants and their families. Applications must contain details of family service with the Union and other pertinent information. The successful applicant will not be eligible for any other Telecommunications Workers Union Scholarships.

**TELECOMMUNICATIONS WORKERS UNION SCHOLARSHIPS** — Three scholarships in the amount of \$750 each are made available by the Telecommunications Workers Union, for sons and daughters of members, with at least 12 months continuous service (or of deceased members with the same service). They are open in competition to students proceeding in the Fall from Grade 12 to a full program of study at the University of British Columbia, the University of Victoria, Simon Fraser University or B.C.I.T. To be eligible for consideration, a candidate must have an overall average of at least 70%. Candidates will be considered either on the basis of their high school transcript, or on the basis of the January or June departmental examinations conducted by the B.C. Ministry of Education. The winners will be selected by the University of British Columbia in consultation with the Union, from those who so qualify. In the final selection, a major factor will be the financial circumstances of applicants and their families. Applications must contain details of family service with the Union and other information.

**THE WILLIAM L. HURFORD MEMORIAL SCHOLARSHIP** — A scholarship of \$500, offered in memory of William L. Hurford by the British Columbia Maritime Employers' Association, is open to sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. The scholarship will normally be awarded to the candidate who is proceeding in the fall to a full program of studies at The University of British Columbia, University of Victoria, Simon Fraser University, or a regional college in B.C. The donors reserve the right to withhold the award if the academic standing of candidates is not sufficiently high or to reaward the the scholarship if the winner receives other scholarships of substantial value.

**THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION ENTRANCE SCHOLARSHIPS** — Four scholarships of \$500 each are offered to members, and sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They will normally be awarded to the candidates who are proceeding in the fall to a full first year program of studies at Simon Fraser University, The University of British Columbia, the University of Victoria, or any accredited regional college in B.C. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high, or to reaward scholarships if winners receive other scholarships of substantial value.

**THE PIPING INDUSTRY JOURNEYMAN TRAINING AND INDUSTRY PROMOTION FUND** — Two scholarships of \$500 each, provided by the Trustee Board of the Journeyman Training and General Industry Promotion Fund, are offered annually to students entering the first year at any British Columbia university or regional college, and proceeding to a full program of studies leading to a university degree in any field. To be eligible a candidate must be (a) the son, daughter, or legal dependent of a member of the United Association of Plumbers and Steamfitters, Local 170, who is employed by a firm which is a contributor to the Fund or (b) the son, daughter or legal dependent of an employer who is a contributor to the Fund. Normally, one \$500 award is made to category (a) and one to category (b). To compete for the scholarship, a candidate must write the Government Scholarship Examinations conducted in January or June by the Ministry of Education of B.C. The academic standing of candidates, which constitutes the sole basis of award, will be determined by the results of these examinations. Grades obtained in other subjects taken during the year may be considered. The Trustees reserve the right to withhold an award if candidates do not obtain sufficiently high standing or if they receive other major awards.

**THE RETAIL CLERKS UNION, LOCAL 1518, SCHOLARSHIPS** — The Retail Clerks Union, Local 1518, offers five scholarships of \$800 each to students beginning or continuing studies in a full academic program at the University of British Columbia, the University of Victoria, Simon Fraser University, the British Columbia Institute of Technology, or at a regional college in B.C. The awards will normally be made to applicants with the highest standing in the final examinations. Students entering from Grade 12 will be considered on the basis either of standing received by recommendation, or in January or June departmental examinations. To be eligible for consideration, a candidate must

\* Administered by the University of Victoria Foundation.

have an overall average of at least 70% in the subjects of the grade or year in which the candidate is registered. To be eligible, a candidate must be a member, or the son, daughter, or legal ward of a member of the Union in good standing. Those who wish to be considered must give full details of their own or their parents' membership in the Union.

**RETAIL, WHOLESALE UNION, LOCAL 517, SCHOLARSHIP** — This scholarship of \$250 is offered to dependents or legal wards of members of Local 517. It is open to competition to applicants who are proceeding from Grade 12 to any accredited University or College of British Columbia, in a full program leading to a degree or diploma. To be eligible for consideration an applicant must have a satisfactory academic standing (normally 65% or better average). In the selection of the winner the basic factor will be the academic standing of the applicant. Should there be a tie the financial need of the applicant and the applicant's family shall be the deciding factor. The winner will be selected in consultation with the Union.

**TAHSIS COMPANY LTD. ENTRANCE SCHOLARSHIP** — Tahsis Company Ltd., offers annually a scholarship of \$1,000 to a first year student to attend The University of British Columbia, the University of Victoria, or Simon Fraser University. This scholarship is open in competition to sons and daughters of employees of the Company proceeding in the fall from Grade 12 to studies leading to a degree in any field. This scholarship is also open to students who intend to proceed to a regional college or the British Columbia Institute of Technology under the following conditions:

1. The applicant must take two consecutive semesters of work at the regional college.
2. The applicant must take a full program of work each semester in courses that will give him equivalent of one full year of University credit at one of the universities in B.C.
3. The courses taken must be in a program that will lead to a degree offered by one of the universities in B.C.

The application must state the name of the applicant's parents, one of whom must be currently employed by the Company, or have been employed by the Company, or have been employed for a minimum of one full year and then retired. Brief details of their service with the Company should also be supplied. All candidates must write the Government of B.C. Grade 12 Scholarship Examinations conducted in January or June by the Ministry of Education. B.C.

The award will be made to the candidate obtaining the highest standing. In the event that the candidate wins another scholarship the University and the Company reserves the right to decide whether the Tahsis Company Ltd. Scholarship shall be paid to the winner or revert to the candidate with the next highest standing.

**THE VANCOUVER SUN SCHOLARSHIP FOR SUN CARRIERS** — The Vancouver Sun offers annually two scholarships of \$500 each to students proceeding from Grade 12 to the first year at The University of British Columbia, the University of Victoria, Simon Fraser University or B.C.I.T. To be eligible, applicants must have been carriers of the Vancouver Sun for at least two consecutive years. The awards will normally be made to students with the highest standing based on their final secondary school transcript but in no case will an award be made to a student who obtains a standing of less than 70%. Winners of these scholarships who, in successive years of their undergraduate courses maintain first class standing (or rank in the top 10% of their year and faculty) will be eligible for renewals of \$500 a year until graduation, not exceeding a total of five payments in all. Holders of this scholarship will not be precluded from enjoying the proceeds of other awards, however, a student may not simultaneously hold this scholarship and the Vancouver Sun Special Scholarship for Carriers. The application must be accompanied by the Service certificate of the Vancouver Sun.

**UNITED ASSOCIATION OF PLUMBERS AND STEAMFITTERS, LOCAL 170, SCHOLARSHIPS** — Two scholarships of \$500 each are provided annually by the United Association of Plumbers and Steamfitters, Local 170, to students entering first year at any public university in British Columbia, and proceeding to a degree in any field. To be eligible, a candidate must be the son, daughter or legal dependent of a member in good standing of the United Association of Plumbers and Steamfitters, Local 170. Candidates must write the government scholarship examinations conducted in January and June by the B.C. Ministry of Education. Academic standing, as determined by the results of these examinations, will be the principal basis for selecting award recipients, although grades earned in secondary school subjects during the year may be considered when rankings among candidates are close. The Union reserves the right to withhold an award if candidates do not obtain sufficient high standing or if they receive other major awards.

**THE VANCOUVER SUN SPECIAL SCHOLARSHIP FOR SUN CARRIERS** — The Vancouver Sun offers annually a scholarship of \$500 to a student proceeding from Grade 12 to the first year at The University of British Columbia, the University of Victoria and Simon Fraser University or the British Columbia Institute of Technology. To be eligible, an applicant must have been a carrier for the Vancouver Sun for at least two consecutive years. An applicant will be considered only if he obtains an overall average of 70% based on his final secondary school transcript. The scholarship will be awarded to the eligible applicant who, in the opinion of the Selection Committee, is the most outstanding in combining high scholastic attainment and achievement in one or more areas such as service to the school and community; writing, drama, fine arts; debating in public speaking; sports. The winner of this scholarship who, in successive years of his undergraduate courses maintains first class standing (or ranks in the top 10% of his year and faculty) will be eligible for renewals of \$500 a year until graduation, not exceeding a total of five payments in all. A holder of this scholarship will not be precluded from enjoying the proceeds of other awards, however, a student may not simultaneously hold this scholarship and the Vancouver Sun Scholarship for Sun Carriers. The application must be accompanied by the Service certificate of the Vancouver Sun.

### C. ENTRANCE AWARDS ADMINISTERED BY THE ASSOCIATION OF UNIVERSITIES AND COLLEGES OF CANADA

**A.U.C.C. AWARDS** — A number of entrance awards are administered by the Association of Universities and Colleges of Canada. Students are eligible to apply for the following awards by virtue of their parents' employment with the relevant donor companies. All awards are tenable for any recognized full time degree course at any Canadian university or college which is a member of the Association of Universities and Colleges of Canada. Candidates must be prepared to enter university in the year of competition. The closing date for receipt of completed applications is June 1. Candidates must have obtained at least an average of 70% in each of the last two years of secondary school and must send these results to the A.U.C.C. as soon as they are available. The awards are as follows:

| Name                                  | Value of Scholarship | Number Available                          |
|---------------------------------------|----------------------|---|
| Air Canada                            | 1,000                | Canada 8<br>U.S.A. 1<br>Other countries 1 |
| Allied Canada                         | 1,500                | up to 3                                   |
| Allied Chemical                       | 1,500                | up to 3                                   |
| AMCA International                    | 1,000                | unspecified                               |
| American Can                          |                      |   |
| — University                          | 2,000                | 2   |
| — Community College                   | 1,500                | 2   |
| Amoco Canada Petroleum Ltd.           | 1,000                | 10  |
| Bell Canada                           | 1,250                | Ontario 9<br>Quebec                       |
| Bristol Myers Pharmaceutical          |                      |   |
| — University                          | 1,200                | 1   |
| — College                             | 600                  | 1   |
| Bristol-Myers Products Canada         |                      |   |
| — University                          | 1,200                | 1   |
| — Community College                   | 600                  | 1   |
| Browning-Ferris                       | 1,500                | 2   |
| Canada Cement Lafarge Limited         |                      |   |
| — University                          | 1,000                | 6   |
| — Vocational                          | 1,000                | 6   |
| Canadian Occidental Petroleum Limited | 1,500                | 4   |
| Societe Canadienne de Metaux          | 750                  | Plan 1-4<br>Plan 2-2                      |
| Reynolds Limitee                      |                      |   |
| Canadian Tire                         |                      |   |
| — University                          | 1,500                | 1   |
| — Community College                   | 700                  | 1   |
| Canron Limited (Howard J. Lang)       | 1,000                | 3   |
| Cargill Limited                       |                      |   |
| — Scholarship                         | 1,000                | 1 English<br>1 French                     |
| — Prize                               | 500                  | 1 English<br>1 French                     |
| CE Canada                             |                      |   |
| — University                          | 1,200                | 5   |

|  |  |             |
|--|--|-------------|
| — Community College                            | 600  | 4           |
| Celanese Canada Inc.                           | 1,000  | 8           |
| Chevron Limited                                | 1,000  | 5           |
| Clairol Canada                                 |  |             |
| — University                                   | 1,000  | 1           |
| — Community College                            | 500  | 1           |
| Companie Internationale<br>de Papier du Canada | 1,000  | 7           |
| Compagnie Miniere IOC                          | 1,000  | 4           |
| Consolidated-Bathurst/Domglas Inc.             | 1,000  | 14          |
| Consumers Glass Company Limited                |  |             |
| — University                                   | 1,500  | unlimited   |
| — Community College                            | 600  |             |
| Continental Corporation<br>Foundation          | 2,000  | 3           |
| Continental Group                              | 1,000  | 2           |
| Distilleries Corby Limitec                     | 1,500  | 4           |
| Domtar   |  |             |
| — Ontario                                      | 1,000  | 4           |
| — Quebec                                       | 1,000  | 4           |
| — Other provinces<br>and U.S.A.                | 1,000  | 3           |
| — Spouses                                      | 1,000  | 1           |
| Dow Jones                                      | 1,000  | 1           |
| Dresser Harbison Foundation Inc.               | 1,000  | 2           |
| Fessenden-Trott                                | 5,000  | 2           |
| Fisher Scientific Co. Limited                  | 1,500  | 1           |
| Gannett Foundation                             | 1,500  | 1           |
| Gaz Metropolitan                               | 1,000  | 10          |
| Gulf Canada Limited                            |  |             |
| — Scholarships                                 | 1,500  | 15          |
| — Prizes                                       | 500  | 20          |
| Gulf Minerals                                  |  |             |
| — Scholarship                                  | 1,500  | 1           |
| — Prize  | 500  | 1           |
| Harry C. Bates-Allied Craftsmen                |  |             |
| — First Place                                  | 600  | 2           |
| — Second Place                                 | 400  | 2           |
| Hoechst Canada Inc.                            | 800  | 7           |
| Holophane                                      | 1,000  | 1           |
| IBM  |  |             |
| — University                                   | 1,800  | 12          |
| — College                                      | 600  | 6           |
| Imasco Limited                                 | 1,500  | 10          |
| Indusmin Limited                               |  |             |
| — University                                   | 1,000  | 3           |
| — Community College                            | 400  | 3           |
| Ingersoll-Rand Company Limited                 | 1,500  | unspecified |
| Interprovincial Pipe Line                      |  |             |
| — University                                   | 1,400  | unspecified |
| — Community College                            | 700  |             |
| Johns-Manville Canada Inc.                     | 1,000  | unspecified |
| Kidd Creek Mines                               | Tuition,<br>compulsory fees,<br>travel and living<br>costs | up to 25    |
| Kraft Inc.                                     | 1,500  | 3           |
| Lever Brothers Limited                         | 1,000  | 3           |
| Levitt-Safety Limited                          | 1,500  | 2           |
| Life Underwriters<br>Association of Canada     | 750  | 4           |
| Metropolitan Life<br>Insurance Company         | 1,200  | 5           |
| MacMillan Bathurst Inc.                        | 1,000  | 3           |
| R.J.R. MacDonald                               | 1,000  | 5           |
| Mobil Oil Canada Limited                       | 750  | up to 4     |
| Motorola Canada Limited                        | 1,000  | 1           |
| Nathan Cummings-<br>Consolidated Foods         | 1,500  | 2           |
| National Sea Products Limited                  | 1,500  | 5           |
| PPG Industries Canada Limited                  | 1,000  | 2           |
| Compagnie Miniere Quebec Cartier               | 750  | 6           |
| Quebec Telephone                               | 1,000  | 2           |
| Rexnord  | 750  | 1           |
| Richardson Scholarship                         |  |             |
| — Category "A" (University)                    | 1,000  | 10          |
| — Category "B" (College)                       | 500  | 3           |
| Scott Paper Limited                            |  |             |
| — University                                   | 1,000  | 2           |

|  |                                |             |
|--|--------------------------------|-------------|
| Sears Limited                                  | 1,000                          | 10          |
| Sperry-Rand Canada Limited                     | 1,000                          | unspecified |
| St. Lawrence Seaway Authority                  | 1,000                          | 2           |
| State Farm Insurance<br>Centennial Scholarship | 750                            | 2           |
| Suncor Inc.                                    |                                |             |
| — University                                   | 1,000                          | 10          |
| — College                                      | 500                            |             |
| Telebec Ltee.                                  | 1,000                          | 1           |
| Telelobe Canada Inc.                           | Tuition and<br>compulsory fees | 35          |
| Transportation Club of Toronto                 | 1,000                          | 1           |
| Via Rail                                       | 500                            | 4           |
| Warner-Lambert Canada Limited                  | 1,000                          | unspecified |
| Westfair Foods Limited                         | 1,200                          | 1           |
| Westinghouse Canada                            | 1,000                          | 6           |
| Weyerhaeuser Canada Limited                    | 1,000                          | up to 2     |
| Witco Chemical Canada Limited                  | 1,500                          | 1           |

Candidates for the above awards should write directly to Scholarship Administration Services, A.U.C.C., 151 Slater Street, Ottawa, Ontario K1P 5N1.

D. ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

THE B.C. ASSOCIATION OF TEACHERS OF CLASSICS SCHOLARSHIP — An annual award of \$100 will be given by the president of the University of Victoria to the leading student in British Columbia Latin 12 who registers at the University of Victoria for a first year course in Latin. An additional \$50 will be given by the B.C. Association of Teachers of Classics. Application to compete should be made through the B.C.A.T.C. Scholarship Committee on forms available from: Mr. E.J. Costain, Chairman, B.C.A.T.C. Scholarship Committee, 1320 Queensbury Road, Victoria, B.C.

COMINCO HIGHER EDUCATION AWARDS — Cominco Ltd. offers awards each year to the sons, daughters, or wards of a person who is regularly employed by Cominco, or of a widow whose husband died while regularly employed by Cominco or a Cominco pensioner or his widow to encourage students of good scholastic accomplishment to continue their education at an institution of higher learning beyond high school or senior secondary school. Cominco shall offer each year two classifications of awards to children of employees who are students enrolled in a high school or senior secondary school leaving course, preparatory to attendance at an institution of higher education. Class I awards, in the amount of \$500 each, shall be awarded to all students who make application and who have obtained an 86% or better standing, or corresponding letter grade, in their high school leaving course. Class II awards, in the amount of \$350 each, shall be awarded to all students who make application and who have obtained an average in the 73% to 86% range, or corresponding letter grade, in their high school leaving course. Applicants for these awards must be planning to attend an accredited Canadian university or college to pursue any course of study which will lead to a recognized degree, or must be planning to attend a recognized junior or regional college, or must be planning to enroll at a recognized provincial institute of technology. In the case of the latter institutions, these must be accredited by or under the supervision of provincial departments of education and where the course of study would lead to a recognized diploma or certificate. Courses of study must be of at least two years duration and will not be applicable when a student would be in receipt of remuneration while also undertaking study. Complete details regarding eligibility as well as application forms may be obtained from: The Secretary, Scholarship and Education Awards Committee, Cominco Ltd., Trail, B.C. The application must be returned no later than September 15.

THE TERRY FOX HUMANITARIAN AWARDS — In keeping with the spirit of his achievements, the Terry Fox Humanitarian Award Program is intended to encourage Canadian youth to seek the high ideals represented by Terry Fox by the granting of commemorative scholarships for the pursuit of higher education. The Government of Canada has provided an initial \$5 million endowment fund for this purpose.

The Terry Fox Scholarship is a renewable award, subject to satisfactory progress, and is tenable at any Canadian university or college. The value of each award is \$3000 annually, for a maximum of four years or until a first degree is obtained. For candidates attending an educational institution in provinces where no tuition fee is applicable, the award value is \$2000.

The awards will be of particular interest to graduating secondary level students and those currently studying towards a first degree or diploma

in a Canadian university or college. Scholarship candidates must be Canadian citizens or have applied for citizenship at the time of award consideration. As many Scholarships will be granted each year as the number of creditable candidates who apply, with the total number awarded each year limited by the interest from the investment of the \$5 million endowment. Candidates must qualify in the province or territory in which they are ordinarily resident. The field of study is open and at the discretion of the successful candidate.

Selection criteria for recipients will be based on demonstration of the highest ideals and qualities of citizenship and humanitarian service while in pursuit of excellence in their academic, amateur sport, fitness, health, community service and related endeavours. A Selection Committee will nominate deserving candidates to the corporation's Board of Directors. The Board is solely responsible for the final determination of successful candidates. Applications will be considered either directly or through academic institutions. Recommendations for scholarship assistance made by institutions will be an important factor in the final selection process.

The Board of Directors reserves the right to cancel any award before payment has been made where the candidate has failed to meet the conditions of this program. The tenure of the Scholarship is dependent upon the maintenance by the student of a standard of work and conduct which, in the opinion of the Board of Directors, justifies the Scholarship. For further information or scholarship application forms, please contact: Terry Fox Humanitarian Award Program, 711-151 Sparks Street, Ottawa, Ontario K1P 5E3. Deadline for submission of application is February 15, 1985.

**IMPERIAL OIL HIGHER EDUCATION AWARDS** — Imperial Oil Limited offers annually free tuition and other compulsory fees to the children of employees and annuitants who proceed to higher education courses. Initial awards, or renewal of awards, are restricted to students under twenty-five years of age on the date of registration for any undergraduate year.

To qualify, a student must attain an average mark of 70% or higher in the appropriate secondary school examinations in the subjects required for admittance to the approved institution, or must have attained an average of 70% or more in a college year upon which application is based.

Courses may be taken at any Canadian university or other approved institutions of higher learning, and awards are tenable for a maximum of four academic years, or the equivalent, at the undergraduate or bachelor degree level. The four levels of academic years are measured from the first year of entering a postsecondary institution.

Further information and application forms may be obtained from The Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Avenue West, Toronto, Ontario M5K 1K3.

**MacMILLAN BLOEDEL LIMITED SPECIAL SCHOLARSHIPS FOR DEPENDENTS OF EMPLOYEES** — Twelve scholarships of \$500 each, offered by MacMillan Bloedel Limited, are available annually to sons and daughters (or legal dependents) of employees of the Company serving in any MacMillan Bloedel Limited Division in North America. In addition to the \$500 scholarship award, special grants to equalize education opportunity may be made to students whose normal residence is remote from the university of their choice. No specific application is required for these grants. Because the majority of employees work in British Columbia, it is expected that most will be awarded in B.C. However, the diversity of the Company's operations will make it possible for awards to be made in other Provinces and in the United States. These scholarships are open to students graduating from secondary school and proceeding to studies at recognized institutes of higher learning. Awards will be made on the basis of academic ability and potential leadership as indicated by grade achievements in Grades XI and XII and participation in school activities. Application forms which must be submitted by May 31 each year, may be obtained from the Manager or Personnel Supervisor at each operating division, or from the Secretary, Scholarship Committee, MacMillan Bloedel Limited, 1075 West Georgia St., Vancouver, B.C. V6E 3C9.

**THE CHRIS SPENCER FOUNDATION SCHOLARSHIPS** — Two scholarships with a potential value of \$8,000 each will be awarded annually to students graduating from British Columbia secondary schools and entering the University of British Columbia, Simon Fraser University or the University of Victoria in the year of graduation. They will be awarded on the basis of scholarship plus a demonstrated interest in and concern for others as well as active participation in school and/or community affairs. Scholarship winners will receive \$1,300 each for the first year of university, and provided that they remain in the top ten percent of their faculty and year, they will receive \$1,675 in each of their years at one of the above B.C. universities, to a maximum of five years

and a total maximum benefit of \$8,000. Money will be made available to the universities involved in October and February. The foundation views these scholarships not so much as rewards for past performance, but as investments in the future of Canada. The awards will not be made on the basis of financial need. Students applying for this scholarship must be Canadian citizens, must have resided in British Columbia for the nine months prior to application and must be able to finance the balance of their university education without further help from the foundation. Winners will be selected by a committee representing the universities and Chris Spencer Foundation.

**TRANS-MOUNTAIN OIL PIPELINE CO. HIGHER EDUCATION AWARDS** — Up to five Higher Education Awards will be offered annually by the Trans-Mountain Oil Pipeline Company to sons, daughters and legal wards of regular employees and annuitants, deceased employees, and deceased annuitants. To be eligible a student must attain a minimum standing of 70% in the appropriate secondary examination in the subjects required for admittance to approved institutions. Each award is tenable for a maximum of four academic years. Selection of winners will be made by The University of British Columbia from applicants who are entering a full program of studies at the University of Victoria, The University of British Columbia, Simon Fraser University, or the British Columbia Institute of Technology. The value of award payments shall equal the tuition and other compulsory fees for the academic year. No portion of an eligible fee which is paid by a government shall be included in the amount paid as awards by the company. Further information and application forms may be obtained from the Division Offices or the Personnel Dept. and forwarded to: The Trans-Mountain Higher Education Awards Committee, c/o The Royal Trust Company, P.O. Box 2031, Vancouver, B.C. V6B 3R7. Applications must be submitted by August 31.

**THE UNIVERSITY OF VICTORIA SCIENCE FAIR AWARD** — The President of the University will award \$150 to the winner of the Senior Division of the Greater Victoria Regional Science Fair. The award is tenable only when and if the winner registers in a full program of studies at the University of Victoria.

**VICTORIA MECHANICAL TRADE PROMOTION FUND SCHOLARSHIP** — Provides a scholarship of three hundred dollars (\$300) each year, based on academic standing only with no reference to financial status or income. The award is open to students entering first year at the University of Victoria. Applicants must be sons, daughters or legal dependents of members of the United Association of Plumbers and Steamfitters, Local 324, who are employed by firms who are contributors to the Victoria Mechanical Trade Promotion Funds as provided in the Collective Agreement. Applicants may also be sons, daughters or legal dependents of employers who employ members of the United Association of Plumbers and Steamfitters, Local 324 and who are contributors to the Victoria Mechanical Trade Promotion Fund. Further information may be obtained from Mr. E.M. McCaffery, Secretary Manager, B.C. Branch, Canadian Plumbing and Mechanical Contractors Association, 1128 West Georgia Street, Vancouver, B.C. V6E 3H9. Applications must be submitted by June 30.

**VICTORIA WOMEN'S CANADIAN CLUB SCHOLARSHIPS** — (1) One hundred and fifty dollars (\$150) awarded to the female student attending a public high school in Greater Victoria School District (No. 61) who makes the highest standing in the B.C. Government Scholarship Examinations, and registering for a full year course in the University of Victoria or The University of British Columbia, the following September. (2) One hundred and fifty dollars (\$150) awarded to the male student in Greater Victoria School District making the highest standing in the same examinations and under the same conditions. Should the student, in either case, be awarded a scholarship from any other source, the Club Scholarship shall then revert to the student having the next highest standing. Correspondence concerning this award should be addressed to the Superintendent of School District 61.

**THE ROYAL WESTMINSTER REGIMENT ASSOCIATION SCHOLARSHIPS** — Two scholarships of \$250 each, the gift of the Royal Westminster Regiment Association, will be awarded annually to worthy and deserving students who are continuing their formal education beyond secondary school in recognized institutions of higher learning in any place within Canada or outside Canada. To be eligible, applicants must be direct descendants, male or female, of a member of the Royal Westminster Regiment Association, or a member of the Royal Westminster Regiment CA (M) or one of those battalions which the Royal Westminster Regiment perpetuates, i.e., the 47th, 104th, or 131st. The scholarships are also open to applicants who are at the time of application serving members of the Royal Westminster Regiment. The applicants

may be in their final year of secondary school or any year of post-secondary study, and may be resident in any place within Canada or outside Canada. The basis of the award will be academic standing in previous studies and need of financial assistance. The Application for Scholarship Form is obtainable from the Scholarship Committee. The Royal Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for application is July 31.

**THE HON. W.C. WOODWARD UNIVERSITY MEMORIAL SCHOLARSHIPS** — These scholarships, each of \$600 per year, and renewable annually in the same amount at the beginning of each undergraduate year (up to a maximum of five payments in all), are offered in competition to sons, daughters, and legal dependents of regular full time staff, or retired staff (retired on Store pension), and of deceased staff (who died while a Woodward's regular full time staff member). Three of these scholarships are available for attendance at the University of Alberta, University of Calgary, or The University of Lethbridge, and four are available for attendance at The University of British Columbia, The University of Victoria, or Simon Fraser University. They are open to applicants, beginning University attendance for the first time, and enter-

ing from Grade XII or XIII of secondary school (or any other source provided they are qualified for admission). Alberta candidates must write the Government Scholarship Examinations conducted by the Provincial Ministry of Education. Awards will be made on the basis of (a) academic standing, (b) activity and interest in youth programs, organizations and athletics within school and community, and (c) personal qualities, character and demonstration, during attendance at school, of citizenship, leadership, and service. Annual renewals are subject to maintenance of satisfactory academic standing, progress, and conduct. Application forms are available from the Personnel Offices of all Woodward's Stores from February 1 onwards and must be completed and returned to Woodward's by July 15. Applicants must include the official transcript of the Secondary School record. If the transcript is not available by July 15, it must be forwarded by the student at the earliest possible date after July 15, directly to the Administrator of Students Awards Office, The University of Alberta, Edmonton, by the Alberta applicants, or the the Chairman, Joint Faculty Committee on Prizes, Scholarships and Bursaries, The University of British Columbia, Vancouver V6T 1W5, by the B.C. applicants.

## SECTION 2

### GOVERNMENT OF BRITISH COLUMBIA AWARDS

**BRITISH COLUMBIA CULTURAL FUND AWARDS** — Students planning to attend recognized institutions in the cultural field should apply directly to the Scholarship Officer, British Columbia Cultural Fund, Cultural Service Branch, Ministry of Provincial Secretary and Government Services, Parliament Buildings, Victoria, B.C.

Assistance is available for the following disciplines and related arts: theatre (acting, directing, technical), music (performance, composition), visual arts and crafts, dance (performance, choreography), creative writing, museological and conservation studies, arts administration.

Areas not recognized include: language study, fashion design, interior design, architecture, fine arts education or health programs, commercial film making, history of the arts, and general art appreciation.

#### Winter Study Awards

Junior Awards up to \$500 (for full time winter studies).

Senior Awards up to \$2000 (for full time winter studies).

Assist study (mainly tuition) costs of outstanding and talented B.C. students pursuing serious training. Awards are paid, generally, to recognized and advanced schools, on behalf of the student.

Terms:

Junior Awards:

Tenable for a maximum of 4 years of full time study, up to and including 2nd year of a university or community college program;

Preference is given to students attending fine arts schools, colleges, universities and academies in British Columbia or other Canadian provinces.

Senior Awards:

Tenable for a maximum of 4 years of full time study for course work/programs after completion of 2nd year at university undergraduate or full time postgraduate degree, or professional diploma programs:

At recognized postsecondary institutions or academies without restriction of country/location.

Student must be majoring in a program and should be of first class ability and standing in all course work.

A portfolio must be submitted with the application.

General Information:

Applications are received once a year on or before June 30 for assistance in the following winter study season (September-June).

Four letters of reference (submitted on forms provided with application form) are required commenting on the applicant's talents, ability, potential, character or financial need.

A letter of acceptance from the institution the student will be attending, together with certification of fees.

A recent statement of academic grades to be provided by the student.

Information regarding all other scholarship assistance must be provided each year the student holds a scholarship.

All supporting documentation to the application form must be received in the CSB offices by July 15. If, for some reason, a document cannot be provided by that date, a letter outlining circumstances must accompany the application form.

Cultural Fund support in any given year cannot be regarded as a

guarantee of similar support the year following. Each year's application form is considered on its merits.

Recipients of tuition awards must advise the Scholarship Officer, in writing, of changes in their study intentions, place of study, etc.

Awards are not retroactive or applicable to past studies.

#### PREMIER'S ATHLETIC AWARDS

The highest athletic award granted by the Provincial Government, the Premier's Athletic Award is designed to encourage world class athletes to train and compete in British Columbia. Applicants must complete an application form and submit it along with a personal letter of application which outlines the applicant's projected training and competitions in the next year. Application forms are available from the appropriate Provincial Sport Governing Body at 1200 Hornby Street, Vancouver, B.C. V6Z 2E2, telephone 687-3333.

Eligibility:

British Columbia athletes who train and compete in B.C. for a minimum of six months, who are ranked in the top eight in the world in an Olympic event or who are members of a Canadian team ranked in the top four in an Olympic sport and who have been resident in British Columbia for one year.

Value:

\$2,500

Number of Awards:

Depends on number of eligible athletes

Selection:

Applications are reviewed by a Selection Committee appointed by the Minister responsible for the sport.

#### UNIVERSITY SPORTS AWARD PROGRAM

The Ministry of Universities, Science and Communications funds the University Sports Award Program. Athletes participating in the following varsity sports may be eligible: basketball (men and women), cross country (men and women), diving (men and women), field hockey (women), football (men), golf (men), gymnastics (men and women), ice hockey (men), rowing (men and women), rugby (men), skiing (men and women), soccer (men), swimming (men and women), track and field (men and women), volleyball (men and women) and wrestling (men).

The head of the athletic department is the person candidates should contact regarding eligibility within the University Sports Award Program. Eligible varsity athletes will be awarded \$1,000 each.

#### NANCY GREENE SCHOLARSHIPS

Twenty-six Nancy Greene Scholarships, valued at \$1,000 each will be awarded annually to those British Columbia students who best combine the qualifications set out hereunder. Students currently registered in a senior secondary school (including independent and private schools) in British Columbia who plan to pursue an educational program at any designated postsecondary educational institution in the Province of British Columbia are eligible to apply. Applicants must show evidence of:

1. athletic ability and performance
2. scholastic achievement and goals (a minimum of C+ is mandatory)

- in order for the application to be considered)
3. leadership and character and
  4. school and community participation and citizenship.

Applicants are requested to complete the application form and submit it along with a personal letter of application, to the principal of their secondary school. The letter of application must outline scholastic and athletic achievements in Grades XI and XII only, educational goals, and school and community activities in which the applicant has participated. It should be typewritten or written in black ink on 8½x11 inch paper and should be limited to no more than three pages. The principal's office is required to mail:

1. the student's application form
2. the student's personal letter of application
3. the principal's own confidential supporting letter certifying the student's participation in school and community activities, both athletic and nonathletic; and
4. a copy of the student's completed "Recommendation for Early Processing" form

Applications will be reviewed by a Selection Committee appointed by the Physical Fitness and Amateur Sports Fund. Up to five athletes for this scholarship may be recommended by the Committee to receive the Premier's Athletic Award. The scholarships will be made available to successful applicants after proof they have been accepted by the institution concerned and have registered, provided they are not in receipt of a similar or other major award of more than \$1,050.

All applications and supporting letters must be postmarked not later than May 1 and are to be addressed to:

Nancy Greene Scholarships,  
Physical Fitness and Amateur Sports Fund,  
Parliament Buildings, Victoria, B.C.,  
V8V 1X4

#### QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIP

To commemorate the visit of Her Majesty Queen Elizabeth II to British Columbia in May of 1971, during the Centennial celebrations, the Government of the Province established the Queen Elizabeth II British Columbia Centennial Scholarship.

The scholarship is administered by the Chief of Protocol of the Province. An advisory Committee evaluates candidates for the scholarship and advises the Provincial Secretary and Minister of Government Services of its recommendations. The Advisory Committee consists of representatives of the Ministry of Provincial Secretary and Government Services, the Ministry of Education and each of the three public universities of the Province.

Number and value of scholarships — One major scholarship is available each year for study, commencing in the fall of that year. The scholarship has a total value of \$20,000. Normally the scholarship will be awarded in the amount of \$10,000 each year for two successive years of study, but the committee may, in exceptional circumstances, award the full sum of \$20,000 for one year of study. In exceptional cases in which the scholarship winner finds it necessary to undertake a third year of postgraduate study to complete his training, he may apply during the second year of such studies for an additional scholarship of \$10,000. In addition to the major scholarship, two minor scholarships of \$4,000 each are available for the two top runnersup to the major winner each year.

Eligibility and tenability — The scholarship will be awarded each year on a competitive basis to a graduate of Simon Fraser University, the University of British Columbia, or the University of Victoria:

- (a) who is a graduate of or graduates from a public university of British Columbia having attended that or another British Columbia public university for a minimum of two years;
- (b) whose domicile or ordinary residence is in the Province;
- (c) who is a Canadian citizen;
- (d) who, in the opinion of the Advisory Committee, is a person of unusual worth and promise and qualifies under the regulations; and
- (e) who proposes to conduct the studies for which the scholarship is awarded at an institution in the United Kingdom.

Basis of selection — The Advisory Committee will make its recommendations on the basis of academic achievement, demonstrated aptitudes, personal qualities and character, interest and participation in university and community affairs, and proposed programs of study.

Successful candidates — A successful candidate shall:

- (a) follow the proposed program of study outlined in his application. If a candidate wishes to follow an alternative program of studies he shall apply to the Advisory Committee for approval of that program;
- (b) obtain admission to an institution in the United Kingdom equivalent to a faculty of graduate studies at a Canadian university;
- (c) maintain a satisfactory standing as required by the institution he is attending; and
- (d) submit a progress report, including any final grades that are available every six months for the duration of the period of his studies.

Payment of scholarships — The major scholarship shall be paid in four or six equal sums, as the case may be, at each September and January from the commencement of studies. The minor scholarships shall be paid in two equal sums, one at the commencement of each academic year of studies.

Submission of application — All inquiries, applications and documents pertaining to this Scholarship must be forwarded directly to:

The Chief of Protocol,  
Ministry of Provincial Secretary and Government Services,  
Parliament Buildings,  
Victoria, B.C., V8V 1X4

(Area code 604 387-4376)

Applications must be forwarded postmarked not later than January 15 in the year for which the scholarship is being offered. Documents and applications which cannot be returned, become the property of the Advisory Committee.

Documents to be submitted —

1. Each applicant must arrange for official transcripts of his post-secondary academic record to be forwarded directly to the Chief of Protocol from the registrars of the institutions concerned.
2. Each applicant must arrange for at least three letters of reference which must be forwarded directly from the persons writing them. At least two of the letters of reference must be from persons who have taught the applicant at the undergraduate level.
3. Each applicant must complete the application form and forward it, along with a letter which includes
  - (a) his interest and participation in college and community affairs;
  - (b) his special achievements and hobbies;
  - (c) his proposed program of studies, including the name of the institution he will be attending;
  - (d) his future career plans; and
  - (e) any further information which he feels is relevant to the application.

## SECTION 3

### UNDERGRADUATE AWARDS FOR WHICH NO APPLICATION IS NECESSARY

The awards listed in this section are open only to students who attend the University of Victoria in the regular Winter Session specified in this calendar. They are awarded automatically on the basis of merit or on nomination by departments and applications from students are not required. Except where terms and conditions of an award specifically state otherwise, award winners must return to the University of Victoria in the next regular session and must enroll in a full program.

#### For Heads of the Graduating Classes

THE GOVERNOR GENERAL'S MEDAL — The Governor General's Medal is awarded annually to the candidate in the Faculty of Arts and Science, registered for a B.A. or B.Sc. degree, who stands at the head of the graduating class on the basis of the graduating average.

DR. MAXWELL A. CAMERON MEMORIAL MEDALS AND PRIZES — The British Columbia Teachers' Federation annually offers a silver medal and a prize to the student completing the final year of the B.Ed. degree (secondary program), who achieves the highest standing in general proficiency with a first class standing in practice teaching. A similar award is made to a student in the B.Ed. elementary program. Selection of the students is left to the Faculty of Education, University of Victoria.

**THE LAW SOCIETY GOLD MEDAL AND PRIZE** — A gold medal, presented by the Law Society of British Columbia, will be awarded to the student obtaining the highest aggregate marks in the three years of study in the Faculty of Law. In addition, the Society will pay the student's Call and Admission Fee.

**THE UNIVERSITY OF VICTORIA JUBILEE MEDAL** — This medal is awarded to the student in the Faculty of Arts and Science, registered for the B.A. or B.Sc. degree, who stands at the head of the Graduating Class on the basis of the graduating average in the degree category which does not include the winner of the Governor General's Medal. The award was established by the 1978 Graduating Class in recognition of the University's Jubilee Year.

**VICTORIA MEDAL** — A silver medal presented by Professor S.W. Jackman in memory of Edward Tatton Anfield will be awarded annually to the candidate in the Faculty of Fine Arts, registered for a B.A., B.E.A. or B.Mus. degree, who stands at the head of the graduating class on the basis of the graduating average.

#### **Undergraduate Awards — General**

\* **THE BRITISH COLUMBIA 1958 CENTENNIAL SCHOLARSHIP** — One thousand two hundred dollars (\$1,200) to be awarded annually to a student who has completed at least one year at the University of Victoria and who is continuing University studies in the Province of British Columbia. The award will be made on the basis of scholastic achievement and effective participation in campus activities.

\* **MARY HANNAH COOPER SCHOLARSHIP FUND** — An annual award of six hundred dollars (\$600) will be made to a worthy and deserving student. The selection will be made by the Senate Committee on Awards.

\* **MATTHEW COWAN ANNUAL SCHOLARSHIP** — Three hundred dollars (\$300) awarded annually to a promising student with high academic standing. The winner must continue at the University of Victoria.

**PERCY H. ELLIOTT MEMORIAL SCHOLARSHIP** — Eight hundred dollars (\$800) awarded to a student of outstanding merit and promise in one specific field of study, who has also a high general academic standing and qualities of character indicating worthiness to hold the scholarship. The scholarship is awarded, upon the recommendation of the Committee on Awards, to a student in the first or second year, proceeding immediately towards a degree.

\* **THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS** — Nine scholarships of seven hundred dollars (\$700) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria as follows:

- (a) One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
- (b) One scholarship to a student who has completed Year III in an Astronomy program;
- (c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

\* **THE FRANK AND MARGARET GIBBS SCHOLARSHIPS** — Scholarship of up to three hundred dollars (\$300) each will be awarded in Arts, Science, Fine Arts and Education, on the basis of distinction in scholarship. Award winners must continue academic work at an approved university.

**KIWANIS SCHOLARSHIP** — Four hundred dollars (\$400) awarded to a student completing the first year and entering the second year at University of Victoria. Selection of the recipient to be made by the Senate Committee on Awards in conference with the Kiwanis Club of Victoria.

\* **THE HAZEL T. KNOX MEMORIAL SCHOLARSHIP** — Five hundred dollars (\$500) awarded annually to a deserving and promising student in an honours program and continuing into the third or fourth year at the University of Victoria. If funds permit, additional awards of a similar nature will be made by the Senate Committee on Awards.

**THE PRATT-SHORT SCHOLARSHIP** — Five hundred dollars (\$500) awarded annually to a student with broad interests completing second year.

**THE PRESIDENT'S SCHOLARSHIPS** — A number of scholarships will be awarded annually by the Senate Committee on Awards. The awards will be made in Arts and Science, Fine Arts, Human and Social Development and Education on the basis of scholarship. Awards of six hundred and fifty (\$650) will be made up to approximately the top 1½% of full time students (15 units) in each of the named faculties unless the

students hold named awards equal to or greater in value than \$650. Awards of five hundred (\$500) will be made to approximately the next 1½% of full time students (15 units) in each of the named faculties unless the students hold named awards equal to or greater in value than \$500. Award winners must return to the University of Victoria in the next winter session in a full program in order to retain the award. Two of these awards are provided from the Colonel Roland O. Bull Memorial Scholarship Fund.

**THE PRESIDENT'S SCHOLARSHIPS FOR PART TIME UNDERGRADUATE STUDENTS** — A number of scholarships will be awarded annually by the Senate Committee on Awards to students registered in either Winter Session or the Summer Studies period whose course load is between 6.0 and 14.9 units. The awards will be made in Arts and Science, Education, Fine Arts, and Human and Social Development on the basis of scholarship. Awards of \$40 per unit of credit work completed in a session or study period will be made to approximately the top 1½% of students in each of the named faculties in each session or study period and awards of \$30 per unit of credit work completed in a session or period will be made to approximately the next 1½% of students in each of the named faculties in each session study period. Award winners must return to the University for further undergraduate credit work within twelve months of the date on the Notice of Award. The award funds will be applied towards students' tuition fees during this period. Any excess balance at the end of the twelve month period will revert to the Part Time Student Scholarship Fund.

\* **THE EDWARD J. SAVANNAH MEMORIAL SCHOLARSHIP** — Four hundred and fifty dollars (\$450), subscribed by his friends and former students, to be awarded annually to students proceeding to third year science at the University of Victoria or elsewhere.

**UNIVERSITY EXTENSION ASSOCIATION OF VICTORIA SCHOLARSHIP** — One hundred dollars (\$100) to be awarded to a worthy and promising student who is returning to the University of Victoria in the following year.

**THE UNIVERSITY OF VICTORIA REVUE AWARDS** — Three awards of one hundred dollars (\$100) each are made annually to students who have made outstanding contributions to the performances of large on campus productions such as those associated with the UVic Revue and the Music Theatre Workshop. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Department of Theatre and the Department of Art and Music.

\* **THE UNIVERSITY OF VICTORIA FACULTY SCHOLARSHIPS** — Approximately 60 scholarships of \$500 are awarded annually on the basis of academic standing. The fund for these awards was established by donations of University of Victoria faculty members and professional librarians. Selection of the recipients will be made by the Senate Committee on Awards.

**THE UNIVERSITY OF VICTORIA FACULTY ASSOCIATION SCHOLARSHIPS** — Two scholarships, of five hundred dollars (\$500) each, to be awarded annually to further the education of students of good academic standing.

**UNIVERSITY WOMEN'S CLUB SCHOLARSHIP** — Four hundred dollars (\$400) awarded to the woman student taking the highest standing in her first year of Arts and Science, and continuing her course in the second year at the University of Victoria or at any other university, provided the course desired is not available at this University. When a student wishes to attend a university outside Canada, the reasons for such attendance should be submitted to the Scholarship and Bursary Society of the University Women's Club for approval.

**THE VICTORIA COUNCIL, UNITED COMMERCIAL TRAVELLERS OF AMERICA SCHOLARSHIP** — Two hundred dollars (\$200) awarded annually to the leading student of the Humanities in the second year. The winner must continue university studies.

\* **THE R.T. WALLACE COMMEMORATIVE SCHOLARSHIP** — Five scholarships of \$1,400 each are awarded annually to outstanding students entering one of the final two years of undergraduate studies of the faculties of Education, Fine Arts and Human and Social Development; two scholarships will be awarded in the Faculty of Arts and Science — one to a student enrolled in a B.A. program and one to a student enrolled in a B.Sc. program.

\* **THE WESTAD SCHOLARSHIP** — This scholarship of five hundred dollars (\$500) is awarded annually to a deserving student completing first or second year and continuing University studies.

\* Administered by the University of Victoria Foundation.

**THE WOODWARD STORES, LIMITED, SCHOLARSHIP** — Two hundred and fifty dollars (\$250) to be awarded annually to an outstanding student completing first or second year and continuing University studies.

**THE WOODS TRUST SCHOLARSHIP** — Awarded annually to promising students at the University of Victoria who intended to pursue studies as undergraduates at the university or as postgraduate students at other universities or educational institutions or at any industrial or commercial concern engaged in the field of electrical engineering or in any allied field in the physical sciences. The scholarships are valued at five hundred dollars (\$500) each.

#### **Undergraduate Awards Listed by Course or Area of Study**

##### **Anthropology**

**THE GRAND POST OF THE NATIVE SONS OF B.C. — BRUCE McKELVIE SCHOLARSHIP** — Two hundred and fifty dollars (\$250) to be awarded annually to a third year Anthropology student with the highest standing in a course relating to Anthropology in B.C. The student must be a Canadian citizen and must return to the University of Victoria in the next regular session.

\* **THE PETT AWARD IN ARCHAEOLOGY** — A scholarship of five hundred and twenty-five dollars (\$525) will be awarded annually to a student who is a Canadian citizen and who has successfully completed at least one course in Archaeology at the University of Victoria, in order to assist the recipient to do field or laboratory work in British Columbia archaeology. The selection will be made by the Senate Committee on Awards upon the recommendation of the senior instructor in Archaeology in the Department of Anthropology.

##### **Astronomy**

\* **THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS** — Nine scholarships of seven hundred dollars (\$700) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria as follows:

- (a) One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
- (b) One scholarship to a student who has completed Year III in an Astronomy program;
- (c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

**THE VICTORIA CENTRE OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA BOOK PRIZE** — A book prize up to the value of \$50, selected by the recipient, will be awarded annually to the student graduating with an Honours B.Sc. in Astronomy, with the highest graduating average, provided that this is at least a first class average. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the appropriate faculty member in the Department of Physics.

##### **Biochemistry and Microbiology**

**THE TERRY FOX SCHOLARSHIP** — An award of \$750 is made annually by the Victoria Real Estate Board to an outstanding student who is in the third year of a program of Biochemistry and Microbiology and who has indicated an interest in the area of cancer research. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

**THE MOLSON COMPANIES SCHOLARSHIPS** — A scholarship of five hundred dollars (\$500), one in each of the departments of Chemistry, Physics, and Biochemistry/Microbiology, is awarded annually to an outstanding student completing year three in a major or honours program. Preference will be given students who have indicated an interest in the business or scientific aspects of the brewing industry. Selection of each recipient will be made by the Senate Committee on Awards upon the recommendation of the department involved.

##### **Biology**

**THE CLIFORD J. BATE SCHOLARSHIP** — Six hundred dollars (\$600) awarded annually to a third year student in Botany on the basis of academic attainment. The award is to be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

\* **THE CHAPMAN MEMORIAL SCHOLARSHIP** — Two scholarships of \$700 each will be awarded annually, one to a student who has completed third year Biology, on the Ecology Program, and one to a student who has completed third year Geography, on the Resources and Physical Program. A book on ecology and conservation, selected by the appropriate department, will be part of the award. These scholarships are given in

memory of John Chapman and his daughter Barbara who were well known conservationists. Selection will be made by the Senate Committee on Awards upon the recommendations of the appropriate departments.

\* **JOHN J. DOBROCKY SCHOLARSHIP** — A scholarship of \$1000 is awarded annually to a student entering fourth year who is specializing in any aspect of oceanography or related marine sciences and who has demonstrated outstanding potential for a professional career in the discipline. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

**B.C. HYDRO SCHOLARSHIPS** — B.C. Hydro is establishing five scholarships of \$500 each to encourage the development of knowledge and expertise in subjects related to environmental impact assessment work within the context of the British Columbia environment. The scholarships are awarded annually to outstanding students entering year 3 or 4 of the following programs: Biology (1 award), Geography (1 award) and Environmental Studies (3 awards). The Geography recipient must be specializing in Techniques and Methods and/or Resources and Physical courses; the Environmental Studies recipients must be specializing in the Natural Resource Management and/or Conceptual options. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Departments and Program involved.

\* **THE SINCLAIR FARRIS AWARD** — An award of \$400 is made annually to an undergraduate or graduate student in Biology for interest and achievement of excellence in the field of microtechnique. The award was established to recognize Sinclair Farris who worked with the Canadian Forestry Service (Environment Canada) for 38 years, specializing in microtechnique. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

\* **FREEMAN F. KING SCHOLARSHIP** — Six hundred and fifty dollars (\$650) awarded to a student entering third or fourth year, preferably the latter, and preparing for a career in natural history, considered in a broad demonstrated interest in field studies, especially in terrestrial biology. The recipient will be selected by the Senate Committee on Awards from candidates recommended by Biology Department staff members.

\* **THE MELBURN-BRENTON SCHOLARSHIP** — An award of five hundred and fifty dollars (\$550) is made annually to a student, with high standing, whose special interest is cryptogamic botany. Selection will be made by the Senate Committee on Awards (or the Graduate Studies Awards Committee, if appropriate) upon the recommendation of the Department of Biology.

\* **B.W. PEARSE SCIENCE SCHOLARSHIP** — Four scholarships of four hundred dollars (\$400) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

**SEASPAN INTERNATIONAL LTD. SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

\* **THE THETIS PARK NATURE SANCTUARY ASSOCIATION SCHOLARSHIP** — An award of six hundred dollars (\$600) is made annually to an undergraduate student, with high standing, whose main interest is plant taxonomy. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

**VICTORIA CENTRAL LIONS CLUB — DR. G.C. CARL AWARD** — Two hundred and fifty dollars (\$250) awarded annually to the top first year student in the Department of Biology who is continuing similar studies at the University of Victoria.

**THE VICTORIA MEN'S GARDEN CLUB SCHOLARSHIP** — Three hundred (\$300) awarded annually to a third year student in Botany on the basis of academic attainment. The award is to be made on the recommendation of the Department of Biology.

**VICTORIA NATURAL HISTORY SOCIETY SCHOLARSHIP** — Four hundred dollars (\$400) awarded to the most deserving student completing first or second year, specializing in Biology, and having demonstrated interest in natural history.

##### **Chemistry**

**THE MOLSON COMPANIES SCHOLARSHIPS** — A scholarship of five hundred dollars (\$500), one in each of the departments of Chemis-

\* Administered by the University of Victoria Foundation.

try, Physics, and Biochemistry/Microbiology, is awarded annually to an outstanding student completing year three in a major or honours program. Preference will be given to students who have indicated an interest in the business or scientific aspects of the brewing industry. Selection of each recipient will be made by the Senate Committee on Awards upon the recommendation of the department involved.

\* **B.W. PEARSE SCIENCE SCHOLARSHIPS** — Four scholarships of four hundred (\$400) awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

\* **THE JOHN F. REEVES MEMORIAL FUND** — The award of \$375 will be offered annually to the student in the Chemistry Coop Program who, during his work term, is judged to have made the most outstanding contribution to his employer in the field of chemistry. The recipient of the award should clearly have demonstrated some distinction in his work term performance. Candidates must be nominated for the award by their employer and the nominations will be assessed by a committee composed of two representatives of employers participating in the Chemistry Coop Program chosen by the Chemistry Department and two members of the Chemistry Department. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the committee. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

**THE RETECH AWARD** — The award of \$200 will be offered annually to a student in the Chemistry Coop Program who, during the work term, is judged to have made an outstanding contribution to the employer and to the field of chemistry. The recipient of the award should clearly have demonstrated some distinction in the work term performance. Candidates must be nominated for the award by their employers and the nominations will be assessed by a committee composed of two representatives of employers participating in the Chemistry Coop Program chosen by the Chemistry Department and two members of the Chemistry Department. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of this committee. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

\* **THE STEPHEN A. RYCE MEMORIAL SCHOLARSHIP** — A scholarship of \$175 will be awarded annually to an outstanding student in third year Chemistry who plans to complete a degree in Chemistry at the University of Victoria. Selections of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Awards Committee of the Department of Chemistry. The award is in memory of Dr. Stephen A. Ryce who was a member of the Chemistry Department for many years.

**SEASPAN INTERNATIONAL LTD. SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

#### **Child Care**

**B.C. CHILD CARE SERVICES ASSOCIATION AWARD** — One year's free membership in the association is awarded annually to a graduating student who has demonstrated proficiency in practica and has made significant contributions to the Association's activities. Selection of the recipient will be made by the School of Child Care and the Association's Victoria Region Executive.

\* **THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS** — Nine scholarships of seven hundred dollars (\$700) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria, as follows:

- One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
  - One scholarship to a student who has completed Year III in an Astronomy Program;
  - Five scholarships for award within the student body at large.
- If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

\* **THE WILLIAM AND GLADYS PARTRIDGE AWARD** — An award of \$125 is made annually to the graduating student in the School of Child Care who submits the best essay offering an original contribution to the theory or practice of child care. Essays must be submitted no later than April 30. If no essay reaches the required standard the award will be withheld. Selection of the recipient will be made upon the recommenda-

tion of the Director of the School of Child Care.

**THE JEAN WHITE MEMORIAL SCHOLARSHIP** — A scholarship of \$400 is awarded annually to a student entering second year in the School of Child Care who is pursuing a career in a health related field and has demonstrated an exceptional commitment to the community through volunteer service. This award has been established by the Queen Alexandra Solarium for Crippled Children Society in memory of the late Mrs. Jean White, Coordinator of Volunteers, who devoted her life to children. Selection of the recipient will be made by the Senate Committee on Awards upon the joint recommendation of the School of Child Care and the Board of Trustees of the Queen Alexandra Crippled Children Society.

#### **Classics**

\* **THE GEORGE P. BLACK MEMORIAL SCHOLARSHIP** — A scholarship of \$400 will be awarded annually to an outstanding undergraduate student in Classics, in memory of George P. Black, who was for 22 years an exceptional teacher of Latin and Greek at Victoria College. The recipient will be selected by the Senate Committee on Awards, upon the recommendation of the Department of Classics.

**CLASSICAL ASSOCIATION OF VANCOUVER ISLAND BOOK PRIZES** — Three prizes (not exceeding \$25 each) will be awarded annually by the Classical Association of Vancouver Island for excellence in the study of Classics. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Classics.

#### **Computer Science**

**DIGITAL EQUIPMENT OF CANADA LIMITED AWARD OF MERIT** — An award of \$100 and a medal is made annually to a student who is entering fourth year, is registered in a Major or Honours Computer Science program (including a combined program) and has achieved the highest overall standing in the required third year Computer Science courses. In the case of a tie in the standing the Department will recommend a recipient. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Computer Science.

**MACDONALD DETTWILER & ASSOCIATES LTD. SCHOLARSHIP** — MacDonald Dettwiler & Associates Ltd. offers a scholarship of \$1,000 to an outstanding student entering the final year of studies in an undergraduate program of Computer Science. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Computer Science and in consultation with MacDonald Dettwiler & Associates Ltd.

#### **Creative Writing**

**THE ROSALIND HULET PETCH MEMORIAL PRIZE IN CREATIVE WRITING** — Two hundred dollars (\$200) to be awarded annually to an outstanding student in Creative Writing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Creative Writing.

#### **Economics**

**THE ASSOCIATION OF PROFESSIONAL ECONOMISTS OF BRITISH COLUMBIA SCHOLARSHIP** — The Association provides a scholarship of \$500 to encourage students to pursue careers as professional economists. It is awarded to an outstanding student in Economics entering the final year of a Major or Honours program in Economics. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

**THE EATON FOUNDATION SCHOLARSHIP IN MARKETING** — A scholarship of five hundred dollars (\$500), the gift of the Eaton Foundation, will be available annually to the third year student who, in the opinion of the Department of Economics, is most proficient in the study of consumer behaviour under competitive market conditions. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics, to a student with a first class average.

\* **THE GEORGE HAMILTON HARMAN MEMORIAL SCHOLARSHIPS** — Two scholarships of three hundred and twenty-five dollars (\$325) each, made available by Miss Emily A. Harman of Toronto in memory of her late brother, will be awarded for proficiency in money and banking or in Economics.

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BRITISH COLUMBIA PRIZE** — An award of \$450 is made annually to the top student completing the accounting course, Commerce 251.

\* Administered by the University of Victoria Foundation.

**THE PALM DAIRIES SCHOLARSHIP** — A scholarship of \$500 is awarded annually to an outstanding student entering year four of an Honours program in Economics. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

**YORKSHIRE TRUST COMPANY SCHOLARSHIP** — Two hundred dollars (\$200) awarded annually to the outstanding student in Commerce 251 who plans to continue University studies leading to a B.Com. degree.

#### Education

**THE BRITISH COLUMBIA ART TEACHERS' ASSOCIATION SCHOLARSHIP** — An annual award of five hundred dollars (\$500) is made to a student who is completing year 2, 3 or 4 in an Education program having Art as one of the teaching areas and who is also a member of the British Columbia Art Teachers' Association. The award criteria will be high academic performance, demonstrated artistic ability and successful student teaching. Selection of the recipient will be made by the Senate Committee on Awards upon the joint recommendation of the Department of Art and Music and the Faculty of Education.

\* **THE DENTON MEMORIAL BOOK PRIZE** — An annual book prize to a student in a professional year (elementary field) who has a first class standing in practice teaching and good general proficiency.

\* **THE H.O. AND ETTA B. ENGLISH MEMORIAL SCHOLARSHIP** — Eight hundred dollars (\$800) to be awarded annually for general proficiency and high standing in practice teaching to a student who is returning for further study in the Faculty of Education.

\* **THE FACULTY OF EDUCATION MEMORIAL SCHOLARSHIP** — A scholarship up to the amount of the recipient's tuition fees will be awarded annually to an outstanding student in the Faculty of Education on the basis of previous academic performance and potential as a teacher. In cases where equal scholastic ability has been demonstrated, financial need will be considered. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

\* **THE WILLIAM A. AND FRANCES E. HARPER SCHOLARSHIP** — One hundred and seventy-five dollars (\$175) to be awarded annually to a deserving and promising student in the Faculty of Education.

**THE A. WILFRID JOHNS MEMORIAL SCHOLARSHIP** — Three hundred and fifty dollars (\$350) will be awarded annually to a promising student entering fourth year who has demonstrated the ability to teach Art Education. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

**THE FRED L. MARTENS SCHOLARSHIP** — A scholarship of three hundred and fifty dollars (\$350) is awarded annually to the School of Physical Education student with the highest grade point average entering year 5 of the B.Ed. degree program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

\* **ROBERT BURNS McMICKING CHAPTER IODE SCHOLARSHIP** — Two hundred and seventy-five dollars (\$275) to be presented annually to a student in the Faculty of Education who has shown outstanding ability in practice teaching, who has high academic standing in the field of kindergarten or primary education and who will be continuing studies in this field.

\* **THE JOHN AND ALICE McCULLOCH MEMORIAL SCHOLARSHIP** — Two hundred and fifty dollars (\$250) is awarded annually to a student in the Faculty of Education showing outstanding merit in the first five or six units in Art Education and planning to continue study at the University of Victoria in the Elementary Art Education Teaching Area. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Art Education Section of the Department of Art and Music Education.

\* **THE NATIVE DAUGHTERS OF BRITISH COLUMBIA SCHOLARSHIP** — Two hundred and fifty dollars (\$250) is awarded annually to an outstanding British Columbia native Indian student completing year 2, 3 or 4 in the Faculty of Education. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

**THE NORA PIGGOTT SCHOLARSHIP** — An award of \$400 is made annually to an outstanding female student in the Faculty of Education. The award is to be based primarily on an assessment of the student's potential as a teacher as displayed in the practicum. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

**ROSE'S LIMITED JEWELLERS WATCH** — To be awarded annually to the leading student in the Faculty of Education at the University of Victoria.

\* **SCHOOL OF PHYSICAL EDUCATION SCHOLARSHIPS** — Three scholarships of three hundred and fifty dollars (\$350) are awarded annually to academically outstanding students who intend to continue their studies in the School of Physical Education at the University of Victoria. The scholarships will be given to the students with the highest grade point average in each of the years 1, 2 and 3. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Faculty of Education.

**DON WRIGHT SCHOLARSHIP IN MUSIC EDUCATION (INSTRUMENTAL MUSIC)** — This scholarship was established by Mr. Don Wright with the aim of strengthening the teaching of instrumental music in the schools. The scholarship of \$600 is awarded annually to a full time student in the Bachelor of Music or Bachelor of Education (Music Education) degree program who has demonstrated a talent and achievement in instrumental music and teaching ability at either the elementary or secondary level. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

**DON WRIGHT SCHOLARSHIP IN MUSIC EDUCATION (VOCAL AND CHORAL MUSIC)** — This scholarship was established by Mr. Don Wright with the aim of strengthening the teaching of vocal and choral music in the schools. The scholarship of \$600 is awarded annually to a full time student in the Bachelor of Music or Bachelor of Education (Music Education) degree program who has demonstrated a special aptitude for vocal and choral music and a teaching ability at either the elementary or secondary level. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

**THE ROSALIND W. YOUNG SCHOLARSHIP** — Four hundred dollars (\$400) to be awarded annually by the University Women's Club of Victoria to the woman achieving the highest standing in second year Education who is continuing University studies.

#### Engineering

\* **THE BAYNES AWARD IN ENGINEERING** — An award of \$800.00 has been made available by G.E. Baynes, Consulting Engineer. The award will be made to an outstanding undergraduate student in Engineering (who is a Canadian citizen and) who has demonstrated strong qualities of leadership combined with active participation in sports. As part of the selection process the Faculty will consult with the Engineering Student's Association. The selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

**MACDONALD DETTWILER & ASSOCIATES LTD. SCHOLARSHIP** — MacDonald Dettwiler & Associates Ltd. offers a scholarship of \$1000 to an outstanding student entering the final year of studies in an undergraduate program of Electrical Engineering. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and in consultation with MacDonald Dettwiler & Associates Ltd.

#### English

\* **THE RALPH BARBOUR BURRY MEMORIAL SCHOLARSHIPS** — Two scholarships of \$1,250 each are awarded annually for excellence in English studies to students entering the third or fourth year in an English Major or Honours program. In cases of comparable academic merit, contributions to university and/or community activities and financial need will be considered. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of English.

**THE EDGAR FERRAR CORBET SCHOLARSHIP** — Two awards of two hundred and fifty dollars (\$250) to be awarded annually for proficiency in English to a second year student who is a graduate of a British Columbia high school and who will be majoring or honouring in English in the third year.

\* **MARTLET CHAPTER IODE CUTHBERT HOLMES ENGLISH HONOURS ESSAY SCHOLARSHIP** — A scholarship to the value of two hundred and seventy-five dollars (\$275) will be awarded annually to the student who has written the best English Honours Graduating Essay. The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department.

\* Administered by the University of Victoria Foundation

\* **CHAPTER N, P.F.O. MEMORIAL PRIZE** — One hundred and fifty dollars (\$150) awarded annually by Chapter N, P.F.O. Sisterhood, to a woman student in first year for excellent in English.

\* **ROYAL INSTITUTION AND FRANK EATON MEMORIAL SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded to the student taking the highest standing in English of the second year.

**THE MADAME SANDERSON MEMORIAL SCHOLARSHIP** — Three hundred and fifty dollars (\$350) offered annually to a promising student for excellence in English and French of the second year.

**THE KATE POTTINGER THOMPSON MEMORIAL SCHOLARSHIP** — An award of one hundred and fifty dollars (\$150) is given annually to the Major or Honours student in English with the best overall performance in the third year. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of English.

#### Environmental Studies

**B.C. HYDRO SCHOLARSHIPS** — B.C. Hydro is establishing five scholarships of \$500 each to encourage the development of knowledge and experience in subjects related to environmental impact assessment work within the context of the British Columbia environment. The scholarships are awarded annually to outstanding students entering year 3 or 4 of the following programs: Biology (1 award), Geography (1 award) and Environmental Studies (3 awards). The Geography recipient must be specializing in Techniques and Methods and/or Resources and Physical courses; the Environmental Studies recipients must be specializing in the natural Resource Management and/or Conceptual options. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Departments and Program involved.

#### French

**ALLIANCE FRANCAISE SCHOLARSHIPS** — Two scholarships of fifty dollars (\$50) each awarded: (1) to the student in the second year who has made the most progress in French and who intends to continue university work in this subject; (2) to the best student entering the fourth year of a Major program in French.

\* **L'ALLIANCE FRANCAISE DE VICTORIA BOOK PRIZE IN MEMORY OF DR. W.D. WITHERSPOON** — An annual book prize will be given to a student graduating with a Major in French. The award is made possible through donations from members of the Alliance Francaise de Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of French Language and Literature.

\* **THE ADELINE JULIENNE DELOUME MEMORIAL SCHOLARSHIPS** — Three hundred dollars (\$300) each to be awarded to the first year female student and the first year male student attaining the highest grades in French in first year university and intending to continue studies in French at the University of Victoria. Additional awards will be presented to students in the Honours and Major Programs, up to a total of \$4,000.

**THE FRENCH GOVERNMENT BOOK PRIZES** — These prizes, the gift of the French government through the consulate in Vancouver, are awarded annually for excellence in French. Selection to be made by the French Department.

**THE MADAME SANDERSON MEMORIAL SCHOLARSHIP** — Three hundred and fifty dollars (\$350) offered annually to a promising student for excellence in English and French of the second year.

**THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA** — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

#### Geography

**B.C. HYDRO SCHOLARSHIPS** — B.C. Hydro is establishing five scholarships of \$500 each to encourage the development of knowledge and expertise in subjects related to environmental impact assessment work within the context of the British Columbia environment. The scholarships are awarded annually to outstanding students entering year 3 or 4 of the following programs: Biology (1 award), Geography (1 award) and Environmental Studies (3 awards). The Geography recipient must be specializing in Techniques and Methods and/or Resources and Physical courses; the Environmental Studies recipients must be specializing in the Natural Resource Management and/or Conceptual options. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Departments and Program involved.

\* **THE DR. NORMAN BETHUNE MEMORIAL AWARD** — An annual award of one hundred and twenty-five dollars (\$125) will be made available in memory of Dr. Norman Bethune. The award is to be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 364. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

\* **THE CHAPMAN MEMORIAL SCHOLARSHIP** — Two scholarships of \$700 each will be awarded annually, one to a student who has completed third year Biology, on the Ecology Program, and one to a student who has completed third year Geography, on the Resources and Physical Program. A book on ecology and conservation, selected by the appropriate department, will be part of the award. These scholarships are given in memory of John Chapman and his daughter Barbara who were well known conservationists. Selection will be made by the Senate Committee on Awards upon the recommendations of the appropriate departments.

\* **THE CHINESE CONSOLIDATED BENEVOLENT ASSOCIATION OF VICTORIA AWARDS** — These awards are granted for the purpose of stimulating the study of the Geography of Chinatowns.

a) **Course Award** — An annual award of one hundred dollars (\$100) will be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 442 (Geography of Chinatowns and Chinese Migration). Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography.

b) **Travel Award** — This award will provide funds to assist Geography students, who are or have been enrolled in Geography 442, to undertake a field study of Chinatowns outside the City of Victoria. The selection of students will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography. The general University requirement that award recipients must return to the University of Victoria in the next regular session and enroll in a full program does not apply to this travel award.

\* **THE CHARLES HOWATSON SCHOLARSHIP** — An award of \$250 is made annually to an outstanding third year student enrolled in a geography major or honours program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography.

\* **THE MAO TSE-TUNG MEMORIAL AWARDS** — These awards are funded by a bequest from the estate of Mr. Bill Scott.

a) **Course Award** — An annual award of one hundred and twenty-five dollars (\$125) will be made available in memory of Mao Tse-Tung. The award is to be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 365. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

b) **Travel Award** — This award will provide funds to assist Geography students, who are or have been enrolled in Geography 364 and 365, to undertake a study tour of China. The frequency of the study tour will be determined by the Department of Geography. The selection of students will be made by the Senate Committee on Awards on the recommendation of the Department of Geography. The general University requirement that award recipients must return to the University of Victoria in the next regular session and enroll in a full program does not apply to this travel award.

**SEASPAN INTERNATIONAL LTD. SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

**THE VICTORIA LAPIDARY AND MINERAL SOCIETY SCHOLARSHIP** — An annual scholarship of \$150 will be awarded to a student with outstanding scholastic ability who has completed the introductory course in Geology and who intends to continue studies in this field. The selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography.

\* Administered by the University of Victoria Foundation.

\* **THE AJAIB SINGH SANGHA MEMORIAL SCHOLARSHIP** — An annual scholarship of \$125 will be awarded to an outstanding student in Geography who has shown special proficiency in the course. The Geography of Southeast Asia. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Department of Geography. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

#### German

**AUSTRIAN GOVERNMENT BOOK PRIZES** — The Austrian Consulate awards book prizes to students in each undergraduate year showing proficiency in German studies.

\* **THE GERMAN CLUB JUBILEE DICTIONARY AWARD** — An award consisting of a German/English Dictionary will be awarded annually to a promising first or second-year student intending to continue German studies at the University of Victoria. The award was established by the University of Victoria German Club (1977-78), and is awarded by the Senate Committee on Awards after consultation with the Department of Germanic Studies.

\* **THE DR. NORA HAIMBERGER SCHOLARSHIPS** — Two scholarships are awarded annually. One (\$25) is given to a promising student enrolled in Germanic Studies 100 or 149. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Germanic Studies.

**GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY BOOK PRIZES** — These book prizes, the gift of the Federal Republic of Germany through the Consulate General in Vancouver, are available for students in each undergraduate year showing proficiency in German studies.

\* **THE J. BEATTIE MacLEAN SCHOLARSHIP** — Two hundred dollars (\$200) awarded annually to a student of outstanding merit and promise in second or third year who intends to continue studies in German at the University of Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Germanic Studies.

**THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA** — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

\* **THE CARL WEISSELBERGER MEMORIAL BOOK PRIZE** — To be awarded to a promising senior student in German on the recommendation of the Department of Germanic Studies.

#### Hispanic and Italian Studies

\* **PABLO CABANAS MEMORIAL SCHOLARSHIP** — A scholarship of \$650 is awarded annually to an outstanding student in second or third year who intends to continue studies in Spanish at the University of Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

**THE GOVERNMENT OF ITALY BOOK PRIZES** — These prizes, the gift of the Italian Government through the Consulate in Vancouver, are awarded annually for excellence in Italian. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

**THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA** — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

**THE SPANISH GOVERNMENT BOOK PRIZE** — Awarded to the best student in a senior Spanish course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

#### History

\* **THE PRINCE AND PRINCESS NICHOLS ABKHAZI BOOK PRIZE IN RUSSIAN HISTORY** — A book prize to the value of \$200 is awarded annually to the student who writes the best essay dealing with some aspect of Russian History related to the reign of Tsar Alexander II. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE KATHLEEN AGNEW MEMORIAL SCHOLARSHIPS** — Two awards of three hundred and twenty-five dollars (\$325) granted for the purpose of stimulating the study of the History of Canada

\* **THE TATTON ANFIELD PRIZE IN AMERICAN HISTORY** — An annual book prize is awarded to an outstanding student enrolled in a senior level undergraduate course in either 20th century American history or American diplomatic history. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE ALEXANDER MacLEOD BAIRD MEMORIAL PRIZE IN SCOTTISH HISTORY** — A prize of \$250 is awarded annually to the student in the Department of History who writes the best essay on a topic in Scottish History. The award has been established by Mrs. A. MacLeod Baird in memory of her husband who was very interested in the role played by the Scots in Canada's history. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

**B.C. HISTORICAL ASSOCIATION SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded to the leading undergraduate student in a course on B.C. history.

**CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (VICTORIA BRANCH) BOOK PRIZE** — An annual prize of one hundred dollars (\$100) offered by the Victoria Branch, Canadian Institute of International Affairs in alternate years to: (1) the leading student in the History Department at the University of Victoria in a senior course dealing with Canada's foreign policy; (2) and the leading student in Political Science 240.

**THE PROFESSOR B.W. DIPPPIE PRIZE IN AMERICAN HISTORY** — An annual prize of three hundred dollars (\$300), donated in honour of Professor B.W. Dippie, will be awarded to an outstanding student of American history, to be selected from students enrolled in senior level American history courses. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE WILLARD E. IRELAND SCHOLARSHIP IN HISTORY** — A scholarship of approximately \$925 will be awarded annually to an outstanding student who has completed third year and is in a Major or Honours program in History. Preference will be given to a student specializing in Canadian History. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

**PROFESSOR S.W. JACKMAN PRIZE IN BRITISH HISTORY** — An annual prize of \$300, donated in honour of Professor S.W. Jackman, will be awarded to an outstanding student of British history, to be selected from students enrolled in senior level British history courses. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

**LEON J. LADNER B.C. HISTORY SCHOLARSHIPS** — Two scholarships, fifty dollars (\$50) to the best undergraduate student studying the History of British Columbia, and one hundred dollars (\$100) for the best graduating essay on the History of British Columbia.

\* **LADNER BOOK PRIZE FOR THE STUDY OF THE HISTORY OF BRITISH COLUMBIA** — An annual book prize will be given to an outstanding student of the History of British Columbia. The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE ALFRED LOFT BOOK PRIZE IN CANADIAN HISTORY** — A book prize to be awarded each year to an outstanding student in Canadian History. The prize is given in recognition of Professor Loft's contribution as a former teacher in the Department of History. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE MAJOR-GENERAL G.R. PEARKES, VC, SCHOLARSHIP** — An annual scholarship of \$200 is awarded to a student in the Department of History with the highest standing in three units of third or fourth year courses dealing with military history or defence studies. Courses eligible for consideration in any year will be identified in the History Department Handbook. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE ALLAN AND ELIZABETH McKINNON SCHOLARSHIP** — An annual scholarship of sixteen hundred dollars (\$1,600) will be awarded to a senior student of high academic standing engaged in a

\* Administered by the University of Victoria Foundation

Major or Honours program in Canadian history who would find it difficult to resume studies without financial aid. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

\* **THE SYDNEY G. PETTIT BOOK PRIZE IN EUROPEAN HISTORY** — A book prize to be awarded each year to an outstanding student in European history. The prize is given in recognition of Professor Pettit's teaching and administrative contributions to the Department of History. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

**ROYAL UNITED SERVICES INSTITUTE OF VANCOUVER ISLAND BOOK PRIZES IN MILITARY HISTORY** — Book prizes to the total value of \$50 will be awarded annually to the two students with the highest academic standing in each of the Canadian and European Military History courses. The two winners and the prizes will be selected by the Senate Committee on Awards upon the recommendation of the Professor teaching the two undergraduate military history courses involved.

\* **THE NORA LUGRIN SHAW AND WENDELL BURRILL SHAW MEMORIAL SCHOLARSHIP** — Two hundred and seventy-five dollars (\$275) to be awarded annually to the student of History who writes the best essay dealing with the Magna Carta, The Petition of Rights and The Bill of Rights as the Fountainhead of Constitutional Liberties. The award is to be made by the Senate Committee on Awards upon the recommendation of the Department of History.

**UNITED EMPIRE LOYALISTS ASSOCIATION OF CANADA, (VICTORIA BRANCH), BOOK PRIZE IN CANADIAN HISTORY** — An annual book prize to be given to an outstanding student of Canadian History in a senior level course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

**VICTORIA MUNICIPAL CHAPTER, IODE SCHOLARSHIP** — Two hundred and seventy-five dollars awarded to an outstanding student in Canadian History in any year.

#### History in Art

\* **THE FLORA HAMILTON BURNS SCHOLARSHIP** — An annual award of five hundred dollars (\$500), donated by Flora Hamilton Burns in memory of Emily Carr, is made to an outstanding student entering fourth year of the B.A. Program in History in Art with an announced intention of proceeding to further study in this discipline. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of History in Art.

\* **MARTLET CHAPTER, IODE PRIZE FOR SCHOLARSHIP IN HISTORY IN ART** — An annual award of two hundred and seventy-five dollars (\$275) will be presented for excellence in History in Art. The winner will be selected by the Senate Committee on Awards on the recommendation of the Department of History in Art.

#### Law

\* **THE ANNIE CADBY MEMORIAL SCHOLARSHIP** — A scholarship, established by Louis F. Lindholm, is awarded annually to the student who attains the highest standing in the introductory course on Constitutional Law offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law. The value of this award will be approximately \$400.

**THE CAMPNEY, MURPHY PRIZE IN COLLECTIVE AGREEMENTS AND ARBITRATION** — A scholarship of \$325 is awarded annually to the student who obtains the highest grade in the course on Collective Agreements and Arbitration offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE CAMPNEY, MURPHY PRIZE IN DEBTOR-CREDITOR RELATIONS** — A scholarship of \$325 is awarded annually to the student who obtains the highest grade in the course on Debtor-Creditor Relations offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon recommendation of the Faculty of Law.

**CANADA LAW BOOK COMPANY BOOK PRIZES** — A book prize of \$150 is awarded annually to a student in each year of the LL.B. program for academic excellence in a course designated annually by the Faculty. Normally, the prize will be awarded to a student who achieves the highest grade in a course which does not have a prize associated with the course. The recipients of the prizes will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **CREASE AND COMPANY SCHOLARSHIP IN LAW** — A scholarship to the value of full tuition is awarded to the student who stands highest in the second year of the LL.B. Program. The scholarship was established by the Victoria Law Firm of Crease and Company in honour of D.M. Gordon, Q.C.

**DAVIS AND COMPANY SCHOLARSHIP** — A scholarship of \$1,000 is awarded annually to a student who has completed the first year program in the Faculty of Law with high academic standing. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **THE JIM ELLIS INTERNATIONAL LAW MOOTING AWARD** — The award shall be made to the students in the Faculty of Law who have demonstrated excellence in preparing and arguing International Law Moots. The award is made to the students who represent the Faculty of Law in an International Law Moot Court Competition. Funds associated with this award will be used to defray the expenses connected with the competition including expenses incurred by the students attending the competition. The names of the recipients will be engraved on a plaque that will be located in the Begbie Building to commemorate the award. Selection of the recipients of this award will be made by the Faculty of Law.

\* **THE JIM ELLIS MEMORIAL PRIZE** — A prize shall be awarded annually to one or more students in the Faculty of Law who display outstanding academic achievement in the subjects in which Professor Jim Ellis had an academic interest; namely, the Law of Taxation, International Law and Solicitors' Practice. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law. In making its recommendation, the Faculty will also consider the students' service to the community and the breadth of their academic and cultural interests. The Faculty may limit the award to one prize in any academic year.

**THE HARPER, GREY, EASTON SCHOLARSHIP** — A scholarship in the amount of \$1500 is awarded annually to a student in the first or second year of studies in the Faculty of Law who is proceeding to the next year of study and who has achieved high standing in those studies. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **THE ALLAN HIGENBOTTAM PRIZE** — The prize is awarded annually to the student in the Faculty of Law who receives the highest standing in the Law, Legislation and Policy course. The endowment for this prize was provided by the Province of British Columbia in memory of the late G. Allan Higenbottam, former Legislative Counsel of British Columbia. The recipient will be selected by the Senate Committee on Awards on the recommendation of the Faculty of Law. The award will have a value of approximately \$225.

\* **THE G. ALLAN HIGENBOTTAM PRIZE IN LEGAL AND LEGISLATIVE DRAFTING** — The prize is awarded annually to the student in the Faculty of Law who, in the opinion of the Faculty, has demonstrated excellence in legal and legislative drafting in an upper year course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law. The Prize has been established to commemorate the memory of the late G. Allan Higenbottam, former Legislative Counsel of the Province of British Columbia. The endowment for the Prize has been provided by the family of the late G. Allan Higenbottam.

**THE BETTY AND GILBERT KENNEDY SCHOLARSHIP IN LAW** — An award of \$1,000 is made annually to an outstanding student beginning year 2 or 3 of the Law program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE LADNER DOWNS PRIZE IN APPELLATE ADVOCACY** — The prize is awarded annually to students who, in the opinion of the Faculty, have displayed greatest merit as appellate mooters. Normally, the prize is awarded to the team of students selected to represent the Faculty in moot court competition. Each year, Ladner Downs will contribute an amount of \$500 to be applied towards the transportation and accommodation expenses of the team at the moot court competition. Selection of the recipients will be made by the Faculty of Law.

**THE LADNER DOWNS SCHOLARSHIP** — A scholarship in the amount of five hundred dollars (\$500), the gift of the firm of Ladner Downs, will be offered annually to a student in the first or second year of the Faculty of Law. The award will be made to a student who, in the

\* Administered by the University of Victoria Foundation.

opinion of the Faculty, has shown excellence in legal studies. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE LADNER DOWNS SUMMER EMPLOYMENT SCHOLARSHIP** — The Ladner Downs Summer Employment Scholarship is awarded annually to a student completing second year of the Bachelor of Laws program who has achieved high academic standing and who has demonstrated proficiency in the legal skills required for the practice of law. The recipient of the scholarship will be employed by Ladner Downs during the summer between second and third year law and Ladner Downs will pay the tuition fees of the student for the third year of the student's Bachelor of Laws Program at the University of Victoria. The selection of the student shall be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE LAWRENCE AND SHAW SCHOLARSHIP** — A scholarship of \$1,000 is awarded annually in February to a student in the second year of the LL.B. program of the Faculty of Law, who has demonstrated superior academic standing in the first year and the fall term of the second year, and who has demonstrated characteristics which indicate that the recipient will likely distinguish himself or herself in the practice of law. Publications, moot court participation, participation in Faculty committees and student government and other extracurricular activities may also be considered. The selection of the recipient from among applicants who apply will be made by a committee consisting of the Dean of Law, or the Dean's nominees, and a representative of the law firm of Lawrence and Shaw.

**THE LAWSON, LUNDELL, LAWSON AND McINTOSH SCHOLARSHIP** — A scholarship is awarded annually to a student in the second year of the Bachelor of Laws program who has achieved high academic standing and who has demonstrated the qualities which are required for the practice of law. The recipient of the scholarship will be employed by the law firm of Lawson, Lundell, Lawson and McIntosh during the summer between the student's second and third year and the firm will pay the tuition fees of the scholarship recipient for the third year law program at the University of Victoria. The selection of the scholarship recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE D.J. LAWSON PRIZE IN CORPORATE LAW** — The D.J. Lawson Prize in the amount of \$200 is awarded annually to the law student who achieves the highest grade in the Corporate Law course. This prize has been established by the partners of Crease and Company to recognize the contributions of D.J. Lawson, Q.C. to the profession and to the practice of corporate law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **THE LARS ALFRED LINDHOLM MEMORIAL SCHOLARSHIP** — A scholarship, established by Louis F. Lindholm, is awarded annually to the student who attains the highest standing in the Labour Law course offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law. The value of this award will be approximately \$400.

**THE McCONNAN, BION, O'CONNOR AND PETERSON PRIZE** — A prize of four hundred dollars (\$400) will be awarded to the Law student who receives the highest grade in Commercial Transactions. The prize is awarded by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **MARTLET CHAPTER IODE SCHOLARSHIP IN LAW** — An annual scholarship of two hundred and seventy-five dollars (\$275) is awarded to the female student with the highest standing in the second year of the LL.B. Program. The scholarship was established by the Martlet Chapter of the IODE.

\* **NATIVE STUDENT SCHOLARSHIP IN LAW** — An award of \$1,500 is made annually to an outstanding female native student entering the Faculty of Law at the University of Victoria. Preference will be given to a student with a demonstrated interest in the area of native women's rights. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE H.A.D. OLIVER PRIZE IN CRIMINAL LAW** — The prize is awarded annually to a member of the graduating class in Law who has demonstrated outstanding academic achievement in the field of Criminal Law. The prize is awarded by the Senate Committee on Awards on the recommendation of the Faculty of Law. The value of this prize will be approximately \$150.

**THE JOSEPH M. PRODOR PRIZE IN TORTS** — A prize of \$500 is awarded annually to the student who achieves the highest grade in the law of Torts. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE RUSSELL AND DuMOULIN SCHOLARSHIP** — One or more scholarships are awarded annually to students in the second year of the Bachelor of Laws program who have high academic standing. The recipients of the scholarships will be employed by Russell and DuMoulin during the summer between the student's second and third year law and the firm will pay the tuition fees of the scholarship recipients for third year law at the University of Victoria and make a contribution of \$200 toward the purchase of books required by each recipient for third year law. The selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **THE J.C. SCOTT-HARSTON PRIZE IN WILLS** — The J.C. Scott-Harston Prize in the amount of \$200 is awarded annually to the law student who achieves the highest grade in the drafting of wills and who has demonstrated high academic achievement in the course in Wills and Succession. This prize has been established by the partners of Crease and Company to recognize the contributions of J.C. Scott-Harston, Q.C. to the profession and to the development of skills in the drafting of wills. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE SWINTON AND COMPANY SCHOLARSHIP** — A scholarship is awarded annually to a student completing second year law who has shown academic excellence and who has demonstrated the qualities which are required for the practice of law. The recipient of the scholarship will be employed by Swinton and Company during the summer between second and third year law and Swinton and Company will pay the tuition fees of the student for the third year of the student's Bachelor of Laws program. The selection of the student will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

**THE THORSTEINSSON, MITCHELL, LITTLE, O'KEEFE AND DAVIDSON SCHOLARSHIP** — A scholarship of \$300 will be awarded to the student obtaining the highest grade in the basic course in taxation offered in the Faculty of Law.

**UNIVERSITY PUBLISHERS AWARD** — University Publishers presents two awards annually of \$175 each. One is made to a first year law student about to enter second year studies; a second is made to a second year law student about to enter third year studies. The awards will be based on the students' participation in law student affairs and student government, and upon the joint recommendation of the Law Students' Society and the Dean of the Faculty of Law.

**THE BERTHA WILSON SCHOLARSHIP** — A scholarship of \$400 donated by the University Women's Club of Victoria is awarded annually to the female student with the highest standing in year one of the LL.B. program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

\* **J. LYLE WILSON BOOK PRIZE IN LAW** — An annual award of \$60 is awarded to the law student who stands highest in the course in Administrative Law. The award is an honour of J.L. Wilson, formerly Solicitor of the B.C. Hydro and Power Authority on Vancouver Island.

\* **THE WOOTTON SCHOLARSHIP IN LAW** — A scholarship of six hundred and twenty-five (\$625) will be awarded to a student who has completed, with high academic standing, the first or second year program in Law. The recipient shall have demonstrated proficiency in composition and legal research. The scholarship was endowed in 1976 by the Honourable Robert A. Wootton, former Justice of the Supreme Court of British Columbia, to honour members of the legal profession of his own family. The selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

#### **Mathematics**

\* **STEPHEN A. JENNINGS MEMORIAL SCHOLARSHIP** — One thousand dollars (\$1,000) is awarded annually to an outstanding student entering the third or fourth year of an honours program offered by the Department of Mathematics. Preference will be given to a student who has performed well in the W.L. Putnam competition. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Mathematics.

**THE BETTY AND GILBERT KENNEDY SCHOLARSHIP IN MATHEMATICS** — An award of \$1,000 is made annually to an outstanding student beginning year 3 of an Honours or Major program in Mathematics. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Mathematics.

\* Administered by the University of Victoria Foundation.

\* **THE MARK E. MOONEY MEMORIAL SCHOLARSHIP** — An award of \$400 is made annually to an outstanding third year student in an Applied Mathematics or a Mathematics and Physics Program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Mathematics.

\* **B.W. PEARSE SCIENCE SCHOLARSHIPS** — Four scholarships of four hundred dollars (\$400) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics, and Physics.

**SEASPAN INTERNATIONAL SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

#### Music

\* **THE HARRY AND FRANCES MARR ADASKIN SCHOLARSHIP IN MUSIC HISTORY** — An annual award of two hundred and seventy-five dollars (\$275) given in honour of these distinguished Canadian musicians by Miss Rivkah Isaacs. The scholarship is awarded to an outstanding music history major entering the final year of undergraduate study and planning to go on to graduate study in musicology. In the case of two equally gifted candidates, need is to be the determining factor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the School of Music.

\* **THE MURRAY AND FRANCES JAMES ADASKIN SCHOLARSHIP IN VIOLIN OR VIOLA** — An annual award of three hundred and seventy-five dollars (\$375) given in honour of these distinguished Canadian musicians by Miss Rivkah Isaacs. The scholarship is awarded to a student violinist or violist entering the third or fourth year of study in the performance program. In the case of two equally gifted candidates, need is to be the determining factor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the School of Music.

\* **THE HAROLD BECKWITH MEMORIAL BOOK PRIZE IN MUSIC** — Given in memory of Harold Arthur Beckwith by his family. Awarded to a graduating Bachelor of Music student for excellence in music. Selection to be made by the Senate Committee on Awards upon the recommendation of the School of Music.

\* **THE RALPH BARBOUR BURRY MEMORIAL SCHOLARSHIPS IN MUSIC** — Three scholarships in varying amounts (minimum award, \$500) are awarded annually to Music students. Preference will be given to entering students in any year. The awards will be based on excellence in music. In the case of two equally gifted candidates, need will be the determining factor. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

\* **THE IDA HALPERN MUSIC SCHOLARSHIP** — An annual award of three hundred dollars (\$300) given in honour of Dr. Ida Halpern by Miss Rivkah Isaacs. The scholarship is awarded to an outstanding student entering the third or fourth year of study toward the Bachelor of Music degree, and who is engaged in study of Western Canadian music, especially of the Western Indians. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

**THE HARBORD SCHOLARSHIP IN MUSIC** — An annual scholarship of five hundred dollars (\$500), donated by Mr. and Mrs. Justin V. Harbord, will be available to an outstanding student in the second, third, or fourth year of study for the Bachelor of Music degree. Selection will be made by the Senate Committee on Awards in consultation with the School of Music.

\* **THE REBECCA AND ESTHER LAZARUS SCHOLARSHIPS IN MUSIC** — Two annual awards each of \$275 made available by Miss Rivkah Isaacs for outstanding performers entering the third or fourth year of the University music program. One is to be given to a singer in memory of Rebecca Lazarus Isaacs, and the other is to be given to a pianist in memory of Esther Lazarus Levy. In the case of two equally gifted candidates for either or both of the above, need is to be the determining factor. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the faculty members of the School of Music.

\* **PERFORMANCE SCHOLARSHIP IN MUSIC** — One or more awards are made annually to student(s) for outstanding achievement in performance. The recipient may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music's Performance faculty.

\* **THE DOUGLAS ROSS MEMORIAL SCHOLARSHIP** — An award of three hundred and seventy-five dollars (\$375) is made annually to a student for outstanding achievement in piano performance. The recipient may be a new or a returning student. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

\* **SCHOOL OF MUSIC FACULTY STRING AWARDS** — Awards made on the recommendation of the School of Music faculty, subject to approval by the Senate Committee on Awards, given annually or as funds permit to outstanding violinists, violists, cellists, or double bassists, in recognition of performance ability. In cases of equal performance skill, need should be the determining factor. The awards are named in recognition of School of Music faculty who made personal contributions to inaugurate this fund, but it is further supplemented through proceeds from scholarship concerts and other sources. The number and size of such awards will be determined annually by the School faculty.

\* **THE TAYLOR SCHOLARSHIP IN MUSIC** — An annual scholarship will be available to an outstanding student in any year of study for the Bachelor of Music degree. Selection will be made by the Senate Committee on Awards on the recommendation of the School of Music. The award is presented in honour of Dr. M.G. Taylor, the first President of the University of Victoria, and Mrs. Taylor, and is administered by the University of Victoria Foundation. If funds permit, additional awards may be made.

**THE VICTORIA COUNCIL, KNIGHTS OF COLUMBUS MUSIC SCHOLARSHIP** — An annual scholarship of one hundred dollars (\$100) will be awarded to a student demonstrating outstanding achievement in the School of Music. Selection will be made by the Senate Committee on Awards on the recommendation of the School of Music.

#### Nursing

\* **THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS** — Nine scholarships of seven hundred dollars (\$700) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria, as follows:

- One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
- One scholarship to a student who has completed Year III in an Astronomy program;
- Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

**THE RICKER NURSING SCHOLARSHIP** — Two hundred dollars (\$200) to be awarded annually to a student who has completed the first year of the program with good grades and who has demonstrated potential to provide leadership within a professional role. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

#### Pacific Studies

**THE JAMES BOUTILIER PACIFIC STUDIES TRAVEL AWARD** — An annual travel award to be given to an outstanding student enrolled in a General Program or Major Program in Pacific Studies. The award will reimburse the student to a maximum of \$1,500 for expenses incurred during a study tour of the South Pacific region, to be taken during the Summer Session. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Centre for Pacific and Oriental Studies. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

#### Philosophy

\* **THE DAVID KAPLAN BOOK PRIZE IN HONOURS PHILOSOPHY** — Offered annually to the student graduating in Honours Philosophy with the highest standing in those philosophy courses required for the Degree.

**THE ANN TERESA WOODS BOOK PRIZE IN PHILOSOPHY** — Offered annually to the student graduating with a Major in Philosophy with the highest standing in those philosophy courses required for the Degree.

**THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL PRIZE** — Seventy-five dollars (\$75) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

\* Administered by the University of Victoria Foundation.

**Physics**

**THE BRITISH COLUMBIA TELEPHONE COMPANY SCHOLARSHIP** — Six hundred dollars (\$600) awarded to a student of first or second year for excellence in Physics. The winner must continue university studies.

\* **THE CLARENCE C. COOK MEMORIAL SCHOLARSHIP** — An award of \$150 is made annually to the first year student who achieves the highest standing in 3 units of Physics from Physics 100, 110, 120 or 220 and who plans to take further courses in Physics at the University of Victoria. In the case of a tie, a recommendation will be made in consultation with the instructor(s) involved.

**THE MOLSON COMPANIES SCHOLARSHIPS** — A scholarship of five hundred dollars (\$500), one in each of the departments of Chemistry, Physics, and Biochemistry/Microbiology, is awarded annually to an outstanding student completing year three in a Major of Honours program. Preference will be given to students who have indicated an interest in the business or scientific aspects of the brewing industry. Selection of each recipient will be made by the Senate Committee on Awards upon the recommendation of the department involved.

\* **B.W. PEARSE SCIENCE SCHOLARSHIPS** — Four scholarships of four hundred dollars (\$400) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

**SEASPAN INTERNATIONAL LTD. SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

**Political Science**

**CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (VICTORIA BRANCH) BOOK PRIZE** — An annual prize of one hundred dollars (\$100) offered by the Victoria Branch, Canadian Institute of International Affairs in alternate years to: (1) the leading student in the History Department at the University of Victoria in a senior course dealing with Canada's foreign policy; (2) and the leading student in Political Science 240.

**THE LADY LAURIER CLUB, ELIZABETH FORBES MEMORIAL BOOK PRIZE** — An award for the purchase of books is made annually to the top female student in the third year of a Political Science program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Political Science.

**THE LADY LAURIER CLUB SCHOLARSHIP** — Two hundred and fifty dollars (\$250) to be awarded annually by the Lady Laurier Club of Oak Bay to a worthy and deserving student entering fourth year at the University and undertaking a course in Political Science.

\* **THE ROBERT LORNE STANFIELD BOOK PRIZES IN POLITICAL SCIENCE** — To be awarded to the top two students in each of Political Science 100 and Political Science 360.

**THE WALTER D. YOUNG SCHOLARSHIP** — A scholarship of \$1,000 is awarded annually to an outstanding student entering the graduating year of an honours or major program offered by the Department of Political Science at the University of Victoria. The recipient will be selected by a committee after consideration of the following criteria: grades in Canadian studies courses, particularly the grade in an introductory course in Canadian government, political science grades, other post-secondary grades and other activities undertaken at the University and in the wider community. Application forms for this scholarship are available from the Department of Political Science and must be submitted not later than March 30.

Note: The committee may require that candidates for the scholarship submit an essay or term paper done by them for an upper level university course. References may be sought and an interview may be held.

**Psychology**

\* **THE W.H. GADDES SCHOLARSHIP** — A scholarship of seven hundred dollars (\$700) will be awarded annually to a third or fourth year student in a Major or Honours program in Psychology, which includes at least one course in each of the physiological and the psychological bases of human development. The recipient may continue studies at the University of Victoria or at some other recognized university. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Psychology.

**ROTARY CLUB OF SAANICH SCHOLARSHIP** — Four hundred dollars (\$400) to be awarded annually to the full time third year student who obtains the highest standing in two upper year Psychology courses and is continuing studies at the University of Victoria or at some other recognized university.

**THE B.C. PSYCHOLOGICAL ASSOCIATION GOLD MEDAL** — Awarded annually to a graduating student in the Honours Psychology program who has demonstrated outstanding achievement in the study of Psychology.

**THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL PRIZE** — Seventy-five dollars (\$75) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

**Slavonic Studies**

\* **THE MICHAEL DANE MEMORIAL BOOK PRIZE IN RUSSIAN** — An annual book prize will be given to the top student in first year Russian who proposes to continue the study of Russian for at least one further year at the University. The winner and the prize will be selected by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

**GOVERNMENT OF THE SOCIALIST REPUBLIC OF YUGOSLAVIA BOOK PRIZE** — An annual book prize will be awarded to the best student in Serbo-Croatian. Selection to be made by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

\* **THE J.B. WOOD BOOK PRIZE IN RUSSIAN** — An annual book prize will be given to the top student in first year Russian who proposes to continue the study of Russian for at least one further year at the University. The winner and the prize will be selected by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

**Social Work**

**BRITISH COLUMBIA ASSOCIATION OF SOCIAL WORKERS PRIZE** — A prize of two hundred and fifty dollars (\$250) is awarded annually to an outstanding student who has completed the first year of the program in the School of Social Work. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

\* **THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS** — Nine scholarships of seven hundred dollars (\$700) each will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria, as follows:

- (a) One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
- (b) One scholarship to a student who has completed Year III in an Astronomy program;
- (c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

**Sociology**

\* **THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL PRIZE** — Seventy-five dollars (\$75) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

\* **THE VICTORIA UNIT OF NATIONAL COUNCIL OF JEWISH WOMEN BOOK PRIZE** — A prize will be given to the best student taking Sociology 335 (Minority and Ethnic Group Relations). The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department of Sociology.

**Theatre**

\* **CRESTVIEW-CHELSEA THEATRE AWARD** — An award of three hundred and fifty dollars (\$350) will be offered at the discretion of the Department of Theatre to a promising and deserving student in Theatre who is continuing at the University of Victoria.

\* **GWEN DOWNES MEMORIAL BOOK PRIZE** — Awarded to the student who gives the best performance in a university play.

\* Administered by the University of Victoria Foundation

\* **THE DOROTHY SOMERSET SCHOLARSHIP IN THEATRE** — An annual scholarship of two hundred and seventy-five dollars (\$275), made available by Miss Rivkah Isaacs of Victoria, will be awarded to that third or fourth year student who, in the opinion of the Department of Theatre, displays outstanding talent and devotion to any branch of theatre work. A third year student must use the award to complete fourth year studies at the University of Victoria Theatre Department; a fourth year student is allowed the option of furthering studies at a recognized school of theatre, such as the National Theatre School or the Royal Academy of Dramatic Art. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

\* **THE BARBARA McINTYRE SCHOLARSHIP IN THEATRE** — An annual scholarship of \$650 will be awarded to a third or fourth year student who, in the opinion of the Department of Theatre, displays outstanding ability in the area of theatre in education. If there is no theatre in education candidate, the award may go to a student in any branch of theatre work. A third year student must use the award to complete fourth year studies at the University of Victoria Theatre Department; a fourth year student is allowed the option of furthering studies at a recognized school of theatre or university. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

#### Visual Arts

**THE PAT MARTIN BATES SCHOLARSHIP** — An award of \$150 is made annually by the University Women's Club of Victoria to the most outstanding woman student completing the third year of a program in

Visual Arts. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

\* **THE HEATHER CRAGG SCHOLARSHIP** — An award of one thousand five hundred dollars (\$1,500) is made annually to an outstanding student completing year two of a Visual Arts program. The student who receives the award at the end of year two may have the award renewed at the completion of year three of the program. The selection of the recipient and the approval of the renewal will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

**THE HEINZ JORDAN MEMORIAL SCHOLARSHIP** — An award of five hundred dollars (\$500) is made annually to an outstanding student completing year two of a Visual Arts program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

**THE JOHN WYATT PRICE BOOK PRIZE IN PHOTOGRAPHY** — A book prize is awarded annually to a student majoring in Visual Arts with an emphasis in photography. Preference will be given to a student who has demonstrated an interest in portraiture. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

\* Administered by the University of Victoria Foundation.

## SECTION 4

### UNDERGRADUATE AWARDS FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA

These awards are open only to students who attend the University of Victoria in the Winter Session specified in this calendar. Application for these awards must be made before April 30, unless otherwise indicated, on forms available in the Office of the Administrative Registrar.

**THE ALAN BOAG SCHOLARSHIP** — A scholarship of one thousand dollars (\$1,000), the gift of the trustees of a fund established by the late Alan Boag, is available for a student who is taking his major in History, Economics, Law, Political Science, or Sociology. This scholarship, which is open to graduates, or to undergraduates who have completed at least two years at the University, will be awarded for the best essay or report on some aspect of socialism. In making the award special consideration will be given for originality in analysis and treatment. The award will be made on the recommendation of a Selection Committee representing each of the areas of study mentioned above. If no essay reaches a required standard, the award will be withheld. Students intending to compete for this scholarship must obtain the approval of their essay subject from the Department of Political Science. Essays must be submitted not later than April 30.

\* **THE L. AND G. BUTLER SCHOLARSHIPS FOR THE DISABLED** — Two awards of five hundred dollars (\$500) are made annually on the basis of academic performance to disabled students attending the University of Victoria. The recipients may be newly admitted or returning students. Students interested in the scholarship should refer to the paragraph on undergraduate scholarship eligibility in the General Regulations (page ). Application forms may be obtained from the Office of the Administrative Registrar and must be submitted by April 30. Selection of the recipients will be made by the Senate Committee on Awards.

**THE CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS** — C.U.P.E. will make available the sum of nine hundred dollars (\$900) to provide scholarships for three deserving and promising students at the University of Victoria who are continuing their studies here. One award will be given to a student entering year 3; two awards will be given to students entering year 2. The selection will be made on the basis of academic standing. These scholarships are open only to sons and daughters of members of contributing locals of the Canadian Union of Public Employees of the Greater Victoria area. Recipients will be selected by the Committee on Awards in consultation with officials of the C.U.P.E. Scholarship Fund.

**THE CHEVRON CANADA LIMITED SCHOLARSHIP** — A scholarship in the amount of one thousand dollars (\$1,000) has been made available by Chevron Canada Limited to a student entering the final year of an undergraduate program. In making the award, preference will be given to candidates who graduated from a Secondary School in British Columbia and who intend to pursue a career in business. Recipients of this award may not simultaneously hold other major awards. Selection of the recipient will be made by the Senate Committee on Awards in consultation with representatives from the company.

\* **LUCY AND MARGARET CORBET SCHOLARSHIP** — Six hundred dollars (\$600) awarded annually to a student who has completed pre-medical studies at the University of Victoria and is proceeding to medical school in September. Selection of the winner will be made by the Senate Committee on Awards on the basis of sound academic achievement and demonstrated financial need. Candidates must provide written acceptance of their entry into an approved medical school.

**THE NORMAN LIDSTER AWARD** — An award of up to one hundred dollars (\$100) will be given annually to a blind student in any year of any faculty for the purchase of special equipment or books. The award is made in memory of Norman Lidster, who authored several books despite being both blind and paraplegic. Selection of the recipient will be made by the Senate Committee on Awards.

\* **THE OLIVER PRENTICE MEMORIAL — SAANICH ROTARY SCHOLARSHIP** — Three hundred dollars (\$300) awarded annually to a student of outstanding merit and promise and qualities of character indicating worthiness to hold the scholarship, who is planning a business career and is continuing his studies at a recognized university or is articulated to a chartered accountant, or C.G.A. Selection of the student is to be made by the Committee on Awards of the University of Victoria. Applications must be submitted before April 30.

\* **THE SENATOR WILLIAM JOHN MACDONALD TRAVELLING SCHOLARSHIP** — This award was established by Mrs. T.G. Keir in memory of her grandfather, Senator Macdonald.

The scholarship is awarded every second year, beginning in 1984, to an outstanding student who has received an undergraduate degree from the University of Victoria since the last competition and who is planning to undertake a graduate degree in Arts, Science or Fine Arts at a Scottish university. If there are no suitable candidates wishing to study at a Scottish university then applicants wishing to attend any United Kingdom university will be considered.

\* Administered by the University of Victoria Foundation

The award will have a value of \$8,000 and will be payable in two \$4,000 installments: one for each of the first two years of the student's graduate program.

Application packages are available from the Secretary of the Senate Committee on Awards, Office of the Administrative Registrar, University Centre. The application package includes three referee forms to be completed by individuals who are familiar with the applicant's work. The application form and the referee forms must all be submitted by April 1.

The selection of the recipient will be made by a Committee, appointed by the President, which is composed of a Dean of one of the Faculties, an individual of professional rank and the Chairman of the Senate Committee on Awards. Decisions reached by the Committee are final.

Awards are made after the results of the final examinations for the relevant Winter Session have been determined.

\* **THE UNIVERSITY CHALLENGE SCHOLARSHIPS** — One or more scholarships to a total of \$675 to be awarded annually from funds won on the CTV Television Program "University Challenge" by Victoria teams. The fund was started in 1971 by a team consisting of Glen Paruk, Robert McDougall, Denis Johnston and Bruce Izard, coached by Professor Alfred Loft. The selection will be made by a joint Student-Faculty Committee under the Senate Committee on Awards on the basis of outstanding service by the candidate to the community and/or the University, coupled with proven high academic ability. Students may apply directly to the Committee or be nominated by a second party but the application must bear the nominee's signature and be accompanied by a letter from the nominator or nominee describing the nominee's qualifications to hold the scholarship.

**UNIVERSITY OF VICTORIA ALUMNI AWARDS** — The University of Victoria Alumni Association offers annually a number of scholarships of \$1,500 each made possible through contributions to the annual Alumni Fund Drive. The Scholarships are open to University of Victoria students entering one of the two final years of undergraduate studies at the University.

Selection of the successful candidates is based upon the following criteria:

- (a) high scholastic achievement as indicated by the Winter Session grades;
- (b) demonstrated contributions to University and/or community activities as determined by the Selection Committee of the Alumni Association;

(c) the satisfying of the University's General Regulations pertaining to undergraduate scholarships as outlined in the Calendar — page .

The selection process consists of interviews of selected students in March of each year, followed by an examination of the final grades achieved as soon as they are available, normally in the month of May. Winners of Alumni Scholarships may not hold any other award administered by the University having a value greater than \$100. Also, winners who are eligible for consideration a second time must be renominated. Nominations from Schools and Departments of the University must be made by a faculty member and endorsed by the Director of a School or Chairman of a Department and must be received in the Alumni Association office no later than March 1 of each year. Nomination forms are available in the Alumni Association Office.

**THE VICTORIA MEDICAL SOCIETY SCHOLARSHIP** — One thousand dollars (\$1,000) is available to a student who wishes to pursue a career in Medicine, has completed at least two years of study at the University of Victoria, and is proceeding to a medical school in Canada next September. Candidates must possess those qualities of character and mind which will lead to success as a medical practitioner, and must have demonstrated sound academic achievement, with at least Second Class standing. Financial need will also be considered. Candidates must provide written acceptance of their entry into an approved medical school. The award will be made by a committee consisting of representatives from the Committee on Awards of the University and the Victoria Medical Society Scholarship Committee, and will be paid through the Bursar of the medical school involved. The successful candidate will be notified in August. The award will be forfeited if the candidate has not entered medical school by January 1986 at the latest. Application forms are available from, and must be returned to, the Office of the Administrative Registrar before April 30.

**VICTORIA REAL ESTATE BOARD AWARDS** — \$750 awarded annually as a scholarship and \$750 awarded annually as a bursary, to students registered at the University of Victoria who are dependants of members of the Victoria Real Estate Board. Students registered at the University of Victoria who find that they must transfer to another university in order to complete their chosen program are eligible to apply for these awards. Selection of the recipients will be made by the Senate Committee on Awards.

\* Administered by the University of Victoria Foundation

## SECTION 5

### UNDERGRADUATE AWARDS ADMINISTERED BY THE OFFICE OF AWARDS AND FINANCIAL AID THE UNIVERSITY OF BRITISH COLUMBIA 2075 WESBROOK PLACE, VANCOUVER, B.C. V6T 1W5

Students who submit applications for scholarships to the University of British Columbia and who are competing on the basis of attendance at the University of Victoria, must forward an official transcript of their academic record at the University of Victoria, preferably accompanying the application.

**Scholarships which must be applied for on the appropriate form by July 1 unless otherwise stated.**

**C.W. DEANS MEMORIAL SCHOLARSHIP** — A scholarship of \$250 established by the Women's Auxiliary to the Canadian Paraplegic Association, B.C. Division, is offered annually to paraplegic students, or sons and daughters of paraplegics. This scholarship will be available to a student beginning or continuing studies in one of the universities in British Columbia. Preference will be given to a student beginning or continuing his studies in Engineering. The award will be made to a student with a good academic record.

**THE EARL KINNEY MEMORIAL SCHOLARSHIP** — This scholarship in the amount of \$750 has been made available by the Graphic Arts International Union, Local 525, to students enrolled in a full academic program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University at the second year level or higher. To be eligible, an applicant must be a member, or the son, daughter, or legal ward of a member in good standing of the Union. Those who wish to be considered must give full details of their own or their parents'

membership in the Union. The award will normally be made to the applicant with the highest standing as determined by the University Awards Committee, U.B.C.

**THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION UNDERGRADUATE SCHOLARSHIPS** — Three scholarships of \$350 each are offered to members, sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They are open to students in attendance at the University of British Columbia, the University of Victoria, Simon Fraser University, the British Columbia Institute of Technology, or any regional college in British Columbia who will continue in a full program of studies in the next session in an undergraduate faculty. These scholarships will normally be awarded to the candidates with the highest standing as determined by the results of the Final Sessional Examinations conducted in April by the named institutions. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high or to re-award scholarships if winners receive other scholarships of substantial value.

**THE THOMAS P. MAYES SCHOLARSHIP** — In memory of Thomas P. Mayes, who until his death in 1968, served as secretary of the Union, the International Longshoremen's and Warehousemen's Union offers an undergraduate scholarship of \$350 to members, and sons and daughters of members, in good standing. The terms and conditions of award are the same as for the three International Longshoremen's and Warehousemen's Union Undergraduate Scholarship, described elsewhere in this section.

**THE ANNE WESTBROOK SCHOLARSHIP** — This scholarship in the amount of \$950, given by the Faculty Women's Club of the University of B.C., is open to: a woman student who has obtained a baccalaureate degree from this University and is continuing her studies either at the

professional or graduate level at this University or any other approved university; or a woman who after third year is proceeding directly to a professional degree in medicine, dentistry or law at this University or any other approved university.

### UNDERGRADUATE AWARDS ADMINISTERED BY OTHER INSTITUTIONS

**ANDRES WINES LTD. SCHOLARSHIP** — A scholarship of five hundred dollars (\$500) will be awarded to an undergraduate student at the University of British Columbia, Simon Fraser University, or University of Victoria. This award will be made to a student who is the son or daughter of an employee of Andres Wines or grape grower shipping to Andres Wines. If no one is available in this category it will be awarded to a student who will undertake a project in the field of winemaking either in Microbiology, Engineering, Chemistry, Agriculture or Economics. Application forms are available from Andres Wines (B.C.) Ltd. at 2120 Vintner Street, Port Moody, British Columbia V3H 1W8, and should be submitted no later than August 30. The award will be made by the donor.

**THE BAY SERVICE AWARD** — A Service Award offered by The Bay (Victoria) is open in competition to students completing Third Year Arts and proceeding to a higher year. Preference will be given to students interested in Department Store careers. To be eligible for this award applicants must qualify in respect to academic standing, ability and personality, and should be considering possible employment with The Bay on graduation. Under terms of the award, employment with The Bay will be guaranteed during the summer vacation preceding the fourth year at the University of Victoria. Subject to satisfactory performance, a winner will, on graduation, be given an opportunity to apply for an executive career with the Company. Interested students should apply to the Personnel Manager, The Bay, not later than March 15. Selection will be made by a representative of The Bay.

**ELIZABETH BENTLEY EASTERN STAR SCHOLARSHIPS** — The Order of the Eastern Star offers annually a number of scholarships to students who have completed at least two years of University courses. Scholarships are awarded on the basis of need, marks and difficulty of courses. Persons eligible are members, wives, husbands, father, mothers, sisters, brothers, sons, daughters, grandchildren or stepchildren of members of the Order of the Eastern Star of B.C. Applications should be sent to the local Eastern Star secretary by July 15.

**RAYMOND CREPAULT, Q.C. MEMORIAL SCHOLARSHIP** — In memory of Raymond Crepault, Q.C. and to commemorate his accomplishments and his special contribution to the Canadian broadcasting industry, as well as to emphasize his deep commitment, as a French Canadian, to the unity of Canada, the Raymond Crepault estate, Radiomutuel and The Canadian Association of Broadcasters are pleased to announce the creation of a scholarship to be granted to a person wishing to complete his training in journalism or communications with a view to subsequent service in electronic journalism (radio and/or television). This is an annual award of \$2,500 which Radiomutuel will present on the occasion of the Annual meeting of the Canadian Association of Broadcasters. It is offered to any French speaking Canadian citizen interested in improving his or her skills in the area of electronic journalism (radio and/or television), through university training or the equivalent thereof, on a full-time basis, in a Canadian institute.

Nominations will be accepted from persons meeting any of the following requirements:

- University graduation in any discipline (first degree).
- University graduation or current studies in communications or journalism (first degree).
- Graduation in broadcasting (radio and TV) technology from a technical institute of recognized standing or the equivalent thereof.
- Current employment in broadcasting but wishing to complete training in this field.

Relevant experience in electronic journalism or any related field could be a major asset.

A selection board of three persons appointed by the Canadian Association of Broadcasters, with the approval of Radiomutuel, will take the following factors into consideration:

1. The candidate's background;
2. The candidate's motivation;
3. Recommendations submitted by the candidate's professor, colleagues or employers, as the case may be;
4. The ability of the candidate to begin, and more particularly, to complete such studies;
5. The candidate's financial need;

6. Whether the candidate is, or not, a Canadian citizen.

The scholarship may be renewed for an additional year, according to the validity of the research project or that of the course content.

All applications must be submitted no later than February 28 of each year (as indicated by the postmark) to the Canadian Association of Broadcasters.

Additional information and application forms may be obtained from Mlle. Danielle Langlais, Canadian Association of Broadcasters, P.O. Box 627, Station "B", Ottawa, Ontario K1P 5S2.

**FEDERATION OF FRANCO-COLUMBIANS SCHOLARSHIP** — An annual scholarship of \$1,000, awarded by the Federation of Franco-Columbians to a candidate wishing to undertake a year of study in a French language university, preferably in Canada. Priority will be given to a student registered at a British Columbia university, having completed the equivalent of two full years of university study, having sufficient knowledge of French to study profitably at a French language university, intending to teach in the Province of British Columbia. Applications should be addressed to the Secretary of the Scholarship Committee, Federation of Franco-Columbians, 1013-B Brunette, Maillardville, B.C. The application must include: a letter in which the candidate outlines his reasons for applying, a copy of his academic transcript, two letters of recommendation to be sent directly to the Secretary of the Scholarship Committee. Applications must be received by March 1.

**MUNGO MARTIN MEMORIAL AWARDS** — Will be made annually from the proceeds of the Mungo Martin Memorial Fund, raised by public subscription under the sponsorship of the B.C. Indian Arts Society of Victoria, B.C. These awards commemorate Mungo Martin, the late Kwakiutl chief, artist, philosopher and carver, who did so much to revive appreciation of Indian art and traditions of the Northwest Coast. The Fund is administered by a Board of Trustees appointed by the said Society for this purpose. The Board of Trustees is the sole authority adjudicating awards and its decisions are final. Awards are to be made in any amount or amounts in any year within the limitations of available funds at the sole discretion of the Trustees. (Awards are normally expected to be from \$50 to \$300.) The purpose of the awards is to assist people of Indian racial background in arts, handicrafts, and other worthy endeavours. Particular emphasis is made to those who seek to do creative work to further the artistic heritage of the Indian peoples, whether it be in painting, carving, music and dance, folklore, or language. While age and circumstances of qualifying candidates may vary considerably, preference will be given to young people.

Candidates for awards must be of Indian racial background and must be domiciled in the Province of British Columbia at the time of application. The recipient of an award may apply for a further award in a subsequent year. Applications for awards should be made on forms provided by the Board of Trustees and may be mailed at any time for consideration to the following address: The Board of Trustees, Mungo Martin Memorial Awards Fund, c/o Mrs. H. Esselmont, Chairman, 3190 Rutledge Street, Victoria, B.C. Board meeting will be held at the call of the Chair early in the year and late in the summer.

**THE WILLIAM McCALLUM MEMORIAL SCHOLARSHIP** — The William McCallum Memorial Scholarship for the study of Law was established in 1977 in recognition of the contributions and many years of service given to Dawson College by the late William McCallum, Chairman of the Board of Governors from 1971 to 1977. This scholarship is awarded annually to a graduate of Dawson College entering, or already studying, Law. The scholarship is renewable in the amount of \$400 per year, for a maximum of four years.

The William McCallum Memorial Scholarship will be awarded to students who show high probability of both responsible citizenship and academic and professional success. The basis for selecting winners is as follows: scholarship, character, leadership and community involvement.

Interested students should submit an application to the William McCallum Scholarship Committee, c/o the Registrar, Dawson College, 485 McGill Street, Montreal H2Y 2H4, before May 1. All official transcripts of credit other than those from Dawson College must be received before an application will be considered. Proof of admission to Law school must be provided by May 30.

**RIXON RAFTER SCHOLARSHIP FUND** — Following his death in 1963, Mr. Rixon Rafter of Arthur, Ontario, left a portion of his estate to the Ontario School for the Blind to be used to provide scholarships to assist blind persons continuing their education at the postsecondary level. Mr. Rafter was a graduate of the Ontario School for the Blind in Brantford and Queen's University in Kingston and for forty-five years publisher of the Arthur Enterprise News. The Rixon Rafter Scholarship Fund will make available scholarship awards of from \$500-\$1,000 to

legally blind Canadians pursuing postsecondary studies with strong career aspirations. Because a limited number of awards are available each year, grants will be made based on the following criteria: financial need, academic achievement, and career goals. Application forms are available from C.N.I.B. Career Counselling Services. These forms must be completed in full and returned to: Chairman, The Rixon Rafter Scholarship Committee, The W. Ross MacDonald School, Brantford, Ontario, N3T 3J9, before July 31. A letter of support from your C.N.I.B. Career Counsellor must accompany your application. The Committee will make a decision on scholarships to be granted before September 1 and awards will be sent out during the month of September. Rixon Rafter expressed a wish that financial assistance be made available to worthy blind Canadians who have the interest, ability and determination to seek higher education. The Rixon Rafter Scholarship Fund seeks to achieve this goal.

**THE RHODES SCHOLARSHIP** — The Rhodes Trustees offer annually for award in the Province of British Columbia one Rhodes Scholarship of the value of approximately 1,550 (English pounds) per annum. This stipend consists of a direct payment to the University and the Scholar's College of approved fees plus a maintenance allowance of 900 (English pounds) per annum paid directly to the Scholar. The sum provided should be sufficient to enable a Scholar to meet necessary expenses for term-time and vacations but those who can afford to supplement it to a modest extent from their own resources are advised to do so.

The Scholarship is tenable ordinarily for two years at Oxford University. A third year (at Oxford or elsewhere abroad) may be authorized in proper cases.

A candidate must be a Canadian citizen or British subject (male or female) and have been ordinarily a resident of Canada for five years by October 1, 1985. A Rhodes Scholarship is forfeited by marriage after election, or during a scholar's first year of residence. Thereafter a Rhodes Scholar may marry and retain the stipend if the Scholar is able to give appropriate assurance of support and accommodation for the spouse.

A candidate must be least 19 but under 25 years of age by October 1, 1985.

A candidate may compete in a province in which he is eligible under either (a) or (b) below:

- (a) The province in which he is ordinarily resident. If he is ordinarily resident in the Northwest Territories he may compete in a province in which he is eligible under (b) or, if there is no such province, in Nova Scotia or New Brunswick.
- (b) The province in which his university study has taken place, provided that if he is ordinarily a resident outside Newfoundland he may not compete in Newfoundland.

In that section of the will in which he defined the general type of Scholar he desired, Mr. Rhodes mentioned four groups of qualities, the first two of which he considered most important:

1. Literary and scholastic attainments;
2. Qualities of truth, courage, devotion to duty, sympathy, kindness, unselfishness, and fellowship;
3. Exhibition of moral force of character and of instincts to lead and to take an interest in his fellows;
4. Physical vigour, as shown by fondness for and success in outdoor sports.

Some definite quality of distinction, whether in intellect or character, or both, is the most important requirement for a Rhodes Scholarship, and it is upon this that Committees will insist. Success in being elected to office in student organizations may or may not be evidence of leadership in the true sense of the word. Mr. Rhodes evidently regarded leadership as consisting of moral courage and an interest in one's fellow men quite as much as in the more aggressive qualities. Physical vigour is an essential qualification for a Rhodes Scholarship, but athletic prowess is of less importance than the moral qualities developed in playing outdoor games. Financial need does not give a special claim to a Scholarship. A candidate for a Scholarship is required to make application by October 25, 1985 and if elected, to go to Oxford in October 1986. Further information concerning the Scholarship and the opportunities for study at Oxford University may be obtained from Sholto Heberton, 1930-505 Burrard Street, Vancouver 1, B.C.

**ROTARY FOUNDATION** — The newest educational activity of the Rotary Foundation. Undergraduate Scholarships are awarded to outstanding young men and women for one academic year of undergraduate study abroad.

A candidate for a 1986-87 Scholarship must be: unmarried; between the ages of 18 and 24 inclusive as of July 1, 1986, and have completed two years of undergraduate university level work but not have attained the bachelor's degree or equivalent at the time he begins his Scholarship year.

He must be a citizen of the country in which his permanent residence and sponsoring Rotary club are located.

In this and all other programs of the Rotary Foundation, a Rotarian, a dependent of a Rotarian, a child, a stepchild, grandchild, brother or sister of a Rotarian, or any spouse thereof, is ineligible for an award.

An Undergraduate Scholarship covers the cost of round trip transportation between the Scholar's home and place of study, registration, tuition, laboratory and other school fees, necessary books and educational supplies, meals and lodging, incidental living costs, limited educational travel during the Scholarship year and, in specified instances, intensive language training in the country of study prior to the beginning of the regular academic year.

Awards may be made for study in any field, but not for independent or unsupervised research. Undergraduate Scholarships are awarded for one academic year of study in another country. They are not granted to students to continue studies already begun in a country. It is not expected or intended that an Undergraduate Scholarship will be used as part of a longer period of study abroad. In many cases it is not possible to obtain academic credit for work done during the Scholarship year. Each candidate should ascertain for himself, in advance, whether it will be possible to receive credit for courses taken or work completed during the year abroad.

Applications for an Undergraduate Scholarship must be made through a Rotary club in the district in which the applicant's permanent residence is located or the district in which is located the school at which he is studying at the time of his application. The sponsoring Rotary club will provide the necessary application forms and explanatory literature. Rotary clubs may obtain this material from their district governor or the secretariat of Rotary International in December of each year. Application forms must be completed and returned to the Rotary Club by March 1, 1986.

**ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARY/SCHOLARSHIPS** — The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursary/scholarships are awarded on the basis of academic standing, financial need, and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled, or other veterans, but applications from other worthy students are also considered. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2. The deadline date for application is May 31.

**IRENE SAMUEL SCHOLARSHIP** — Scholarships of at least \$300 are awarded annually to people who are qualified to enter an accredited University in order to further their education in Teacher Training and/or Judaic Studies. Upon completion of their studies their intent must be to teach Hebrew and/or Judaic Studies in a Jewish School in Canada for a minimum of two years.

Candidates should have a good Jewish and general educational background and broad extracurricular activities and interests. Mature students returning to their studies or those wishing to upgrade their qualifications are also eligible. Financial need as well as academic achievement will be considered.

Further information and applications are available upon request from: NATIONAL COUNCIL OF JEWISH WOMEN OF CANADA, 1111 Finch Avenue West, Suite 401, Downsview, Ontario M3J 2E5.

**THE SONS OF NORWAY SCHOLARSHIPS** — Three Scholarships of \$600 each are offered by Sons of Norway Foundations in Canada to students who have shown interest in Norwegian Culture. History of Language. They are open to students who show evidence of sound academic performance and financial need. The awards are tenable, at any recognized Junior College, Vocational Institute, or University in B.C. and can be for any study year. Forward application, not later than July 30, to Sons of Norway Foundation in Canada, No. 905-935 Marine Drive, West Vancouver, B.C. V7T 1A7.

**THE J.M. WARREN SCHOLARSHIP** — The British Columbia Foundation has established a Scholarship to honour Mr. Jack M. Warren in recognition of his many years of distinguished service as Administrator of the British Columbia Cancer Institute and as Comptroller to the British Columbia Cancer Foundation.

The Scholarship of \$2,000 will be offered annually to support advanced study or training in cancer treatment and control, including the administration of cancer programs.

Candidates should apply to the Bursary, Scholarship and Awards Committee, British Columbia Cancer Foundation, 2656 Heather Street, Vancouver, B.C. V5J 3J3, prior to December 1, setting out their plan of study and submitting a transcript of their academic record. Candidates must also submit the names, addresses and telephone numbers of two

individuals who are familiar with their academic or professional ability, and who have been asked to submit letters of recommendation directly to the Bursary, Scholarship and Awards Committee.

**THE ROYAL WESTMINSTER REGIMENT ASSOCIATION SCHOLARSHIP** — Two scholarships of \$250 each, the gift of the Royal Westminster Regiment Association, will be awarded annually to worthy and deserving students who are continuing their formal education beyond secondary school in recognized institutions of higher learning in any place within Canada or outside Canada. To be eligible, applicants must be direct descendants, male or female, of a member of the Royal Westminster Regiment Association, of a member of the Royal Westminster Regiment CA (M) or one of those battalions which the Royal Westminster Regiment perpetuates, i.e. the 47th, 104th or 131st. The scholarships are also open to applicants who are at the time of application serving members of the Royal Westminster Regiment. The applicants may be in their final year of secondary school or any year of postsecondary study, and may be resident in any place within Canada or outside Canada. The basis of the award will be academic standing in previous studies and need of financial assistance. The Application for Scholarship Form is obtainable from the Scholarship Committee, The Royal Westminster

Regiment Association, Box 854, New Westminster, B.C. The cut-off date for application is July 31.

**THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN HOME ECONOMICS** — A scholarship of \$250 will be awarded annually by the Woman's Institute of B.C. It is available to the daughter of a member of the Institute. The member must have a good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Home Economics. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

**THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN AGRICULTURE** — A scholarship of \$250 will be awarded annually by the Woman's Institute of B.C. It is available to the son or daughter of a member of the Institute. The member must have been in good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Agriculture. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

## SECTION 6

### AWARDS FOR GRADUATE STUDY

#### Awards Administered by the Faculty of Graduate Studies

##### UNIVERSITY OF VICTORIA FELLOWSHIPS:

A limited number of Special Fellowships, valued at \$10,550 for twelve months, will be awarded to exceptional full time students.

University of Victoria Fellowships of \$8,050 may be awarded by the Faculty of Graduate Studies to students of high academic standing registered full time in the Faculty as candidates or provisional candidates for a degree.

Application for the above should be made at the time of application for admission, in the space provided on the Application Form, which must be received by February 15 in order to be considered. Late applications will be considered if funds are available. New students will be notified by approximately March 31, and returning graduate students by mid June.

NOTE 1: Fellowship holders may not normally hold another major award.

NOTE 2: Fellowship holders may accept paid employment, but normally this should not exceed 50 hours in any four month term.

**THE WILLIAM G. BENDER SCHOLARSHIP** — An award of \$1,000 is made annually to an outstanding student in the Master of Public Administration program who has achieved high standing in Personnel Management and/or Industrial Relations courses. Selection of the recipient will be made by the Awards Committee of the Faculty of Graduate Studies on the recommendation of the School of Public Administration.

**FLORA HAMILTON BURNS GRADUATE FELLOWSHIP** — An annual award of about \$800, donated by Flora Hamilton Burns, in memory of Emily Carr, is granted to a highly qualified student in the Department of History in Art, holding a University of Victoria Graduate Fellowship. The award will be made by the Awards Committee of the Faculty of Graduate Studies, on the recommendation of the Department of History in Art.

**THE HOLIFF FAMILY MATURE STUDENT SCHOLARSHIP** — An annual Scholarship of \$1,000 will be granted to a full time student, aged 40 years or older, who is in the first year of an M.A. programme in English, History, or Philosophy. The recipient must have graduated with an Honours degree from the Department of English, History, or Philosophy, at the University of Victoria, with a G.P.A. of 6.50 or better in the final year of full time study. The recipient may not hold a University of Victoria Fellowship or a major external fellowship. Selection will be made by the Awards Committee of the Faculty of Graduate Studies.

\* **THE SINCLAIR FARRIS AWARD** — An award of \$400 is made annually to an undergraduate or graduate student in Biology for interest and achievement of excellence in the field of microtechnique. The award was established to recognize Sinclair Farris who worked with the Canadian Forestry Service (Environment Canada) for 38 years, specializing in

microtechnique. Selection will be made by the Faculty of Graduate Studies Awards Committee in the case of a graduate student and by the Senate Committee on Awards in the case of an undergraduate student, on the recommendation of the Department of Biology.

\* **R.M. PEARCE MEMORIAL FELLOWSHIP** — The R.M. Pearce Memorial Fellowship is awarded annually to a highly qualified candidate who holds a NSERC Postgraduate Scholarship or a UVic Fellowship, who wishes to work as a full time student towards a M.Sc. or Ph.D. degree in Physics at the University of Victoria. The award is valued at about \$1,000 in addition to the current NSERC or UVic award. Application should be made to the Chairman, Graduate Committee, Department of Physics, University of Victoria. Selection will be based upon the recommendation of this Committee to the Graduate Faculty Awards Committee.

\* **R.M. PETRIE MEMORIAL FELLOWSHIP** — The R.M. Petrie Memorial Fellowship is granted annually to a highly qualified candidate who wishes to work towards the M.Sc. or Ph.D. degree in Astronomy at the University of Victoria. The award is valued at \$10,000 plus travel assistance to Victoria is tenable at the University of Victoria for a period of one year, and, if progress is satisfactory, is renewable for a second year, and for a third year in the case of a Ph.D. program only. Holders of Natural Sciences and Engineering Research Council Postgraduate Scholarships may also be awarded the R.M. Petrie Memorial Fellowship, in which case a sum of \$1,000 will be added to the NSERC award. Application should be made to the Petrie Memorial Fellowship Committee, Department of Physics, University of Victoria. Selection will be based upon the recommendation of this Committee to the Graduate Faculty Awards Committee.

\* **THE LEWIS J. CLARK MEMORIAL FELLOWSHIPS** — There are two Fellowships, one to be held by a graduate student in Biology, with preference given to a student in Botany, and one by a graduate student in Chemistry. The awards will be made to students of good academic standing registered full time as candidates for the M.Sc. or Ph.D. degrees in the above disciplines. No duties are attached to the Fellowship and, subject to an annual review of progress, it may be held for a maximum of two years in the case of a student proceeding towards the M.Sc. Selection will be based upon recommendation by the department concerned to the Graduate Faculty Awards Committee. The Fellowship carries a remuneration of \$9,050 per annum. Holders of Natural Sciences and Engineering Research Council postgraduate scholarships may also be awarded this fellowship in which case \$1,000 will be added to the NSERC award.

**B.C. GRADUATE RESEARCH ENGINEERING AND TECHNOLOGY AWARDS** — The G.R.E.A.T. awards are cooperative awards to encourage research collaboration between universities, business and industry in British Columbia. The Province of British Columbia offers awards of \$12,000 per year, paid in monthly installments, to graduate students working on approved research projects in the natural sciences and Engineering disciplines, in cooperation with public or private orga-

nizations in British Columbia. It is required that a research project be arranged which is acceptable to both the collaborating organization and the University. Students wishing to apply for a G.R.E.A.T. award should do so in writing to the Dean of Graduate Studies, or the Graduate Adviser in the appropriate department. Applications must be received in the Graduate Studies Office not later than January 15.

**THE SARA SPENCER FOUNDATION RESEARCH AWARDS IN APPLIED SOCIAL SCIENCE** — These awards are intended to encourage Social Scientists in cultural, environmental and social studies with particular reference to the Capital Regional District. The proceeds of a fund established by the Sara Spencer Foundation and administered by the University of Victoria Foundation will be used to provide individual awards in amounts up to a maximum of \$3,000 to superior students, to assist with the costs of research in the applied areas of the Social Sciences. Awards will be made by the Awards Committee of the Faculty of Graduate Studies on the recommendation of an Advisory Committee drawn from the Departments of Anthropology, Economics, Geography, Political Science, Psychology and Sociology.

#### *Confirmation of the above Awards*

Within one month after the receipt of the notice of the above awards students must confirm to the Office of the Dean of Graduate Studies that they intend to accept. If this is not done, the awards will be forfeited and reassigned.

#### **ASSISTANTSHIPS:**

Graduate students may make application, through the Department concerned, for paid employment as Academic Assistant, Research Assistant, Scientific Assistant, Laboratory Instructor. Such employment is negotiated through the Department concerned, not through the Faculty of Graduate Studies, at rates of pay determined by the University. No full time graduate student may be gainfully employed, however, for more than 150 hours in any four month term. Students appointed as Teaching and/or Research Assistants may also be recommended by their departments to the Faculty of Graduate Studies for a Supplement.

#### **SCHOLARSHIPS AND PRIZES:**

**THE LEON J. LADNER B.C. HISTORY SCHOLARSHIP** — Three hundred dollars (\$300) awarded annually for the best graduate thesis on the History of British Columbia. Selection is made by the Faculty of Graduate Studies Awards Committee, on the recommendation of the Chairman of the Department of History.

**THE MARTLET CHAPTER IODE GRADUATE SCHOLARSHIP FOR WOMEN** — A Scholarship to the value of \$250 will be awarded annually to a woman student with high standing who is entering the second year of a Master's program. Selection will be made by the Awards Committee of the Faculty of Graduate Studies.

\* **THE G. NEIL PERRY AWARD IN PUBLIC ADMINISTRATION** — An annual award of fifty dollars (\$50) will be granted to a student whose Administration 598 Report is judged to be the best. Selection will be made by the Awards Committee of the Faculty of Graduate Studies upon the recommendation of the School of Public Administration.

**THE SCHOOL OF PHYSICAL EDUCATION GRADUATE SCHOLARSHIP** — \$300 will be awarded annually to a M.Ed. or M.A. physical education student of good academic standing. The award will normally be given to a second year graduate student and will be based on the student's academic performance and active involvement with the School of Physical Education during the preceding year. This scholarship will not normally be given to students who are currently holding fellowships or other major awards.

**THE VICTORIA REGIONAL GROUP OF THE INSTITUTE OF PUBLIC ADMINISTRATION OF CANADA (IPAC) SCHOLARSHIP** — An annual scholarship of \$500 will be awarded to the most outstanding student having completed the first year of full time study towards the M.P.A. degree and continuing in the second year of full time studies in the School of Public Administration at the University of Victoria. Selection of the recipient will be made by the Awards Committee of the Faculty of Graduate Studies, upon the recommendation of the School of Public Administration.

**THE PHILLIPS, HAGER AND NORTH LTD. GRADUATE BURSARY** — A bursary of \$1,500, the gift of Phillips, Hager and North Ltd. is offered annually to a graduate student in Economics. The Bursary will be based firstly on the financial circumstances of those eligible and secondly on their academic standing. The Bursary is to be awarded on the recommendation of the Economics Department to the Faculty of Graduate Studies Awards Committee. At their discretion the total amount may be divided into two awards.

\* **MAIRI RIDDEL MEMORIAL BOOK PRIZE** — A book prize to be awarded annually to a graduate student in the English Department for the best seminar essay. Selection is made by the Faculty of Graduate Studies Awards Committee, on the recommendation of the English Department Graduate Committee.

**DAVID STEWART BOOK PRIZE FOR COUNSELLING** — A book prize to be awarded annually to the most promising graduate student in the Counselling Psychology in Education program, as evidenced by papers published or presented at professional conferences. Selection will be made by the Award Committee of the Faculty of Graduate Studies, on the recommendation of the Graduate Adviser, Department of Psychological Foundations in Education.

#### **Awards Administered by Government and Other Organizations**

There are many other Graduate Awards, not administered by the University of Victoria. Notices of these are posted in the Faculty of Graduate Studies Office and published in the "Grants and Fellowships" Newsletter circulated to departmental offices. Information may also be obtained from the catalogue "Canadian Directory of Awards for Graduate Study" which can be found in the Reference Division of the Library under REF/LB2339/C3 C33. Since these awards are subject to constant change, prospective applicants are advised to obtain further details from the Faculty of Graduate Studies Office, or directly from the administering agency. A brief description of some of the major awards follows:

#### **SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL *Special M.A. Scholarships and The Queen's Fellowships***

*Field of Study:* Various areas of the humanities or social sciences.

*Eligibility:* Canadian citizens in the final year of an honours B.A. program, with first class standing for study at a Canadian University.

*Value:* \$11,340 for 12 months. The Queen's Fellowship also includes tuition fees.

Information and application forms can be obtained from the Office of the Dean of Graduate Studies.

*Deadline:* December 1.

#### *Doctoral Fellowships*

*Field of Study:* Various areas of the humanities or social sciences.

*Eligibility:* Persons who, by the time of taking up the award, must

- have completed one year of graduate studies beyond the Honours B.A. or its equivalent; and

- be registered in a program of studies leading to a doctoral degree.

*Value:* Up to \$11,340.

Information on the above and other Social Sciences and Humanities Research Council awards is available from the Office of the Dean of Graduate Studies, together with some application forms.

*Deadline:* November 19.

**NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA** — Postgraduate awards and a limited number of Fellowships are available in the fields of science, including physical geography and experimental psychology. Candidates must be Canadian citizens or landed immigrants resident in Canada. These Scholarships and Fellowships are awarded on the basis of high scholastic achievement and evidence of skill at research.

#### *Postgraduate Scholarships*

Postgraduate scholarships are valued at \$11,600 for 12 months.

Additional information on NSERC awards may be obtained from the Office of the Dean of Graduate Studies. Application forms are made available through Departmental Offices in early October. The deadline for return of completed applications to the Chairman of the appropriate Department is usually early November.

**ASSOCIATION OF UNIVERSITIES AND COLLEGES OF CANADA** — The Association of Universities and Colleges of Canada administers a number of national and international programs on behalf of Canadian and foreign donors. A comprehensive list of awards, including those offered by foreign governments for study abroad, is available from the Association and many are posted in the Office of the Dean of Graduate Studies.

*General Eligibility:* Unless otherwise indicated, these awards are offered to graduates of a Canadian university or college which is a member or affiliated to a member of the A.U.C.C., and are tenable at a similar institution.

\* Administered by the University of Victoria Foundation.

Conditions of awards, closing dates and other factors vary, and those meeting the general eligibility requirements should write to the Director of Awards, A.U.C.C., 151 Slater Street, Ottawa, Ontario K1P 5N1, for more complete information and application forms.

**BRITISH COLUMBIA HERITAGE TRUST SCHOLARSHIPS** — The British Columbia Heritage Trust offers three Scholarships annually, in the amount of \$7,500 each:

Charles E. Borden Scholarship, for the study of B.C. archaeology;  
Peter N. Cotton Scholarship, for the study of architectural conservation or the architectural history of British Columbia;  
Willard E. Ireland Scholarship, for the study of British Columbia history and archival studies.

Letters of application and application material must be submitted by December 31 to:

The Secretary  
British Columbia Heritage Trust  
Parliament Buildings  
Victoria, B.C. V8V 1X4

Further information concerning these awards may be obtained from the above address or from the office of the Dean of Graduate Studies.

**CANADIAN FEDERATION OF UNIVERSITY WOMEN FELLOWSHIPS**

*Margaret McWilliams Travelling Fellowship*

One Fellowship awarded annually to a predoctoral woman scholar in any field of study.

*Value:* \$5,500. Doctoral program must be well advanced and the candidate must plan to continue the work outside Canada; for residents of Canada who may be studying elsewhere at the time of application.

*Professional Fellowship*

One or two Fellowships are awarded for any woman who wishes:

- to spend a year at an accredited Library School, School of Social Work or similar professional school, or
- to embark on a program leading to an advanced degree after some years of experience in a particular field, or a lapse of time away from formal study.

Applicant must be a Canadian citizen holding a degree from a Canadian university.

*Value:* \$4,000

Further information about these two awards may be obtained from the Canadian Federation of University Women, Malaspina College, Wakesiah Campus, 900 5th Street, Nanaimo, B.C. V9R 5S5.

**CANADA MORTGAGE AND HOUSING FELLOWSHIPS** — A large number of Fellowships are awarded annually for study in urban and regional planning and related fields, in approved Canadian universities and elsewhere. Candidates must be Canadian citizens or landed immigrants in Canada for not less than 18 months when applying.

*Value:* up to \$9,348 plus tuition and initial travel expense. In addition, a Fellow may receive an allowance of \$1,494 for each dependent child. Renewable up to three times.

Application forms are available from the Office of the Dean of Graduate Studies or the Administrative Officer, Scholarships, Canada Mortgage and Housing Corporation, Ottawa, Ontario K1A 0P7, and must be submitted through the appropriate department of the university in which the student proposes to enroll. Applications for study at Canadian universities must be sent to CMHC by March 15; applications should be submitted to the University, therefore, well before the end of February.

**COMMONWEALTH SCHOLARSHIP AND FELLOWSHIP PLAN** — Under a Plan drawn up at a conference in Oxford, in 1959, each participating country of the Commonwealth offers a number of scholarships to students from other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travel costs, tuition fees, other university fees and a living allowance.

Details may be obtained from the relevant government office in the applicant's own country, or from the Canadian Commonwealth Scholarship and Fellowship Committee, c/o Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa, Ontario K1P 5N1.

**IMPERIAL OIL GRADUATE RESEARCH FELLOWSHIPS** — Imperial Oil Limited offers a total of six Fellowships annually, three for pure and applied natural and/or exact sciences, and three for social sciences and humanities.

*Eligibility:* graduates of any approved university undertaking research leading to a doctoral degree, who are Canadian citizens;

*Value:* \$7,000 per annum, for a period of up to three academic years.

Information and application forms are available from the Office of the

Dean of Graduate Studies, or Coordinator, Graduate Research Fellowships, Imperial Oil Limited, 111 St. Clair Ave. West, Toronto, Ontario M5W 1K3. Deadline for nominations is February 1.

**INTERNATIONAL FELLOWSHIPS FOR WOMEN** — The American association of University Women Educational Foundation offers a variety of Fellowships, ranging in value from \$2,500 to \$5,500, particularly for women of Canada and other countries wishing to study in the United States. Application forms and information are available from: AAUW Educational Foundation, 2401 Virginia Ave. N.W., Washington, D.C., U.S.A. 20037.

**CANADIAN INTERNATIONAL DEVELOPMENT AGENCY AWARDS**

CIDA offers scholarships to qualified Canadians to enhance their professional competence in any aspect of international development assistance. Applications involve the proposal of a program related to some specific developmental need or problem providing for a substantial period of work, observation, or research in a developing country. The program may be up to two years duration, the award for the second year being dependent on satisfactory review. Only Canadian citizens are eligible, and must clearly indicate their intention to pursue a career in the international development field. The awards, in a maximum amount of \$15,000 per year; are tenable in Canada and/or in developing countries.

Applications should be received by CIDA by January 31. Forms and further details may be obtained from Canadian International Development Agency, Scholarship Program for Canadians, Human Resources Division, 122 Bank St., Ottawa, Ontario K1A 0G4.

**DEPARTMENT OF NATIONAL DEFENCE SCHOLARSHIPS AND POST DOCTORAL FELLOWSHIPS** — The Department of National Defence offers Scholarships and Post Doctoral Fellowships for military and strategic studies of relevance to Canada. Applicants must be Canadian citizens. Candidates for a Fellowship must hold a Ph.D. degree, or equivalent, and candidates for a Scholarship must hold an Honour's Bachelor's degree, or its equivalent.

*Value:* Fellowships \$18,000, Scholarships \$9,000.

Application forms are available from the office of the Dean of Graduate Studies and must be submitted by February 1.

**IODESCHOLARSHIPS** — Up to nine scholarships are offered annually to students who, at the time of applying hold, or are currently working on a Master's degree, and are not more than 35 years of age on December 31 of the year in which the award would be received.

*Value:* \$8,500 for study in Canada; \$11,000 for study overseas within the Commonwealth.

Information and application forms are available from the Office of the Dean of Graduate Studies. Deadline for receipt of applications is December 1.

**NATIONAL INSTITUTE ON MENTAL RETARDATION** — The National Institute on Mental Retardation offers Research Grants of up to \$8,000 and Bursaries of up to \$1,500 to graduate students doing research in fields relating to human services and mental retardation. Candidates must be Canadian citizens or landed immigrants, studying at Canadian universities.

*Research Grants:* Application forms and information are available from the Office of the Dean of Graduate Studies or from The Secretary, Bursaries and Grants Adjudicating Committee, National Institute on Mental Retardation, Kinsmen NIMR Building, York University Campus, 4700 Keele Street, Downsview, Ont., M3J 1P3. Deadline: April 30.

*Bursaries:* Application should be made, in the form of an outline of intended or current area of study; a proposal of research plan; letters of reference and transcripts, to B.C. Association for the Mentally Retarded, Airport Square, No. 155, 1200 West 73rd Ave., Vancouver, B.C., V6P 6G5. Deadline: March 30.

**QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIP** — The purpose of this Scholarship is to enable selected British Columbians to take further studies at approved universities in the United Kingdom.

*Number and Value:* One Scholarship each year of \$10,000 renewable.

*Eligibility:* A graduate of the University of Victoria, University of British Columbia or Simon Fraser University;

- who has attended any British Columbia public university for a minimum of 2 years;
- whose ordinary domicile, home or residence is in B.C.;
- who is a Canadian citizen.

Applications are available in the Office of the Dean of Graduate Studies. All inquiries, applications and supporting documents must be forwarded directly to The Deputy Provincial Secretary, Legislative

Building, Victoria, B.C., by February 15.

**THE J.H. STEWART REID MEMORIAL FELLOWSHIP** — Open to graduate students in any field at a Canadian University, who are Canadian citizens.

*Value:* \$5,000, renewable, *Deadline:* February 28.

Information and forms available from: Awards Officer, Canadian Association of University Teachers, 75 Albert St., Suite 1001, Ottawa, Ontario, K1P 5E7.

**ROTARY GRADUATE FELLOWSHIPS** — Graduate Fellowships may be awarded for any field of study. The purpose of the awards is to promote understanding and friendly relations between peoples of different nations. Candidates must have both an outstanding academic record and the potential to become high quality ambassadors of good will. Applicants must be between the ages of 20 and 28, inclusive, as of the application deadline of March 1, unless that age period included military service, in which case the upper age limit may be waived. Candidates must hold a bachelor's degree, or its equivalent, prior to the commencement of the Fellowship year.

The Fellowship is calculated on the basis of air fare between the recipient's residence and place of study, incidental travel expenses, tuition fees, essential books and supplies, and room and board, plus

incidental living expenses.

Application for a Rotary Foundation Graduate Fellowship must be made through a Rotary Club in the district of the applicant's legal or permanent residence, or in the district in which he is studying at the time of application. A period of 18 months is required for processing. Further details may be obtained from the Office of the Dean of Graduate Studies.

**FELLOWSHIPS IN TRANSPORTATION** — Fellowships are offered by the Transportation Development Agency for full time graduate study in any discipline related to transportation, and leading to an advanced degree for which there is a thesis requirement. Applicants must be Canadian citizens, and normally plan to study at a Canadian university.

*Value:* Ph.D. Fellowship \$10,000

Master's Fellowship \$5,000

Industrial Fellowship \$10,000

*Deadline:* Early January

Information and applications are available from the Office of the Dean of Graduate Studies, or from

Strategic Policy Directorate,

Transport Canada,

Tower "C", Place de Ville,

Ottawa, Ont. K1A 0N5

# UNIVERSITY OF VICTORIA

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William C. Gibson, B.A., M.Sc., M.D., D.Phil., F.R.C.P.

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F. Murray Fraser, Q.C., B.A., LL.B., LL.M.

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## VICE PRESIDENT, FINANCE

Robert W. McQueen, B.Com., C.A., Bursar

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Ron Ferry, B.A. (Tor.), Registrar (Secretary, ex officio)

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Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., LL.D., F.R.S.C., President

### Members Appointed by the Lieutenant Governor in Council:

Wesley D. Black, O.St.J., M.P.A., P.Admin., F.C.I.S. Term expires August 28, 1987

John Bruk, B.Com., LL.B. Term expires May 3, 1987

Ian E. Cairns, B.A., C.A. Term expires March 7, 1987

George P. Kidd, B.A., M.A. Term expires August 28, 1987

David R. Sinclair, F.C.A. Term expires May 31, 1984

Ian H. Stewart, Q.C., B.A., LL.B. (Chairman). Term expires August 18, 1985

### Members Elected by the Faculty Members:

Sydney W. Jackman, B.S., M.A., A.M., Ph.D. Term expires May 31, 1987

Alexander McAuley, B.Sc., Ph.D., D.Sc. A.R.I.C. Term expires May 31, 1987

### Members Elected by Student Association:

John R. Graham, B.A. Term expires April 30, 1985

Corinne J. Mol. Term expires April 30, 1985

### Member Elected by Employees:

Liliane G. Morgan. Term expires May 31, 1987

### Secretary:

Ron Ferry, B.A. (Tor.)

## SENATE

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F. Murray Fraser, Q.C., B.A., LL.B., LL.M., Vice President, Academic  
Samuel E. Scully, B.A., M.Litt., Ph.D., Dean of Humanities, Faculty of Arts and Science

Louis D. Costa, A.B., M.A., Ph.D., Dean, Faculty of Arts and Science

Roger R. Davidson, B.Sc., M.A., Ph.D., Dean of Science, Faculty of Arts and Science (to June 30, 1985)

John J. Jackson, Dip.P.E., M.Sc., Ph.D., Dean, Faculty of Education

Leonard T. Bruton, B.Sc., M.Eng., Ph.D., Dean of Engineering

Douglas G. Morton, R.C.A., Dean, Faculty of Fine Arts

John M. Dewey, B.Sc., Ph.D., Dean, Faculty of Graduate Studies

Brian Wharf, B.A., B.S.W., Ph.D., Dean, Faculty of Human and Social Development

Lyman R. Robinson, Q.C., B.A., LL.B., LL.M., Dean, Faculty of Law

Dean W. Halliwell, M.A., B.L.S., University Librarian

Glen M. Farrell, B.S.A., M.S.A., Ph.D., Director, University Extension

### Members Elected by the Individual Faculties:

#### Arts and Science:

E.I. Berry, A.B., M.A., Ph.D. Term expires June 30, 1986

Richard J. Powers, B.A., M.A., Ph.D. Term expires June 30, 1987

#### Education:

R.A. Ruth, B.S., M.S., Ph.D. (Vice Chairman). Term expires June 30, 1986

Beverly A. Timmons, B.A., M.S., D.Ed. Term expires June 30, 1987

#### Engineering:

A. Antoniou, B.Sc., Ph.D. Term expires June 30, 1986

Geoffrey W. Vickers, Dip.Eng., M.Sc., Ph.D., P.Eng., C.Eng. Term expires June 30, 1987

#### Fine Arts:

J.L. Osborne, B.A., M.A., Ph.D. Term expires June 30, 1986

Derk Wynand, B.A., M.A. Term expires June 30, 1987

#### Graduate Studies:

T. Rennie Warburton, B.A., Ph.D. Term expires June 30, 1987

Wesley T. Wooley, A.B., A.M., Ph.D. Term expires June 30, 1986

#### Human and Social Development:

A. Farquharson, B.A., M.S.W., M.Ed., D.Ed. Term expires June 30, 1986

D.J. Kergin, B.S.N., M.P.H., Ph.D. Term expires June 30, 1986

#### Law:

Donald G. Casswell, B.Sc., LL.B., LL.M. Term expires June 30, 1986

Ronald I. Cheffins, Q.C., B.A. LL.B., LL.M. Term expires June 30, 1987

### Members Elected by the Faculty Members:

Michael R. Best, B.A., Ph.D. Term expires June 30, 1986

James Cutt, M.A., Ph.D. Term expires June 30, 1986

Brian W. Dippie, B.A., M.A., Ph.D. Term expires June 30, 1987

Gerhart B. Friedmann, B.Sc., M.A., Ph.D. Term expires June 30, 1985

William R. Gordon, B.A., M.A., Ph.D. Term expires June 30, 1987

Reginald H. Mitchell, B.A., M.A., Ph.D. Term expires June 30, 1985

John Money, B.A., M.A., Ph.D. Term expires June 30, 1985

Charles E. Picciotto, A.B., M.A., Ph.D. Term expires June 30, 1987

Gerald A. Poulton, B.A., Ph.D. Term expires June 30, 1986

John A. Schofield, B.A., M.B.A., M.A., Ph.D. Term expires June 30, 1985

### Members Elected by the Student Association:

#### Full Time Students (Term expires April 30, 1985)

Mary-Jane Bilinski, B.A.

Janet E. Erasmus, B.A.

Nicole Frechette

Susan M. Goldsmith, B.A.

Faith D. Hennessey

Roy M. Kahle, B.A.

Gary B. Kines

Lori A. McKague

Corinne J. Mol

Emerald M. Murphy, B.A.

Catherine A. Waters

C. Anthony Wilson, B.A.

**Part Time Student:**

R. Bruce Hawkes, B.Sc. Term expires April 30, 1986

**Members Elected by the Convocation** (Term expires December 31, 1987)

Olivia R. Barr, Dip.H.E., B.A., Dip.Ed.

Eileen D. Garrison, B.Ed.

Theresa Kerin, B.A., M.A.

Timothy Winkelmanns, B.Ed.

**Member Elected by the Professional Librarians:**

Hana J. Komorous, M.A., M.L.S. Term expires June 30, 1985

**Members Appointed by the Lieutenant Governor in Council:**

Barbara G. Corry, R.T., B.Sc., M.Sc. Term expires November 30, 1984

Patricia K. Johnston, B.A., M.D. Term expires December 15, 1984

Jack W.Y. Lee, B.Com. Term expires December 18, 1987

Pamela A. Murray, Q.C., B.A., LL.B. Term expires December 18, 1987

**Secretary of Senate (ex officio):**

Ron Ferry, B.A. (Tor.), Registrar

## UNIVERSITY OF VICTORIA FOUNDATION

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Herbert P.R. Brown. Term expires December 31, 1987

Joyce G. Clearihue, M.D., C.M., F.R.C.P.(C). Term expires December 31, 1987

Justin V. Harbord. Term expires December 31, 1987

Roger F. Hemeon. Term expires December 31, 1986

Arnold H. Lane, D.D.S. Term expires December 31, 1985

Robert W. McQueen, B.Com, C.A. (ex officio) (Treasurer)

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Colin P. Rutherford. Term expires December 31, 1985

Robert T.D. Wallace, M.A., LL.D. Term expires December 31, 1985

Reginald R. Wilde. Term expires December 31, 1985

Louis B. Williams. Term expires December 31, 1986

**Secretary:**

Floyd A. Fairclough

## OTHER UNIVERSITY OFFICERS

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**Institutional Analysis:**

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Alan R. Wilson, B.Sc. (U.N.B.), Analyst/Statistician

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Joanne R. Thomas, B.A. (U. of Vic.), Assistant to the Director

**Division of University Extension and Community Relations:**

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Helen Brazier, Program Assistant, Language Programs

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W. (Trudy) Hadley, Program Assistant — Public Administration

Denis J. Haughey, B.A., Dip.Ed. (Queen's, Belfast), M.Ed. (Alta.), Coordinator Community Programs

Thomas G. Lietaer, B.A. (York), Conference Officer

Brishkai Lund, B.A. (San Diego St.), M.A. (Wash.), Program Coordinator, Humanities, Women's and Seniors' Programs

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Mary Ransberry, Program Assistant, Conference Office

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Gail Woods, B.F.A. (U. of Vic.) Publicity Officer

Arlene Zuckernick, B.A. (McGill), M.A. (Tor.), Program Coordinator — Distance Education

**Research Administration:**

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Fred H. Bennett, B.Com. (Alta.), M.B.A. (Brit. Col.), Senior Academic Assistant

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Victor J. Golinsky, Manager, Projects and Telephone Services

Anthony J. James, Manager, Grounds

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Donavon J. Thorndick, Manager, Janitorial, Mail and Messenger Services

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Robert W. Carson, Programmer Analyst

Vincent J. Connor, B.Sc. (Belfast), M.Sc. (London), Programmer Analyst

Herbert D. Fox, Network Coordinator

Daniel C. Gillett, B.Sc. (U. of Vic.), Programmer Analyst

Moirá Glen, B.Sc. (London), Programmer Analyst

Merrilee H. Hoen, B.Sc. (Brit. Col.), Programmer Analyst

Kenneth T. Howard, B.A. (Guelph), Senior Programmer Analyst

Vance S. Johnson, B.Sc. (Man.), Senior Programmer Analyst

M. Glenn Jorgensen, Programmer Analyst

Michael J. Keating, B.Sc. (U. of Vic.), Programmer

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Melvin D. Klassen, B.Sc. (U. of Vic.), Senior Programmer Analyst

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Agnes M.J. Lynn, B.Sc. (U. of Vic.), Senior Programmer Analyst

Kenrick I. McGowan, B.A., M.P.A. (U. of Vic.), Data Administrator

Martin T. Milner, B.Sc. (U. of Vic.), Senior Programming Analyst

Paul Molyski, B.Sc. (Brit. Col.), Senior Programmer Analyst

Michael P. Motek, B.Sc. (U. of Vic.), Senior Programmer Analyst

Laura J. Proctor, B.Sc. (Guelph), Programmer Analyst

N. Paul Sales, B.Sc. (London), Senior Programmer Analyst

Barry S. Smith, B.Sc. (Lakehead), Senior Analyst

Joseph D. Sparrow, Programmer Analyst

David Stothard, B.A. (Brit. Col.), M.P.H. (Minn.), Associate Director, Computing Services

Philip J. Sumsion, Network and Technical Services Manager, Computing Services

Robert J. Tapp, B.Sc. (U. of Vic.), M.A.Sc. (Brit. Col.), Senior Programmer Analyst

Alan D. Trumpour, B.Sc. (U. of Vic.), Senior Programmer Analyst

Alan Tweedale, B.Sc. (Manchester), Ph.D. (Sussex), Assistant Director, Software Development

Samuel K.P. Wong, B.Sc. (Hong Kong), M.Sc., Ph.D. (Brit. Col.), Senior Analyst

Rudy Zittlau, B.A., B.Sc. (Alta.), Programmer Analyst

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David Clode, B.Ed. (U. of Vic.), General Manager

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Howard Kelsey, B.A. (Principia College), M.Sc. (Ore.), Coordinator, Athletics

Wayne Pealo, B.S. (Ore.), M.A. (U. of Vic.), Coordinator, Recreation

James D. Hays, B.A. (West. Wash.), Coordinator, Aquatics and Intramural Sports

Barry N. Read, Sports Information Officer

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Gertraude Martin, Manager

Nijyar Shemdin, B.Sc. (Iraq), M.B.A. (Lebanon), Assistant Manager, Campus Shop

#### *Counselling Services*

Robert C. Willihnganz, B.A. (Calif. St. Coll.), Ph.D. (Texas), Manager  
Mary Jane McLaughlan, B.A., B.Ped., B.Ed., M.Ed. (Man.), Counselling Psychologist

Joel Newman, B.S., M.S. (Wisc.), Ed.D. (Wash. St.), Counselling Psychologist

Joseph A. Parsons, B.A. (Utah), M.A., Ph.D. (Illinois), Coordinator, Learning Skills Program

#### *Food Services*

Horst Mann, C.G.A., Manager

Geraldine A.R. Robb, Production Coordinator

Phyllis Swindells, Catering Coordinator (part time)

Jenny A. Woo, Assistant Manager

#### *Health Services*

John E. Petersen, M.D. (Alta.), Medical Director

Michael C. Bassett, B.Sc. (U. of Vic.), M.Sc., M.D. (Brit. Col.), General Practitioner (part time)

William H. Dyson, B.Sc. (Moravian Coll.), M.A., Ph.D. (Kansas), M.D. (McMaster), General Practitioner (part time)

Frances Forrest-Richards, B.Sc., M.D., (Alta.), C.R.C.P., F.R.C.P., Psychiatrist (part time)

John W. Mackie, B.Sc., M.Sc. (Michigan), M.D. (Brit. Col.), General Practitioner (part time)

Alistair S. Murray, M.B., Ch.B. (Glasgow), C.R.C.P.(C), F.R.C.P.(C), Psychiatrist (part time)

Danielle Pastirovic, B.Sc. (Tor.), M.D. (McMaster), General Practitioner (part time)

Sandra L. Taylor, R.N. (B.C.I.T.), B.Sc., M.D. (Calg.), General Practitioner (part time)

Stephen Parker, B.Sc. (W. Ont.), B.Sc. (U. of Vic.), Physiotherapist Trainer

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Doris Bloomfield, Assistant Manager, Residence and Conference Services

Michael C. Ramsay, B.Ed., B.H.K. (Windsor), Coordinator of Resident Student Affairs

#### *Physical Education and Recreational Facilities*

Barry N. Read, Coordinator

#### *Student Financial Aid Services*

Nels I. Granewall, B.A. (U. of Vic.), Manager

Robin J. MacLeod, B.A. (Brit. Col.), Financial Aid Officer

#### **Supply and Technical Services:**

Peter A. Darling, B.A.Sc., M.A.Sc., (Brit. Col.), P.Eng., Director

#### *Audio-Visual and Television Services*

Ronald A. Harper, B.Ed., M.Ed. (Brit. Col.), Manager

Arthur G. Hall, Media Production Coordinator

#### *Printing and Duplicating Services*

E. Russell Smith, Manager

#### *Purchasing Services*

George M. Smith, Manager

#### **University Centre Auditorium:**

Martin J. Segger, B.A. Dip.Ed. (U. of Vic.), M.Phil. (Warburg, London), F.R.S.A., Manager

### **OFFICE OF THE VICE PRESIDENT, FINANCE**

#### **Accounting Services:**

Dennis G. Davis, C.A., Director

John R. Levey, C.A., Financial Accountant

Frederick W. Marshall, B.Ed. (U. of Vic.), C.G.A., Financial Accountant

Margot M. Brand, C.O.A., Assistant Accountant

#### **Internal Audit:**

Brian H. Atwell, F.C.A. (England and Wales), Director

**OFFICE OF THE ADMINISTRATIVE REGISTRAR**

Gordon J. Smiley, B.A. (McMaster), Administrative Registrar  
 Kathleen E. Boland, B.Ed. (U. of Vic.), Admissions/Liaison Officer  
 Garry R. Charlton, B.A. (U. of Vic.), Admissions/Records Officer  
 Lauren Charlton, B.A. (U. of Vic.), Records Officer, Academic Programs  
 E. Keith Clamp, B.Ed. (Alta.), M.A. (U. of Vic.), Records Officer, Professional Programs  
 Cecelia Freeman-Ward, B.A., Dip.Ed., M.P.A. (U. of Vic.), Admissions/Records Officer, Graduate Studies  
 Anna Gardziejewska, B.A. (Man.), Admissions/Liaison Officer  
 David A.C. Glen, B.A. (Mt. Allison), Director of Admission Services  
 Christopher Moss, B.Ed. (Brit. Col.), Admission/Liaison Officer  
 Kevin D. Paul, B.A., B.A. (U. of Vic.), Admissions/Liaison Officer  
 Ronald E. Stevens, B.Sc. (U. of Vic.), Scheduling Officer  
 D. Cledwyn Thomas, B.A. (Wales), Director of Records Services

**LIBRARY**

Dean W. Halliwell, M.A. (Sask.), B.L.S. (Tor.), University Librarian  
 S. Howard Bayley, M.A. (Edin.), A.L.A. (Strathclyde, Glasgow), Collections Librarian  
 Sandra L. Benet, B.A. (Mich.), M.A. (Wash. St.), B.L.S. (Alta.), Music Librarian  
 Marilyn E. Berry, B.A., B.L.S. (Brit. Col.), Reference Librarian  
 Vicki M. Booth, B.A., M.L.S. (Brit. Col.), Cataloguing Librarian  
 G. Robert Campbell, Systems Analyst  
 John O. Dell, B.A., B.L.S. (Brit. Col.), Cataloguing Librarian  
 Patricia A. Ekland, B.A. (Regina), B.L.S. (Alta.), Reference Librarian  
 Robert W. Farrell, B.A., M.A. (Dublin), B.L.S. (McGill), Collections Librarian  
 Joan N. Fraser, B.A., B.L.S. (Brit. Col.), Law Public Services Librarian  
 Howard B. Gerwing, B.A., B.L.S. (Brit. Col.), Special Collections Librarian  
 Betty J. Gibb, B.A. (Mich. St.), M.L.S. (Wash.), Interlibrary Loans Librarian

Robert M. Gray, B.A. (Brit. Col.), M.A., B.L.S. (Calif.), Reference Librarian  
 Dorothy Grieve, B.A. (W. Ont.), B.L.S. (Brit. Col.), Reference Librarian  
 Donald E. Hamilton, B.A. (Mt. Allison), M.S.L. (W. Mich.), Education Librarian  
 George J. Hruby, M.Phil. (Charles), L. ès Sc. Mor. (Geneva), Ph.D., B.L.S. (Montréal), Cataloguing Librarian  
 Hugh L. Irving, B.A., B.L.S. (Brit. Col.), Assistant Head, Cataloguing  
 David Isaak, B.A. (United Coll.), B.L.S. (Tor.), Reference Librarian  
 Hana J. Komorous, M.A., C.L.S. (Charles), Serials Librarian  
 Mary Beth MacDonald, B.A. (Brit. Col.), M.L.S. (Tor.), Circulation Librarian  
 Gene Mah, B.A. (Virginia Poly. Inst.), M.L.S. (Rosary Coll.), Cataloguing Librarian  
 Jack K. O'Brien, B.A., LL.B. (Sask.), B.L.S. (McGill), Cataloguing Librarian  
 Christopher G. Petter, B.A. (U. of Vic.), M.A., M.Phil. (Leeds), M.L.S. (W. Ont.), Archives Librarian  
 Diana M. Priestly, B.A., LL.B. (Brit. Col.), M.L.L. (Wash.), Law Librarian  
 Helen M. Rodney, B.A. (Alta.), B.L.S. (Tor.), M.A. (London), Head, Reference  
 Elena Romaniuk, B.Sc. (McMaster), M.L.I.S. (Univ. of Illinois), Serials Librarian  
 Frances E. Rose, B.A. (N.B.), B.L.S. (McGill), Government Documents Librarian  
 Margaret A. Salmond, B.A. (Vic. Coll.-Brit. Col.), M.A. in L.S. (Denver), Law Cataloguing Librarian  
 Priscilla R. Scott, B.A. (Brit. Col.), B.L.S. (Tor.), Head, Circulation  
 Donna L. Signori, B.A., M.A. (Brit. Col.), M.L.S. (Tor.), Collections Librarian  
 William R. Taggart, B.A. (Man.), B.L.S., M.A. (McGill), Head, Collections  
 June G. Thomson, B.A. (Alta.), M.A. (Tor.), B.L.S. (McGill), Head, Cataloguing  
 Jean I. Whiffin, B.A., B.L.S. (Tor.), Head, Serials  
 Donald J. White, B.A. (San Jose St.), M.L.S. (Rutgers), M.A. (Memorial), Reference Librarian

## EMERITUS FACULTY AND HONORARY DEGREE RECIPIENTS

**EMERITUS FACULTY**

Jane A. Abramson, Social Work  
 Geoffrey J.D. Archbold, Classics  
 J. Douglas Ayers, Education  
 Ralph W. Baldwin, French  
 Howard B. Barnett, Music  
 Walter M. Barss, Physics  
 Alex Bavelas, Psychology  
 Horace D. Beach, Psychology  
 Roger J. Bishop, English  
 Leon Bowden, Mathematics  
 George A. Brand, Education  
 Winnett A. Brand, Education  
 C. Vyncr Brooke, Spanish  
 Kathleen M. Christie, Education  
 John L. Clinenhaga, Physics  
 Jean D. Dey, Education  
 John P. Dobreiner, Visual Arts

Gladys V. Downes, French  
 P. Maximilian H. Edwards, French  
 W. Gordon Fields, Biology  
 Jessie B. Fleming, Education  
 Esme N. Foord, Arts and Science  
 William H. Gaddes, Psychology  
 Robert F. Gray, Anthropology  
 Nora E. Haimberger, German  
 Herta M. Hartmanshenn, German  
 W. Harry Hickman, French  
 Howard J.N. Horsburgh, Philosophy  
 Charles H. Howatson, Geography  
 Herbert H. Huxley, Classics  
 D. Elizabeth Kennedy, Mathematics  
 A. Richard King, Education  
 Fredrick Kriegel, German  
 Jan Kupp, History  
 Chester L. Lambertson, English

Alfred E. Loff, History  
Donald J. MacLaurin, Chemistry  
J. Beattie MacLean, German  
Fred. L. Martens, Education  
Geoffrey P. Mason, Education  
Frederick Mayne, English  
Barbara McIntyre, Theatre  
John McLeish, Education  
Richard H.J. Monk, Education  
O. Phoebe Noble, Mathematics  
G. Neil Perry, Public Administration  
Sydney G. Pettit, History  
Kenneth W. Rankin, Philosophy  
Dolores Reventlow, Spanish  
M. Harry Scargill, Linguistics

Bérangère B. Steel, French  
Neil A. Swanson, Political Science  
Fred T. Tyler, Education  
Jean-Paul Vinay, Linguistics  
Robert T.D. Wallace, Mathematics  
William D. West, Theatre

**HONORARY DEGREE RECIPIENTS, 1984**

Frances James Adaskin, May 1984  
Murray Adaskin, May 1984  
Minita Elmira Gordon, May 1984  
George Ignatieff, May 1984  
Myfanwy Spencer Pavelić, May 1984  
Frank P. Levirs, November 1984  
Peter Williams, November 1984

## STATISTICS

**ENROLLMENT 1984-85 AS OF DECEMBER 1, 1984**  
(Figures for 1983-84 are in brackets)

|   |      |        |
|---|------|--------|
| <b>Faculty of Arts and Science — Full Time*</b> |      |        |
| First Year .....                                | 1296 | (1573) |
| Second Year .....                               | 1198 | (1318) |
| Third Year .....                                | 999  | (921)  |
| Fourth Year .....                               | 773  | (699)  |
| Unclassified as to year .....                   | 83   | (70)   |
| Total in Faculty .....                          | 4349 | (4551) |

|  |     |       |
|--|-----|-------|
| <b>Faculty of Education — Full Time*</b> |     |       |
| First Year .....                         | 126 | (58)  |
| Second Year .....                        | 171 | (174) |
| Third Year .....                         | 210 | (210) |
| Fourth Year .....                        | 205 | (229) |
| Fifth Year .....                         | 111 | (110) |
| Unclassified as to year .....            | 5   | (102) |
| Total in Faculty .....                   | 828 | (883) |

|  |     |   |
|--|-----|---|
| <b>Faculty of Engineering — Full Time*</b> |     |   |
| First Year .....                           | 70  | — |
| Second Year .....                          | 36  | — |
| Total in Faculty .....                     | 106 | — |

|  |     |       |
|--|-----|-------|
| <b>Faculty of Fine Arts — Full Time*</b> |     |       |
| First Year .....                         | 146 | (179) |
| Second Year .....                        | 166 | (164) |
| Third Year .....                         | 144 | (138) |
| Fourth Year .....                        | 114 | (108) |
| Unclassified as to year .....            | 8   | (10)  |
| Total in Faculty .....                   | 578 | (599) |

|   |     |       |
|---|-----|-------|
| <b>Faculty of Human and Social Development — Full Time*</b> |     |       |
| First Year .....  | 0   | (0)   |
| Second Year .....   | 63  | (54)  |
| Third Year .....  | 156 | (129) |
| Fourth Year .....   | 103 | (87)  |
| Unclassified as to year .....                               | 3   | (6)   |
| Total in Faculty .....                                      | 325 | (276) |

|                                      |      |         |
|--------------------------------------|------|---------|
| <b>Faculty of Law — Full Time*</b>   |      |         |
| First Year .....                     | 99   | (97)    |
| Second Year .....                    | 95   | (86)    |
| Third Year .....                     | 69   | (77)    |
| Unclassified as to year .....        | 0    | (2)     |
| Total in Faculty .....               | 263  | (262)   |
| Total full time undergraduates*      | 6449 | (6571)  |
| Total part time undergraduates ..... | 3349 | (3659)  |
| Total Undergraduates .....           | 9798 | (10230) |

\* Undergraduates registered in 12 units or more.

Source: University of Victoria Registration  
Statistics 1984-85 as of December 1, 1984

|                                    |       |         |
|------------------------------------|-------|---------|
| <b>Faculty of Graduate Studies</b> |       |         |
| Full time .....                    | 552   | (629)   |
| Part time .....                    | 369   | (490)   |
| Total in Faculty .....             | 921   | (1119)  |
| <b>Grand Total</b> .....           | 10719 | (11349) |

**FULL TIME STUDENTS OF  
NON-B.C. ORIGIN 1984-85**Determined by location of previous educational institution attended.  
(Figures for 1983-84 are in brackets.)

|                             |      |        |
|-----------------------------|------|--------|
| Alberta .....               | 406  | (468)  |
| Saskatchewan .....          | 46   | (67)   |
| Manitoba .....              | 56   | (68)   |
| Ontario .....               | 275  | (335)  |
| Quebec .....                | 40   | (52)   |
| New Brunswick .....         | 6    | (6)    |
| Nova Scotia .....           | 30   | (38)   |
| Prince Edward Island .....  | 1    | (2)    |
| Newfoundland .....          | 6    | (11)   |
| Yukon .....                 | 19   | (29)   |
| Northwest Territories ..... | 0    | (3)    |
| Other Countries .....       | 286  | (291)  |
| Total .....                 | 1171 | (1370) |

**DEGREES CONFERRED 1983-84**B.A. — 560; B.Ed. — 245; B.F.A. — 64; B.Mus. — 30; B.Sc. — 260;  
B.S.N. — 76; B.S.W. — 50; LL.B. — 97; M.A. — 61; M.Ed. — 92;  
M.Mus. — 10; M.P.A. — 45; M.Sc. — 10; Ph.D. — 13. TOTAL — 1619.**PERMANENT BUILDINGS ON  
THE UNIVERSITY CAMPUS**

|  |   |
|--|---|
| Student Union Building (1962)<br>addition 1976 | Music Wing (1978)                                   |
| Clearihue Building (1962)                      | McPherson Library (1964)<br>addition (1973)         |
| Classroom-Office Extension<br>(1971)           | Sedgewick Building (1968)<br>additions (1969, 1970) |
| Third Wing (1976)                              | Lansdowne Residence Buildings<br>(1969)             |
| Fourth Wing (1979)                             | Cunningham Building (1971)                          |
| Cornett Building (1966)                        | Saunders Building (1974)                            |
| Elliott Building (1963)                        | McKinnon Building (1975)                            |
| Lecture Wing (1964)                            | University Centre (1978)                            |
| Craigdarroch Residence<br>Buildings (1964)     | Visual Arts Building (1978)                         |
| additions (1966, 1967,<br>1973, 1981)          | Gordon Head Residence<br>Buildings (1978)           |
| Campus Services Building (1965)                | Begbie Building (1980)                              |
| McLaurin Building (1966)                       | Phoenix Building (1981)                             |

## INDEX I — FACULTY MEMBERS AND ADMINISTRATIVE AND ACADEMIC PROFESSIONAL STAFF

NOTE: Since the University Calendar goes to press in March, this list and lists under faculties and departments may be subject to some modification when the academic session begins.

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## UNIVERSITY MAP DIRECTORY

| DEPARTMENT   | BUILDING                         | LOCATION | DEPARTMENT  | BUILDING                          | LOCATION |
|--|----------------------------------|----------|---|-----------------------------------|----------|
| Academic Systems                                       | Clearhuc                         | C-3      | Health Information Sciences Program                     | Cornett                           | B-3      |
| Accounting Services                                    | University Centre                | C-3      | Health Services   | Health Services                   | E-4      |
| Administration   | Sedgewick                        | B-3      | Hispanic & Italian Studies                              | Clearhuc                          | C-3      |
| Administrative Stores                                  | R                                | C-1      | History   | Clearhuc                          | C-3      |
| Administrative Registrar                               | University Centre                | C-3      | History in Art  | Clearhuc                          | C-3      |
| Administrative Systems                                 | Clearhuc                         | C-3      | Housing & Conference Services                           | Craigdarroch Office Building      | D-3      |
| Admission Services (Undergraduate)                     | University Centre                | C-3      | Human & Social Development (Dean's Office)              | Sedgewick                         | B-3      |
| Admission Services (Graduate)                          | University Centre (Grad Studies) | C-3      | Institutional Services                                  | Sedgewick                         | B-3      |
| Admission Services (Law)                               | Begbie                           | A-3      | Institutional Analysis                                  | Sedgewick                         | B-3      |
| Advising Centre (Arts & Science)                       | Clearhuc                         | C-3      | Knowledge Network                                       | J                                 | D-2      |
| Advising Centre (Education)                            | MacLaurin                        | B-4      | Language & Listening Labs                               | Clearhuc                          | C-3      |
| Alma Mater Society                                     | Student Union                    | D-3      | Law   | Begbie                            | C-3      |
| Alma Mater Society Ombudsperson                        | Student Union                    | D-3      | Learning & Teaching Centre                              | Begbie                            | A-3      |
| Alumni Association                                     | Sedgewick                        | B-3      | Lexicographical Research Centre                         | McPherson Library                 | C-3      |
| Anthropology   | Cornett                          | C-3      | Library   | McPherson Library                 | C-3      |
| Arts & Science (Deans' Offices)                        | Clearhuc                         | C-3      | Linguistics   | Clearhuc                          | D-2      |
| Athletics & Recreational Services                      | McKinnon                         | C-2      | Mail & Messenger Services                               | Saunders                          | C-3      |
| Audio-Visual & Television Services                     | McPherson Library                | C-3      | Malahat Review  | Clearhuc                          | C-3      |
| Auditorium   | McPherson Library                | C-3      | Mallwood Art Museum & Gallery                           | University Centre                 | C-3      |
| Biochemistry & Microbiology                            | University Centre                | C-2      | Marlet  | Student Union                     | D-3      |
| Biology  | L                                | C-4      | Mathematics   | Clearhuc                          | C-3      |
| Bookings (Academic)                                    | Cunningham                       | C-4      | Music   | MacLaurin Music Wing              | C-3      |
| Bookings (Non-Academic, athletic & recreational)       | University Centre                | C-3      | Native Student Union                                    | MacLaurin                         | B-4      |
| Bookstore & Campus Shop                                | University Centre                | C-3      | Nursing   | Sedgewick                         | B-3      |
| Buildings & Grounds                                    | Campus Services                  | C-2      | Nursing Pacific & Oriental Studies                      | Clearhuc                          | C-3      |
| Campus Planning  | Saunders                         | D-2      | Personnel Services                                      | Sedgewick                         | B-3      |
| Canada Employment Centre on Campus                     | University Centre                | D-2      | Philosophy  | Clearhuc                          | B-3      |
| Ceremonies & Special Events                            | University Centre                | C-3      | Physical Education, Athletics & Recreational Facilities | McKinnon                          | C-3      |
| Chaplain   | Clearhuc                         | C-3      | Physics   | McKinnon                          | C-2      |
| Chemistry  | University Centre                | C-3      | Political Science                                       | Elliot                            | C-4      |
| Child Care   | Elliot                           | B-3      | Post Office   | Cornett                           | B-3      |
| Classics   | Sedgewick                        | B-3      | President and Vice Chancellor                           | Campus Services                   | C-2      |
| Community Relations & Development                      | Clearhuc                         | C-3      | Printing & Duplicating Services                         | Sedgewick                         | B-3      |
| Computer Science                                       | Sedgewick                        | B-3      | Psychology  | Cornett                           | B-3      |
| Computer Science Software Engineering Laboratory       | Clearhuc                         | C-2      | Public Administration                                   | McPherson Library (side entrance) | C-3      |
| Cooperative Education Programs                         | E                                | C-2      | Purchasing Services                                     | R                                 | C-1      |
| Counselling Services                                   | Clearhuc                         | C-3      | Recital Hall  | MacLaurin Music Wing              | B-4      |
| Creative Writing                                       | University Centre                | C-3      | Records (Student)                                       | University Centre                 | C-3      |
| Curriculum Laboratory                                  | University Centre                | C-3      | Registrar (Admissions & Student Records)                | University Centre                 | C-3      |
| Day Care Services                                      | Clearhuc                         | C-3      | Registrar (Secretary of Senate & Board of Governors)    | Sedgewick                         | B-3      |
| Economics  | MacLaurin                        | B-4      | Research Administration                                 | University Centre                 | C-3      |
| Education  | Day Care Centre                  | D-1      | Residences  | University Centre                 | D-3      |
| Engineering (Dean's Office)                            | Cornett                          | B-3      | Secretarial Services                                    | Craigdarroch, Gordon Head,        | D-3      |
| Engineering (Labs, Offices)                            | MacLaurin                        | B-4      | Slavonic Studies  | Lansdowne, McGill                 | /D-4     |
| English  | Campus Services                  | C-2      | Sociology   | Sedgewick                         | B-3      |
| Environmental Studies Program                          | L                                | C-2      | Sociology   | Clearhuc                          | C-3      |
| Extension Division                                     | Clearhuc                         | C-2      | Staff Relations   | Sedgewick                         | B-3      |
| Faculty Association                                    | Clearhuc                         | C-3      | Statistics Laboratory                                   | Cornett                           | B-3      |
| Faculty Club   | University Centre                | C-3      | Student & Ancillary Services                            | Sedgewick                         | B-3      |
| Fine Arts (Dean's Office)                              | University Centre                | C-3      | Student Financial Aid                                   | Cornett                           | B-3      |
| Food Services  | Faculty Club                     | C-3      | Supply & Technical Services                             | University Centre                 | C-3      |
| Geography  | MacLaurin                        | B-4      | Theatre   | University Centre                 | C-3      |
| Germanic Studies                                       | Craigdarroch Office Building     | D-3      | Traffic & Security                                      | Phoenix Building                  | A-4      |
| Graduate Students' Society                             | Cornett                          | B-3      | Vice Presidents, Academic & Administration              | Saunders                          | D-2      |
| Graduate Studies (Dean's Office, Admissions & Records) | Student Union                    | D-3      | Vice President, Finance                                 | Sedgewick                         | B-3      |
| Gymnasium  | University Centre                | C-3      | Visual Arts   | University Centre                 | C-3      |
|  | McKinnon                         | C-2      |   | Visual Arts                       | D-1      |

## VISITOR PARKING:

**DAYS** (7:00 a.m.-6:00 p.m.), MONDAY THROUGH FRIDAY (Statutory Holidays Excluded)

**Surface Parking:**

Hourly: Limited metered space available in most lots. See symbol (M) on map.

Daily: Purchase permit at this Directory and park in an **unreserved** space in any **numbered** lot **outside** Ring Road.

**Covered Parking:**

Parkade below University Centre. Terms and rates are posted inside Parkade.

**EVENINGS** (6:00 p.m.-7:00 a.m.), WEEKENDS AND STATUTORY HOLIDAYS

**Surface Parking:**

No fees required.

Park in any lot except "B" and reserved parts of "6" and "D". No restrictions weekends and Statutory Holidays.

**Covered Parking:**

Parkade below University Centre. Terms and rates are posted inside Parkade.

A B C D E

1

2

3

4

**LEGEND:**

- Buildings
- Building Wing Designation
- Reserved Parking
- General Parking
- Motorcycle Parking
- Parking Meters



University of Victoria







# UNIVERSITY OF VICTORIA

CALENDAR SUPPLEMENT

1985-86

# CALENDAR SUPPLEMENT

1985-86

This supplement contains corrections of errors (excluding obvious typographical ones) that appear in the 1985-86 Calendar, as well as new and revised regulations and curriculum items.

## GENERAL INFORMATION:

Page 19: Fees section replaced by the following:

### FEES

#### 1. PAYMENT OF ACCOUNTS

- (a) The obligation to pay fees for a course or program is incurred upon registration, subject only to adjustments for officially recorded course drops, withdrawal or cancellation of registration.
- (b) Payment of fees is due by the following dates:
  - First term courses/programs .....September 30
  - Full year courses/programs - first half .....September 30
  - second half.....January 31
  - Second term courses/programs .....January 31Where courses are added in a subsequent month, their fees are due by the end of that month.
- (c) Students are responsible for calculating and paying their fees using the information in this Calendar and the Calendar Supplement. Statements of account are not mailed in advance, but may be collected at Accounting Services immediately prior to September 30 and January 31. Payments must be made by due dates whether or not a statement of account has been issued or received.
- (d) Service charges of 2% a month (minimum \$ 2.00) are added to overdue accounts.
- (e) Students with overdue accounts are subject to loss of registered status and denial of services. These services include re-registration; use of libraries; access to classes and examinations; issue of loans, awards, grades, transcripts, degrees and documents certifying enrollment or registered status. *Failure to pay full fees by October 31 in the first term and by February 28 in the second term will result in automatic cancellation of registration.*
- (f) Students who withdraw or otherwise leave the University remain liable for settlement of unpaid accounts and for return of any University property. The University may seek to enforce its rights as a creditor through legal action or the use of collection agencies.

#### 2. FEES FOR UNDERGRADUATE PROGRAMS OTHER THAN LAW

- (a) Tuition, per fee unit ..... 86.00
- (b) Courses are assigned a fee unit value for the purpose of tuition fee assessment. Where this fee unit value is different from the academic unit value it is shown either in the course description or as follows:

|   | <u>Academic<br/>Units</u> | <u>Fee<br/>Units</u> |
|---|---------------------------|----------------------|
| Art 120, 130, 140, 220, 231, 232,<br>233, 240   | 1.5                       | 1.7                  |
| Art 321, 322, 323, 332, 333, 341,<br>342, 390, 490  | 3.0                       | 3.4                  |
| Art 499   | 12.0                      | 12.9                 |
| Engineering (all courses)   | 1.5                       | 1.6                  |
| Geography 325   | 1.5                       | 1.8                  |
| Geography 427   | 1.5                       | 1.9                  |
| History in Art 488, 489   | 1.5                       | 5.0                  |
| Music 140, 240, 340, 440  | 2.0                       | 2.4                  |
| Music 145   | 3.0                       | 3.7                  |
| Music 245, 345, 445   | 6.0                       | 6.7                  |
| Russian 304   | 1.5                       | 1.6                  |
| Theatre 240, 340, 341, 342  | 3.0                       | 3.4                  |
| (c) Course challenge, per fee unit .....  |                           | 43.00                |
| May be waived for students who have<br>completed a non-credit diploma<br>program and paid equivalent credit<br>program fees - apply to University Extension |                           |                      |
| (d) Cooperative program, per work term.....   |                           | 172.00               |
| (e) Athletics/Recreation, per term  |                           |                      |
| -4½ units or more.....  |                           | 8.00                 |
| -less than 4½ units.....  |                           | 4.00                 |
| (f) Alma Mater Society, per term  | Activity                  | Building<br>Fund     |
| -4½ units or more   | 17.50                     | 10.00                |
| -less than 4½ units   | 8.75                      | 5.00                 |
| (g) Graduation.....   |                           | 25.00                |
| (h) Alma Mater Society Graduating Class.....  |                           | 10.00                |
| <br>3. FEES FOR FACULTY OF LAW  |                           |                      |
| (a) Application .....   |                           | 25.00                |
| (b) First year acceptance deposit.....  |                           | 100.00               |
| Forfeited if student does not register, but \$ 50.00 refundable<br>if withdrawal of application received before August 10.                                  |                           |                      |
| (c) Tuition - full time.....  |                           | 1,650.00             |
| - part time.....  |                           | 825.00               |
| (d) Law Students Society.....   |                           | 15.00                |
| (e) Athletics/Recreation, Graduation and Alma Mater Society fees<br>As shown in Section 2.  |                           |                      |

## 4. FEES FOR VISA STUDENTS

- (a) Visa students registering in undergraduate courses/programs are required to pay tuition fees at 1.75 times the rates shown in preceding sections.
- (b) Visa students who were registered (other than under contractual arrangements) and in good standing at April 1, 1984, or at April 1, 1985, are exempted from these differential fees until April 1, 1987.

Where reciprocal agreements exist, visa students shall pay only the regular tuition fees.

## 5. FEES FOR GRADUATE PROGRAMS

- (a) Public Administration program acceptance deposit.....100.00  
Forfeited if student does not register, but \$ 50.00  
refundable if withdrawal of application received  
28 days prior to classes.
- (b) Tuition, per fee unit.....184.00
- (c) Maximum tuition per year (9 fee units).....1,656.00
- (d) There are additional fees for the following courses. These fees do not form part of the maximum tuition under paragraph (c) nor of the fee requirements under (e), (f) or (g).
  - Music 540.....32.00
  - Music 545.....64.00
  - Theatre 508, 509, 510, 520, 521, 523.....32.00
- (e) Payment of 15 fee units is required for a Master's degree. However, if all program requirements are completed with 16 months, this will be reduced to 12 fee units.
- (f) Payment of 22½ fee units is required for a Doctor's degree.
- (g) When Master's and Doctor's degree are both taken at the University of Victoria, payment of 30 fee units is required in total.
- (h) Full time Master's candidates who transfer to Doctor's programs may apply tuition paid for the Master's programs towards their Doctor's programs, subject to a limit of one year's tuition if the transfer takes place after 15 months.
- (i) Reregistration fee, per term.....184.00  
Required from students who have paid the fee units for their degree but have not completed program requirements. For this purpose terms are January-April, May-August, September-December.
- (j) Tuition fees paid by special and qualifying students do not count towards the fee unit requirement for a degree.
- (k) Cooperative program fee, per work term (nonthesis programs only).....184.00

- (l) Athletics/Recreation, per term ..... 8.00
- (m) Graduate Students Society, per term  
 -Activity.....7.00  
 -Building Fund.....8.00
- (n) Graduation .....25.00
6. FEES FOR AUDITORS
- (a) Under age 65, per fee unit - undergraduate.....43.00  
 - graduate.....92.00
- (b) Age 65 or over, per fee unit - undergraduate.....14.00  
 - graduate.....31.00
- (c) Auditor fees are not refundable.
7. MISCELLANEOUS FEES
- (a) Preliminary application for admission.....10.00
- (b) Document evaluation.....35.00
- (c) Late registration.....35.00
- (d) Returned cheque.....10.00
- (e) Reinstatement.....75.00
- (f) Supplemental examination - per paper -on campus.....35.00  
 -off campus.....45.00
- (g) Doctoral dissertation abstract.....30.00
- (h) Transcripts, per request - first copy.....4.00  
 - additional copies, each.....1.00
- (i) Education Deduction and Tuition Certificate replacements...4.00
- (j) Calendar mailing charge - outside Canada.....6.00  
 - inside Canada.....4.00
8. REFUNDS FOR DROPPED COURSES, WITHDRAWAL AND CANCELLATION OF REGISTRATION
- (a) Refunds are based on the officially recorded date of drop, withdrawal or cancellation of registration.
- |   | Sessional<br>Courses | First<br>term<br>Courses | Second<br>term<br>Courses |
|---|----------------------|--------------------------|---------------------------|
| (b) Tuition - undergraduate<br>other than Law |                      |                          |                           |
| On or before                                  |                      |                          |                           |
| September 18                                  | 100%                 | 100%                     | 100%                      |
| September 27                                  | 80%                  | 60%                      | 100%                      |
| October 11                                    | 70%                  | 40%                      | 100%                      |
| October 31                                    | 60%                  | 20%                      | 100%                      |
| January 17                                    | 50%                  | -                        | 100%                      |
| January 31                                    | 30%                  | -                        | 60%                       |
| February 14                                   | 20%                  | -                        | 40%                       |
| February 28                                   | 10%                  | -                        | 20%                       |

- (c) Tuition - students in  
Law  
On or before  
September 18 100%  
January 17 50%
- (d) Tuition - graduate  
programs  
On or before  
September 18 100% 100% 100%  
January 17 50% - 100%
- (e) One half of Athletics/Recreation and Student Society fees will be refunded to students withdrawing by September 30 or January 31.

#### 9. GENERAL FEE REGULATIONS

- (a) The University reserves the right to change fees without notice.
- (b) Students registering in Summer Studies should consult the Summer Studies Calendar Supplement.
- (c) Except where donors direct otherwise, proceeds of student awards received or granted by the University will be applied to unpaid accounts and any excess balance will be paid to the student.
- (d) Credit balances in fee accounts will be refunded on request.

#### FACULTY OF ARTS AND SCIENCE:

- Page 38: MICR 480: ( $1\frac{1}{2}$ ) should be ( $1\frac{1}{2}$ )
- Page 48: BIOL 580 should be 560
- Page 54: CHEM 633: ( $1\frac{1}{2}$ ) should be ( $1\frac{1}{2}$ -3)
- Page 62: Economics: Major and Honours B.Sc. Programs: under Major (b) should be:  
(b) MATH 151 or 102(or 100), or 100 and 101; 152  
OR MATH 100 and 101; 233A; 200 and 201; 152  
OR permission of the Department (See Note 1)
- Page 68: ENGL 202: (3-0) should be (3-0; 3-0)
- Page 73: Environmental Studies: Core Courses: omitted:  
ECON 330 ( $1\frac{1}{2}$ ) Environmental Economics  
E S 300 ( $1\frac{1}{2}$ ) Environmental Studies
- Page 87: GER 499: (3-0) should be (3-0; 3-0)
- Page 92: HIST 354A: 1949 should be 1849
- Page 100: LING 570 should be LING 570 (PSYC 570)
- Page 107: Mathematics - Graduate Courses: add the following new courses (subject to approval by the Senate on 11 Sept.):  
MATH 522 (2-4) COMBINATORICS  
(Prerequisite: 422 or permission of the Department)  
MATH 523 (2-4) GRAPH THEORY  
(Prerequisite: 423 or permission of the Department)
- Page 109: JAPA 400: (3-0) should be (3-0; 3-0)
- Page 112: PHIL 238 will be offered January-April

- Page 118: PHYS 519 replaced by 519A (1½), 519B (1½) SELECTED TOPICS IN GEOPHYSICS: I and II
- Page 119: ASTR 400 will be offered January-April
- Page 120: Astronomy - Graduate Courses: add the following after final paragraph:  
Astronomy 500 - 505 offered as A(1½) and B(1½).  
ASTR 500 to 505: (3) changed to (1½ or 3)  
Add to ASTR 511: (May be taken more than once)

FACULTY OF EDUCATION:

- Page 157: ED-B 341: add (3)
- Page 159: ED-B 532: (3) changed to (1½ or 3) and title changed to Administration of the Educational Program  
ED-B 536: title changed to Philosophy of Education  
ED-B 537: add the following:  
537C Tasks and Processes of Administration: The Principalship  
Analysis of the role of the school principal, with emphasis upon legal status, administrative tasks, and managerial performance.  
537H Tasks and Process of Administration: Educational Planning  
A review of the concepts, approaches and actual practice of educational planning of both macro- and microlevels of activity. New features of planning will be examined for improving the design of policies and the operational procedures of educational organizations.
- Page 162: P E 452: (3-0) should be (3-0; 3-0)

FACULTY OF ENGINEERING:

- Page 174: ENCR 441: hours: (3-0)

FACULTY OF FINE ARTS:

- Page 178: Under General and Major Programs: line 3, the second 202 should be 203
- Page 182: H A 231 should be \*H A 231
- Page 189: MUS 100B: (2) should be (1)
- Page 193: Omitted: \*THEA 307 (1½) STUDIES IN MEDIEVAL THEATRE  
Theatre of the Middle Ages. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department) (Prerequisite: 200 or permission of the Department) (3-0)
- Page 195: Omitted: THEA 397 (1½ or 3) DIRECTED STUDIES IN COSTUME DESIGN  
(Prerequisite: 341, 441 and permission of the Department)

FACULTY OF GRADUATE STUDIES (Subject to approval by the Senate on 11 Sept.):

- Page 218: Sociology: under 1. Program of Studies, add:  
Undergraduate Competence: All incoming graduate students must fulfill the requirements expected of undergraduate Honours students in this Department (i.e., SOCI 300, 371, 375 and 471, or their equivalencies).  
Graduate Course Work and Thesis: All students, etc. (as in current Calendar)

FACULTY OF HUMAN AND SOCIAL DEVELOPMENT:

Page 223: C C 210B: add (1½)

Page 233: Consult the School of Social Work concerning changes in degree requirements for students entering third year in September 1987.

Page 234: SOCW 304: (6) changed to 4½

SOCW 351: delete

SOCW 355 (formerly half of 351) (1½) HUMAN DEVELOPMENT

The objectives of this course are to: (1) introduce students to concepts and models of how human behaviour is acquired, maintained and modified, and (2) develop an understanding of normal human development as a knowledge base for practice with individuals, families and groups in a rural context. January-April (3-0)

The following changes take effect in 1986-87:

SOCW 402: add to prerequisite: corequisite 403

SOCW 403 (1½) ADVANCED SOCIAL WORK PRACTICE

Approaches to generalized social work intervention and the application of human relation skills are examined in depth, and are directly related to the second field placement (402). For this reason the course is delivered in a format that permits learning at a distance from the campus. (Prerequisites: 303, 304, 352)

SOCW 452: (3) changed to (1½, formerly 3). Delete "one or two day" in line 3.

SOCW 455 (formerly half of 351) (1½) THE RURAL COMMUNITY

The objectives of this course are to: (1) analyze rural community structures and problems, (2) understand the delivery of human services in rural communities, and (3) review approaches to community work practice.

September-December (3-0)

OTHER UNIVERSITY OFFICERS:

Page 280: Library, omitted:

Robert H. Ker, B.A. (McGill), M.A., M.L.S. (Calif., Berkeley),  
Reference Librarian

Alexander L. Slade, B.A. (U. of Vic.), B.L.S. (Brit. Col.), Extension  
Librarian

6 June 1985







SCHEDULE OF DATES RESERVED FOR MEETINGS 1985-86

|      | Arts & Science   | Educ.                     | Engin.            | Fine Arts         | Graduate Studies  | Human & Soc. Dev. | Law     | Senate                         | Board of Governora | Faculty Assoc.           |
|------|------------------|---------------------------|-------------------|-------------------|-------------------|-------------------|---------|--------------------------------|--------------------|--------------------------|
|      | 15:30<br>ELL 167 | 14:30<br>MAC D288         | 14:00<br>SEOG 011 | 12:30<br>MAC A169 | 15:30<br>COR B108 | 12:30<br>COR B145 | BEG 205 | 19:30<br>Senate and Board Room | (TBA)              | 15:30<br>COR A121        |
| SEPT | 20               |                           | 9                 | 12                | 27                | 20                | TBA     | 11                             | 16                 | 16<br>19:30<br>Fac. Club |
| OCT  | 18               | 11                        | 7                 | 10                | 25                | 18                | TBA     | 2<br>9*                        | 21                 | 4                        |
| NOV  | 22*              | 8                         | 4                 | 14                |                   | 22                | TBA     | 6<br>13*                       | 18                 | 1                        |
| DEC  | 11<br>9:30       | 13                        | 2                 | 12                | 18<br>10:00       | 13                | TBA     | 4<br>11*                       | 16                 | 6                        |
| JAN  | 24               | 10                        | 6                 | 16                | 31                | 24                | TBA     | 8                              | 20                 | 6<br>19:30<br>Fac. Club  |
| FEB  | 28               | 14                        | 3                 | 13                |                   | 21                | TBA     | 5<br>12*                       | 17                 | 7                        |
| MAR  | 21*              | 14                        | 3                 | 13                |                   | 21                | TBA     | 5<br>12*                       | 17                 | 7                        |
| APR  | 18<br>10:00      | 11                        | 7                 | 10                | 4                 | 18                | TBA     | 2<br>9*                        | 21                 | 14<br>19:30<br>Fac. Club |
| MAY  | 21<br>10:00      | 16<br>11:00<br>(MAC D283) | 5                 | 16<br>14:30       | 14<br>10:00       | 16                | TBA     | 7<br>14*                       | 20                 |                          |
|      |                  | 23                        |                   |                   |                   |                   |         | 21<br>14:00                    |                    |                          |
| JUNE |                  |                           |                   |                   |                   |                   |         |                                | 16                 |                          |
| JULY |                  |                           |                   |                   |                   |                   |         |                                | TBA                |                          |

\*Division Meetings:  
Humanities  
CLE A201  
Science  
ELL 162  
Soc. Sci.  
COR B108

\*Second Session only if necessary

R. Ferry  
12 June 1985

