

# University of Victoria Calendar 1978/79



## ENQUIRIES

The University's telephone number is: (area code 604) 477-6911.

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

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

### Admission and Advice About Programmes

All Faculties, Schools and Programmes, 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 Centre

### Financial Aid and Awards

Financial Aid Office

### Day Care

Day Care Centre No. 1, 2246 McCoy Road, Victoria, B.C.

### Health Services

Director, University Health Services

### Housing and Residence Accommodation

Manager, Housing and Conference Services

### Parking Permits

Superintendent, Traffic and Security

### Summer Session

Director, Summer Session

### Textbooks

Manager, Bookstore

Enquiries 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

### 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.\*

March 31	Faculty of Education (professional years only), Faculty of Human and Social Development, Faculty of Law.
May 31	Persons outside Canada — programmes other than those listed above.
June 30	Persons in Canada — programmes other than those listed above.
July 31	Persons wishing to register in 6 units or fewer in September.*
September 16	Up-Island courses. (Registration in person takes place in Nanaimo on this date.)
November 30	Second term courses — for third and fourth year students only (not applicable to students in attendance in the first term).

\*This does not apply to Law — applications received after March 31 will not be considered.

### Summer Session

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

N.B. Each of the above dates, except September 16, 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.

## NOTICE CONCERNING FEES

*If it is found necessary to increase fees above the levels shown in this Calendar effective for the 1978-79 Winter Session, notification of any changes in the current fee schedules will be given as far in advance as possible by means of a supplement to this Calendar.*

### Other University Publications of Interest to Prospective Students

#### *Admissions Handbook*

Provides information on the University, programmes 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 Session Supplement*

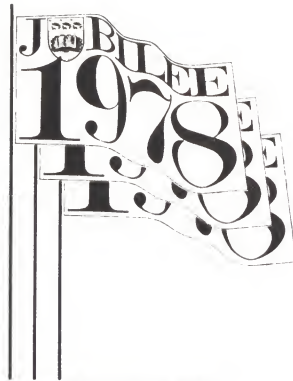
Lists offerings available in the period May through August. Available from the Director, Summer Session.

#### *Division of Continuing Education Supplement*

Lists credit offerings available in the late afternoon and evening. Available from the Director, Division of Continuing Education.

#### *Division of Continuing Education Calendar*

Lists non-degree programmes; issued in the fall and spring. Available from the Director, Division of Continuing Education.



UNIVERSITY OF VICTORIA 1963  
VICTORIA COLLEGE 1903

# UNIVERSITY OF VICTORIA

## *Calendar*

### *1978-79*

The University of Victoria operates under the authority of the *Universities Act* (S.B.C. 1974 c. 100) which provides for a Convocation, Board of Governors, Senate and Faculties. The *Universities 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 Office of the Registrar under authority granted by the Senate of the University.

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# SESSIONAL CALENDAR

1978

JANUARY							FEBRUARY							MARCH							APRIL								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER								
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																					31								

## December 1978

- 6 Wednesday Senate meets.
- 7 Thursday 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).
- 9 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).
- 18 Monday Board of Governors meets.
- 21 Thursday First-term examinations end. End of first term, all faculties.
- 25 Monday Christmas Day. University closed.
- 26 Tuesday Boxing Day. University closed.

## September 1978

- 4 Monday Labour Day. University offices closed.
- 5 Tuesday Registration in person in all faculties begins. Details of place and time are mailed to all students receiving authorization to register or re-register in September 1978. No registration in the Professional Years in Education will be accepted after this date.  
Only day for registration in Faculty of Law.
- 5 Wednesday Beginning of all Professional Years in Education. First-term classes begin in Faculty of Law.
- 7 Friday Last day of registration.
- 8 Monday First-term classes begin (except as above).
- 8 Tuesday First day of period for dropping and adding courses which begin in the first term.
- 8 Wednesday Senate meets.
- 6 Friday Last day of 5-day period for late registration with permission. Last day for course changes in Faculty of Law.
- 8 Monday Board of Governors meets.
- 2 Friday Last day of period for adding courses which begin in the first term. All change forms must be deposited at the Records Office by 4:00 p.m. on this date.

## October 1978

- 4 Wednesday Senate meets.
- 9 Monday Thanksgiving Day. University offices closed.
- 8 Friday No refund on first-term fees for courses dropped after this date.
- 16 Monday Board of Governors meets.
- 31 Tuesday Last day for dropping first-term courses without penalty of failure. All change forms must be deposited by 4:00 p.m. on this date, at the Records Office (for undergraduates) or the Faculty of Graduate Studies (for graduates).

## November 1978

- 1 Wednesday Senate meets.
- 10 Friday Reading Break. Classes cancelled.
- 11 Saturday Remembrance Day.
- 13 Monday Reading Break. Classes cancelled. University offices closed.
- 20 Monday Board of Governors meets.

1979

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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30														30	31						30	31					

**January 1979**

- 1 Monday New Year's Day. University closed.
- 3 Wednesday Second-term classes begin in Faculty of Law.
- 8 Monday Second-term classes begin in other faculties. Registration in person for third and fourth year students receiving authorization to register in courses beginning in the second term. (Not applicable to students in attendance in the first term.)
- 10 Wednesday Senate meets.
- 12 Friday Last day for course changes in Faculty of Law.
- 15 Monday Board of Governors meets.
- 19 Friday Last day for adding courses which began on January 8. All change forms must be deposited at the Records Office by 4:00 p.m. on this date.

**February 1979**

- 7 Wednesday Senate meets.
- 9 Friday No refund of second-term fees for courses dropped after this date.
- 19 Monday Board of Governors meets.
- 26 Monday and 27 Tuesday Reading Break. Classes cancelled.
- 28 Wednesday Last day for dropping full-year and second-term courses without penalty of failure. All change forms must be deposited by 4:00 p.m. on this date, at the Records Office (for undergraduates) or the Faculty of Graduate Studies (for graduates).

**March 1979**

- 7 Wednesday Senate meets.
- 9 Monday Board of Governors meets.

**April 1979**

- 4 Wednesday Senate meets.
- 6 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).
- 11 Wednesday Examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
- 13 Friday Good Friday. University offices closed.
- 16 Monday Easter Monday. University offices closed.
- 17 Tuesday Board of Governors meets.
- 30 Monday End of examinations for all faculties. End of Winter Session (except for Professional Years in Faculty of Education, to be announced).

**May 1979**

- 1 Tuesday Classes in May-June and May-August courses begin.
- 2 Wednesday Last day for changing May-June and May-August courses.
- 2 Wednesday Senate meets.
- 11 Friday Last day of final practicum for Professional Years (regular programmes) in Faculty of Education.
- 16 Wednesday Special Senate meeting (tentative).
- 21 Monday Victoria Day. University offices closed.
- 22 Tuesday Board of Governors meets.
- 26 Saturday Convocation.
- 31 Thursday Last day for withdrawing without penalty of failure from May-June courses.

**June 1979**

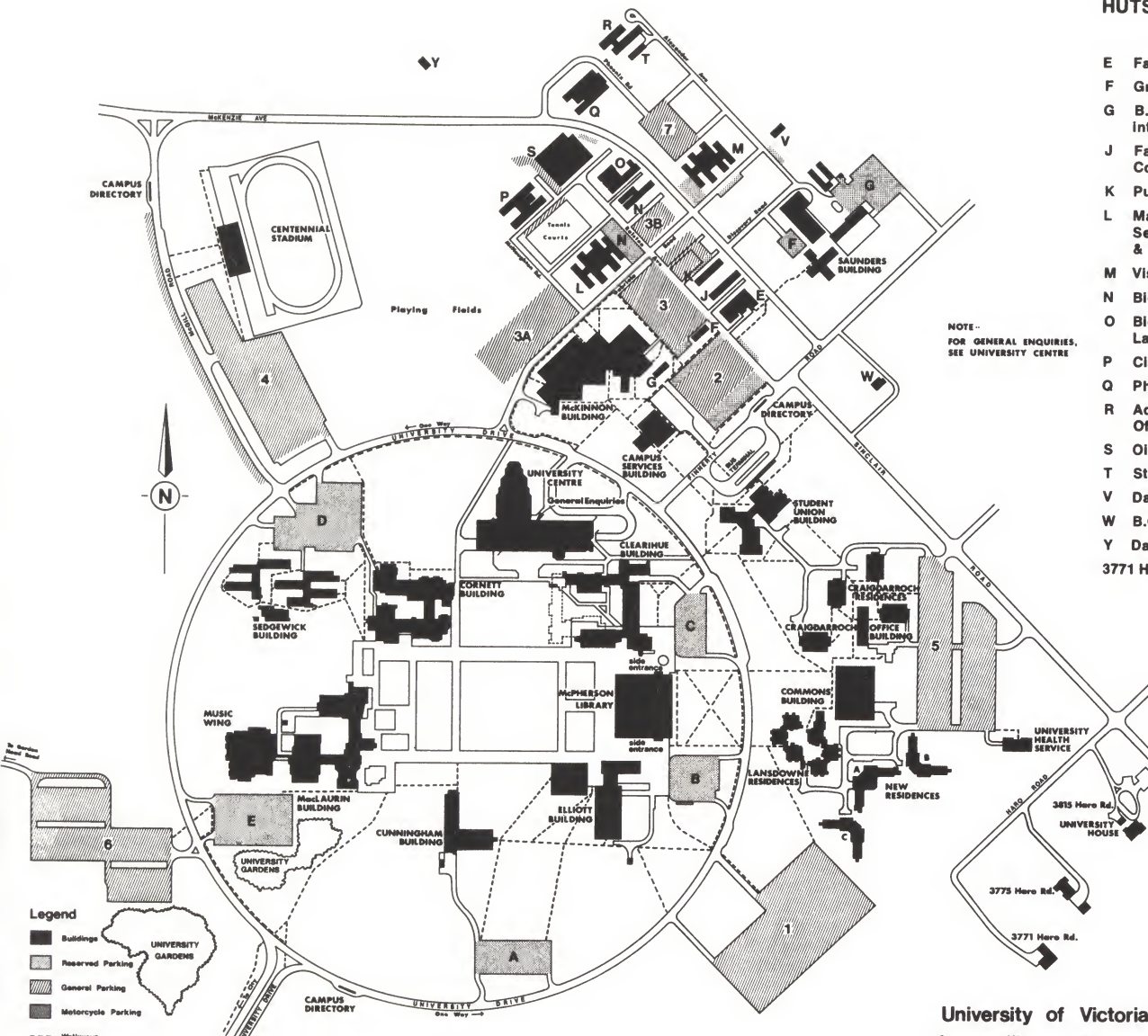
- Wednesday Senate meets (date to be announced).
- 18 Monday Board of Governors meets.
- 29 Friday May-June courses end.

**July 1979**

- 1 Sunday Dominion Day.
- 2 Monday University offices closed.
- 4 Wednesday First-term classes in Summer Session courses begin.
- 5 Thursday Last day for changing courses beginning on July 4.
- 13 Friday Last day for withdrawing without penalty of failure from courses ending on July 25.
- 25 Wednesday Summer Session first-term courses end.
- 26 Thursday Summer Session second-term courses begin.
- 27 Friday Last day for changes in Summer Session courses beginning on July 26.

**August 1979**

- 1 Wednesday through 3 Friday Supplemental Examinations for Winter Session 1978-79.
- 6 Monday Last day for withdrawing without penalty of failure from Summer Session courses beginning or continuing in the second term.
- 7 Tuesday British Columbia Day. University offices closed.
- 17 Friday May-August and Summer Session courses end.



**HUTS**

- E Faculty Club
  - F Graduate Students' Society
  - G B.C.N.I.T.A. Liaison Office; Intercultural Education; L.E.A.R.N.
  - J Faculty Association; UVic Correctional Education Programme
  - K Purchasing Services
  - L Mail Services; Personnel; Secretarial Services; Biochemistry & Microbiology
  - M Visual Arts
  - N Biochemistry & Microbiology Laboratories
  - O Biochemistry & Microbiology Laboratories
  - P Classrooms and Storage
  - Q Phoenix Theatre; Theatre
  - R Administration Stores; Theatre Box Office
  - S Old Gymnasium
  - T Storage
  - V Day Care 3
  - W B.C. Systems Corporation
  - Y Day Care 2
- 3771 Haro Rd., B.C. Systems Corporation

NOTE - FOR GENERAL ENQUIRIES, SEE UNIVERSITY CENTRE

- Legend**
- Buildings
  - Reserved Parking
  - General Parking
  - Motorcycle Parking
  - Walkways
  - UNIVERSITY GARDENS

**University of Victoria**

0 250 500  
FEET

0 50 100 150  
METRES

FEB. 9, 1978

**KEY TO BUILDINGS**

<b>CAMPUS SERVICES</b> — Bank; Bookstore; Campus Shop; Hair Stylist; Post Office; Print Shop	<b>MacLAURIN</b> — Arts & Science; Education; Fine Arts; Language & Listening Labs	<b>UNIVERSITY CENTRE</b> — General Enquiries; Accounting Administrative Registrar; Admissions; Auditorium; Cafeteria; Canada Manpower Centre; Continuing Education; Co-operative Education; Counselling; Graduate Studies and Research Administration; Joint Ministry; Maitwood Art Museum and Gallery; Non-Academic Bookings; Senate and Board Room; Student Financial Aid; Student Records Office; Summer Session
<b>CLEARIHUE</b> — Computing and Systems Services; Creative Writing; English; Environmental Studies; French Language & Literature; Germanic Languages & Literature; Linguistics; Maahat Review; Mathematics; Pacific Studies; Slavonic & Oriental Studies	<b>MUSIC WING</b> — Music	<b>UNIVERSITY HEALTH SERVICES</b> — Health Services; Infirmary
<b>COMMONS</b> — Coffee Shop; Dining Room; Food Services; Gold Room; Green Room; Lower Lounge; Raven's Wing	<b>McKINNON</b> — Athletics & Recreational Services and Facilities; Physical Education	<b>UNIVERSITY HOUSE</b> — Alumni Association; Ceremonies; Community Relations; Information Services
<b>CORNETT</b> — Anthropology; Economics; Geography; History; Political Science; Psychology; Sociology	<b>McPHERSON</b> — Central Library; Media & Technical Services; Office of Secretary of Senate, Board of Governors, and Faculties (Registrar)	<b>VISITOR PARKING</b>
<b>CRAIGDARROCH OFFICE</b> — Executive Development Training Programme; Public Administration; Student and Ancillary Services	<b>McPHERSON (side entrance)</b> — Law; Law Library	Up to 2 hours limited meter space available in reserve lots. Rate 10c per half hour.
<b>CRAIGDARROCH RESIDENCES</b> — Student Residences	<b>SAUNDERS</b> — Buildings & Grounds; Campus Planning; Traffic & Security	Alternatively purchase 50c permit from Directory Board and park in any numbered unreserved lot.
<b>CUNNINGHAM</b> — Biology	<b>SEDEGWICK</b> — Child Care; Classics; Hispanic & Italian Studies; History in Art; Institutional Analysis; Nursing; Offices of the President; Philosophy; Social Work	University Centre: up to 4 hours meter space available. Daytime rate 25c per hour; nighttime rate (6 p.m. to 1 a.m.) 50c.
<b>ELLIOTT</b> — Chemistry; Physics	<b>STUDENT UNION</b> — AMS Offices; Cafeteria; Martlet Office; S.U.B. Auditorium	
<b>LANSDOWNE RESIDENCES</b> — Housing & Conference Services; Student Residences		

# 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 post-war enrolment 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 co-operation of the Department of National Defence and the Hudson's Bay Company) the 284-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. Joseph B. Clearihue, who was first associated with the former Victoria College in 1902 as a student, became the first Chancellor of the University in the autumn of 1963. W. Harry Hickman was Acting President until July 1964 when Malcolm Gordon Taylor was appointed President of the University. Following Dr. Taylor's resignation on June 30, 1968, Robert T. D. Wallace was appointed Acting President for one year. On July 1, 1969, Bruce J. Partridge became President, serving until January 31, 1972, when Hugh E. Farquhar was appointed President (pro tem). Subsequently, on July 1, 1972, Dr. Farquhar was appointed President and served until August 31, 1974. Stephen A. Jennings served as Acting President until January 1, 1975, when Howard E. Petch was appointed President and Vice-Chancellor. Richard B. Wilson was elected Chancellor of the University by acclamation in September 1966 for a three year term. In December 1969, Roderick Haig-Brown was elected Chancellor of the University and served until December 1972, when Robert T.D. Wallace was elected Chancellor of the University. Dr. Wallace was re-elected in January 1976.

The historical traditions of the University are reflected in the Arms of the University (see back cover), 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.

## UNIVERSITY REGALIA

### Visitor

*Gown* royal blue wool broadcloth, trimmed with gold silk taffeta.  
*Headdress* black velvet mortarboard, trimmed with gold braid.

### Chancellor

*Gown* purple corded silk, trimmed with purple velvet and gold braid.  
*Headdress* black velvet mortarboard, trimmed with gold braid.

### President

*Gown* royal blue bordered silk, trimmed with blue velvet and gold braid.  
*Headdress* black velvet mortarboard, trimmed with gold braid.

### Board of Governors

*Gown* Cambridge (Doctor of Music) pattern, grey material, with gold and blue ribbon trim.  
*Headdress* black cloth mortarboard, with black silk tassel.

### Honorary Degree of Doctor of Laws

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

### Honorary Degree of Doctor of Science

*Gown* Cambridge (Doctor of Music) pattern, scarlet wool broadcloth, trimmed with gold silk taffeta.  
*Hood* Aberdeen pattern, outside shell of scarlet wool broadcloth, lined with gold silk taffeta.  
*Headdress* Tudor style in black velvet with red cord trim.

### Bachelors

*Gown* traditional (Canadian) Bachelor's style, in black.  
*Hood* 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:  
B.A. — scarlet  
B.Sc. — gold  
B.Ed. — blue  
B.F.A. — green  
B.Mus. — pink  
B.S.N. — apricot  
B.S.W. — citron  
LL.B. — blue-purple  
*Headdress* standard black cloth mortarboard with black silk tassel.

### Masters

*Gown* traditional (Canadian) Master's style in black.  
*Hood* 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.  
*Headdress* standard black cloth mortarboard with black silk tassel.

### Doctors

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

## 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 12.)

*Award* — See list of definitions on page 180.

*Concentration* — The area or subject of specialization within the General Degree programme in the Faculty of Arts and Science.

*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 programme leading to a Master's or Doctoral degree.

*Lower Level* — Courses numbered between 100 and 299.

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

*Part-time Student* — An undergraduate student undertaking fewer than 12 units of study.\*

*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 14.

*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.

*Programme* — The courses of study organized to fulfil an academic objective, such as a B.Sc. programme.

*Registration* — Formal enrolment in courses.

*Regular Student* — A student who is registered as a candidate for a University of Victoria degree, or as a candidate for the University of Victoria Diploma in Education.

*Section* — The division of a course, e.g. Section Y 01 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.

*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.

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

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

*Upper Level* — Courses numbered between 300 and 499.

*Year* — A minimum of 15 units of courses; the level within a programme of study or the level of a course, e.g., First Year student, First Year course (Physics 101).

\*See page 151 for graduate students.

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 Diploma Programmes in Education for graduates seeking teacher certification and for persons wishing to teach native languages.

### Co-operative Education Programme:

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

Co-operative Education Programmes are at present offered by several departments in the Faculty of Arts and Science (see page 28) and the Faculty of Graduate Studies (see page 153).

## ACADEMIC ADVICE

In choosing undergraduate degree programmes, students are strongly urged to consult the Calendar prescriptions for the degree programme 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 programmes with this in mind. Advice may be obtained from the Advising Centre of the Faculty of Education.

## PRE-PROFESSIONAL STUDIES

Students who intend to complete a year or two of studies and then transfer to another university are urged to design their programme 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 Engineering, 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 25, Pre-Professional 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 Centre, the Canada Manpower 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 19, 21, and 23.

## 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 on page 180.

Financial aid schemes open to all students attending the University are described on page 180.

Information in regard to entrance awards and financial aid may be obtained from the Financial Aid Office, whose personnel will be pleased to give whatever advice and assistance they can.

## CALENDAR CHANGES

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.

## 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 Session. The Calendar Supplement for Summer Session is published separately. A list of credit courses offered in the late afternoon and evening is also published separately.

## PROGRAMMES OFFERED

The University offers the following degrees through the Faculty of Arts and Science, the Faculty of Education, the Faculty of Fine Arts, the Faculty of Graduate Studies, the Faculty of Human and Social Development, the Faculty of Law, the School of Public Administration: Bachelor of Arts; Bachelor of Education (a five-year degree preparing teachers for the elementary and secondary schools of the Province); Bachelor of Fine Arts;

## LIMITATION OF ENROLMENT

The University reserves the right to limit enrolment, 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:

- Regular student
  - { Candidate for a degree
  - { Candidate for a diploma in Education
- Special student — A student admitted to credit courses but not a candidate for a degree or diploma.

## CLASSIFICATION OF STUDENTS 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 26.5 units	Second Year
27 to 41.5 units	Third Year
42 units or above	Fourth Year (4 year programmes)
42 to 56.5 units	Fourth Year (B.Ed. only)
57 units or above	Fifth Year (B.Ed. only)

Students registered in the Diploma in Education and 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, 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 term in which a one-term course is given is indicated by the use of one of the following:

September-December.  
 January-April.

## 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 of 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 12 for Medical Requirement.

Enquiries relating to admission to the Faculty of Graduate Studies should be addressed to the Dean of Graduate Studies. (See page 151.)

Enquiries relating to admission to the Faculty of Law should be addressed to the Dean of Law. (See page 171.)

All enquiries 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

- Persons seeking admission for the first time must obtain an Application for Admission form 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 programme applied for (see inside front cover of this Calendar).
- 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 *Canada Manpower*.

- Persons applying for admission to the 1978 Summer Session who plan to attend the Winter Session 1978-79 must submit an Application for Re-Registration to the Records Office (see page 11), and may apply for Winter Session up to the end of the first week of classes in the Summer Session, instead of the end of June.
- Each applicant applying for the first time must arrange for 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 educational institutions of secondary or higher level attended and to submit evidence of the standing obtained at each. Applicants who hold a British Columbia teaching licence or certificate must supply a photo-copy of the teacher's card. In addition, candidates who undertook formal teacher-training more than ten years ago must present with their application recent reports on their teaching effectiveness from Principals and/or Superintendents. These candidates must also supply a written résumé of their teaching experience.
- Each applicant whose academic records, in whole or in part, originate outside the Province of British Columbia must pay an Evaluation Fee of \$15. This fee, which is not refundable and which is not applicable to tuition fees, must accompany the Application for Admission or must be paid when evaluation of documents is requested prior to application being made.
- Candidates presenting transcripts from academic institutions outside North America may be required to supply a catalogue or syllabus showing the description of courses studied and the duration of those courses.
- Transcripts in languages other than English or French must be submitted together with official, notarized translations into English or French.
- The University reserves the right to limit enrolment. In addition, although an applicant may be admissible to the University, it may not be possible to grant him entry to the specific programme he would wish to follow.
- Applicants should consult the programme prerequisites in the chart opposite since, in certain cases, the applicant must demonstrate special aptitudes beyond the normal academic requirements, e.g., in Music, Physical Education, etc.
- All applicants will be informed in writing of their acceptance or rejection as soon as their applications can be processed by the Admissions Office. Applicants should not anticipate and should wait for written confirmation before setting out for University. This is particularly applicable to applicants who live at some considerable distance from Victoria.
- 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 Re-registration, 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.
- 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 Re-registration, c/o the Director of Admission Services, that his 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.  
 Any such candidate whose request for reconsideration results in a negative decision has the right of final appeal to the Senate. Letters of appeal should be addressed to the Secretary of Senate, and should include a statement of the grounds on which the appeal is being made. All such appeals must be lodged with the Secretary of Senate by at least two weeks prior to the commencement of classes.
- 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:

- Applicants from British Columbia and Yukon Secondary Schools:**  
 The qualifications below are approved by the Senate of the University. Enquiries relating to Secondary School Graduation should be addressed to

PROGRAMMES (by Faculty and Department or School)	PROGRAMME PREREQUISITES†														
	For the convenience of applicants who have graduated from British Columbia senior secondary schools, the secondary school course requirements specified for programmes offered within the faculties and departments or schools of the University are assembled in this chart.														
1. ARTS AND SCIENCE (see Note 1)	Biology		Chemistry		Alg.*	Geom.	Comp. Sci.	Prob. & Stats.	Physics		Science**		Lang.	Lit.	Hist.
Humanities	11	12	11	12	12	12	11	12	11	12	11	12	11	12	12
English															Y
Classical Studies (incl. Greek & Latin)															
Creative Writing															
French															
German															
Hispanic & Italian Studies															
History														Y	Y
Linguistics					Y								Y		
Philosophy															
Slavonic & Oriental Studies															
<b>Sciences</b>															
Astronomy					X				Y	Y					
Biochemistry & Microbiology			X	Y	X	Y		Y	X	Y					
Biology (see Note 2)	Y	Y	X	Y	X				X	Y					
Chemistry (see Notes 2 and 3)			X	X	X				Y	Y					
Mathematics (see Notes 3 and 4)					X										
Physics (see Note 3)			Y	Y	X				Y	Y					
<b>Social Sciences</b>															
Anthropology							Y	Y			Y		Y		
Economics (see Note 2)					X										
Geography (see Note 5)					Y	Y									
Political Science					Y			Y						Y	Y
Psychology					Y	Y		Y			X	Y			
Sociology					Y	Y	Y	Y							
<b>2. EDUCATION</b>															
Education (Elementary) (see Note 6)	Y		Y						Y		X				Y
Education (Secondary) (see Note 6)															
Physical Education	Y		Y						Y		X				Y
Human Performance															
<b>3. FINE ARTS</b>															
History in Art															
Music (audition required)															
Theatre (interview required)															
Visual Arts															
<b>4. HUMAN AND SOCIAL DEVELOPMENT</b>															
Child Care									Y						
Nursing					X				Y						
Social Work									Y						

† In addition to the general admission requirements, shown on page 10.

\* Mathematics 12 completed prior to introduction of Algebra 12 is acceptable.

\*\* Science = Biology, Chemistry, Earth Science, Geology, Physics.

X = Required Y = Recommended

Note 1. For programmes in Environmental Studies, see page 62; Liberal Studies, see page 80; Pacific Studies, see page 92; then refer to departmental requirements in the chart.

Note 2. Exceptions may be made by the Department.

Note 3. Co-operative Education Programmes in Chemistry, Geography, Mathematics and Physics are available and information may be obtained by contacting the department concerned.

Note 4. Applicants with credit for Computing Science 11 should consult the Department of Mathematics before registering in Computing Science 170.

Note 5. Recommended - Geography 12.

Note 6. Students are not admitted to B.Ed. programmes until second year (except for Physical Education teaching areas of study). Students are referred to departmental requirements in the Faculty of Arts and Science and the Faculty of Fine Arts when planning their selection of education teaching areas of study. The teaching areas of study for the B.Ed. (Elementary Curriculum) are given on pages 120 to 121 of the Calendar. The teaching areas of study for the B.Ed. (Secondary Curriculum) are given on pages 122 to 126 of the Calendar. Candidates for the Industrial Education teaching area of study should take Mathematics 11 and Physics or Chemistry at the Grade XI or XII level in addition to their Industrial Education courses.

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 1978-79 is graduation from senior secondary school, as prescribed by the Ministry of Education of the Province of British Columbia, with a minimum overall average of C+ in:

- (i) English 12 plus two courses selected from the following: 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, and any other Grade XII Arts & Science course approved by the Ministry of Education;
- (ii) Algebra 11\*, and one Science 11 or one Language 11 course;
- (iii) English 11 and Social Studies 11;
- (iv) Any four additional Grade XI or Grade XII courses (other than P.E. and Guidance 11).

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 programmes offered by the faculties of the University are shown in the chart on the previous page.

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

Although normally all applicants will be required to meet (ii) above, graduates lacking this requirement may be considered for admission to certain programmes. Such applicants are invited to apply in the normal way making sure that they state their choice of programme.

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.

The above regulations apply to the graduates of public senior secondary schools and schools which hold membership in the British Columbia Federation of Independent School Associations or in the Independent Schools Association of British Columbia.

### (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.
  - b. The student must be maintaining a B average in all his subjects and an A average in the discipline he wishes to study at the University. If the student elects a discipline not taught in his secondary school, his Principal 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 June 30 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 programme.

### (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 Re-registration, which will judge each case separately.

\*The former Mathematics 11 (academic) is acceptable in lieu of Algebra 11.

## 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).

The following specific requirements apply:

Alberta, Saskatchewan, Manitoba, New Brunswick, Nova Scotia, the Northwest Territories: Grade XII graduation with a minimum average equivalent to the British Columbia C+ on all Grade XI and XII subjects, excluding P.E. The subjects to include, as a minimum: Grade XI — English, a Social Science (such as Geography, History, etc.), Mathematics, one Science or one second Language; Grade XII — English and two additional academic subjects.

Ontario: Either a 65% average on full Grade XIII, completed within one year, or a 70% average in Grade XII on the 5-Year Arts and Science programme. The subjects to include, as a minimum: Grade XI — English, a Social Science (such as Geography, History, etc.), Mathematics, one Science or one second Language; Grade XII — English and two additional academic subjects.

Quebec: Le diplôme d'études collégiales (D.E.C.) on completion of the two-year academic course of studies at a collège d'enseignement général et professionnel (CEGEP). (In general, this grants placement in Second Year; applicants may be considered for admission to the First Year following completion of two semesters at a CEGEP.)

Prince Edward Island: At least a C average on the First Year's courses at the University of Prince Edward Island, or the equivalent. (Credit may be given for courses appropriate to the applicant's proposed programme at the University of Victoria.)

Newfoundland: An average of at least 60%, with no failed subjects, in the First Year's courses at the Memorial University of Newfoundland.

### (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.): Standing in at least 5 subjects including English, Mathematics, a second Language or a Laboratory Science and two academic electives, of which 2 must be at the Advanced (A) Level. A candidate presenting 4 subjects, 3 at the A Level, who meets the English, Mathematics and Language/Laboratory Science requirements will be considered. A minimum overall average of C on the Ordinary (O) and Advanced Level subjects presented is required.
- (ii) Cambridge School Certificate: As for the G.C.E. (i) above, with stated standing in Principal and Subsidiary Level courses, respectively.
- (iii) University of Hong Kong Matriculation Certificate: Standing equivalent to (i) above.
- (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 least: 8 semesters of English, 6 semesters of Mathematics, 6 semesters in a second Language or 6 semesters of a Laboratory Science, 6 semesters in Social Science (such as Geography, History, etc.), 8 semesters each of two other academic subjects, grade average equivalent to British Columbia C+ in all subjects taken in Grades 11 and 12.

### (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:

Note for applicants from British Columbia Colleges: the University of Victoria Transfer Guide, which is available from the Admissions Office, 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 programme at the University of Victoria.

Transfer credit granted on admission may or may not be applicable to the degree programme selected by the student, that is, it is subject to the same

regulations as credit earned at the University (See Credit, page 13).

Transfer credit granted in a degree programme is limited and may not normally be applied to the final 30 units of the programme. 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.

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's 2.00 in all college or university courses that are acceptable for transfer credit will apply as described in Paragraph 1, under Application for Admission, on page 8.
- (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's 2.00 will apply as described in Paragraph 1, under Application for Admission on page 8.
- (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 Re-registration.

#### 4. 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.

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

- (a) request an Application for Admission form by writing to the Director of Admission Services;
- (b) return the Application for Admission form together with a letter written by the applicant outlining work experience and relevant personal background;
- (c) arrange to have an official transcript of all academic work sent directly to Admission Services by the issuing institution;
- (d) provide two letters of reference from employers or from persons who know the applicant well.

An interview with the Director of Admission Services may be required after a completed application and all the above-mentioned letters and transcripts have been received.

#### 5. 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 the Admissions Office, University of Victoria. For further information, contact the Director of Admission Services.

#### 6. Applicants whose First Language is not English:

The University requires that:

- (a) 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 University.
- (b) Students who are admitted to the University under 1., above, and who subsequently fail the English Qualifying Examination (see English Requirement, below) will be required to take Linguistics 099.
- (c) 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. However, if at the time of admission they do not meet the University's English requirement they may be required to take Linguistics 099 prior to taking English 099.
- (d) Students enrolled in Linguistics 099 must complete the course and, if successful in obtaining a pass, must then take the English Qualifying Examination again and follow regular University procedures from that point. If they fail Linguistics 099, they may be required to repeat the course, or may be required to withdraw from the University for insufficient command of the language of instruction.

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 Centre.

## RE-REGISTRATION

All enquiries relating to re-registration in undergraduate faculties should be addressed to the Administrative Registrar, Records Office.

### APPLICATION FOR RE-REGISTRATION

1. Students who were registered in a previous session at the University must submit an Application for Re-registration to the Records Office by the date specified for the programme applied for (*see inside front cover of this Calendar*).
2. 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 re-registration must include with his application a letter, addressed to the Senate Committee on Admission and Re-registration, c/o the Records Office, which states why the student believes his application should be accepted. This letter should be accompanied by letters of support from persons who have employed the student since his last attendance or who have knowledge of his abilities and circumstances.  
Any such student whose request for re-registration results in a negative decision has the right of final appeal to the Senate. Letters of appeal should be addressed to the Secretary of Senate, and should include a statement of the grounds on which the appeal is being made. All such appeals must be lodged with the Secretary of Senate by at least two weeks prior to the commencement of classes.
3. 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 post-secondary 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.
4. If the results of deferred examinations affect the standing of a student, an Authorization to Re-register will not be issued until examination results are available.

## REGISTRATION

Enquiries relating to registration in undergraduate faculties should be addressed to the Administrative Registrar. Enquiries relating to registration in the Faculty of Graduate Studies should be addressed to the Director of Graduate Registration and Records.

### Completion of Registration:

In addition to completing the procedures mentioned above under the headings Application for Admission and Application for Re-registration all students in the Winter Session are required to register in person at times announced by the Records Office. Each new student, by his Authorization to Register (the stamped pink copy of Application Form), and each returning student, by his Authorization to Re-register will be informed of the time and place for registration in person. Sessional fees are payable at the time of registration.

All Authorizations to Register or Re-register that are not used to register in the term and session to which they apply are automatically cancelled. Students who are issued an Authorization for September may not use this document for entry in January (see Registration for One Term Only).

No registration will be valid until all required procedures have been completed and fees have been paid in accordance with the regulations given on page

### Student Responsibility:

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, each student is responsible for the completeness and accuracy of his registration. He must ensure that there is no discrepancy between the programme he is following and that recorded in the Records Office and that all changes, including those in address and telephone number, are reported promptly to the Records Office. A student may not take courses for which he has not registered, and may not drop courses without permission. A student who registers in a course for which he has previously received credit or for which he has received equivalent credit on transfer must indicate this by entering DUP (duplicate) on his registration form.

A letter mailed to a student's address as currently on record in the Records Office 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, the first two days of classes.

**Registration with Unsatisfactory Standing:**

No student with unsatisfactory standing will be permitted to register without the 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 half-year courses beginning in January.

**Registration for One Term Only:**

If suitable half-year courses are available, students eligible to register in Third or Fourth Year or higher (those holding acceptable credit for 27 units or more) may:

- Register during the regular September registration period for a programme of half-year courses to be taken in the First Term only. (*See inside front cover for due dates for application.*)
- Register on the first day of classes in January for a programme of half-year courses to be taken in the Second Term only (applications due by November 30).

**Changes in Registration:**

- Students may add and drop courses during the first ten days of classes in the First Term and during the first ten days in the Second Term upon submission of the appropriate change form to the Records Office.
- Students may drop courses until the last day of classes in October in the First Term and the last day of classes in February in the Second Term, provided they submit the appropriate withdrawal form to the Records Office. Failure to notify the Records Office by the specified date will result in the student receiving a failing grade for the course.
- 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 he will be registered in not more than 18 units. A student who has an E in a First Term course may take a Second Term course which lists the First Term course as prerequisite only with the permission of the department concerned.

**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 programme 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 Graduation:**

See Graduation, page 16.

**ENGLISH REQUIREMENT**

All students enrolling in First Year are required to write a placement test in English before completing registration. The test, which affects a student's placement in English courses but does not determine admissibility to the University, may be any one of: (shown as English 001 on student records)

- the British Columbia English Placement Test
- the British Columbia Scholarship Examination in English Composition
- The University's Qualifying Examination in English.

Students who obtain an acceptable standing in any of these tests need take only those English courses which may be required in their degree programme. Those who do not obtain such standing are directed according to their first language:

- 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. If, however, they obtain a grade of A or higher in English 099, they may drop the selected second term course unless it is required for their degree programme. 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 and, 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 evidence of attainment of the required level of competence in English, such denials being subject to appeal to the Senate Committee on Admission and Re-registration.

- Those whose first language is not English must follow the same procedure as for those whose first language is English but may be required to take Linguistics 099 before English 099 (see Applicants whose First Language is not English, page 11).

Students who enter the University from other post-secondary institutions and who do not possess the equivalent of either English 099 with a grade of A, or any two of English 099, 115, 121 and 122 will be required to take one of the above placement tests and proceed, with regard to English courses, in the same manner as those enrolling in First Year.

Students in British Columbia senior secondary schools can obtain information about the British Columbia English Placement Test and the Scholarship Examination in English Composition from their school principal.

Students coming from other provinces or countries should obtain information about the placement tests from the Admissions Office of the University.

**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:

- The individual must receive permission from the department concerned.
- Admittance to the class is dependent upon the class size and other factors that the instructor and the department establish.
- The degree of participation in the course is at the discretion of the department.
- 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 programme.
- 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.
- The fee, shown in the fee schedule in the Calendar, is payable at the time of registration. (See para. 9, page 19.)

**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 or director in the other faculties. The availability of such courses will be determined by the department concerned.

For individually supervised studies in Summer Session see page 24.

**MEDICAL REQUIREMENT**

Students registering for the first time in the Winter Session are required to submit a health history. The necessary form is mailed to each student with his Authorization to Register, and must be completed and mailed to the University Health Service before registration can be completed. A medical examination is not compulsory except for resident students and those 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 University Health Service, may require a student to take a medical examination at any time during his 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 University Health Service, page 21.

## AVENUES OF APPEAL AND REDRESS

Students who feel unjustly treated within the University are encouraged to seek all avenues of appeal open to them. In particular, in cases where students have problems involving individual faculty members and wish to seek redress, they may do so, without fear of consequence, through any of the following channels, but before doing so, are urged to discuss the matter with the individual faculty member concerned: the Counselling Centre, the Student/Faculty Liaison Committee or similar committee, the departmental chairman or director, the Dean, or the President. In any event, should all appropriate recourses be to no avail, students have the right of final appeal to the Senate. Such appeals should be lodged in writing with the Secretary of Senate.

4. Students seeking voluntary withdrawal from a practicum, whether permanent or temporary, must receive permission to do so from their faculty supervisor.
5. Students who withdraw or are required to withdraw under Section 2 or 3 above must drop any course involved by notifying the Records Office in writing. If such students later wish to re-enter the practicum they must apply for re-admission to the course and should not assume that re-admission is guaranteed.
6. The dates of practica will be established by each faculty, department, division, school, or programme and will be announced to the students involved at the beginning of each term.
7. The normal avenues of appeal (see left-hand column) are available to students in regard to a Dean's action taken under paragraph 2 or 3.

## ACADEMIC REGULATIONS

### ATTENDANCE AND COURSE LOAD

#### Attendance at Lectures:

A student is expected to attend all lectures in each course for which he is enrolled. Admission to a lecture or laboratory may be refused by the instructor for lateness, misconduct, inattention or neglect of duty. A student who neglects his academic work, including assignments, may be debarred from the Christmas or the final examinations in a course. (See Term Assignments - Debarment from Examinations, page 15.)

#### 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 Session. In certain programmes, 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 programmes 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 programmes that require a commitment to a specific number of units of courses in each Winter Session.

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

#### Maximum Course Load:

The maximum number of units a student is permitted to undertake in the Winter Session is 18.

An undergraduate student is permitted to enrol in not more than 9 units of course work during the period from May to August, but at any one time a 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.

#### 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 Minimum Degree Requirements for Graduation, page 16, and to the prior consent of the Dean of the faculty concerned.

### REGULATION CONCERNING PRACTICUM\*

1. Through its several faculties,\* the University reserves to its individual departments, divisions, schools and programmes the right to approve any agency or institution that provides placements for student practica and, where placement selection is determined by the individual department, division or school, to change any placement assigned to a student. The student, however, has the right to be informed of the reasons for any such change in placement.
2. 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.
3. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Dean of the faculty.

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

### CREDIT

#### Accumulation of Credit:

Successful completion of a credit course entitles the student to the recording of such credit on his academic record. The application of such credit to a degree or diploma programme, however, is subject to the regulations governing the requirements of the programme. 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 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 enquiries should be directed to the Records Office, where application forms may be obtained. The course challenge fee of \$18.00 per unit must be paid before the challenge examination is undertaken. If the appropriate chairman or director permits a course challenge, he shall sign the application form indicating his approval 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.

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 or director, after having approved the results, will report the grade awarded in the course challenge examination to the student and the Records Office in writing.

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

A grade received as a result of a course challenge examination is not open to grade review procedures.

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 programme. 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 programme may apply for credit in courses which were passed within a "failed year" either at the University of Victoria or at another university or college and which are applicable to the

student's degree programme 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 the Records Office.

Application for credit in such courses passed at other institutions must be made in writing to: The Senate Committee on Admission and Re-registration, c/o Records Office, 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 the 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 takes 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 expulsion from the University in the most extreme, deliberate or persistent cases. Offenses 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 or expelled, subject to appeal to the Senate.

### GRADING SYSTEM†

Grade	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	Marginal Pass**
*COM	N/A	Complete (pass)
**Undergraduates only		
<b>Falling 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/ session; no supplemental
<b>Temporary Grades:</b>		
*INC	N/A	Incomplete
*DEF	N/A	Deferred examination granted

\* COM — used only for 0 unit courses and those Winter Session credit courses designated by the Senate. Such courses are identified in the course listings.

INC — used for those Winter Session credit courses designated 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).

† For Faculty of Law, see page 172.

### EVALUATION OF STUDENT ACHIEVEMENT

#### Assessment Techniques:

The Senate has adopted a range of assessment techniques available to each department for the purpose of evaluating student achievement. Each department selects the assessment techniques it wishes to use from amongst those approved by the Senate.

At the beginning of the course, the instructor shall discuss with the students the methods used by his department in evaluating student achievement. The instructor shall then select the method or methods he will use from amongst those approved assessment techniques adopted by his department. Upon making his decision, he shall inform both the students and the department, in writing if possible, of the method or methods he will use.

#### 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 one 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 concerned.

#### **Term Assignments — Debarment from Examinations:**

In any course which involves term assignments, students may be debarred from writing examinations if the required term work has not been completed to the satisfaction of the department concerned.

#### **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:**

If a student falls ill during an examination or misses an examination because of illness, an accident or family affliction, this must be brought to the attention of the Records Office. A physician's certificate or other substantiating document must be submitted to the Records Office within two days of the close of the examinations. The Records Office will communicate with the instructor for an assessment of the student's performance.

Deferred examinations are granted only where final examinations are involved and are normally held in August. If a deferred examination is not taken, the grade 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 the Records Office 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. If a candidate believes there is an error in a paper, he should report it immediately to the invigilator, and, after the examination, report the error in writing to the Records Office. If he has other reason for complaint, he should communicate with that office within 24 hours.
6. A candidate may not leave the examination room without first delivering his 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 hands or rise in their places.
9. Candidates may be called upon by the 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 who suffer an accident or family affliction before an examination should report the circumstances immediately to the Records Office.
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.

#### **Examination Results:**

Instructors are permitted to release final grades to students in their classes who request them as soon as the grades have been forwarded by the department to the Records Office, on the understanding that grades are subject to final approval by the Senate in May. Statements of final grades will be mailed to students in the graduating class and to other students about the end of May, following granting of authority by the Senate to release grades. First term results for full-year courses are released by instructors, not by

the Records Office. Where courses are final at Christmas, instructors are authorized to release grades tentatively on the understanding that grades are subject to final approval by the Senate in May.

#### **Access to Final Examinations:**

All final examinations are stored for twelve months in the departmental office or the Records Office. Students may have access to final examination questions and their own answers on request to their instructors. 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:**

Reviews, where permitted by the faculty concerned, are governed by the following regulations:

1. Any request for a review of an assigned grade, other than for a supplemental examination or course challenge examination (for either of which no such request will be granted) must reach the Records Office within two weeks after the announcement of final grades.
2. When applying for a review, the applicant must state clearly in writing why he believes his course deserves a grade higher than it received; pleas on compassionate grounds should not form part of the appeal. If the basis of an appeal depends, in part, on term work, any essays or assignments that have been returned to the student should be submitted with the letter of appeal. Prospective applicants should note that, if any examination paper is involved, the paper is read at least a second time before a grade of E or F is recorded. For that reason, an applicant who is eligible for a supplemental examination should prepare for the examination since a change in grade is unlikely and since the result of the review may not be available before the time of the supplemental examination.
3. Reviews will not be permitted in more than 6 units in a full programme in one Winter Session, and in 3 units in a partial programme of 9 units or less or in the work of one Summer Session.
4. During the session, if a student feels that a grade awarded for term work is unfair, he should discuss the matter informally with the instructor concerned. Failing that, he should appeal directly to the departmental chairman or to the Dean of the faculty.
5. Students are advised that there can be no appeal against that part of a final grade which is based on oral examination or class participation.

N.B. Students in the Faculty of Law should consult the Dean.

#### **Undergraduate Supplemental Examinations:**

In all undergraduate faculties except the Faculty of Law (for which see page 171), eligibility to write a supplemental examination requires, first, that the final examination in a course has been written and a final grade of E obtained for the course (a grade of F or N does not qualify). Other requirements follow:

1. A student taking 15 or more units in the Winter Session will be granted supplemental examinations for no more than 3 units, provided that credit is obtained for at least 12 units in that session, except that a student who would otherwise be a candidate for a degree to be awarded at the end of that winter session may be granted supplemental examinations in an additional 3 units, at the discretion of the Dean of the faculty in which the student is taking a degree programme.
2. A student enrolled in the Summer Session or taking fewer than 15 units in the Winter Session may be granted supplemental examinations for no more than 3 units in the session, each such case being judged, on the basis of the student's overall standing, by the Dean of the faculty in which the student is taking a degree programme.
3. If a grade of E is obtained for a course completed in December, the student has the option of repeating the course in the Second Term if it is offered, or, if eligible, writing a supplemental examination in August.

Supplemental examinations covering the work of both the First and Second Terms are held in August; those covering the work of the Summer Session are arranged in consultation with the Dean who grants them.

Applications for supplemental examinations, accompanied by the necessary fees, must reach the Records Office by July 1 for Winter Session courses and by October 15 for Summer Session courses.

A student who, because of exceptional circumstances, is permitted to postpone a supplemental beyond the first regular supplemental examination period, will be responsible for the content of the course as currently offered. If the course is not offered or is discontinued, the supplemental privilege may be cancelled.

If a supplemental examination is written, the grade obtained will be shown in the student's transcript but, if it is passed, the grade point value will be 1, corresponding to a D, in the computation of the graduating grade point average and determination of the class of the degree.

Students may also apply to write supplemental examinations for courses in which a passing grade has been obtained, with the intent of raising the grade.

In determining the class of degree the higher of the two grades will be used in the computation of the grade point average.

A student in the final year of a degree programme, who obtains a failing grade in the supplemental examination, may be granted a second such examination, at the discretion of the Dean; otherwise the failed course must be repeated or a permissible substitute taken.

Supplemental examinations for Winter Session courses may be written at the University as well as at the following British Columbia centres: Cranbrook, Dawson Creek, Kamloops, Kitimat, Ocean Falls, Penticton, Powell River, Prince George, Prince Rupert, Trail, Vancouver; and at Whitehorse, Y.T. Other centres outside of British Columbia are restricted to universities or their affiliated colleges.

The fee for each supplemental examination written at the University is \$15.00; off campus, \$20.00.

## 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.)

### Minimum Sessional Grade Point Average:

Undergraduates who fail to obtain a sessional grade point average of at least 2.00 are considered to have unsatisfactory standing and will be placed on academic probation for the next session attended.

A student who is on academic probation and whose sessional grade point average falls below 2.00 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.

This regulation governs all sessions, including the period May through August.

### Academic Probation:

Any student whose sessional grade point average falls below 2.00 will be automatically on probation in the next session attended.

A student who has:

- (a) a marginal record upon admission, or
- (b) unsatisfactory progress in a previous session, or a poor record in a previous term or session

may be placed on probation by the Director of Admission Services or the Dean of his faculty, respectively.

In each case the student will be notified by the Records Office that he will be on probation. An interview will be arranged through the Dean of his faculty, and the student may be requested to seek help at the Counselling Centre, the appropriate advising centre, or to take the Reading and Study Skills Workshop which is offered to all students by the Counselling Centre.

Depending upon the 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.)

## 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.

### Voluntary Withdrawal:

Any undergraduate student who after registration decides to withdraw from the University must notify the Records Office in writing. It is recommended that such students first visit the Counselling Centre, or the Co-ordinator of Academic Advising (Education students), and then go to the Records Office. 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 the Records Office. Students will be required to obtain clearance from the University, to the satisfaction of the Records Office, 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, page 12.

### 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 the Records Office, 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 his case by lodging a written appeal with the Secretary of Senate.

## 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 his anticipated graduation. Candidates who have received permission to complete a course or courses elsewhere must apply for graduation not later than June 1 for fall graduation or December 1 for spring graduation. Special forms for this purpose are available from the Records Office.

### Minimum Degree Requirements for Graduation:

Each candidate for a Bachelor's degree is required:

- (a) to present a passing grade in a qualifying examination in English (see page 12); or a grade of A in English 099, or a passing grade in English 099 and one of English 115, 116, 121, 122; or transfer credit for the equivalent of two of English 099, 115, 121, 122;
- (b) to present credit in a minimum of 60 units of university level courses; 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 (but see Credit by Course Challenge, page 13);
- (c) to meet the specific degree and programme 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 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 acceptable for credit in the student's degree programme 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 regulation of 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 13). 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 May each year. Students who complete degree requirements at Summer Session graduate in the following November, when the Senate grants their degrees. However, such graduates are asked to choose either to receive their diplomas in January by mail and have their degrees conferred in absentia at the Convocation ceremony in May, or to attend the Convocation ceremony and have their degrees conferred in person. 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 institution may be allowed to pursue undergraduate studies leading to a second bachelor's degree:

- (a) The student must be admissible to the programme 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 programme 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 re-registration, as appropriate (See pages 8 to 11). Students currently enrolled in their first bachelor's degree programme 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 a student's academic record will be mailed by the Records Office direct to the institution or agency indicated in the request. Each transcript must include the student's complete record at the University. Since standing is determined by the results of all final grades in each session, transcripts are not available for the first term grades until after the end of the session.

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. 16, page 19.

## FEES

### NOTICE

*If it is found necessary to increase fees above the levels shown in this section effective for the 1978-79 Winter Session, notification of changes in current fee schedules will be given as far in advance as possible by means of a supplement to this Calendar.*

#### SECTION A.

#### SUMMARY OF FEE PAYMENTS REQUIRED — APPLIES TO ALL WINTER SESSION STUDENTS

*At registration* — a tuition fee payment not less than \$50, except first year Law, for which \$100 is required upon acceptance by an applicant of a place in the First Year.

*On or before October 13, 1978* — the balance of tuition fees for the first term, plus student organization and any other required fees.

*On or before January 19, 1979* — tuition fees for the second term.

FULL FEES FOR THE SESSION MAY BE PAID AT ANY TIME PRIOR TO THE DEADLINE DATES MENTIONED ABOVE.

It is the student's responsibility to make payment of the required fees to the University Accounting Office by the due dates. Students unsure of the balance owing should consult the Accounting Office. Students who encounter financial difficulties which make it impossible for them to meet fee payment deadlines should consult the Financial Aid office well in advance of deadline dates. **NOTWITHSTANDING THIS, THERE ARE FINANCIAL PENALTIES FOR LATE PAYMENT** (see Section E) and a student's registration may become invalid for failure to pay fees.

Students must consult the following sections for details of the fees which apply to individual programmes:

Undergraduate faculties other than Law	—Section B
Faculty of Law	—Section C
Graduate Programmes	—Section D

Students should consult the remaining sections for other fee regulations which may apply to them:

Late Registration, Late Payment and Reinstatement	—Section E
Fees for Added or Dropped Courses	—Section F
Fees charged upon Withdrawal from University	—Section G
General Regulations and Miscellaneous Fees	—Section H

#### SECTION B.

#### WINTER SESSION FEES FOR UNDERGRADUATE FACULTIES OTHER THAN LAW

##### Tuition Fees:

First Term — \$36 per unit for courses which begin and end in the first term, plus \$18 per unit for full year courses.

Second Term — \$36 per unit for courses which begin and end in the second term, plus \$18 per unit for full year courses, subject to a maximum of \$540 for the session.

#### Alma Mater Society Fees:

##### Activity and Building Fees

First Term	9 or more units	Fewer than 9 units
Activity fee	\$20	\$2.35 per unit
Student Union Building Fund	14	1.65 per unit
Total Activity and Building Fees	\$34	\$4.00 per unit

Second Term - Alma Mater Society fees for students registering in the second term only are one-half of those above (i.e., a total of \$17 for those registered in 5 or more units, and \$2 per unit for those registered in fewer than 5 units).

These fees are based upon the number of units taken for credit in on-campus courses as of the end of the second week of lectures. Enquiries regarding these fees should be directed to the Alma Mater Society.

##### Athletics and Recreation Fee

First Term - \$8 if taking 9 or more units, and \$4 if taking fewer than 9 units.

Second Term - Applicable only to students registering in the second term; \$4 if taking 5 or more units, and \$2 if taking fewer than 5 units.

##### Graduating Class Fee

This fee of \$10 is required from students who expect to graduate during the session. Enquiries regarding the fee should be directed to the Alma Mater Society.

#### Illustration of fees charged for a typical programme:

	First Term	Second Term
First term courses 4.5 units	\$162	\$ —
Full year courses 9 units	162	162
Second term courses 1.5 units	—	54
Total tuition 15 units	324	216
Activity and building fees	34	—
Athletics fee	8	—
Total term fees	\$366	\$216

This is an illustration only, and the fees required from individual students will depend upon their respective course programmes.

#### SECTION C.

#### WINTER SESSION FEES FOR THE FACULTY OF LAW

##### Application Fee:

This fee of \$15 is to be paid at the time of application for admission. It is not refundable.

##### Acceptance Deposit:

A deposit of \$100 must accompany the acceptance by an applicant of a place in the First Year. If an application is withdrawn and a claim for a refund is received by the Faculty of Law before August 10, \$50 of the deposit is refundable. Notwithstanding this, an applicant who has made a deposit of \$100 to the Faculty of Law and who accepts an offer from the Faculty of Law at The University of British Columbia after August 10 may claim a refund of \$50 if the application to the Faculty of Law is withdrawn on the same day as the acceptance of the offer from the Faculty of Law of The University of British Columbia. This deposit is applied against tuition fees.

##### Tuition Fees:

First term — \$329; second term — \$329.

##### Alma Mater Society Fees:

Same as for undergraduate faculties other than Law (Section B).

##### Law Students' Society Fee:

This fee of \$10 is required in the first term. Enquiries regarding the fee should be directed to the Society.

#### SECTION D.

#### FEES FOR GRADUATE PROGRAMMES

##### Tuition Fees:

Full-time Students (see page 151 for Categories of Students, Note 2).

	Master's degree	Doctor's degree
First year	\$564.00	\$564.00
Second year	564.00	564.00
Third year	40.00	564.00
Subsequent years	40.00	40.00

Full-time Master's candidates completing all degree requirements in the first third of the second year will be exempt two-thirds of the second year fees; Master's candidates completing in the second third of the second year will be exempt one-third of the second year fees.

Part-time students, and full-time students who change from full-time status in their second year, are assessed fees at \$75.00 per unit up to a maximum of \$564.00 per annum, but must pay \$1,125 for a Master's degree or \$1,689.00 for a Doctor's degree before graduation.

Special students and qualifying students are assessed fees at \$75.00 per unit up to a maximum of \$564.00 per annum. Fees paid in these categories are not applicable towards a subsequent degree programme.

Students taking a Doctor's degree after a Master's degree, both degrees taken at the University of Victoria, will pay a total of \$1,128.00 in tuition fees for the Doctor's degree in addition to the tuition fees paid for the Master's degree.

Master's candidates who are transferred to a Doctoral programme before completing the Master's degree may count at most \$564.00 in tuition fees paid as Master's candidates towards the tuition fee for a Doctor's degree.

Tuition fees cover all prescribed courses of study at the University of Victoria, direction and supervision of research, the use of laboratory and library facilities, and examinations. Tuition fees do not cover the cost of prescribed field trips, travel in connection with research, or the typing or binding of theses and dissertations.

The schedule of payments required will be issued to the student at the time of registration.

#### **Graduate Students' Society Fees:**

The following fees are required annually as long as the student is registered:

Activity fee	\$15
Building Fund	14
Total G.S.S. fees	\$29

Enquiries regarding these fees should be directed to the Society.

#### **Athletics and Recreation Fee:**

The following fees are required annually as long as the student is registered:

Full-time students \$8 — other students \$4.

### **SECTION E.**

#### **ADDITIONAL FEES FOR LATE REGISTRATION, LATE PAYMENT & REINSTATEMENT**

##### **Late Registration Fee:**

A fee of \$25 will be charged to any student who completes registration procedures after the time appointed by the University.

##### **Late Payment Fee:**

Students who have an overdue amount in their fee account will be assessed late payment fees at the following dates: October 14, December 1, January 20, and March 1. These fees are 10% of the overdue amount (minimum \$5, maximum \$30). Except where there is an error on the part of the University, remission of these fees will be considered only upon submission to the Accounting Office of a medical certificate, evidence of serious domestic affliction, or evidence of errors in administration of government financial aid.

##### **Reinstatement Fee:**

If a student's registration is invalidated by non-payment of fees or for any other reason, and the student is granted permission for reinstatement, a reinstatement fee of \$30 will be payable. A graduate student who has allowed registration to lapse without permission must pay a reinstatement fee of \$100.

### **SECTION F.**

#### **FEES CHARGED FOR ADDED OR DROPPED COURSES**

During the first two weeks of lectures in each term there is no charge for dropped courses. After these periods a reduced charge will be made for each dropped course as follows:

Dropped during 3rd week	— \$20 per course
Dropped during 4th week	— \$25 per course
Dropped during 5th week	— \$30 per course
Dropped after 5th week	— full term fees

The reduced charges above do not apply to students registered in Law or graduate programmes, where fees are charged for a programme or degree.

Courses added by permission, whether substitutions or not, will be assessed at full fees.

### **SECTION G.**

#### **FEES CHARGED UPON WITHDRAWAL FROM UNIVERSITY**

Students who wish to withdraw must give notice in writing at the time of withdrawal (see page 16 or 152). Fee charges will be based on the officially recorded date of withdrawal.

##### **Undergraduate Students, other than Law:**

- The minimum fee payment of \$50 is non-refundable, unless the student cancels registration prior to the start of lectures or unless the student is registered in 3 units or fewer as of the end of the second week of lectures. In these cases, \$25 is non-refundable.
- Tuition fees charged in each term for withdrawal after commencement of lectures:
 

During first two weeks	— non-refundable fee above
During subsequent weeks	— fees calculated in Section F for any courses dropped prior to withdrawal, plus 10% of term fees per week of lectures for courses remaining at withdrawal

##### **Students in Law:**

Students who withdraw with permission in the first two weeks of the fall term will be charged the \$100 deposit. Students who withdraw with permission after the first two weeks of the fall term will normally be charged full fees for that term.

Students who withdraw in the first two weeks of the spring term will not be assessed fees for that term. Students who withdraw with permission after the first two weeks of the spring term will normally be charged full fees for that term.

##### **Students in Graduate Programmes:**

Students who withdraw with permission will normally be charged full fees for the term in which they withdraw.

##### **Refund of A.M.S. Fee:**

Applications for refunds must be made to the Alma Mater Society. Upon surrender of the A.M.S. membership card refunds are made as follows:

Withdrawal from University	Amount of Refund
On or before October 15	Full A.M.S. fee paid
On or before January 31	One-half A.M.S. fee paid, except where the student registered in the second term only, in which case the refund is the full A.M.S. fee paid
After January 31	No refund

### **SECTION H.**

#### **GENERAL REGULATIONS AND MISCELLANEOUS FEES AND CHARGES**

- The University reserves the right to change fees without notice.
- Fees paid for one session cannot be applied to a subsequent session.
- Students registering in the Summer Session should consult the Calendar Supplement for Summer Session which is published in January.
- Students may invalidate their registrations by failure to pay fees as required by these regulations, and may be denied entry to classes and examinations.
- Although the University may mail fee statements from time to time to addresses supplied by students to the Records Office, it is the responsibility of the student to calculate fees in accordance with these regulations and ensure payment by the prescribed dates. Failure to receive a fee statement does not relieve the student of this responsibility.
- Except where donors direct otherwise, the proceeds of student awards received or granted by the University will be applied to unpaid fees for the entire session. Any excess balance will be paid to the student.
- Students seeking advice about scholarships, fellowships, prizes, bursaries and loans should direct their enquiries to the Financial Aid Services office.
- Students registered in co-operative and internship programmes are subject to the same maximum fee for each year of their programme as students registered in the Winter Session. Students registered in

co-operative programmes will initially be assessed tuition fees on a per unit basis, and should contact the Accounting Office if these assessments exceed the maximum fee. Students registered in internship programmes will be issued a schedule of fee payment requirements at the time of registration.

9. Auditors' fees (where auditing is permitted) are:
- |                         | Undergraduate<br>courses, per unit | Graduate<br>courses, per unit |
|-------------------------|------------------------------------|-------------------------------|
| Students under age 65   | \$18                               | \$38                          |
| Students age 65 or over | 6                                  | 13                            |
10. Courses which have "0" unit value are assigned a fee unit value for the purpose of assessing fees. This value is shown in the course description.
11. Students who withdraw from or otherwise leave the University remain liable for settlement of unpaid residence or tuition fee accounts, and the University may seek to enforce its rights as a creditor through legal action or the use of collection agencies.
12. Students who have unpaid fee accounts are not eligible to re-register; in any event all payments received are applied firstly to unpaid accounts from prior sessions.
13. A document evaluation fee of \$15 is required from applicants for undergraduate faculties, other than the Faculty of Law, whose academic records, in whole or in part, originate outside British Columbia. The fee must accompany the Application for Admission, or must be paid when evaluation of documents is requested prior to application being made.
14. The course challenge fee is \$18 per unit (see page 13).
15. Supplemental examination fees, per paper:  
Examinations on campus — \$15  
Examinations off campus — \$20
16. Students may make one request per degree programme for up to three official transcripts at no charge. Others may be purchased at \$2 for the first copy in each request and 50 cents for each additional copy. Overpayments of less than \$5 will not be refunded.
17. Doctoral dissertations submitted to the Faculty of Graduate Studies must be accompanied by a payment of \$25. This fee is to pay for the publication of an abstract in *Dissertation Abstracts*.
18. Students registered in Chemistry courses are required to buy a laboratory ticket for \$6 from the Department of Chemistry.
19. Parking fees and fines are levied in accordance with University regulations administered by the Traffic and Security Office.
20. Fines will be imposed for infraction of Library regulations in amounts determined by the University Librarian.
21. Information regarding University Residences fees is given on page 20.

## ACADEMIC SERVICES

### LIBRARY

The Library of the University of Victoria contains over 750,000 volumes, over one million items in microform, and more than 20,000 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 60,000 maps and 50,000 aerial photographs.

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 a research library.

Regulations regarding loan policies and information concerning hours of service are posted prominently in the Library or may be obtained at the Information and Circulation Desks.

### ACADEMIC ADVISING

Each of the undergraduate faculties provides an academic advising service for students contemplating enrolment in programmes offered at the undergraduate level. The Advising Centre of the Faculty of Arts and Science is located in room 323 in the MacLaurin 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.

## SPECIAL COURSE IN ENGLISH AS A SECOND LANGUAGE

The Department of Linguistics offers a non-credit course in English for students whose native language is not English. For details see *Linguistics 099* on page 81 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. These services are centred around an IBM System/370 Model 148 computer located in the Clearihue Building. This main computing facility consists of the following equipment —

- System/370 Model 148 CPU, 2048K main storage
- 8 Disk drives, 806 thousand characters per second transfer rate, 1600 million characters of on-line storage
- 4 Magnetic tape drives, 200 thousand characters per second transfer rate
- Printer, 1100 lines per minute
- Card reader, 1000 cards per minute
- Card punch, 300 cards per minute
- Remote job entry (Cornett Building)
- Communications controller, for use with time-sharing terminals
- Time-sharing terminals
- Drum Plotter
- Paper tape to Magnetic tape converter
- Optical mark scoring reader, for scoring multiple choice examinations
- Key punches, card interpreter, sorter, and reproducing punch machines available for general use.

The high speed terminal facility, designed primarily to offer fast computing service to students, consists of a card reader (1000 cards per minute) and line printer (1100 lines per minute). Adjacent to the high speed terminal facility are large keypunch and study areas available for general student use.

The Computing Centre 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 the Centre is to provide adequate support for the computing requirements of academic programmes. 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, the Computing Centre also supports the information handling requirements of the McPherson Library, Accounting Office, and the Records Office. These and other Administrative departments make regular use of Computing Services for Library administration, circulation controls, payroll, budgets, accounts payable, and student records.

Students in all disciplines are encouraged to learn and use the computing system within the first or second year of studies, if possible. Credit and non-credit courses are available for students and consultative assistance is available from the staff of the Computing Centre.

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 the Computing Centre. Some additional opportunities exist from time to time for employment with faculty members as research assistants.

## STUDENT SERVICES

### COUNSELLING CENTRE

#### A Student Service:

The purpose of the Counselling Centre is to assist students to gain the maximum in education and development while at the University. This may involve helping them to solve learning, vocational or personal problems and to integrate new skills and experiences into their lives so they will have more competence and self confidence.

#### Counselling for Study and Learning Problems:

It is normal for students to have study and learning problems from time to time — problems such as poor retention, inability to concentrate, difficulties with assignments, persistence, organization, expression, reading, writing exams, and so on. If these get too big or continue for too long, the student's

educational career can be threatened. The Counselling Centre offers a Reading and Study Skills course, as well as individual counselling and assistance with these problems and invites students to come early rather than late.

*Reading and Study Skills Course* — This short, non-credit 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.

*Transition Course* — A concentrated version of the Reading and Study Skills programme, is offered in the two weeks prior to registration in the fall. It is designed to help newcomers prepare for university kind of learning, including the use of library resources.

### Personal Counselling:

Professional counsellors provide an open-minded and 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 the Counselling Centre are shyness and lack of self-confidence, difficulty in communicating with and relating to others, inability to speak up and express themselves, family conflicts, loneliness, depression, loss of interest and feeling "fed up", questions about aptitudes and intelligence, disappointment with the University and professors, difficulty in making decisions, anxieties connected with writing examinations, presenting seminars, practice teaching, and heterosexual and homosexual concerns. 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.

### Educational-Vocational Counselling:

Many individuals are interested in getting into an educational programme which provides for maximum achievement and satisfaction, and which opens doors to a variety of vocational and job opportunities. Counsellors utilize interest tests and other assessment techniques to help students understand their strengths and weaknesses for learning and achievement and for different vocations. Educational-vocational counselling today is person-centred, i.e., focused on helping the individual to discover his unique needs and potential, to find which types of occupations will meet his personal and professional needs and to develop learning, adjustment, and exploratory strategies that will enable him to adapt to a rapidly changing world.

### Group Programmes:

In addition to problem solving, and other remedial counselling, the Counselling Centre is developing and offering a number of group programmes. Students may arrange to join a particular group by contacting the Counselling Centre.

*Anxiety Management* — In this programme students are trained to deal with anxiety, stress, and worries (e.g. public speaking anxiety, examination anxiety, and phobias) so that these cause less discomfort and disruption of studies and their lives. The programme involves training in relaxation, desensitization of anxieties, and mental self-control.

*Assertion Training* — This programme is for those who have difficulty standing up for their rights, expressing their views and feelings, and distinguishing between assertion and aggression.

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

*Eliminating Self-Defeating Behaviours* — This workshop is designed to help students rid themselves of thoughts, feelings or behaviours which hinder their progress toward greater happiness and productivity. Some examples of self-defeating thoughts, feelings and behaviours are feelings of inferiority, anger or anxiety; fear of failure or close relationships; inappropriate social acts, etc. Emphasis is placed on understanding the causes of these behaviours and learning how to reduce their occurrence or impact.

*Human Sexuality* — This group programme is for men and women who are interested in exploring values, attitudes and conduct related to sexuality.

*Self-Control for Weight Control* — This programme utilizes new methods from counselling and clinical psychology which facilitate self-awareness and the development of personal control over behaviour associated with eating and exercise.

*Vocational Counselling and Career Development* — This programme is for students who are interested in exploring their interests, aptitudes, preferred life style, and career options.

### Admissions Testing:

The Counselling Centre is authorized to administer the Scholastic Ability Test and the Achievement Test of the Admissions Testing Programme, the Graduate Record Examinations, the Miller Analogies Test, the Law School Admission Test, the Dental Aptitude Test Programme, the Medical College Admission Test, and the Test of English as a Foreign Language.

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

## HOUSING AND CONFERENCE SERVICES

### University Accommodation:

At the present time the University offers single and double room accommodation for 611 students in two residence complexes, Craigdarroch and Lansdowne.

By September 1st, 1978, construction of a new complex will be complete. This complex will house 300 students in single rooms and will provide students with options in living styles i.e. coeducational or single sex areas, high, moderate or low social interaction areas.

Fees for full room and board for 1977-78 were:

	Single	Double
First Term	\$ 728.00	\$ 663.00
Second Term	\$ 770.00	\$ 704.00
Total:	\$1498.00	\$1367.00

Please contact Housing office for the 1978-79 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 \$50.00 which will be credited to the first term fees. The first term fees are due on or before September 1. If fees are not paid by the due date, the deposit is forfeited and the room assignment will be cancelled.

Assignment of accommodation will commence in July 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 student to inform Housing Services in writing of their status with Admission Services.

Students who have been assigned residence accommodation may occupy their rooms on Tuesday, September 5, the first day of registration. During registration week students may purchase meals on campus at current rates. The residence meal pass becomes effective for dinner on Sunday, September 10.

Students who are unable to occupy assigned accommodation by September 11, 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, Lansdowne 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, Lansdowne 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. Any disputes that arise should be taken to the Provincial Rentalsman for resolution.

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.

## UNIVERSITY FOOD SERVICES

The University operates a comprehensive food service facility in the Commons Building. Three Coffee Gardens on the main floor of the building provide meals and snacks to all members of the University community. Residents' meals are served in the Cafeteria-Dining Room located on the second floor of the building.

Additional cafeteria and dining facilities are located in the University Centre.

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 Services 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.

Returns of unmarked books are accepted only with a receipt and within 10 days of purchase. During the period when class changes are permissible at the beginning of each term, students may return books no longer needed as long as they are in mint condition.

Students who drop courses within the first 8 weeks of the term and wish to return books not yet used may submit their case to the Manager. The first condition for acceptable returns at any time is the cash register receipt.

Sale books and student outlines may not be returned.

Between April 15 and September 1, 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, located opposite the Bookstore in the Campus Services Building, is operated under Bookstore management.

It offers school and art supplies, gym strip, lab coats, crested ware, drugstore and gift items, magazines, musical recordings, cosmetics, greeting cards, stationery, games, hosiery, and sporting goods. The Campus Shop also provides the services of a Sub Post Office.

### Sub Post Office:

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

## UNIVERSITY HEALTH SERVICE

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

A nurse is in attendance from 9:00 a.m. to 4:30 p.m. Monday through Friday.

In addition to the medical services required in direct support of various university activities and programmes, the University Health Service offers general medical treatment, health counselling and psychiatric services for the convenience 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 advised to have medical insurance.

British Columbia students are encouraged to enrol in 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.

Students from other Provinces are encouraged to continue their Provincial Medical coverage and are to be prepared to produce a medical insurance identification number.

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. Non-resident 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 1977-78 were \$150 for a single student and \$310 for a married student for twelve month coverage. These rates are subject to yearly change.

Details regarding medical and hospital insurance coverage are available from the University Health Service.

### Illness Involving Examinations:

Students are referred to the academic regulations governing illness at the time of examinations, found on page 15, under Student Evaluation.

## STUDENT FINANCIAL AID SERVICES

The University operates a Financial Aid Services office which is open during regular University hours, (8:30 a.m. to 4:30 p.m.), Monday through Friday. It is located on the second floor of the University Centre, where a trained staff can answer questions regarding loans, grants, bursaries and scholarships. Students wishing to discuss their financial situation are advised to call the office at 477-6911, local 4209 or 4703, well before they require assistance. Financial advisors are available to discuss and advise prospective

students about the costs of attending and the potential sources of funds to cover these costs. More specific information on the financial aid available to students is contained in the section entitled Awards and Financial Aid at the back of this Calendar.

## ATHLETICS AND RECREATION SERVICES

The Athletics and Recreational Department has the responsibility for the planning and operating of athletic, intramural and recreational programmes.

Intramural and instructional recreational programmes are scheduled for students, faculty and staff. Good weather and year-round playing fields make outdoor sports a big attraction for the participant or spectator at the University of Victoria which has men's and women's teams in most inter-collegiate sports, such as basketball, rugby, soccer, rowing, volleyball, and field hockey. The University is sufficiently small so that nearly all interested students can participate.

## PHYSICAL EDUCATION, ATHLETICS AND RECREATIONAL FACILITIES

Use of the athletics and recreational facilities or participation in the programmes is open to all students paying A.M.S. or G.S.S. fees and faculty and staff who have purchased an activity card from the Athletics 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 co-operation with the four core Victoria municipalities.

## DAY CARE CENTRES

Three co-operative day care centres for those students, staff or faculty with pre-school-age children are located on the border of the campus. The centres are licensed to take children between the ages of two and five. The Provincial government pays subsidies, based on need, toward the fees of these non-profit centres which are staffed by trained personnel. Registration is limited. Application should be made at Day Care Centre, No. 1, 2246 McCoy Road (477-6911, local 4857).

## CANADA MANPOWER CENTRE

The Canada Manpower Centre On Campus is operated by the Federal Department of Manpower and Immigration, in co-operation 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 Counselling
- Career Employment Opportunities
- Teacher Recruitment
- Part-time, Christmas and Summer Employment Opportunities.

Graduating or graduate students interested in permanent career employment either during or following the academic year should register 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.

Teacher Recruitment, usually carried out in March or April, is publicized well in advance at the Centre and on the campus employment notice boards.

Students seeking summer employment, particularly in governmental Career-Oriented Programmes, are advised to contact Manpower immediately after second term classes begin. In May, summer employment opportunities are co-ordinated through Greater Victoria Canada Manpower Centre for Students (specific details are advertised in local newspapers and further information is available at Manpower on campus).

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

Career information, 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. Manpower on Campus has a Careers Room stocked with literature from many companies. Help and guidance in writing résumés 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, old wing), Cunningham and Cornett Buildings, and the Student Union Building.

### CAREER INFORMATION AND VOCATIONAL COUNSELLING

Career information and vocational counselling may be obtained from the University Counselling Centre or the Canada Manpower 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 advisors in their areas of study for advice pertinent to career planning.

## STUDENT AFFAIRS

The Director of Student and Ancillary Services serves as the liaison between the Alma Mater Society and the University.

### ALMA MATER SOCIETY

The Alma Mater Society is the legally incorporated society of undergraduate students of the University of Victoria. It is the equivalent to what is known as a "Student Union" in many universities. The Society functions as the recognized means of communication between students and the faculty, the administration, and the outside community. The governing body of the Society is the Representative Assembly which consists of 25 members (10 administrative officers and 15 student representatives) elected in February of each year.

The administrative officers direct the day-to-day activities of the Society. The *President* acts as chief spokesperson of the Society and also serves as a liaison for students as individuals and as a group, with the University administration and the outside community. The *Vice-President Internal* is responsible for representing the Society in on-campus concerns which include campus development, residences, athletics, and serves as the Society's liaison with the student members of the Board of Governors. The *Vice-President External* is concerned with communicating and co-ordinating the Society's relations with other student societies and government bodies. Special concerns of this position are housing, employment, and financial aid. The *Treasurer* is responsible for all the financial affairs of the Society. The *Communications Director* is the public information officer of the Society, who ensures that minutes of its meetings are produced and distributed, and that Society activities are adequately publicized. The *Academic Affairs Director* is responsible for the production of the Academic Guidebook, as well as for investigating and alleviating academic complaints submitted by students, and serves as the Society's liaison with the student members of Senate. The *Academic Programming Director* initiates and co-ordinates all Society programmes of an academic nature. The *Publications Director* is responsible for the Martlet, the telephone directory, the Student Handbook, and all other A.M.S. publications. The *Clubs Director* is the liaison between the Society and the Clubs it sponsors. The *Activities Co-ordinator* fulfills the same function as the Academic Programming Director in the co-ordination of all Society-sponsored activities of a non-academic nature. The fifteen student representatives are elected at large, and are responsible for voicing student opinion, and representing student concerns to the Representative Assembly.

The President, Treasurer, and Clubs Director have offices on the main floor of the Student Union Building. The remainder of the administrative officers have offices upstairs, in the Student Administration wing. All have office hours during which they may be contacted. Student Representatives may be reached through the Student Union Building as well. All of these persons are willing to listen to any student problems and concerns. Do not hesitate to get in touch with them.

A.M.S. fees, as described on page 17 are collected by the University on behalf of the Society.

The programmes of the Society can generally be divided into four areas of concern - administrative, academic, service and community. Administration involves the day-to-day activities of the Society, the operation of the Student Union Building and its various facilities, placing student representatives on A.M.S. and University committees. Academic concerns are the production of an Academic Guidebook (professor-course evaluation of First and Second Year courses for use by students), examination of grading procedures and the promotion and tenure of faculty. In the service area the Society acts to provide students with many activities, facilities, and publications designed to enhance their education and lifestyles. These include the student newspaper, musical entertainment and dances, a speakers' programme, athletic and recreational activities, clubs, day care, student housing, and traffic and parking facilities. Finally, those students concerned about the problems of the community or society as a whole can work through the Alma

Mater Society to express these concerns, and organize other students to act on them.

Any member of the Society is eligible to vote in Alma Mater Society elections and, as long as the member is not on academic probation, to run for office. However, many more students than those elected are needed to assist in the work of the Society. Student input is needed in all levels of Society activity. The Alma Mater Society actively encourages the involvement of all its members.

The door is always open.

<i>President</i>	1978-79: Mr. David D. Connell
	1977-78: Mr. Brian Gardiner
	1976-77: Mr. J. Alistair Palmer
	1975-76: Mr. Clayton J. Shold
	1974-75: Mr. Kirk Patterson
	1973-74: Miss Linda M. Flavelle
	1973 : Mr. David C. Clode (Acting: June-October)
	1972-73: Mr. Russell W.E. Freethy
	1971-72: Mr. Ian J. McKinnon
	1970-71: Mr. Robert McDougall
	1969-70: Mr. Norman Wright
	1968-69: Mr. Frank Frketch
	1967-68: Mr. David McLean
	1966-67: Mr. Stephen Bigsby
	1965-66: Mr. Paul Williamson
	1964-65: Mrs. Olivia Barr
	1963-64: Mr. Laurence E. Devlin

### 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 eight members of the Executive of the Society are elected for one year terms by the members of the Society. Four of the Executive members are elected in April and four in October of each year. 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 18). 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 through addresses published in the Graduate Student Newsletter (the Newsletter is mailed directly to each member of the Society).

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.

Further information about the Society and its functions may be found in the *Graduate Students' Handbook*, a booklet published by the Society.

<i>President</i>	1977-78: Mr. Mark Hallam
	1976-77: Mr. Albert L. Rydant/ Mr. Stephen B. McClellan (Acting)
	1975-76: Mr. Richard J. Thomas
	1974-75: Mrs. Anne D. Forester
	1973-74: Mr. James B. London
	1972-73: Mr. Eric S. Lee
	1971-72: Mr. John N. Dornier
	1970-71: Mr. Murray J. King
	1969-70: Mr. William F. Hyslop
	1968-69: Mr. Fred P. Dieken
	1967-68: Mr. Michael G. Roberts
	1966-67: Mr. Pdraig Coughland

### 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 is becoming 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.*

## SERVICE TRAINING WHILE AT THE UNIVERSITY

### Military Service Scholarships:

The Department of National Defence sponsors programmes 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 programmes sponsored are the Regular Officer Training Plan (ROTP), Medical Officer Training Plan (MOTP), Dental Officer Training Plan (DOTP) and Reserve Officer University Training Plan (ROUTP). Training given under these plans is divided into two parts: normal attendance at university throughout the academic year and military training each summer.

### Regular Officer Training Plan:

This plan combines university subsidization with career training as an officer in the Regular Component of the Canadian Forces. Successful applicants are enrolled in the rank of Officer Cadet. They are required to maintain a good standing both academically and militarily while in the plan. All tuition and other essential fees are paid by the Department of National Defence. In addition the Officer Cadet receives an annual grant of \$125.00 to purchase books and instruments, and a monthly pay of \$365.00 in the first year, \$380.00 in the second year, \$390.00 in the third year, and \$400.00 in the fourth and subsequent years of paid service under the plan. Free medical and dental care is provided. Twenty working days annual leave with full pay and allowances may be granted each year, either before or after the summer training period. On graduation the Officer Cadet is promoted to the commissioned rank of Second Lieutenant.

### Medical Officer Training Plan:

Sponsorship is provided under the Medical Officer Training Plan during the 2nd, 3rd and 4th year medicine and internship year. It consists of paid tuition, \$125.00 annual book and instrument grant, complete medical and dental coverage, paid holidays and monthly pay of 2nd Lieutenant, \$625.00 in academic years and \$1020.00 in the internship year. Three years' military service in Canadian Armed Forces starting with the rank of Captain is required upon obtaining a licence to practise medicine.

### Dental Officer Training Plan:

Sponsorship is provided under the Dental Officer Training Plan during the 1st, 2nd, 3rd and 4th year dentistry. Subsidization consists of paid tuition, \$125.00 annual book and instrument grant, complete medical and dental coverage, paid holidays and monthly pay of \$365.00 in 1st year, \$625.00 in 2nd, 3rd and 4th year. Four years' military service in the Canadian Armed Forces starting with the rank of Captain is required upon receiving a licence to practise dentistry.

### Reserve Officer University Training Plan:

This plan provides an opportunity for selected undergraduates to prepare themselves for promotion to commissioned rank in the Reserve Component of the Canadian Forces. They are selected during the first months of the University year by the local Reserve Unit and are enrolled as Officer Cadets in the Primary Reserve. Cadets receive pay for training completed at local Reserve Units during the academic year (up to 15 days) and at training bases during the summer (up to 16 weeks).

Admission requirements:

An applicant must:

- be a Canadian citizen;
- be single and remain so until commissioned (ROTP only); MOTP, DOTP AND ROUTP applicants may be married;
- if ROTP, be between the ages of 16 and 21 on the first of January of the year he commences First Year studies at University; if MOTP and DOTP, be between the ages of 17 and 38; ROUTP from 17 to 23.

### How To Apply:

Interested students are requested to contact one of the following:

for ROTP, MOTP, DOTP  
Commanding Officer  
Canadian Forces Recruiting Centre  
614 Yates Street  
Victoria, B.C. V8W 1K9  
Telephone: 388-3547

or

University Liaison Officer  
Royal Roads Military College  
Victoria, B.C. V0S 1B0  
Telephone: 388-1442

for ROUTP (Militia)

Commanding Officer  
Canadian Militia District Headquarters  
Bay Street Armouries  
715 Bay Street  
Victoria, B.C. V8P 1R1  
Telephone: 388-3601

for ROUTP (Naval Reserve)

Commanding Officer  
H.M.C.S. Malahat  
FMO  
Victoria, B.C. V0S 1B0  
Telephone: 388-2241

or

Dr. Michael L. Hadley  
Department of Germanic Languages and Literature  
University of Victoria

## ALUMNI ASSOCIATION

Graduates of the University of Victoria and members of Convocation automatically become members of the Alumni Association. People who attended Victoria College or Victoria Normal School are associate members. Interested people in the community may also become associate members. The Association was originally a branch of the U.B.C. Alumni because Victoria College was part of U.B.C. When the College became a separate university, the Association became the Alumni Association of the University of Victoria and was incorporated under the *Societies Act* in 1965. Its purpose is to promote the well-being of the University.

The Association is governed by an Alumni Executive of 12 members plus representatives of the faculty, A.M.S. and Senate. The Association's policies and programmes are developed by the Executive and carried out by the staff under the supervision of the Executive. The Association's operation is supported by an annual grant from the University.

The Association's university and community services are supported by an annual fund drive. These funds provide entrance scholarships, a loan fund particularly for mature students, and a travel fund for graduate students. The Association also helps the University by raising money to support projects such as the Marine Sciences Service Vessel, the University Archives, and the University Day Care Centres on campus.

The Association keeps alumni informed about developments and activities on campus through the *Quarterly* magazine. It has arranged for alumni to have continued access to the Library, to many A.M.S. activities and to recreational and athletic facilities. The Association sponsors social events during the year for Alumni. Alumni members serve on many University advisory committees.

For students on campus, the Association organizes career discussions with members of the Alumni Association working in various occupational fields.

The Alumni Association office is located in University House and is always open to graduates and interested persons. Telephone 477-6911, local 4588.

<i>President</i>	1976-78: Thomas G. Heppell, Vic. Coll. '50-52. B.Ed. '70, M.Ed. '76
	1973-76: Olivia R. Barr, B.A. '64, Dip.Ed. '69
	1973: Reginald H. Roy, Vic. Coll. '46-48, B.A., M.A. ( <i>Brit. Col.</i> ), Ph.D. ( <i>Wash.</i> )
	1971-73: John D. Herbert, Vic. Coll. '55-59, B. Comm. ( <i>Brit. Col.</i> )
	1969-71: J. David T. Price, B.Ed. ( <i>Brit. Col.</i> ), M.Ed. ( <i>Oregon</i> )

- 1967-69: Donald S. Thomson,  
Vic. Coll. '52-53,  
B.A. (Brit. Col.), M.P.A. (Queen's)
- 1966-67: Hamish I.F. Simpson,  
Vic. Coll. '53-54,  
B.A. (Brit. Col.)
- 1964-66: J. David N. Edgar,  
Vic. Coll. '54-56,  
B. Comm. LL.B. (Brit. Col.)
- 1963-64: Robert St. G. Gray,  
Vic. Coll. '47-48,  
B.A. (Brit. Col.)

## 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 Professor Robin Skelton, B.A., M.A., F.R.S.L. Subscription: \$8.00 for one year; \$21.00 for three years.

### *The Ring*

A news tabloid published every week by the Department of Community Relations, 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. Publication of the new edition is planned for 1979-80. Project Director: Jean-Paul Vinay, Professor Emeritus of Linguistics. Research Associate: Murray T. Wilton, B.A., M.A., Dip.Ed.

## DIVISION OF CONTINUING EDUCATION

The purpose of the Division is to provide learning opportunities for adults seeking the most current knowledge in a wide variety of subjects. Through the continuing education programme, the academic resources of the University are made directly available to citizens of Greater Victoria, and other areas of the Province.

The non-degree programme of the Division consists of a broad range of courses offering potential intellectual growth and improved professional competence. In addition, the Division plans and administers degree credit courses at off-campus locations and publishes each spring a calendar of evening degree courses offered on campus.

The non-degree programme utilizes a variety of educational formats, such as courses, lecture series, workshops, conferences, residential seminars, and symposia. The curriculum is developed in co-operation with Departments from all Faculties of the University — Arts and Science, Education, Fine Arts and Law, and the Schools of Nursing, Social Welfare and the Child Care Programme. Instructors are also appointed from the University's professional staff of the McPherson Library, Computing and Systems Services and the Counselling Centre.

The following partial list of non-degree courses offered in the academic year 1977-78 illustrates the variety of learning opportunities available to adults through the Division:

**LANGUAGES:** *French, English Words with Greek Origins, Hebrew, Greek and Russian.*

**LIBERAL STUDIES:** *Has Your Writing Become an Albatross?, Psychology and the Arts, Don't Just Sit There — Write Your Story, Overseas Chinese in British Columbia, Changing Women in a Changing World, Philosophy Lecture Series.*

**EXPRESSIVE ARTS:** *Dinner/Theatre Evenings, Dinner/Music Evenings, Film Maker's Workshop, A Practical Study of Painting and Drawing.*

**DOWNTOWN COURSES:** *German for Singers, Faculty of Law — Public Lecture Series, Public Administration Lecture Series, Team Building, Leadership, Self-Exploration Seminar for Women.*

**CONTINUING PROFESSIONAL EDUCATION:** *Engineers and Computers, Engineering Lecture Series, Nutrition Education for Pharmacists, Pharmacy and Psychiatry, Counter Points II, Gardening in the Pre-School, Scarfe Lecture Series: Early Childhood Education Around the World, Standard First-Aid Certificate for Pre-School Teachers, Enrichment for the Early Years, Clinical Applications, Family Systems Therapy, The Cardio-Vascular System for Registered Nurses, The Nurse and the Diabetic Patient.*

**OTHER PROGRAMMES:** *Mutual Aid Counselling, Write On!, Educational Travel: France, Residential Weekends: Classics, Creative Writing, Law.*

## FRENCH LANGUAGE DIPLOMA PROGRAMME

In co-operation with the Department of French Language and Literature and the Department of Linguistics, the Division offers a *French Language Diploma Programme*. The Programme 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 3-4 years. The University awards a Diploma to successful candidates.

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

For a calendar listing Fall and Spring Programmes, Evening Credit Courses or for other information contact:

Division of Continuing Education  
University of Victoria  
Telephone 477-6911, Locals 4802, 4803, 4804.

## SUMMER SESSION

The announcement of the courses to be offered in the Summer Programme will be issued in January and will be available on request from the Summer Session Office.

The regulations governing the Summer Session are the same as those for Winter Session except as described in the Summer Programme Supplement to this Calendar.

### INDIVIDUALLY SUPERVISED STUDIES MAY TO AUGUST 1979

Individual supervised studies may be undertaken during the periods May 1 - June 30, July 4 - August 17 or May 1 - August 17. These studies may consist of Directed Studies courses (normally numbered 490) or regular courses taken as individually supervised courses.

Under no circumstances will courses be allowed to extend beyond the terminal date.

The following conditions apply to all individually supervised studies courses:

- The student must have an academic standing acceptable to the Faculty or Department, Division or School in which the course is given.
- Approval in writing must be given by each of the following, in the order indicated:
  - The supervising faculty member (or members).
  - The Head or Chairman of the Department or Division, or the Director of the Programme.
  - The Dean of the Faculty, who requires a course outline for Directed Studies courses.
  - The Director of Summer Session.
- Written approvals as indicated above, except for 2(d), and completed registration materials must be received by the Summer Session Office as follows:
 

Courses starting in May — March 31

Courses starting in July — April 30

### Procedures:

The student is required to arrange for a course as follows:

- Consult with the instructor for his written approval and, if the course is a Directed Studies course, obtain an outline of the course.
- Obtain the approval in writing of each of the other officials designated above.
- Present his completed registration materials to the Summer Session Office by the date indicated.

**NOTE:** It is the student's responsibility to make all the necessary arrangements personally. The University will not enter into correspondence in regard to arrangements for individually supervised courses.

### Other Regulations:

Individually supervised studies courses are subject to the University regulations that govern course load, grading and credit, fees, and other regulations that apply — see Summer Programme Supplement to this Calendar.

## OFF-CAMPUS COURSES

University of Victoria offers credit courses during the Winter Session at certain centres on Vancouver Island for the benefit of persons who are

unable to attend courses at the University and who wish to undertake studies on a part-time basis. The term is the same as that for students on campus and classes are conducted for the same number of hours per week. The University reserves the right to change the starting times or cancel courses when enrolment is not sufficient.

### CALENDAR REGULATIONS

Students taking courses off campus are subject to all the academic rules and regulations that apply to students at the University. The courses offered are the same as those offered to students proceeding to a degree on campus. Selection of courses must be made in keeping with Calendar prescriptions for the degree programme involved. Students seeking academic advice regarding degree programmes should consult the appropriate academic advising centre. Enquiries should be directed to one of the following:

Advising Centre — Faculty of Arts and Science — R. 323 MacLaurin Building.

Advising Centre — Faculty of Education — R. 250 MacLaurin Building.

The Dean's Office — Faculty of Fine Arts — R. 192 MacLaurin Building.

### CREDIT FOR HIGHER TEACHER CERTIFICATION

Applicants who hold teaching certificates should not assume that they possess the requirements for admission to the University. Applicants admitted to a degree programme at the University may improve their teacher certification by completion of appropriate courses as specified in the Calendar of the University. Teachers who do not wish to work towards a degree but toward higher teacher certification, or who are not admissible to a degree programme, must direct all enquiries concerning teacher certification to the British Columbia Ministry of Education, Victoria, which is solely responsible for teacher certification in this Province.

### SESSION

Monday, September 11, 1978, to Monday, April 30, 1979.

### AUDITING

Persons wishing to audit a course may do so but may not register until after students have registered for credit. (See page 12).

### APPLICATION AND REGISTRATION PROCEDURES

Students who were registered in credit courses prior to September 1978 should apply for re-registration using the required APPLICATION FOR RE-REGISTRATION form which is obtainable from the Records Office.

Persons seeking admission to the University for the first time must obtain an APPLICATION FOR ADMISSION form from the Director of Admission Services. This form, fully completed and accompanied by all official transcripts of academic records, should be submitted to the Director of Admission Services.

Applicants whose registration is authorized will receive notification by mail and must attend registration-in-person procedures held in Nanaimo on September 16, 1978.

Students will be registered in courses on a first-come, first-served basis and, while applications that are accompanied by all required documents may be accepted if presented in person at Nanaimo on September 16, students are urged to complete application procedures well in advance of registration-in-person procedures, otherwise their registration will be delayed until their applications are processed.

Registration for all courses to be taken during the Winter Session, including courses beginning in January, must be completed at the time of registration in person in September.

### FEES (INCLUDING AUDITORS)

Regulations regarding payment of fees are contained on page 17 of the Calendar and are the same as those for other students in the Winter Session, with the exception that the full fee instalment must be paid at the time of registration by students enrolled in off-campus courses. The following is a brief summary of calendar fee regulations which apply to off-campus courses:

Tuition fees: \$36 per unit. Auditors: \$6 per unit for those 65 years of age or over; \$18 per unit for all other auditors.

Other fees when applicable are:

Graduation Class fee ..... \$10.00

Late Registration fee ..... \$25.00

Late Payment

fee ..... 10% of unpaid balance; minimum \$5.00, maximum \$30.00

### Payment of Fees:

- a. For courses that finish in the first term — full fees must be paid at the time of registration.
- b. For courses that do not finish in the first term — fees may be paid in full at the time of registration or in two instalments:
  - (i) First fee instalment — one-half of sessional tuition fees plus (if applicable) graduation class fee and late registration fee — payable at the time of registration.
  - (ii) Second fee instalment — one-half of sessional tuition fees — may be paid at time of registration or at any time during the first term. Second fee instalments not received in full by January 19, 1979 are subject to a late payment fee, additional to all other fees.

### WITHDRAWAL

Students who withdraw from a course should notify the Records Office immediately in writing. Otherwise, full sessional fees will be assessed and applications for re-registration may not be accepted until accounts are settled in full. Refunds will be made in accordance with regulations given on page 18 of this Calendar.

### LIST OF COURSES

A list of courses to be offered may be obtained from the Division of Continuing Education, local centres of adult education where University courses are offered, and from the Admissions Office or the Records Office.

## AFFILIATE

### VICTORIA CONSERVATORY OF MUSIC

On June 18, 1968 the Victoria Conservatory of Music became affiliated with the University of Victoria. The Conservatory began in 1964 as the Victoria School of Music.

Students in the Bachelor of Music programme and in the music teaching area in the Bachelor of Education programme receive their solo performance tuition from the faculty of the Conservatory.

A list of the Conservatory faculty is shown under the Department of Music. See page 141.

## PRE-PROFESSIONAL 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.

**Please note that course programmes 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.**

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.

### AGRICULTURE

Suggested courses:

Biology  
Chemistry  
English  
Mathematics  
Physics

### ARCHITECTURE

Suggested courses:

English  
Mathematics  
History in Art  
Physics  
Social Sciences

### 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 English and Mathematics).

### APPLIED SCIENCE

Suggested courses:

English  
Mathematics  
Chemistry  
Physics  
Elective

**DENTAL HYGIENE**

Suggested courses:  
English  
Chemistry  
Biology  
  
Psychology  
An elective

**FORESTRY**

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Physics

**MEDICINE**

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

**REHABILITATION MEDICINE**

Suggested courses:  
English  
Mathematics  
Chemistry  
Biology  
Elective

**PSYCHOLOGY**

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

**LABORATORY TECHNICIAN**

Suggested courses:  
English  
Mathematics  
Biology  
Chemistry  
An elective

**SPEECH AND HEARING SCIENCE**

Students intending to pursue studies in the Speech and Hearing Sciences after graduation should include introductory calculus (e.g. Mathematics 102) and introductory physics (e.g. Physics 102) in their first or second year. Students with this interest are advised to consult the Department of Linguistics on the design of their degree programme.

**VETERINARY MEDICINE**

Completion of two years in Arts and Science including:  
English  
Physics  
Biology, including Genetics  
Chemistry, including Organic Chemistry  
Mathematics  
Electives.

**DENTISTRY**

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

**HOME ECONOMICS**

Suggested courses:  
English  
Chemistry  
Physics  
Mathematics  
Biology or a Social Science

**PHARMACY**

Suggested courses:  
Chemistry  
English  
Mathematics  
Physics or Biology  
Elective

# FACULTY OF ARTS AND SCIENCE

Alfred Fischer, B.Sc., M.Sc., Ph.D. (N.Z.), Dean of the Faculty.

I.-D. Pal, B.A., M.A. (Panjab), M.Sc.Econ. (London), Ph.D. (McGill), Acting Dean to June 30, 1978.

Donald H. Mitchell, B.A., B. Comm., M.A. (Brit. Col.), Ph.D. (Ore.), Associate Dean.

G. Grant McOrmond, C.D., M.A. (Sask.), Assistant Dean and Director of Academic Advising.

Marjorie L. Menhenett, B.A. (Wellesley Coll.), M.A. (Calif. Berkeley), Advising Officer.

Linda M. Rhodes, B.A. (U. of Vic.), M.A. (Carleton), 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, 323 MacLaurin Building. Students seeking information or advice regarding programmes, courses, or University and Faculty regulations are invited to visit the Centre, or write to the Director. Appointments with an Advisor may be made by telephoning 477-6911, local 6676.

**Departmental Advising:** All academic Departments have Advisors generally available throughout the Winter Session who can give detailed information regarding courses and programmes within each discipline. Students wishing advice from Departmental Advisors during the summer months should write or telephone the department for an appointment.

**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.

## PROGRAMME PLANNING

It is recommended that all students discuss their proposed programmes with the Arts and Science Advising Centre and/or with Departmental Advisors 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 Programme:** All students in the Faculty of Arts and Science are required to declare a degree programme by completing a Record of Degree Programme 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 fulfill the requirements for the degree programme selected. A copy of the form is placed on file in the Records Office to be used as a record for graduating purposes.

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

Each candidate for a bachelor's degree is required:

- either to present a passing grade in a qualifying examination in English, or to present a grade of A in English 099, or to present a passing grade in English 099 and in one of English 115, 116, 121, 122, or to present transfer credit for the equivalent of two of English 099, 115, 116, 121, 122 (this is a general University requirement);
- 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; 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 13);
- 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  
Creative Writing  
Economics  
English  
Environmental Studies  
French Language  
and Literature  
Geography  
Germanic Languages  
and Literature  
Hispanic and Italian Studies  
History  
Liberal Studies  
Linguistics  
Mathematics  
Oriental Studies  
Pacific Studies  
Philosophy  
Political Science  
Psychology  
Slavonic Studies  
Sociology

### Bachelor of Science

Biochemistry  
and Microbiology  
Biology  
Chemistry  
Geography  
Mathematics  
Physics  
Psychology

- to meet the requirements for the degree programme selected: see below, and under the individual departments, pages 30 to 112.

## DEGREE PROGRAMMES 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 Programmes: Honours, Majors, or General (but see section on Combined 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 programme to select.

### THE HONOURS PROGRAMME

The Honours Programme 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 Programme.

#### Admission to an Honours Programme

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

- the department offers an Honours Programme;
- the student has fulfilled the requirements of the first two years and has at least a grade point average of 3.50 in the work of the Second Year and in the field in which he wishes to specialize; and
- the student has completed all prerequisite courses.

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

#### Requirements of the Honours Programme

The number of units required for an Honours Programme varies between 60 and 69, depending upon the requirements of the department concerned, which are set out on pages 30 to 112 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 programme 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 his final year to take a comprehensive examination — oral, written, or both.

Normally a student should complete the requirements for an Honours Programme in four academic years. 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. A student who passes his courses but fails to obtain at least Second Class (normally, a graduating grade point average of 3.50 minimum) may, upon the recommendation of the department, be granted appropriate standing in a Major or General Programme. See Graduation Standing, page 29.

### Honours Programmes 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 Programme in one of the following:

#### Bachelor of Arts

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

#### Bachelor of Science

Astronomy  
Biochemistry  
Biology  
Chemistry  
Combined Chemistry  
and Mathematics  
Geography  
Mathematics  
Microbiology  
Physics  
Physics and Applied Mathematics  
Psychology

**Double Honours:** With the joint approval of the departments concerned, a student may be permitted to fulfill the requirements for an Honours Programme in each of two departments, both leading to the same degree, a B.A. or a B.Sc. Such a programme may require an extra year of study, in which case approval of the Dean should be sought. In any case where a Double Honours Programme is selected, the student shall be eligible to proceed to no more than one B.A. or B.Sc.

**Combined Honours and Major Programme:** Where it is possible to do so within the period of four academic years required for Honours Programmes, a student may elect to complete an Honours Programme in one area of study together with a Major Programme in another area of study, both leading to the same degree, a B.A. or B.Sc. Again, the student shall be eligible to proceed to no more than one B.A. or B.Sc.

### THE MAJOR PROGRAMME

The Major Programme 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 Programme

The Major Programme requires:

- (a) the completion of the first 30 units in conformity with the regulations common to all degree programmes given above;
- (b) the completion of the remaining units in conformity with the regulations common to all degree programmes given above, and including the following:
  1. 15 units of courses numbered 300 or 400, selected to meet the requirements of the Major programme, as specified by the department concerned;
  2. at least 15 units of electives, which may include not more than 9 units prescribed by the Major department as corequisites.

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

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

#### Bachelor of Arts

Anthropology	Economics	History	Political Science
Classical Studies	English	Linguistics	Psychology
Classics	French	Mathematics	Russian
Creative Writing	Geography	Philosophy	Sociology
	German		Spanish

#### Bachelor of Science

Astronomy	Geography
Biochemistry	Mathematics
Biology	Microbiology
Chemistry	Physics
Combined Chemistry and Mathematics	Psychology
Computing Science	

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

**B.A. in Liberal Studies:** This is an experimental interdisciplinary programme which is described in detail on page 80.

**B.A. with a Major in Pacific Studies:** The Pacific Studies programme is designed to provide a concentration in the area of Pacific Studies for both educational and professional purposes. Details of the programme are given on page 92.

**B.A. with a Major in Social Welfare:** Effective 1976-77, no further registrations in this programme will be accepted. For those students who have already formally declared a Degree Programme in Social Welfare, the Major requires, in the Third and Fourth years, a minimum of 33 units. Of these 33 units, 9 must be taken in courses numbered 300 and above, as required for the General Programme specified by the department concerned in each of two of the following: Anthropology, Economics, Political Science, Psychology, Sociology. Either as part of, or in addition to, these two areas of concentration the student must complete Psychology 335 and Sociology 350. In addition, the Major requires Social Work 400.

**Double Major:** A student may elect to complete the requirements for each of two Major Programmes 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 for a Double Major, nor can Computing Science with Mathematics (Computing Science Emphasis). In any case where a Double Major is sought, the student shall be eligible to proceed to no more than one B.A. or B.Sc.

A student pursuing a Major Programme for the B.A. degree within the Faculty of Arts and Science may concurrently satisfy the requirements for the Major Programme of the Department of History in Art as approved for the Faculty of Fine Arts. Conversely, a Fine Arts student majoring in History in Art may concurrently satisfy the requirements for the Major Programme of a Department in the Faculty of Arts and Science. Only one B.A. degree with a Double Major will be awarded, on the recommendation of the Faculty in which the student is registered.

**The Environmental Studies Programme:** This is an interdisciplinary programme designed to provide students with a concentration of courses in the area of environmental topics. It does not in itself constitute a degree programme, and may only be taken in conjunction with a Major programme, leading to the B.A. or the B.Sc., in specified departments. For details of the Environmental Studies Programme, see page 62.

**Co-operative Education Programmes:** Co-operative Education is based on the principle that academic training, integrated with alternating terms in a structured working environment, develops graduates of a high academic and professional stature.

Graduating students who complete successfully their co-operative requirements will have this noted on their academic records and transcripts. Students registered in a Co-operative Education Programme are employed for specific work terms, each with a minimum duration of 13 weeks, as a required part of their academic programme. This employment is related as closely as possible to the student's course of studies and individual interest.

To participate in the Co-operative Education Programme, a student must maintain an above average standing in each academic year. A notation will be included on the student's academic record and transcript following satisfactory completion of each Work Term. To graduate in the Co-operative Programme, a student must have completed at least three satisfactory Work Terms, in addition to the normal academic requirements. Students who complete less than three Work Terms will still have a notation on their academic records and transcripts for each satisfactory Work Term completed.

Details of the undergraduate programmes in the Departments of Chemistry, Geography, Mathematics, and Physics are outlined on pages 43, 67, 85 and 97.

### THE GENERAL PROGRAMME

The General Programme 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 Programme

The General Programme requires:

- (a) the completion of the first 30 units in conformity with the regulations common to all degree programmes given above;

(b) completion of the remaining units in conformity with regulations common to all degree programmes 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 Programmes Leading to the B.A.

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

Anthropology	Linguistics
Classics	Mathematics
Creative Writing	Pacific Studies
Economics	Philosophy
English	Political Science
French	Psychology
Geography	Russian
German	Sociology
History	Spanish

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

Biochemistry and Microbiology	Chemistry
Biology	Physics

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

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

Biochemistry and Microbiology	Mathematics
Biology	Physics
Chemistry	Psychology
Geography	

### OTHER INFORMATION REGARDING CREDIT AND COURSES

#### CREDIT FOR SUMMER SESSION 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 Session entry elsewhere in this Calendar and the Summer Session Supplement to the Calendar, published in January).

#### 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 open to students for elective credit in the Faculty of Arts and Science:

Art 100  
History in Art 120  
Music 100, 110, 115  
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:

Education-B 490  
History in Art: All courses marked with an asterisk (see pages 138-140)  
Music 200, 300, 311, 312, 313, 320, 400  
Theatre 200, 300, 371, 400, 414; 390-394 (one only);  
410, 411, 412, 413 (1½ units maximum for each).

**Other Courses outside the Faculty of Arts and Science:** 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 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 programme may receive additional units of credit towards a degree programme 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 programme. In no case, however, may such credit be used to replace that specified for the Major or Honours programme selected, nor may the credit for such courses be later transferred to another Major or Honours programme unless the credit is then accepted by the department concerned.

Students on a General Programme 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 programme 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 programme. 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.

#### FOURTH YEAR CREDIT FOR MEDICAL STUDIES

A student who has taken his first three years at the University of Victoria may be granted a B.A. or a B.Sc. after at least one year of a medical or dental programme provided that the courses he takes at the medical or dental school, when combined with those taken at the University of Victoria, are deemed equivalent to those which would be required at the University of Victoria either for a general or a major programme. Only courses which do not overlap courses taken at the University of Victoria and which are acceptable to the appropriate department(s) will be accepted for credit. The University shall receive assurance from the other university that a Bachelor of Arts or a Bachelor of Science degree will not be granted for the same work.

A student must apply through the Records Office for assessment by the department or departments concerned.

If a student contemplates transferring to a medical or dental school before graduation, he should consult with the department or departments concerned prior to registering in his third year so that he may choose his courses to meet the requirements of a major or a general programme. Following completion of his third year, he should then confirm in writing to the Records Office his intention to transfer to a medical or dental school and seek credit for work taken towards his bachelor's degree.

Following completion of the work required for the degree, a departmental recommendation for a bachelor's degree will be made through the Faculty to the Senate.

Students are referred to page 16 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 16 of the calendar, except that the determination of the class of degree in an Honours programme may be subject to conditions specified by the department concerned. Honours students should note, in particular, that the graduating grade point 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 programme or a Combined Honours and Major programme, 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 16), 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.

Anthropology 100	Italian 100, 200
Astronomy 120	Japanese 100, 301
Biology 150	Latin 100
Chemistry 120, 124	Linguistics 100, 108
Chinese 100, 301	Mathematics 100, 101, 102, 110, 130, 151, 160, 180
Classical Studies 100, 207	Microbiology 101
Computing Science 170, 171	Philosophy 100, 102, 202, 207, 211, 212, 222, 232, 233, 238, 242, 245, 269
Creative Writing 100	Physics 101, 102, 103, 121
Economics 100	Political Science 100
English 099, 115, 116, 121, 122	Psychology 100
French 100, 160, 180	Russian 100, 301, 390
Geography 101	Sociology 100
German 100, 140, 200, 204, 295	Spanish 100, 240, 260, 290
Greek 100	
History 205, 210, 220, 230, 234, 236, 240, 242, 250, 252	

## COURSES IN ARTS AND SCIENCE

Course	Page
Anthropology .....	31
Astronomy .....	100
Biochemistry .....	33
Biology .....	37
Chemistry .....	44
Chinese .....	91
Classical Studies .....	48
Commerce .....	55
Computing Science .....	89
Creative Writing .....	50
Economics .....	53
English .....	57
Environmental Studies .....	64
French .....	64
Geography .....	67
Geology .....	71
German .....	73
Greek .....	49
History .....	77
History in Art (see Faculty of Fine Arts) .....	138
Italian .....	76
Japanese .....	92
Latin .....	49
Liberal Arts .....	80
Linguistics .....	81
Marine Science .....	41
Mathematics .....	86
Microbiology .....	33
Pacific Studies .....	92
Philosophy .....	93
Physics .....	98
Political Science .....	102
Psychology .....	106
Russian .....	109
Serbo-Croatian .....	110
Social Work .....	110
Sociology .....	111
Spanish .....	75
Statistics .....	90
Women's Studies .....	112

## DEPARTMENT OF ANTHROPOLOGY

- Orville S. Elliot, A.B. (*Middlebury*), A.M., Ph.D. (*Harvard*), Associate Professor; and Chairman of the Department to June 30, 1978.
- William H. Alkire, B.A. (*Wash.*), M.A. (*Hawaii*), Ph.D. (*Ill.*), Associate Professor.
- N. Ross Crumrine, B.A. (*Northwestern*), M.A., Ph.D. (*Arizona*), Associate Professor.
- Leland H. Donald, B.A. (*Emory*), Ph.D. (*Ore.*), Associate Professor.
- Robert B. Lane, A.B., Ph.D. (*Wash.*), Associate Professor.
- Donald H. Mitchell, B.A., B.Com., M.A. (*Brit. Col.*), Ph.D. (*Ore.*), Associate Professor.
- Kathleen A. Mooney, B.A. (*U. of Vic.*), M.A., Ph.D. (*Michigan*), Assistant Professor.
- David S. Moyer, B.A. (*Franklin and Marshall Coll.*), M.A. (*Harvard*), Ph.D. (*Leiden*), Assistant Professor.
- Nicolas Rolland, B.Sc., M.A. (*Montreal*), Ph.D. (*Cantab.*), Assistant Professor.

Gail Thompson, B.A., M.A. (*Wash.*), Sessional Lecturer (1977-78).

John C. Yerbury, B.Ed., M.A. (*S. Fraser*), Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 153; for graduate courses, see page 32.

### GENERAL, MAJOR AND HONOURS PROGRAMMES

While Anthropology 100 is not required for the General, Major, or Honours Programmes, First Year students who plan to undertake any of these programmes are urged to enrol in the introductory course.

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

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

- 300, and at least one of 341 or 350;
- three units from 322, 323, 324, 325, 326, 327, 328, 329, 334, 339, chosen to include two ethnographic areas;
- three units from 400, 401, 416, 417, 418, 441;
- three units from 305, 306, 310, 335, 341, 350, 405, 406, 407, 412, 419, 449, 451;
- one of Linguistics 100, 220, 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 programmes.

NOTE: Anthropology 341 or 350 cannot be used simultaneously to fulfill both requirements (a) and (d).

**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 Programme 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:

- 300, 341, 350, and 499;
- three units chosen from 400, 416, and 417;
- three units from 322, 323, 324, 325, 326, 327, 328, 329, 334, 339, chosen to include two ethnographic areas;
- six units chosen to include at least one and a half units from each of the following groups:
  - 305, 306, 310, 335, 401, 405, 406, 407, 412, 418, 419;
  - 341, 441, 449 and 451.

In addition students will be expected to achieve satisfactory standing in courses in Linguistics and in techniques of analysis chosen in consultation with the Department. Students who are allowed to take 390 or 490 should consult the Department when planning their programmes.

The First Class Honours degree requires a grade point average of 6.5 or better in upper level courses. A Second Class Honours degree will be awarded for a grade point average between 3.5 and 6.49 in upper level courses. A student who fails to attain a grade average of 3.5 or better but who completes the requirements for the major degree may be awarded a major degree.

### UNDERGRADUATE COURSES

Unless indicated otherwise, courses begin in September and end in April.

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:

- Completion of Anthropology 100 as a prerequisite and completion of other prerequisites specified for the course selected.
- Completion of Anthropology 200 as a prerequisite or corequisite and completion of other prerequisites or corequisites specified for the course selected.
- The student has at least Third Year standing and the permission of the course Instructor.

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

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

**ANTH 100 (formerly 200). (3) Introduction to Anthropology**

Surveys the field and basic concepts of the discipline; origins of man and culture; nature of race; development of culture. The comparative study of cultural institutions such as social structure, language, art, religion. For students who have had no prior course in Anthropology. Anthropology 100 is intended for First Year students and others wishing a general survey of the field. (3-0; 3-0)

**ANTH 200 (formerly 201). (3) Cultural and Social Anthropology**

An introduction to the analysis of socio-cultural 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 Anthropology 321 rather than Anthropology 200.

Prerequisite: At least Second Year standing or completion of Anthropology 100. (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 Anthropology 100. September-December or January-April (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 Anthropology 100. September-December or January-April. (2-2)

**ANTH 300. (3) Comparative Social Organization**

Comparative analysis of social structure with emphasis on kinship oriented societies. Consideration of causes and conditions of change in social structures.

Prerequisite: Anthropology 200 or permission of instructor. (3-0;3-0)

**ANTH 305. (1½) Primitive Arts and Crafts**

The development and functions of arts and crafts in prehistoric and primitive cultures. Major traditions and their distributions.

September-December or January-April (3-0)

**ANTH 306. (1½) Folklore and Mythology**

Oral traditions of non-literate peoples. The structure and functions of specific types of materials. The relations of the study of folklore and mythology to other interests in Anthropology.

September-December or January-April. (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 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: Anthropology 100, or at least Third Year standing. (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.

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

**ANTH 323 (formerly 422). (1½) Ethnology of the 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.

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

**ANTH 325. (1½) Ethnology of South America**

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

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

**ANTH 326. (1½) Ethnology of Oceania: Micronesia and Polynesia**

Ethnological description and analysis of the cultures of Micronesia and Polynesia. September-December or January-April. (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.

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

**ANTH 329 (formerly 328). (1½) Ethnology of Southeast Asia**

An integrated description and analysis of the peoples and cultures of Mainland and Island Southeast Asia.

September-December or January-April. (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.

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

**ANTH 335 (Sociology 335). (3) Minority and Ethnic Group Relations**

Minority and ethnic groups within complex societies with special reference to Canada. (3-0; 3-0)

**ANTH 339. (3) Indians of the Pacific Northwest**

Native cultures of the Pacific Northwest and anthropological problems presented by this area; a survey of the native peoples of the New World; racial, linguistic and cultural relationships; intensive study of a few representative tribes. (3-0; 3-0)

**ANTH 341. (3) Old World Archaeology**

The archaeological record for the behavioural study of early and ancient societies as provided by the evidence from Africa, Eurasia and Oceania. Review of the direct evidence for subsistence systems, technologies, and past societies in a chronological and palaeo-environmental framework. Interpretation of the record from the earliest traces of hominid behaviour up to mediaeval times in an anthropological perspective.

Prerequisite: Anthropology 240. (3-0;3-0)

**ANTH 350 (formerly 340). (3) Evolution and Adaption in Human Populations**

Evolutionary theory and population biology with special reference to the evolution of man; bases of intra-population and inter-population variability; cultural biological interaction in contemporary populations. (Students will find some background in biology helpful for this course.)

Prerequisite: Anthropology 250 or at least Third Year standing and permission of the instructor. (3-0; 3-0)

**ANTH 390. (1½) Selected Problems in Anthropology**

Presentation of selected problems in Anthropology. Students interested in this course should inquire 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. (3) Anthropological Theory**

The first half of the course will present an integrated survey of anthropological theory. The second half will involve student and faculty presentations and discussions of specific theoretical points.

Open to third and fourth year students. (3-0; 3-0)

**ANTH 401. (1½) Cultural Ecology**

Theories concerning the relationship of man, culture and environment; cultural systems as the means by which human populations adapt to their environments.

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

**ANTH 405 (formerly 404, 405). (1½) Economic Anthropology**

A comparative analysis of the social context of production, distribution and exchange systems. September-December or January-April. (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. September-December or January-April. (3-0)

**ANTH 407. (1½) Symbolic Anthropology**

A comparative study of the function of symbolism in social, ritual, and cognitive systems. An examination of the structural and functional relations of cultural, social, and personality systems from the viewpoint of man as a symbolizing animal. Selected human groups will be analyzed from this point of view and the relations between symbolic systems and culture change will be discussed.

Prerequisite: In addition to Anthropology 100 or 200, 306 is recommended. September-December or January-April. (3-0)

**ANTH 412. (1½) Magic and Medicine in Tribal Societies**

Survey of anthropological theories of magic; consideration of the concept of ethnomedicine and its relation to magic; study of ethnographic literature relating to these topics.

Prerequisites: Anthropology 200 or permission of instructor. (3-0)

**ANTH 416. (1½, formerly 3) 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 or January-April. (3-0)

**ANTH 417. (1½) (formerly half of 416) Introduction to Anthropological Research: II**

Formal methods of analysis in Anthropology, especially statistics, problems of validation, and the comparative method.

Prerequisite: Anthropology 416, or permission of the instructor.

September-December or January-April. (2-2)

**ANTH 418 (Sociology 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.

September-December or January-April (3-0)

**ANTH 419 (Sociology 419). (1½) Modernization and Development**

Process of modernization. Industrialization and urbanization in the contemporary world.

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

**ANTH 441. (1½) Archaeological Method and Theory**

Techniques of excavation, description and analysis of archaeological materials, research design and preparation of reports; the historical and anthropological contexts of archaeological research.

Prerequisite: Anthropology 240.

September-December or January-April. (2-2)

**ANTH 449. (1½) Archaeology of the Pacific Northwest**

Intensive study of problems of interpreting Pacific Northwest archaeological data. Field trips will be scheduled.

September-December or January-April. (2-2)

**ANTH 451. (1½) Method and Theory in Physical Anthropology**

Advanced topics concerned with theory and method in physical anthropology. The course will include laboratory work in analysis of skeletal populations; anthropometric studies in living populations, and blood group analysis; lectures and seminars on the theory of population divergence; and introduction to quantitative methods in physical anthropology.

Prerequisites: Anthropology 350 or permission of instructor.

September-December or January-April. (2-2)

**ANTH 490. (1-3) Directed Studies**

Students may register for this course in the Fourth Year of the Major or Honours Programme with permission of the Department and the Instructor.

Prerequisites: Fourth Year standing and permission of the Department and the Instructor.

**ANTH 499. (3) Honours Seminar and Graduating Essay****GRADUATE COURSES****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

**\*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****ANTH 560 (Linguistics 560). (1½) Linguistic Anthropology****\*ANTH 590. (1½-3) Directed Studies****ANTH 599. (3) Thesis**

\*Students must consult the Department before enrolling in this course.

**DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY**

Alastair T. Matheson, B.A., M.Sc. (*Brit. Col.*), Ph.D. (*Tor.*), Professor and Chairman of the Department.

William W. Kay, B.Sc. (Agr.), M.Sc., Ph.D. (*Brit. Col.*), Associate Professor.

Jack L. Nichols, B.Sc., M.Sc., Ph.D. (*Alta.*), Associate Professor.

Trevor J. Trust, B.Sc., M.Sc., Ph.D. (*Melbourne*), Associate Professor.

Shiela A. Berry, B.Sc., M.Sc., Ph.D. (*Alta.*), Visiting Assistant Professor (part-time), (1977-78).

James T. Buckley, B.Sc., Ph.D. (*McGill*), Assistant Professor.

A. C. Blackwood, B.Sc. (*Alta.*), Ph.D. (*Wisc.*), Visiting Scientist (1977-78).

Gill G. Geesey, B.A. (*Calif., San Diego*), M.Sc., Ph.D. (*Ore. St.*), Sessional Lecturer (1977-78).

Edward E. Ishiguro, B.A., M.A. (*San Francisco St. Coll.*), Ph.D. (*Ill.*), Sessional Lecturer (1977-78).

**GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 153; for graduate courses, see page 34.

**GENERAL, MAJOR, AND HONOURS PROGRAMMES**

The Department offers Honours and Major programmes 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 programmes. The Major programmes 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 programmes.

**BIOCHEMISTRY AND MICROBIOLOGY PROGRAMMES**

	General	Major	Honours
First Year			
Math 130	(3)	Math. 130	(3) Engl. 121 (1½)
Chem. 124	(3)	Chem. 124	(3) Engl. 122 (1½)
Phys. 101 or 121	(3)	Phys. 101 or 121	(3) Math. 130 (3)
Other courses	(6)	Other courses	(6) Chem. 124 (3)
			Phys. 101 or 121 (3)
			Other courses (3)
Second Year			
Math. 230	(3)	Math. 230	(3) Math. 230 (3)
Chem. 233*	(3)	Chem. 233*	(3) Chem. 233* (3)
(or 230)		(or 230)	
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

Prerequisite: In addition to Anthropology 100 or 200, 306 is recommended. September-December or January-April. (3-0)

**ANTH 412. (1½) Magic and Medicine in Tribal Societies**

Survey of anthropological theories of magic; consideration of the concept of ethnomedicine and its relation to magic; study of ethnographic literature relating to these topics.

Prerequisites: Anthropology 200 or permission of instructor. (3-0)

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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 or January-April. (3-0)

**ANTH 417. (1½) (formerly half of 416) Introduction to Anthropological Research: II**

Formal methods of analysis in Anthropology, especially statistics, problems of validation, and the comparative method.

Prerequisite: Anthropology 416, or permission of the instructor. September-December or January-April. (2-2)

**ANTH 418 (Sociology 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.

September-December or January-April (3-0)

**ANTH 419 (Sociology 419). (1½) Modernization and Development**

Process of modernization. Industrialization and urbanization in the contemporary world.

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

**ANTH 441. (1½) Archaeological Method and Theory**

Techniques of excavation, description and analysis of archaeological materials, research design and preparation of reports; the historical and anthropological contexts of archaeological research.

Prerequisite: Anthropology 240. September-December or January-April. (2-2)

**ANTH 449. (1½) Archaeology of the Pacific Northwest**

Intensive study of problems of interpreting Pacific Northwest archaeological data. Field trips will be scheduled.

September-December or January-April. (2-2)

**ANTH 451. (1½) Method and Theory in Physical Anthropology**

Advanced topics concerned with theory and method in physical anthropology. The course will include laboratory work in analysis of skeletal populations; anthropometric studies in living populations, and blood group analysis; lectures and seminars on the theory of population divergence; and introduction to quantitative methods in physical anthropology.

Prerequisites: Anthropology 350 or permission of instructor. September-December or January-April. (2-2)

**ANTH 490. (1-3) Directed Studies**

Students may register for this course in the Fourth Year of the Major or Honours Programme with permission of the Department and the Instructor.

Prerequisites: Fourth Year standing and permission of the Department and the Instructor.

**ANTH 499. (3) Honours Seminar and Graduating Essay****GRADUATE COURSES****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:

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- 510B Economic Anthropology
- 510C Political Anthropology
- 510D Anthropology of Religion
- 510E Symbolic Anthropology
- 510F Cultural Ecology
- 510G Cultural Change

**\*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****ANTH 560 (Linguistics 560). (1½) Linguistic Anthropology****\*ANTH 590. (1½-3) Directed Studies****ANTH 599. (3) Thesis**

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**BIOCHEMISTRY AND MICROBIOLOGY PROGRAMMES**

	General		Major		Honours	
First Year	Math 130	(3)	Math. 130	(3)	Engl. 121	(1½)
	Chem. 124	(3)	Chem. 124	(3)	Engl. 122	(1½)
	Phys. 101 or 121	(3)	Phys. 101 or 121	(3)	Math. 130	(3)
	Other courses	(6)	Other courses	(6)	Chem. 124	(3)
					Phys. 101 or 121	(3)
					Other courses	(3)
Second Year	Math. 230	(3)	Math. 230	(3)	Math. 230	(3)
	Chem. 233*	(3)	Chem. 233*	(3)	Chem. 233*	(3)
	(or 230)		(or 230)		(or 230)	
	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

Third and Fourth Years	Third Year	Third Year
Nine additional units of Biochemistry and Microbiology numbered 300 and above (9)	Chem. 224 (3) Bioc. 300 (3)  Micr. 300 (3)  Bioc. 380 or Micr. 380 (0) Other courses (6)	Chem. 224 (3) Bioc. 300 (3)  Micr. 300 (3)  Bioc. 380 or Micr. 380 (0) Other courses (9)
Nine units in a second area of concentration (9)	Fourth Year Chem. 335, 338, 345 or 346 (3) Bioc. 400 (3) Micr. 400 (3) Bioc. 480 or Micr. 480 (1½) Other courses (4½)	Fourth Year Chem. 335, 338, 345 or 346 (3) Bioc. 400 (3) Micr. 400 (3) Bioc. 480 or Micr. 480 (1½) Micr. 499 (3) Other courses (4½)
Other courses (12)		

Other courses suggested:

English 200 or higher level courses  
Language 100 or higher level courses  
Mathematics 110, 210  
Statistics 253  
Computing Science 170, 171  
Chemistry 316, 317, 324, 325, 338, 345, or 346, or 400 level courses  
Biology 203, 204, 206, 207, 300, 302, 304, 305, or 400 level courses  
Physics 214, 215, 216, 217, 316, 317 or 325  
Biochemistry 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 in other modern languages 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.

**HONOURS**

Students who wish to be admitted to one of the Honours programmes 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 programme are specified above. Normally admission to the Honours programme 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 programme is required to meet the general regulations of the University on pages 13 to 16 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 Programme 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 grade point 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: Biology 200 which should be taken in the second term (see Biology 200 Calendar entry).

Pre- or Corequisite: Chemistry 230 or 233.

September-December (3-2)

**BIOC 201. (1½) Introduction to Nutritional Biochemistry**

The characteristics of man's various nutrient requirements and their relations to the Biochemical mechanisms of the cell will be considered. The course will be oriented to students seeking a knowledge of man's nutritive needs and the food supplies and procedures available to meet them.

J. T. Buckley.

January-April (3-0)

**BIOC 300. (3) General Biochemistry**

A general course in Biochemistry. Protein structure, enzyme kinetics, bioenergetics and metabolism. Metabolic control systems. Synthesis of DNA and RNA, protein synthesis and morphogenesis.

Prerequisites: Biochemistry 200, Biology 200.

Texts: Lehninger, *Biochemistry*; Biochemistry 300 Laboratory Manual. (3-3; 3-3)

**BIOC 380. (0) Seminar**

Attendance and participation in either Biochemistry 380 or Microbiology 380 is required for students in the third year of the Major and Honours programmes. Credit for attendance will not be given for both Biochemistry 380 and Microbiology 380. Attendance is recommended for students in their first and second years who plan to enter Major and Honours programmes. (Grading: COM, N, or F.) (2-0; 2-0)

**BIOC 400. (3) Macromolecules**

An advanced study of the biosynthesis, functions and regulation of biological macromolecules. Topics will include the nucleic acids and proteins, supramolecular organization and functions of ribosomes, viruses, biological membranes, and bioenergetics.

Prerequisite: Biochemistry 300, or permission of the Department.

Texts: Selected reading from the literature; Watson, *The Molecular Biology of the Gene*; Parsons, *Biological Membranes*; Biochemistry 400 Laboratory Manual. (2-4; 2-4)

**BIOC 470. (1½ or 3) Directed Studies in Biochemistry**

Members of the Department.

**BIOC 480. (1½) Seminar**

Attendance and participation in either Biochemistry 480 or Microbiology 480 is required of all students in the fourth year of the Major and Honours programmes. Credit will not be given for both Biochemistry 480 and Microbiology 480. (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 Biochemistry 499 and Microbiology 499.

**MICROBIOLOGY**

**MICR 101 (formerly BACT 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.

Texts: Smith, *Principles of Microbiology*; Microbiology 101 Laboratory Manual. September-December. Also January-April. (2-2)

**MICR 200 (formerly BACT 200). (3) Introductory Microbiology**

The nature, characteristics and activities of micro-organisms, their relation to health and diseases of animals, plants and man, their role in industry and in the environment, and methods used for their control. The laboratory provides an introduction to microbiological techniques.

Texts: Pelczar and Reid, *Microbiology*; Microbiology 200 Laboratory Manual. (2-2; 2-2)

**MICR 300 (formerly BACT 300). (3) General Microbiology and Immunology**

A detailed consideration of selected groups of micro-organisms with emphasis on the bacteria, and including aspects of applied and environmental microbiology. The fundamental principles of immunology, including consideration of the interaction between the immune system and infectious agents. The laboratory provides practical illustration and application of lectures.

Suggested prerequisite: Microbiology 200.

Texts: Selected readings from the literature: Roitt, *Essential Immunology*, 2nd ed; Microbiology 300 Laboratory Manual. (2-3; 2-3)

**MICR 380 (formerly BACT 380). (0) Seminar**

Attendance and participation in either Microbiology 380 or Biochemistry 380 is required of students in the third year of the Major and Honours programmes. Credit for attendance will not be given for both Microbiology 380 and Biochemistry 380. Attendance is recommended for students in their first and second years who plan to enter Majors and Honours programmes. (Grading: COM, N, or F.) (2-0; 2-0)

**MICR 400 (formerly BACT 400). (3) Advanced Microbiology**

An advanced consideration of molecular aspects of bacteria and viruses. Expression and control of genetic information and the effects on metabolism will be emphasized. Molecular biology of plant, animal and bacterial viruses will be considered with emphasis on structure, morphogenesis and gene expression.

Prerequisites: Biochemistry 300 and Microbiology 300, or permission of the Department.

Texts: Selected readings from the literature; Microbiology 400 Laboratory Manual. (2-3; 2-3)

**MICR 470 (formerly BACT 470). (1½ or 3) Directed Studies in Microbiology**

Members of the Department.

**MICR 480 (formerly BACT 480). (1½) Seminar**

Attendance and participation in either Biochemistry 480 or Microbiology 480 is required of all students in the fourth year of the Major and Honours programmes. Credit will not be given for both Biochemistry 480 and Microbiology 480. (2-0; 2-0)

**MICR 499 (formerly BACT 499). (3) Undergraduate Thesis**

Research under the direction of a faculty member. Open to Honours students only. Credit will not be given for both Biochemistry 499 and Microbiology 499.

**GRADUATE COURSES****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.

**BIOC 510. (3) Topics in Biochemistry**

An intensive consideration of recent advantages in the discipline. Topics will encompass a wide range of aspects of biochemistry including the chemistry of nucleic acids, proteins and metabolism and application in areas of medicine, agriculture, and industry.

**BIOC 570. (1-3) Directed Studies in Biochemistry**

A wide range of biochemical topics will be available for assignment. Topics will be restricted to recent advances. The student's graduate advisor 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 (formerly BACT 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 micro-organisms.

**MICR 510 (formerly BACT 510). (3) Topics in Microbiology**

An intensive consideration of recent advances in the discipline. Topics will of necessity encompass a wide range of micro-biological fields from the chemistry of microbial genes to aspects of industrial and pathogenic microbiology.

**MICR 570 (formerly BACT 570). (1-3) Directed Studies in Microbiology**

A wide range of micro-biological topics will be available for assignment. Topics will be restricted to an analysis of recent advances. The student's graduate advisor will not normally participate in directed studies taken for more than one unit credit.

**MICR 580 (formerly BACT 580). (1) Seminar**

Attendance and participation are required. Formal presentation of a major research topic in Microbiology other than the student's own research will be required.

**MICR 599 (formerly BACT 599). (Credit to be determined) M.Sc. Thesis - Microbiology****MICR 699. (Credit to be determined) Ph.D. Dissertation - Microbiology****DEPARTMENT OF BIOLOGY**

Arthur R. Fontaine, B.Sc. (*McGill*), D.Phil. (*Oxon.*), Professor and Chairman of the Department.

F. Thomas Algard, A.B. (*San Jose St.*), Ph.D. (*Stanford*), Professor.

Michael J. Ashwood-Smith, B.Sc., M.Sc. (*Durham*), Ph.D. (*London*), Professor.

W. Gordon Fields, B.A. (*Brit. Col.*), A.M., Ph.D. (*Stanford*), Professor Emeritus (Visiting Professor, 1977-78).

George O. Mackie, B.A., M.A., D.Phil. (*Oxon.*), Professor.

John N. Owens, B.S. (*Portland St.*), M.S., Ph.D. (*Ore.*), Professor.

Alan P. Austin, B.Sc., Ph.D. (*Wales*), Associate Professor.

David J. Ballantyne, B.Comm. (*Brit. Col.*), M.Sc. (*Wash. St.*), Ph.D. (*Maryland*), Associate Professor.

Marcus A. M. Bell, B.S.F. (*Brit. Col.*), M.F. (*Yale*), Ph.D. (*Brit. Col.*), R.P.F., Associate Professor and Curator of the Herbarium.

Derek V. Ellis, B.Sc. (*Edin.*), M.Sc., Ph.D. (*McGill*), Associate Professor.

Edwin M. Hagmeier, B.A. (*Queen's*), M.A., Ph.D. (*Brit. Col.*), Associate Professor.

John S. Hayward, B.Sc., 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.

John E. McInerney, B.Sc. (*Ottawa*), M.Sc., Ph.D. (*Brit. Col.*), Associate Professor. (On leave of absence 1978-79).

John W. Paden, B.S. (*Calif.*), M.S., Ph.D. (*Idaho*), Associate Professor.

Robert G. B. Reid, B.Sc., Ph.D. (*Glasgow*), 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.

Patrick T. Gregory, B.Sc. (*Tor.*), M.Sc., Ph.D. (*Man.*), Assistant Professor.

Brian M. Marcotte, B.Sc. (*Stonehill*), M.A. (*Clark*), Ph.D. (*Dalhousie*), Assistant Professor.

Miles Paul, A.B. (*Harvard*), Dip. in Educ. (*Makerere*), Ph.D. (*Stanford*), Assistant Professor. (On study leave 1978-79.)

Edward Anderson, B.A. (*Harvard*), Ph.D. (*Dalhousie*), Part-time Sessional Lecturer (1977-78).

Linda Gregory, B.A. (*Queen's*), M.Sc. (*Man.*), Part-time Sessional Lecturer (January-April 1978).

David W. Jamieson, A.B., M.A. (*Humboldt St. Coll.*), Ph.D. (*Brit. Col.*), Sessional Lecturer (1977-78).

Thomas F. Mace, B.Sc. (*U. of Vic.*), M.Sc. (*Nfld.*), Ph.D. (*Guelph*), Sessional Lecturer (1977-78).

James P. Pojar, B.Sc., M.Sc. (*Minn.*), Ph.D. (*Brit. Col.*), Part-time Sessional Lecturer (January-April 1978).

Ralph O. Brinkhurst, B.Sc., Ph.D., D.Sc. (*London*), Honorary Professor.

Arthur T. Bergerud, B.Sc. (*Ore. St.*), M.Sc. (*Wis.*), Ph.D. (*Brit. Col.*), Honorary Associate Professor.

Harriet McCurdy Blanchard, B.Sc. (*Calif., Berkeley*), M.Sc., Ph.D. (*Iowa*), Honorary Research Associate.

Hamish D. W. Bridgman, C.D., B.Sc. (*U. of Vic.*), B.A., M.A. (*Cantab.*), Administrative Officer.

Hans (Jack) F. Dietrich, Senior Scientific Assistant.

Yousuf A. Ebrahim, M.Sc. (*York*), Senior Laboratory Instructor.

W. James Morris, B.Sc. (*U. of Vic.*), Senior Laboratory Instructor.

John G. S. Trelawny, B.Sc. (*U. of Vic.*), Senior Laboratory Instructor.

**GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 154; for graduate courses, see page 42.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

In all cases, students planning a programme in Biology should consult with the Department Office for advice.

Honours and Major programmes 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 Programmes are outlined on this page. A number of programmes are suggested on pages and for students interested in particular areas of biology.

B.Sc. General and B.A. General programmes should be chosen to meet the requirements as set out in the Programme outline on this page.

**NOTES:** (These refer to the Biology Programmes chart below.)

1) Biology 150 or equivalent is prerequisite to all other courses in the Department unless otherwise stated in course descriptions. The Biology 150 requirement may be considered fulfilled by any one of: Biology 105, Botany 105, Zoology 105, Bacteriology 200, Grade XIII Biology, Botany or Zoology. Students who have passed Biology 11 and 12 may enroll in courses for which Biology 150 is prerequisite while students having credit only in Biology 11 should take Biology 150. Students having only Biology 11 may, under special circumstances, bypass Biology 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 both Physics 11 and 12, or by Physics 101. Physics 101 requires Mathematics 102 or 130 as corequisite.

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 Chemistry 124 as prerequisite for Chemistry 224.

4) Mathematics 130 or equivalent must be taken if a student intends to take advanced courses in Mathematics, Chemistry or Physics; otherwise Mathematics 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 Biochemistry 200 (1½) and Biology 200 (1½) sequence of courses may count 1½ units for Biochemistry 200 towards the minimum of 6 units of 200 level Biology required for a B.Sc. General or B.A. General degree.

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. Programme, the Honours Programme 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 29: Fourth Year Credit for Medical Studies) 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 programme. 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 29 can be met.

Students may be required to meet part of the expenses involved in required field trips or the supplying of course manuals.

## BIOLOGY PROGRAMMES

B.Sc. HONOURS		B.Sc. MAJOR	
<b>Core</b>		<b>Core</b>	
Biol. 150 (1)	3	Biol. 150 (1)	3
Bioc. 200	1½	Bioc. 200	1½
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. 303, 305 or 331	3	One of Biol. 303, 305, or 331	3
Biol. 304	3	Minimum of 9 Biology units chosen to complete programme (5)	9
Biol. 460	1		
Biol. 499	3		—

Minimum of 12 Biology units chosen to complete programme (5)	12	Minimum No. of Biology units	27
Minimum No. of Biology units	37	<b>Corequisites</b>	
<b>Corequisites</b>		Phys. 101 (2)	3
Phys. 101 (2)	3	Chem. 124 (3)	3
Chem. 124 (3)	3	Math. 130 or 102/151 or equivalent (4)	3
Math. 130 or 102/151 or equivalent (4)	3	Chem. 230 or 233	3
Chem. 230 or 233	3	Electives	21
Electives	12	<b>TOTAL UNITS</b>	<b>60</b>
<b>TOTAL UNITS</b>	<b>61</b>		

B.Sc. GENERAL		B.A. GENERAL	
Biol. 150 (1)	3	Biol. 150 (1)	3
Minimum of 6 units of 200 level Biology courses (6)	6	Minimum of 6 units of 200 level Biology courses (6)	6
Minimum of 9 units of acceptable Biology courses numbered 300 and above (5)	9	Minimum of 9 units of acceptable Biology courses numbered 300 and above (5)	9
Minimum No. of Biol. units	18	Minimum No. of Biol. units	18
Phys. 101 (2)	3	<b>Corequisites</b>	
Chem. 120 or 124 (3)	3	Chem. 120 or 124 (3)	3
Math. 130 or 102/151 or equivalent (4)	3		

<sup>1</sup> See note 1) on left.

<sup>3</sup> See note 3) on left.

<sup>5</sup> See note 5) on left.

<sup>2</sup> See note 2) on left.

<sup>4</sup> See note 4) on left.

<sup>6</sup> See note 6) on left.

## RECOMMENDED PROGRAMMES FOR MAJORS AND HONOURS

The five suggested programmes listed on the following pages are examples of programmes commonly chosen but they are not intended to be the only options available. Programmes designed to fit the specific needs of a student may be made with the approval of the Department as long as they fulfil the requirements listed in the Biology Programmes chart above.

### MAJOR

#### Suggested Programme in Botany

First Year	Second Year	Third Year	Fourth Year
Biol. 150 <sup>1</sup>	3 Bioc. 200/ Biol. 200	3 Biol. 300/ 306	3 Biol. 318/ 418
Chem. 124	3 Biol. 203/ 204	3 Biol. 331	3 Biology Group I Electives <sup>4</sup>
Phys. 101	3 Biol. 206/ 207	3 Biol. 343 and 344	3
Math 102/ 151 or 130 or equivalent	Chem. 230 or 233	3	
Electives <sup>2</sup>	3 Electives <sup>2</sup>	3 Electives <sup>3</sup>	6 Electives <sup>3</sup>
	15	15	15

<sup>1</sup> See Note 1, page 36.

<sup>3</sup> See Note 3, page 36.

<sup>2</sup> See Note 2, page 36.

<sup>4</sup> See Note 4, page 36.

#### Biology Group I Electives

Biol. 315 (3), 411 (3), 420 (1½), 422 (1½), 423 (1½), 453 (1½).

**Departmental Advisors in Botany:** Drs. Austin (Phycology), Ballantyne (Physiology), Bell (Ecology and Taxonomy), Owens (Morphogenesis) and Paden (Mycology).

**Suggested Programme in Ecology**

First Year	Second Year	Third Year	Fourth Year	
Biol. 150 <sup>1</sup>	3 Bioc. 200/ Biol. 200	Biol. 300/ 3 306	Biol. 427 3	1½
Chem. 124	3 Biol. 203/ 204	Biol. 305 3 or 331	Biol. 440 3	1½
Phys. 101	3 Biol. 206/ 207	Biol. 318/ 3 418	Biology 3 Group II Electives <sup>4</sup>	3
Math. 102/ 152 or 130 or equivalent	Chem. 230 or 233	3		
Electives <sup>2</sup>	3 Electives <sup>2</sup>	3 Electives <sup>3</sup>	6 Electives <sup>3</sup>	9
	15	15	15	15

**Biology Group II Electives**

Biol. 406 (3), 408 (1½), or 316\* (1½), 411 (3), 420 (1½), 425 (3), 426 (3), 427 (1½), 428 (1½), 432 (1½), 453 (1½).

\*with Departmental permission.

**Departmental Advisors in Ecology:** Drs. Austin (Marine and Freshwater Plant), Bell (Terrestrial Plants), Ellis (Marine), Gregory (Terrestrial and Population), Hagmeier (Terrestrial and Freshwater), Marcotte (Marine and Theoretical).

**Suggested Programme in Functional Biology**

First Year	Second Year	Third Year	Fourth Year	
Biol. 150 <sup>1</sup>	3 Bioc. 200/ Biol. 200	Biol. 300/ 3 306	Biology 3 Group III Electives <sup>4</sup>	6
Chem. 124	3 Biol. 203/ 204	Biol. 305 3 or 331	3	
Phys. 101	3 Biol. 206/ 207	Biol. 309 3 or 343	1½	
		Biology Group III Electives	1½	
Math. 102/ 151 or 130 or equivalent	Chem. 230 or 233	3		
Electives <sup>2</sup>	3 Electives <sup>2</sup>	3 Electives <sup>3</sup>	6 Electives <sup>3</sup>	9
	15	15	15	15

**Biology Group III Electives:**

Biol. 302\* (3), 309 (1½), 343 (1½), 401 (3), 403 (3), 405 (3), 409 (3), 344 (1½) or 417 (1½), 419 (1½), 424 (1½), 425 (3), 433 (3).

**Departmental Advisors in Functional Biology:** Drs. Algard (Growth and Development), Ashwood-Smith (Cell Physiology), Ballantyne (Plant Physiology), Fields (Invertebrate Embryology), Fontaine (Invertebrate Functional Morphology and Ultrastructure), Hayward (Whole Animal Physiology), McInerney (Environmental and Fish Physiology), Owens (Plant Morphogenesis), Paul (Developmental Zoology), Styles (Genetics).

**Suggested Programme in Marine Biology**

First Year	Second Year	Third Year	Fourth Year	
Biol. 150 <sup>1</sup>	3 Bioc. 200/ Biol. 200	Biol. 300/ 3 306	Biol. 301 3 or 311	3
Chem. 124	3 Biol. 203/ 204	Biol. 305 3 or 331	Biology 3 Group IV Electives <sup>4</sup>	3
Phys. 101	3 Biol. 206/ 207	Biol. 301 3 or 311	3	
Math. 102/ 151 or 130 or equivalent	Chem. 230 or 233	3		
Electives <sup>2</sup>	3 Electives <sup>2</sup>	3 Electives <sup>3</sup>	6 Electives <sup>3</sup>	9
	15	15	15	15

**Biology Group IV Electives:** Biol. 314 (3), 403 (3), 406 (3), 411 (3), 414 (3), 425 (3), 431 (3), 450 (1½), 451 (1½), 452 (1½).

**Departmental Advisors in Marine Biology:** Drs. Ellis (Benthic Ecology), Fields (Marine Invertebrates: Embryology), Fontaine (Marine Invertebrates: Functional Morphology), Hobson (Oceanography: Phytoplankton), Littlepage (Oceanography: Zooplankton), Mackie (Marine Invertebrates: Behavioural Physiology and Ultrastructure), Marcotte (Oceanography: Benthos), McInerney (Fish: Physiology and Behaviour), Paul (Marine Embryology), Reid (Marine Invertebrates: Physiology).

**Suggested Programme in Zoology**

First Year	Second Year	Third Year	Fourth Year	
Biol. 150 <sup>1</sup>	3 Bioc. 200/ Biol. 200	Biol. 300/ 3 306	Biology 3 Group V Electives <sup>4</sup>	6
Chem. 124	3 Biol. 203/ 204	Biol. 305 <sup>3</sup> 3		
Phys. 101	3 Biol. 206/ 207	Biol. 309 3 Biology Group V Electives	1½	
Math. 102/ 151 or 130 or equivalent	Chem. 230 or 233	3		
Electives <sup>2</sup>	3 Electives <sup>2</sup>	3 Electives <sup>3</sup>	6 Electives <sup>3</sup>	9
	15	15	15	15

**Biology Group V Electives:** Biol. 301 (3), 302\* (3), 312/313 (3), 314 (3), Biol. 403 (3), 412 (1½), 417/419 (3), 425 (3), 427/428 (3), 431 (3), 432 (1½), 437 (1½), 444/445 (3).

**Departmental Advisors in Zoology:** Drs. Fields (Invertebrates), Hayward (Mammalian Physiology), Mackie (Invertebrates), Marcotte (Invertebrates), McInerney (Ichthyology), Paul (Development Zoology), Ring (Entomology).

**NOTES:** (These refer to Suggested Programme charts on pages 35 and 36.)

1) Students who bypassed Biology 150 should take three units selected from Biology 203, 204, 206, and 207 in their first year and Biology 300 and 306 in their second year. They must choose an additional three units of course-work to be taken in their third or fourth year, either from the appropriate Suggested Programme 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 advisor regarding the desirable choice of electives for any particular area of interest within this option. Biology 304 is strongly recommended for all Biology Majors.

4) See note 5) on page 35.

## HONOURS

Honours students should complete the programme of required courses and Biology electives as described for the Major, and in addition should take Biol. 304 (3) preferably in their third year, Biol. 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 must discuss their proposed thesis research with a Department faculty member and obtain his approval to serve as their thesis supervisor prior to March 1 of their third year of studies. They should apply in writing to the Chairman of the Biology Department for admission to the Honours programme following agreement of a faculty member to act as supervisor, and also no later than March 1 of their third year of studies. The completed thesis will be examined by a small committee including the supervisor. Intending applicants should have and should maintain a B+ average 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 Biol. 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 Biol. 499. A student who obtains a first class average in his 300 and 400 level courses but second class standing in Biology 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 less than second class standing in Biology 499 will graduate under the Major programme provided he fulfills other requirements for the degree.

The submission date for the thesis is the last day of lectures.

**A student with a D, E, or F grade in any Biology course is advised not to register for further courses in the Department and may not do so without permission of the Department. Provision exists for writing a supplemental examination to improve a course grade.**

## UNDERGRADUATE COURSES

### BIOLOGY

*Unless indicated otherwise, courses begin in September and end in April.*

NOTE: Biology 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 35.

#### **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 35.)

Text: Kirk and Starr, *Biology Today*, (2nd Ed.)

R.A. Ring and Members of the Department. (3-3; 3-3)

#### **BIOL 200 (formerly 402). (1½, formerly 3) 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 Biochemistry 200 Calendar entry).

Pre- or corequisites: Chemistry 230 or 233.

Prerequisite: Biochemistry 200.

F. T. Algard, M. J. Ashwood-Smith, R. G. B. Reid.

January-April (0-0; 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. Not open to students with credit for Botany 205.

Text: To be announced.

A. P. Austin, 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. Not open to students with credit for Botany 205.

Text: To be announced.

J. N. Owens.

January-April (3-3)

#### **BIOL 206. (1½) Invertebrate Zoology**

History of invertebrate animals, including taxonomy, morphology, life histories and phylogeny. Not open to students with credit for Zoology 301.

Texts: To be announced.

B. M. Marcotte.

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

#### **BIOL 207. (1½) Chordate Zoology**

A maximum credit of 1½ units can be obtained in this course.

September-December: In this section the patterns of chordate evolution from the point of view of organism-environment interactions will be emphasized. Changes in the structure and organization of vertebrate systems will be studied in relation to the succession of environments exploited by the chordates. This section is recommended for major and non-major students except as follows:

January-April: This section will stress the structure and organization of vertebrate organ systems. Students intending to register later, in Biology 302 (Microanatomy), Biology 303 (Vertebrate Physiology) or who are preparing for future studies in the Health Sciences are advised to register in this section.

Not open to students with credit for Zoology 202.

Text: To be announced.

J. S. Hayward.

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

#### **BIOL 300. (1½) Genetics**

A discussion of the gene concept in the light of present knowledge concerning the nature and function of the genetic material. Reproduction and heredity in eucaryotes and procaryotes; classical concept of the gene; genetic control of biochemical reactions, growth and differentiation; genetic variation in individuals and in populations; genetics and evolution; genetics and man. Demonstration sessions will be arranged. Biology honours and major students should take this course in conjunction with Biology 306.

Pre- or corequisite: Biology 200 (Cell Biology).

Students are strongly advised to delay taking Biology 300 until after they have successfully completed Biology 200 (Cell Biology).

Texts: Merrell, *An Introduction to Genetics*.

E. D. Styles.

January-April (3-2)

#### **BIOL 301 (formerly ZOO 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: Biology 206. Corequisite: Biology 303 or 305 (Zoology 303 or 305).

Texts: To be announced.

A. R. Fontaine.

(2-3; 2-3)

#### **BIOL 302 (formerly ZOO 302). (3) Microanatomy**

A course designed to lead to an understanding of the microscopic structure of the cells, tissues, and organs of higher vertebrates. Functions of specialized cells will be discussed and also those changes in structure and function which occur during reproduction and development. Emphasis is placed on the human. Reading is normally limited to suitable textbook material, however, opportunities exist for outside reading. Essays, reports, papers or drawings are not required. Criteria for entry: Third or fourth year honours, major, and pre-profession students or permission of the instructor.

Pre- or corequisites: Zoology 202 or Biology 207. Biology 303 (Zoology 303) is desirable.

Texts: Copenhaver, *Bailey's Textbook of Histology*; Patten, *Foundations of Embryology*.

F. T. Algard.

(2-3; 2-3)

#### **BIOL 304. (3) Biometrics**

Introduction of the student to layout, analysis and interpretation of biological experiments. Introduction to probability and statistics; probability distributions, sampling methods; tests of hypotheses; analysis of variance; linear and curvilinear regression; covariance; non-parametric tests.

Weekly laboratory assignments involving problems.

Prerequisites: Mathematics 102/151 or 130 or equivalent.

Texts: Zar, *Biostatistical Analysis*.

P. T. Gregory.

(2-3; 2-3)

#### **BIOL 305 (formerly ZOO 305). (3) Animal Physiology**

A general survey of the physiology of animals from single-celled to human levels of organization.

The following systems will be treated: nutritional; digestive; osmoregulatory; excretory; respiratory; thermoregulatory; neuromuscular and endocrinal. In addition physiological aspects of defence, animal associations and behaviour will be studied.

Pre- or corequisites: Biochem 200, Biology 200 or equivalent. Chemistry 230 or 233. Students are strongly advised to delay taking Biology 305 until after they have successfully completed these courses. Not normally open to students in 2nd year.

Texts: To be announced.

J. S. Hayward, R. G. B. Reid. (2-3; 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 Biology 300.

Texts: To be announced.

P. T. Gregory, D. V. Ellis, E. M. Hagmeier. September-December (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 and aging.

Prerequisites: Biology 200, 206 and 207 or permission of instructor.

Text: Berrill and Karp, *Developmental Biology*.

September-December (2-3)

### **BIOL 310. (3) Elements of Oceanography**

A non-technical 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 2nd, 3rd and 4th years.

Biology 150 is not required for this course. Credit for this course will not be counted toward degree programmes in Biology. Students planning to proceed to other courses in Oceanography must take Biology 311. Credit will not be given for both Biology 310 and 311.

Texts: Anikouchine and Sternberg, *The World Ocean*; Russell-Hunter, *Aquatic Productivity*.

J. L. Littlepage (3-0; 3-0)

### **BIOL 311. (3) Introduction to Oceanography**

An introduction to the concepts of physical, chemical, geological and biological oceanography. Designed for biology programmes, this course will provide a broad, comprehensive study of the open ocean. Lectures will be supplemented by laboratory experience in the techniques of modern oceanography. Participation in single day cruises is expected. This course may be taken by students with 3rd year standing or higher.

Prerequisites: Physics 101 or 103; Mathematics 151/102 or 130; Chemistry 120 or 124; Biology 203 or Botany 205; and Biology 206 or Zoology 301. Non-biology science majors wishing this course should consult with the instructor for special permission. Credit will not be given for both Biology 310 and 311.

Texts: Gross, *Oceanography*.

L. A. Hobson. (2-3; 2-3)

### **BIOL 312 (formerly ZOO 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 50 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 Biology 313.

Pre- or corequisites: Biology 206 or Zoology 301.

Text: Borror & DeLong, *An Introduction to the Study of Insects*.

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: Biology 150 or written permission of instructor.

Texts: Assigned readings.

R. A. Ring. September-December (3-0)

### **BIOL 314. (3) Natural History of Marine Invertebrates**

General problems of ecology, morphology, physiology and life histories of marine invertebrates. Students will become familiar with local fauna through field trips to a variety of marine habitats and through study of living animals in the laboratory. Results of individuals projects will be reported in seminars.

Prerequisite: Biology 206 or equivalent. Not open to students with credit in Biology 311 and Biology 406.

Credit will not be given for both Biology 314 and Marine Science 410.

Text: To be announced.

B. M. Marcotte. (2-3; 2-3)

### **BIOL 315. (3) Introductory Mycology**

Morphology and biology of fungi. Basidiomycetes, Chytridiomycetes, Oomycetes, Zygomycetes and Myxomycetes will be treated during the first term. Ascomycetes and imperfect fungi will be treated during the second term, as well as important fungal plant diseases. Specialized isolation, culture, and cytological techniques will be presented. Readings in the current literature will supplement the text. A collection of at least 25 properly annotated genera and a research project are required for completion of the course.

Prerequisite: Botany 205 or Biology 203 or permission of instructor.

Not open to students with credit for Biology or Botany 415.

Text: Alexopolous, *Introductory Mycology*.

J. W. Paden. (2-3; 2-3)

### **BIOL 316. (1½) Environmental Issues**

An interdisciplinary course broadly dealing with man in the ecosystem. Participation by non-biologists is encouraged. Through informal discussion, field trips, and projects chosen by class interest, the course seeks to improve communication between disciplines on environmental issues and generally to broaden perspectives on environment-man relationships.

Requirements: active participation in discussion, participation in two 4-day weekend field trips in mid-September and November, and a project presentation. Normally not for credit towards degree programmes in Biology but may be taken as a free elective by Biology Majors. Open to students from any department with at least two years of university or comparable experience.

Text: Assigned Readings.

M. A. M. Bell. September-December (3-0)

### **BIOL 318. (1½) Taxonomy of Flowering Plants**

An introduction to plant systematics with emphasis on angiosperms; principles of classification; nomenclature, identification; seminars on contemporary topics; familiarization with selected plant families of British Columbia; field trips.

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: Botany 205 or Biology 204 or written permission of the instructor.

Texts: C. L. Porter, *Taxonomy of Flowering Plants*; Harrington & Durrell, *How to Identify Plants*.

M. A. M. Bell. 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 sessions will be arranged. Open to non-Biology and general programme Biology students. Biology honours and major students should register for Biology 300. Credit will not be given for both Biology 300 and Biology 320.

Prerequisites: 2nd, 3rd, or 4th year students with Biology 150 or equivalent, or written permission of instructor.

Texts: To be announced.

E. D. Styles. September-December (3-0)

### **BIOL 329 (formerly ZOO 416). (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 project must also be completed. Field trips will be planned when possible.

Prerequisites: Biology 207 or Zoology 202, or written permission of Department.

Texts: Robbins, *et al*, *Field Guide to Birds of North America*; Cowan & Guignet, *The Mammals of British Columbia*; Stebbins, *A Field Guide to Western Reptiles and Amphibians*.

P. T. Gregory.

January-April (2-3)

**BIOL 331 (formerly BOTA 331). (3) Introductory Plant Physiology**

An introduction to all phases of plant physiology. Growth and flowering, dormancy, mechanisms of ion exchange and salt accumulation, water relations, respiration and photosynthesis; synthesis of carbohydrates, fats and proteins.

Pre- or corequisites: Biology 200; Botany 205 or Biology 203 and 204; Chemistry 230 or 233; or written permission of the instructor.

Text: Bidwell, *Plant Physiology*.

D. J. Ballantyne.

(2-3; 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 2nd, 3rd, and 4th years. Biology 150 is not required for this course. Normally credit for this course will not be counted toward degree programmes in Biology, but Biology students may take this course as a free elective.

Texts: Scientific American Reprints; Baker, *Plants and Civilization*.

D. J. Ballantyne.

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 programmes in Biology, but Biology students may take this course as a free elective.

Prerequisites: One of Biology 150, 200, 204, or 334 or permission of instructor.

Text: Street and Opik, *The Physiology of Flowering Plants*.

D. J. Ballantyne.

January-April (3-0)

**BIOL 343 (formerly BIOL 342). (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 credit for Biology 342 (3).)

Prerequisites: Biology 204 (Botany 205).

Text: Esau, *Anatomy of Seed Plants*. Alternative Texts: Cutter, *Plant Anatomy Part I and Part II*.

J. N. Owens.

September-December (2-3)

**BIOL 344 (formerly BIOL 342). (1½) Plant Microtechnique**

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, histo-chemistry and autoradiography. (Not open to students who have credit for Biology 342 (3).)

Prerequisites: Biology 204 (Botany 205).

Text: Johansen, *Plant Microtechnique*.

J. N. Owens.

January-April (2-3)

**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: Biology 150 or permission of Department.

Texts: Assigned readings.

R. G. B. Reid.

September-December (3-0)

**BIOL 401. (3) Application of Genetic Principles**

Selection of continuous and discontinuous variation. Use of heterosis, chromosome manipulations and mutation in plant and animal breeding. Genetic basis for host-parasite relationships, disease and insect resistance. Genetic control of insects. Detection of environmental mutagens. Use of cell hybridization techniques. Genetics in medicine. Proposed methods for gene therapy. Implications of applying genetic principles to man.

Pre- or corequisite: Chemistry 230 or 233; (recommended: Biology 300).

E. D. Styles.

(2-3; 2-3)

**BIOL 403 (formerly ZOO 403). (3) Embryology of Marine Invertebrates (formerly Embryology of Marine Organisms)**

Reproductive biology and development of marine invertebrates; examination of developmental process at the cellular and molecular level coordinated with descriptive and experimental embryology. In the first term the descriptive and experimental embryology of the marine invertebrate groups will be surveyed. The second term will include a more intensive examination of selected topics through readings in the literature and seminar presentations; topics will depend on student interests. The laboratory in the second term will consist of research projects.

Prerequisites: Biology 309 or permission of the instructor.

Credit will not be given for both Biology 403 and Marine Science 411.

Text: To be announced.

(Not offered in 1978-79; intend to offer in 1979-80.)

(2-3; 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.

Prerequisite: Biology 200. Consultation with instructor suggested prior to registration.

M. J. Ashwood-Smith.

(2-3; 2-3)

**BIOL 406. (3) Marine Ecology**

A study of ecosystems of the marine environment with emphasis on rocky shores and sediment sea-beds. Consideration of community structure, methods of association analysis, and ecosystem processes such as productivity, bio-geochemical cycling and energy flows.

Prerequisites: Biology 306; Zoology 301 or Biology 206. Pre- or corequisite: Biology 304. Participation in three or four field trips is required.

Credit will not be given for both Biology 406 and Marine Science 430.

Text: Carefoot, *Pacific Seashores*; plus selected reading.

D. V. Ellis.

(2-3; 2-3)

**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 corequisites: Biology 206 (or Zoology 301) or Biology 203 (or Botany 205) or written permission of instructor.

Texts: Current Literature.

A. P. Austin.

January-April. (2-3)

**BIOL 409. (3) Neurobiology**

Cell biology of neurons, their growth, regeneration and trophic effects on target tissues; neurosecretion; specificity in the formation of neural connections; the nerve impulse; sensory transduction and coding; junctional transmission; excitation and control of muscles, cilia and electric organs; evolution of excitable tissues; organization of simple neuronal circuits; pattern generation; organization of retina and visual cortex.

First term labs deal with neurohistology and methods for visualizing nerves; second term is devoted to neurophysiology.

Prerequisites: Biology 303 or Biology 305. Biology 417 is recommended. Enrolment is limited to 16 because of space and equipment. Honours students will be admitted, others by permission of the Department.

Text: S.W. Kuffler and J.G. Nicholls, 1976. *From Neuron to Brain*. Sinauer Associates, Inc.

G. O. Mackie.

(2-3; 2-3)

**BIOL 411 (formerly BOTA 411). (3) Marine and Freshwater Algae (Phycology)**

A treatment of the biology of the algae with emphasis upon the ecological, morphological, phylogenetic and economic aspects. Laboratory and field work centres upon live materials collected by class members, in the rich and varied marine and freshwater communities in our region, and involves rudiments of necessary microtechnique, photomicrography, taxonomic identification, and some experimental ecological and cultural exercises. Emphasis upon either or both marine and freshwater forms is optional in project work. Participation in field excursions to coastal and lake algal habitats is expected.

Prerequisite: Botany 205 or Biology 203.

Text: To be announced.

A. P. Austin. (2-3; 2-3)

**BIOL 412 (formerly ZOOL 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 familiarize themselves with the recent literature from leading journals of insect physiology. Both written and laboratory term reports will be required.

Prerequisite: Biology 312 (Zoology 312).

(Not open to students who have credit for Biology 412 (3).)

Text: Wigglesworth, *Principles of Insect Physiology* and selected readings.

R. A. Ring. January-April (2-3)

**BIOL 414 (formerly ZOOL 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.

Prerequisites: Biology 301 or Biology 314.

Texts: Assigned Readings. Students should possess a general textbook of *Invertebrate Zoology* for reference.

G. O. Mackie. (3-2; 3-2)

**BIOL 417 (formerly ZOOL 417). (1½) Zoological Microtechnique**

Lectures and laboratories in the principles and practice of zoological microtechnique, including photomicrography, limited treatment of selected histochemical procedures and advanced microscopic techniques. Students will prepare microscope slides and photomicrographs for evaluation.

Prerequisite: Biology 200. Corequisite: Biology 302 (Zoology 302).

Text: To be announced.

A. R. Fontaine. September-December (1-4)

**BIOL 418 (formerly BOTA 418). (1½) Plant Ecology**

A study of plant communities in the context of ecosystems; vegetation structure, composition, productivity, succession; soils, climate; group projects; seminars; weekend field trips.

Pre- or corequisites: Biology 318 (Botany 318) and Biology 306, or written permission of instructor.

Texts: Mueller-Dombois and Ellenberg, *Aims and Methods of Vegetation Ecology*.

M. A. M. Bell. September-December (2-3)

**BIOL 419 (formerly ZOOL 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 microscopic material. A research-type project is assigned involving substantial reading of original literature.

Prerequisite: Biology 417 (Zoology 417); Biology 302 (Zoology 302) advised as a pre- or corequisite.

Texts: To be announced.

A. R. Fontaine. 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: Biology 306 and Biology 418, or written permission of the instructor.

Text: To be announced.

M. A. M. Bell. January-April (2-3)

(Not offered 1978-79.)

**BIOL 421 (formerly BOTA 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 experimental methods.

Prerequisites: Biology 343 and 344. Prerequisite or corequisite: Biology 331.

Text: Steeves and Sussex. *Patterns in Plant Development*, and selected

references.

J. N. Owens. September-December (2-3)

(This course will alternate with 443; next offered 1978-79.)

**BIOL 423 (formerly BOTA 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: Biology 331 or permission of instructor; Biochemistry 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: Biochemistry 200 and Biology 200; Biology 302 or Biology 343 are recommended.

Texts: Assigned Readings.

G. O. Mackie. (3-0)

(Not offered 1978-79; intend to offer 1979-80.)

**BIOL 425 (formerly ZOOL 425). (3) Environmental Physiology**

The adaptations 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 3 or 4 directed research projects, reports written in scientific format and seminar presentation of reports.

Pre- or corequisites: Biology 303 (Zoology 303) or 305.

Texts: To be announced. (2-3; 2-3)

**BIOL 426. (3) Limnology**

Biological study of fresh water systems with emphasis on lakes. Lectures, seminars, field and laboratory work.

Prerequisite: Biology 306.

Texts: To be announced.

E. M. Hagmeier. (2-3; 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: Biology 306; pre- or corequisite: Biology 304 (or equivalent).

Texts: Emmel, *Population Biology*.

P. T. Gregory. September-December (2-3)

**BIOL 428 (formerly ZOOL 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: Biology 306.

Texts: To be announced.

E. M. Hagmeier. September-December (2-3)

**BIOL 429. (1½) Wildlife Management**

Biological principles in conservation and management of economically important birds and mammals. Laboratories will stress analysis of food habits, sex and age determination, censuses, trapping and banding, planting food and cover, habitat mapping and specimen preparation.

Prerequisite: Biology 329.

Text: To be announced.

(Not offered 1978-79.) January-April (2-3)

**BIOL 430. (1½) Principles of Taxonomy**

Study of classical and contemporary concepts and procedures in biological taxonomy with emphasis in zoology but utilizing a comparative approach to

the taxonomy of plants and micro-organisms. 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.

Text: Blackwelder, *Taxonomy: A Text and Reference Work*.

D. V. Ellis. January-April (2-3)

(This course will alternate with 445; next offered 1978-79.)

**BIOL 431 (formerly ZOOLOGY 431). (3) Ichthyology**

Selected topics on the morphological, physiological and behavioural adaptations of fishes. Laboratory work consists of three or four directed research projects, reports written in scientific format and seminar presentation of results.

Prerequisites: Zoology 202 or Biology 207. Biology 303 or 305 (Zoology 303 or 305) recommended. Credit will not be given for both Biology 431 and Marine Science 412.

Text: Marshall, *The Life of Fishes*.

J. E. McInerney. (2-3; 2-3)

**BIOL 432 (formerly ZOOLOGY 432). (1½) Parasitology**

Study of the biology and taxonomy of parasitic organisms.

Prerequisite: Zoology 301 or Biology 206. Not open to students who have credit in Zoology 432 (3). (2-3)

**BIOL 433 (formerly ZOOLOGY 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: Biology 302 (Zoology 302); Biology 303 or 305 (Zoology 303 or 305). Students should consult with the instructor before registration.

Texts: Assigned readings.

F. T. Algard. (1-4; 1-4)

**BIOL 440. (1½) Quantitative Ecology**

The use of simple mathematics and simulation in *ecology*.

Prerequisites: Biology 306; some knowledge of the use of FORTRAN and elementary computer programming (this requirement may be met by Computing Science 170 or equivalent). Recommended: Biology 304 and Biology 427.

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 genetics of some of the more important species will be considered. Several field trips will be made, some involving collection and identification of specimens.

Prerequisite: Biology 204.

Text: Selected references.

J. N. Owens. September-December (2-3)

(This course will alternate with 421; next offered 1979-80.)

**BIOL 444. (1½) Animal Behaviour: I**

Study of the range and function of animal behaviour, with an introduction to causative physiological mechanisms and consideration of human analogies. Participation in field work is required. The course is given in association with Psychology 434, Animal Behaviour, and students may not register for both.

Text: To be announced.

D. V. Ellis. September-December (3-1)

**BIOL 445. (1½) Animal Behaviour: II**

Study of the phylogeny, functions and causation of animal behaviour from both field-descriptive and laboratory-experimental points of view. The course is designed for professional biologists in training, and normally should not be taken before the fourth year in order that corequisite background in physiology, ecology and biometrics can be obtained. The course is given in association with Psychology 434, Animal Behaviour, and students may not register for both.

Prerequisites: Biology 444 and Psychology 100. Students wishing to register in this course should consult with the instructor prior to registration.

Texts: Original and review literature.

D. V. Ellis. January-April (2-2)

(This course will alternate with 430; next offered 1979-80.)

**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.

Prerequisite: Biology 311 and Biology 305 or 331.

Text: To be announced.

J. L. Littlepage. (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: Biology 331 or permission of instructor.

Text: Treshow, *Environment and Plant Response*.

D. J. Ballantyne. September-December (3-0)

(Not offered 1978-79.)

**BIOL 460. (1) Honours Seminar**

Participation in seminars as arranged by the Department and the Honours Co-ordinator. 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. (1-3) Directed Studies in Biology**

Students must obtain the written consent of the Department before registering for this course. (Grading: INC; Letter Grade.)

Members of the Department.

**BIOL 499. (3) Thesis or Tutorial**

Members of the Department. (Grading: INC; Letter Grade.)

## MARINE SCIENCE

A number of Marine Science courses are offered at the Bamfield Marine Station in Summer Session only at present. These courses may supplement or substitute for courses listed above in the normal biology programmes. 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.

Offered in Summer Session only, as announced.

**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.

Offered in Summer Session only, as announced.

**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.

Offered in Summer Session only, as announced.

**MRNE 410. (3) Marine Invertebrate Zoology**

A survey of the 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.

NOTE: Credit will not be given to both Marine Science 410 and Biology 314.

Offered in Summer Session only, as announced.

**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 one hand, and for reproductive ecology on the other hand. Credit will not be given for both Marine Science 411 and Biology 403.

Offered in Summer Session only, as announced.

**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 Marine Science 412 and Biology 431.

Offered in Summer Session only, as announced.

**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.

Offered in Summer Session only, as announced.

**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.

NOTE: Credit will not be given for both Marine Science 430 and Biology 406.

Offered in Summer Session only, as announced.

**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.

Offered in Summer Session only, as announced.

**GRADUATE COURSES**

Biology 511 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 Biology 560 (seminar).

Admission to any graduate course requires prior permission of the instructor.

**BIOL 500. (1) Selected Topics in the History and Philosophy of Biology**

All graduate students are expected to participate in this course each year for a maximum of 3 years.

R. G. B. Reid.

**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.

Members of the Department.

**BIOL 510. (3) Advanced Topics in Ichthyology**

J. E. McNerney.

**BIOL 511. (3) Marine Science Seminar**

Selected topics in marine biology will be dealt with in depth.

A. P. Austin and Members of the Department.

**BIOL 512. (3) Advanced Marine Ecology**

D. V. Ellis.

**BIOL 513. (3) Topics in Vertebrate Anatomy and Embryology**

F. T. Algard.

**BIOL 514. (3) Zooplankton Ecology**

J. L. Littlepage.

**BIOL 515. (3) Physiology of Marine Animals**

R. G. B. Reid.

**BIOL 517. (3) Oceanography II**

J. L. Littlepage.

**BIOL 519. (1-3) Animal Ecology****BIOL 520. (3) Advanced Mycology**

J. W. Paden.

**BIOL 521. (3) Advanced Phycology**

A. P. Austin.

**BIOL 522. (1-3) Advanced Plant Ecology**

M. A. Bell.

**BILL 523. (2) Advanced Plant Physiology**

D. J. Ballantyne.

**BIOL 524. (1-3) Plant Anatomy and Morphology**

J. N. Owens.

**BIOL 525. (3) Recent Advances in Insect Physiology**

R. A. Ring.

**BIOL 526. (1½) Topics in Biological Ultrastructure**

G. O. Mackie.

**BIOL 527. (1-3) Advanced Topics in Cell Biology**

Seminars, discussions and laboratory work associated with recent advances in cell biology. Topics will include: quantitative tissue culture; bacterial and mammalian cell mutations; use of isotopes in biology; basic methods of cell separation; subcellular and molecular separations and ultracentrifugation.

Text: Research paper and reviews.

M. J. Ashwood-Smith.

**BIOL 528. (1-3) Topics in Advanced Invertebrate Zoology**

Members of the Department.

**BIOL 529. (1-3) Advanced Parasitology****BIOL 530. (2) Recent Advances in Genetics**

E. D. Styles.

**BIOL 531. (1½) Selected Topics in Vertebrate Physiology**

J. S. Hayward.

**BIOL 532. (3) Advanced Techniques in Cell Biology**

M. J. Ashwood-Smith.

**BIOL 533. (3) Advanced Topics in Embryology of Marine Invertebrates**

M. Paul.

**BIOL 534. (1-3) Problems in Environmental Management**

M. A. Bell.

**BIOL 535. (1-3) Advanced Topics in Zoogeography**

E. M. Hagmeier.

**BIOL 536. (1-3) Advanced Topics in Ecology**

E. M. Hagmeier.

**BIOL 550. (1-6) Directed Studies****BIOL 560. (1) Seminar**

Participation in a programme of seminars. Required of all graduate students every year of their degree programme as an addition to the normal 15 units. 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 599. (credit to be determined) Thesis****BIOL 699. (credit to be determined) Ph.D. Dissertation**

## DEPARTMENT OF CHEMISTRY

Alexander D. Kirk, B.Sc., Ph.D. (*Edin.*), Professor, and Chairman of the Department.

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### GRADUATE PROGRAMMES

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 154; for graduate courses, see page 46.

### GENERAL, MAJOR AND HONOURS PROGRAMMES

The Department of Chemistry offers a wide variety of programmes 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 programme 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 Programmes 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 Programme is that the student participates in a short research project in the final year of study. The Honours Programme requires 34 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 Programme is fundamentally similar to the Honours, but provides the student with somewhat more flexibility in the choice of courses. Twenty-four 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 programmes 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 Programme. 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 non-scientists who have successfully completed at least 15 units of university credit.

### CHEMISTRY CO-OPERATIVE EDUCATION PROGRAMME

The Co-operative Education Programme in the Faculty of Arts and Science is described on page 28.

Entry to the Chemistry Co-operative Programme is restricted to students who are enrolled in an Honours or Major programme in Chemistry. Students will be admitted during their second year. To enter and remain in the Chemistry Co-operative Programme, students must maintain a B average and a minimum of C in any required course. Students are also required to complete satisfactorily at least three work terms. The first work term will be in the summer at the end of their second academic year and thereafter the sequence is one of alternating four-month terms of academic study and work experience.

First year students may be selected as Chemistry Co-operative "candidates" and participate in a summer work experience.

Further information concerning the Co-operative Programme in Chemistry may be obtained from the Department.

### Work Term Transcript Entries

Students in the Co-operative Programme will register in one of the following when undertaking a Work Term. When a Work Term is satisfactorily completed, the grade COM will be entered on the student's academic record and transcript.

CHEM 001. (0) Co-op Work Term: I  
 CHEM 002. (0) Co-op Work Term: II  
 CHEM 003. (0) Co-op Work Term: III  
 CHEM 004. (0) Co-op Work Term: IV

### COURSE REQUIREMENTS OF CHEMISTRY UNDERGRADUATE PROGRAMMES

GENERAL	MAJOR	HONOURS
<b>First Year</b>		
Chem. 124 (3)	Chem. 124 (3)	Chem. 124 (3)
Math. 100/101 (3)	Math. 100/101 (3)	Math. 100/101 (3)
Phys. 101 or 121 (3)	Phys. 101 or 121 (3)	Phys. 101 or 121 (3)
Other courses (6)	Other courses (6)	Other courses (6)
<b>Second Year</b>		
Chem. 224 (3)	Chem. 224 (3)	Chem. 224 (3)
Chem. 233 (3)	Chem. 233 (3)	Chem. 233 (3)
Math. 200/201 (3)	Math. 200/201 (3)	Math. 200/201 (3)
Other courses (6)	Two of Physics 214, 215, 216, 217 (3) (recommended) or Bioc. 200 and Biol. 200 (3) or Math. 110/210 (3) or Other (3) (Biochemistry, Physics or Mathematics course with permission of department)	Two of Physics 214, 215, 216, 217 (3) (recommended) or Bioc. 200 and Biol. 200 (3) or Math. 110/210 (3) or Other (3) (Biochemistry, Physics or Mathematics course with permission of department)
	Other courses (may include options not used above) (3)	Other courses (may include options not used above) (3)
<b>Third and Fourth Years</b>		
Nine additional units of chemistry in courses numbered above 300 for which the required prerequisites have been taken (9)	Chem. 316 and 317 (3) Chem. 324 and 325 (3) Chem. 335 and 338 (3) Chem. 345 and 346 (3)	<b>Third Year</b> Chem. 316 and 317 (3) Chem. 324 and 325 (3) Chem. 335 and 338 (3) Chem. 345 and 346 (3)  Other courses (3) Chem. 399 (1)
Nine units in a second area of concentration (9)	Any two of Chem. 422, 423, 433, 434, 444, 446 (3)	<b>Fourth Year</b> Chem. 422 and 423 (3) Chem. 443 and 434 (3) Chem. 444 and 446 (3) Chem. 499 (3)
Other courses (12)	Other courses (15)	

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 programmes 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 with a D grade in any course in chemistry are advised not to register for a following course in chemistry and may not do so without written permission of the Department. A supplemental examination may be written to improve the course grade (see page 15).

4. Students registering for any chemistry course which includes laboratory work are required to purchase a Chemistry Laboratory Credit Card (\$6.00) immediately following registration. Any unused portion of this credit is refundable. 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 Programme are specified in the column to the left. Permission of the Department is required for admission into each of the Third and Fourth Years of the Chemistry Honours programme. 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 re-admission 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 Programme. Honours students are advised to include an additional mathematics course among their electives. Suitable courses are Computing Science 170, 171, and Mathematics 323, 330.

A student with the Chemistry Honours Programme 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 a first class standing 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 programme 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 a first-class standing 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.

### COMBINED PROGRAMMES IN CHEMISTRY AND MATHEMATICS

For a B.Sc. degree in the Combined Chemistry and Mathematics Programme students may take a Major or Honours programme. These programmes are not joint degrees in Chemistry and Mathematics, but a single degree programme composed of a selected combination of courses from each of the departments. Students opting for either of these combined programmes must contact the Chemistry and Mathematics Departments and each student will be assigned an advisor from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult carefully with their advisors prior to making their final choice of courses.

A student graduating in the combined Honours programme will be recommended for a first class degree if the student achieves a graduating grade point 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 grade point average of at least 4.0 and a second class standing in Chemistry 499. A student with a first class graduating grade point 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)

Chemistry 124	3 units
Chemistry 224	3 units
Chemistry 233	3 units
Physics 121 (or 101)	3 units
Computing Science 170 and 171	3 units

Mathematics 100 and 101	3 units
Mathematics 110 and 210	3 units
Mathematics 200 and 201	3 units

#### THIRD AND FOURTH YEAR (Major)

(All courses listed below must be 300 level or above)

Chemistry 324	1½ units
Chemistry 325	1½ units
Chemistry 345	1½ units
Chemistry 346	1½ units
Chemistry 316 (or 317)	1½ units
Chemistry 446	1½ units
Chemistry 444 (or 422)	1½ units
Mathematics 330A and 330B	3 units
Mathematics 333A	1½ units
One of Mathematics 333B, 422 or 423	1½ units
Mathematics 325 and 326	3 units
Course chosen from the Mathematics Department in consultation with the Mathematics Department	1½ units
Course(s) chosen in consultation with the Chemistry and Mathematics Departments	3 units

#### THIRD AND FOURTH YEARS (Honours)

(All courses listed below must be 300 level or above)

All Chemistry courses listed under Major programme plus	10½ units
Chemistry 399	1 unit
Chemistry 499	3 units
Mathematics 334 and 336	3 units
Mathematics 338	1½ units
Mathematics 333A and 333B	3 units
Mathematics 445	3 units
Course(s) chosen from the Mathematics Department in consultation with the Mathematics Department	3 units

Some possible courses which might be used to fulfill the choice units in the above programmes are:

C SC 349A, C SC 349B, MATH 350, STAT 353\*, STAT 354\*, MATH 367, MATH 466, (For Honours — MATH 325 and MATH 326), CHEM 306, CHEM 316 or 317, CHEM 335, CHEM 338, CHEM 422 or 444, CHEM 423.

\*These courses have STAT 253 as a prerequisite, which would have to be included in the student's programme as an option.

### UNDERGRADUATE COURSES

*Unless indicated otherwise, courses begin in September and end in April.*

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 305 (page 80).

#### 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 Chemistry 120 and 124.

Prerequisites: Chemistry 11; Mathematics 12 is also strongly recommended. Students desiring to register in Chemistry 120, but who do not have the chemistry prerequisite, should consult the Department prior to registration. When permission to enter Chemistry 120 is granted, then registration will be in Lecture Section number 1, which has four lectures per week.

(3-3; 3-3)

NOTE: Chemistry 120 provides a comprehensive course in General Chemistry at the First Year University level and is suitable for some fields and programmes at this University. However, some programmes and certain pre-professional programmes require Chemistry 124.

#### CHEM 124. (3) Fundamentals of Chemistry

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter. Basic physical chemistry including thermochemistry, thermodynamics, chemical kinetics, and equilibrium in chemical systems. Introduction to organic and inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation.

Prerequisites: Mathematics 12 and Chemistry 12 or their equivalents. Students desiring to register in Chemistry 124, but who do not have Chemistry 12 must register in special sections of 124 which will have four lectures per week. Students lacking Mathematics 12 must register

concurrently in a first year Mathematics course or Mathematics 012.  
(3-3; 3-3)

NOTE: Chemistry 124 is the first part of a Chemistry 124-224 sequence and is an essential first course for students planning a programme in chemistry.

**CHEM 224. (3) Physical and Inorganic Chemistry**

Introduction to spectroscopy. Chemistry of the main group elements. Quantitative inorganic analysis. Emphasis will be placed on the application of the principles of physical chemistry introduced in Chemistry 124. This course includes experimental laboratory applications of solution equilibria, and acid-base and redox theory in chemical analysis.

Prerequisite: Chemistry 124 (or 120 with permission of the Department).  
(3-4; 3-4)

**CHEM 230. (3) General Organic Chemistry**

Fundamental principles of organic chemistry and descriptive chemistry of the main classes of organic compounds with special emphasis on the structure and reaction of biologically important compounds. This course includes a laboratory illustrating the basic operations and representative reactions and preparations of organic chemistry.

This course is designed for students preparing to enter professional schools such as Medicine, Pharmacy, Dentistry, Forestry, and Nursing (see page 26). Credit will not be given for both Chemistry 230 and 233.

Prerequisite: Chemistry 120 or 124. (3-3; 3-3)

**CHEM 233. (3) Organic Chemistry - Part I**

An introduction to theoretical, physical and descriptive organic chemistry as exemplified by a study of the properties of aliphatic, alicyclic and simple aromatic compounds. Introductory spectroscopy. This course includes a laboratory illustrating the basic operations and representative reactions and preparations of organic chemistry.

This course is designed for students planning to take the Chemistry 233-335-338 sequence. Students who do not plan to take Chemistry 335 or 338 are advised to take Chemistry 230. Credit will not be given for both Chem 230 and 233.

Prerequisite: Chemistry 124 or 120. (3-3; 3-3)

**CHEM 300. (3) Chemistry in Modern Society**

This course is intended for *non-scientists*, and will consist of lectures, demonstrations, class experiments and discussions.

The 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 Chemistry 300 and any other Chemistry course numbered 200 and above.

(3-0; 3-0)

**CHEM 302 (formerly one-half of 301). (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 Chemistry 302 and 306.

Prerequisite: Chemistry 120 or 124. September-December (3-0)

**CHEM 303 (formerly one-half of 301). (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 man-made 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 Chemistry 303 and Chemistry 306.

Prerequisites: Chemistry 230 or 233. 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 programme. Credit will not be given for both Chemistry 306 and Chemistry 302 or Chemistry 303.

Prerequisites: Chemistry 224 and Chemistry 233 or 230. September-December (3-0)

**CHEM 310. (1½) Chemical Instrumentation for Environmental Sciences**

This course is intended for students in sciences other than Chemistry who have a need to make use of chemical instrumentation. It will present the principles of modern instrumental techniques and illustrate their applications to the study of environmental problems, particularly in the monitoring and control of chemical species in the biosphere. Techniques to be studied will include chromatography, spectrophotometry, mass spectroscopy and radiochemical, electrochemical and thermogravimetric analysis. Credit will not be given for both Chemistry 310 and 314, 316 or 317. Chemistry 310 will not be open for credit for a Major or Honours in Chemistry.

Prerequisite: Any 200 level course in Chemistry. January-April (3-3)

**CHEM 316 (formerly one-half of 314). (1½) Spectroscopic Techniques of Analysis**

Theory and analytical applications of instrumental techniques based on the absorption and emission of electromagnetic radiation.

Prerequisite: Chemistry 224 (or a grade of at least B minus in Chemistry 230 or 233 and permission of the Department). January-April. Also May-August 1979. (2-4)

**CHEM 317 (formerly one-half of 314). (1½) Instrumental Techniques of Analysis**

Theory and application of non-spectroscopic methods of analysis including electrochemical, radiochemical, chromatographic and mass spectroscopic methods.

Prerequisite: Chemistry 224 (or a grade of at least B minus in Chemistry 230 or 233 and permission of the Department). September-December (2-4)

**CHEM 324 (formerly one-half of 326). (1½) Transition Metal Chemistry - Part I**

Introduction to transition metal chemistry: Structure, isomerism and solution stability of co-ordination complexes, basic symmetry considerations, types of ligand. Magnetic properties of co-ordination complexes. Crystal field theory and introduction to molecular orbital theory of transition metal compounds. Chemistry of early transition elements (Sc — Mn groups).

Prerequisites: Chemistry 224 and Mathematics 230 or 231. September-December (3-3)

**CHEM 325 (formerly one-half of 326). (1½) Transition Metal Chemistry - Part II**

Molecular orbital theory of transition metal compounds. Interpretation of electronic spectra of co-ordination complexes. Applications of spectroscopic methods of inorganic systems. Stereochemical non-rigidity. Kinetics and mechanisms in reactions of complex ions. Inorganic chemistry in biological systems. Metal carbonyl complexes. Chemistry of later transition elements (Fe — Zn groups).

Prerequisite: Chemistry 324. January-April. Also May-August 1979. (3-3)

**CHEM 335 (formerly one-half of 333). (1½) Organic Chemistry - Part II**

Carbanion chemistry, polyfunctional organic compounds, aromatic chemistry. Reaction mechanisms and spectroscopic properties of each class of compounds are included.

Prerequisite: Chemistry 233 (or Chemistry 230 with permission of the Department). September-December (3-3)

**CHEM 338 (formerly one-half of 333). (1½) Organic Chemistry - Part III**

Polycyclic aromatics, introductory heterocyclic chemistry, macromolecules, natural products. Molecular rearrangements and neighbouring group effects.

Prerequisite: Chemistry 335. January-April. Also May-August 1979. (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: Chemistry 230 or 233. (3-3)

**CHEM 340T. (3) Chemistry for Science Teachers**

This course may be taken for credit in the Faculty of Education (M.Ed. programme) only.

Selected topics in organic and inorganic chemistry. Modern aspects of atomic structure and chemical bonding. Thermodynamics of chemical equilibrium; chemical kinetics and electrochemistry.

Prerequisites: At least 3 units of university level chemistry and permission of the Department. Students wishing to enter this course may be required to complete selected reading and study assignments prior to the course.

Ten hours of lectures and nine hours of laboratories per week. Summer Session only.

**CHEM 345 (formerly one-half of 344). (1½) Thermodynamics, Solutions and Electrochemistry**

Chemical thermodynamics. Properties of solutions. Electrochemistry.

Prerequisites: Chemistry 224 and Mathematics 230 or 231.  
January-April. Also May-August 1979. (3-3)

**CHEM 346 (formerly one-half of 344). (1½) Gases, Liquids and Chemical Kinetics**

Properties of gases and liquids. Kinetic molecular theory. Phase equilibria. Chemical kinetics.

Prerequisites: Chemistry 224 and Mathematics 230 or 231.  
September-December. (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 422 (formerly one-half of 424). (1½) Physical Methods in Inorganic Systems**

A general survey of the chemistry of the solid state. Crystallographic methods. Description of the major structural types. Main group chemistry - application of physical techniques.

Prerequisites: Chemistry 324 and 325 (or Chemistry 326).  
January-April. (3-3)

**CHEM 423 (formerly one-half of 424). (1½) Bio-organic and Organometallic Chemistry**

Organometallic Chemistry: Chemistry of ionic, *o*, *n* and electron deficient bonds between organic groups and metals or metalloids. Metal ions in biological systems: Cobalt, Copper, Iron and Zinc in electron transport, peptidase and group transfer reaction. Model systems, mechanisms.

Prerequisites: Chemistry 324 and 325 (or Chemistry 326).  
September-December. Also May-August 1979. (3-3)

**CHEM 433 (formerly one-half of 435). (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: Chemistry 335 and 338 (or Chemistry 333).  
September-December. Also May-August 1979. (3-3)

**CHEM 434 (formerly one-half of 435). (1½) Physical Organic Chemistry**

Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity.

Prerequisites: Chemistry 335 and 338 (or Chemistry 333).  
January-April. (3-3)

**CHEM 444 (formerly one-half of 445). (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: Chemistry 345 and 346 (or Chemistry 344).  
January-April. (3-3)

**CHEM 446 (formerly one-half of 445). (1½) Quantum Chemistry**

The basic principles of quantum mechanics and their application to simple physical models and to chemical systems, including the use of semi-empirical methods. Molecular spectroscopy and symmetry.

Prerequisites: Chemistry 324, 325, 345, and 346 (or Chemistry 326 and 344); Computing Science 170 or Mathematics 232 (or 110/210) are strongly recommended. September-December. Also May-August 1979. (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 Chemistry 490. Chemistry 490 may be taken more than twice only in different areas of chemistry.

Chemistry 490A Readings	in analytical chemistry
Chemistry 490B Studies	
Chemistry 490C Readings	in inorganic chemistry
Chemistry 490D Studies	
Chemistry 490E Readings	in organic chemistry
Chemistry 490F Studies	
Chemistry 490G Readings	in physical chemistry
Chemistry 490H Studies	
Chemistry 490J Readings	in theoretical chemistry
Chemistry 490K Studies	

**CHEM 499. (3) Thesis**

Experimental research under the direction of faculty. This course is designed primarily for Chemistry Honours students, but Chemistry Majors students may be granted permission by the Department to take the course as an elective. (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 552. (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. M.Sc. Thesis (Credit to be determined but normally 5 units in this Department).**

**CHEM 630. (1½-3) Current Topics in Organic Chemistry**  
Offered as 630A, 630B, 630C, 630D.

**CHEM 633. (1½-3) 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. Ph.D. Dissertation (Credit to be determined).**

## DEPARTMENT OF CLASSICS

Samuel E. Scully, B.A., M.Litt. (*Bristol*), Ph.D. (*Tor.*), Assistant Professor and Chairman of the Department.

David A. Campbell, M.A. (*Glasgow*), M.A. (*Oxon.*), Professor.

Herbert H. Huxley, M.A. (*Cantab.*), M.A. (*Dublin*), F.I.A.L., Professor. (On study leave July-December 1978.)

Peter L. Smith, B.A. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Professor.

Geoffrey J. D. Archbold, B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Associate Professor.

John P. Oleson, B.A., M.A., Ph.D. (*Harvard*), Associate Professor.

Gordon S. Shrimpton, B.A., M.A. (*Brit. Col.*), Ph.D. (*Stanford*), Associate Professor.

John G. Fitch, B.A., M.A. (*Cantab.*), Cert. Ed. (*Leeds*), Ph.D. (*Cornell*), Assistant Professor.

Caroline A. Overman, B.A. (*U. of Vic.*), Ph.D. (*Brown*), Sessional Lecturer (1977-78).

### GRADUATE PROGRAMMES

For information on studies leading to the M.A. Degree, see page 155; for graduate courses, see page 50.

### GENERAL, MAJORS AND HONOURS PROGRAMME

The Department of Classics offers the student an opportunity to study Classics at any of three levels of concentration: *General*, *Major* and *Honours Programmes*.

The *General Programme* does not necessarily involve language study. The *Major* and *Honours Programmes* do include the study of classical languages. For the *Major* and *Honours Programme*, 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 Programme* will be taking advanced courses in other departments. Students following an *Honours Programme* with the Classics Department should note that it may be possible for them to complete an honours programme 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 programmes 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 programme 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 300 level.
- 24 Total

#### MAJOR IN CLASSICS:

##### 1. GREEK Emphasis:

- (a) Greek 100.
  - (b) Greek 200.
  - (c) Greek 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) Latin 100.
  - (b) Latin 200.
  - (c) Latin 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 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 programme. The Honours programme features the core courses Latin/Greek 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) Greek 100.
- (b) Latin 100.
- (c) Latin and/or Greek 200.

NOTE: Classical Studies 100 is strongly recommended; English 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 programme of 30-36 units. Requirements listed below may be completed in any year by a student who has the prerequisites.

#### GREEK Honours:

- (a) Greek 300.
- (b) Greek 400.
- (c) 12 additional units in Greek numbered above 300.
- (d) Latin 200.
- (e) Classical Studies 330 or 3 units of History chosen from Greek 390, 490, 491, and Classical Studies 480A.

#### LATIN Honours:

- (a) Latin 300.
- (b) Latin 400.
- (c) 12 additional units in Latin numbered above 300.
- (d) Greek 200.
- (e) Classical Studies 340 or 3 units of History chosen from Latin 390, 490, 491, and Classical Studies 480C.

#### CLASSICS Honours:

- (a) Greek 300.
- (b) Greek 400.
- (c) Latin 300.
- (d) Latin 400.
- (e) 9 additional units in Greek and/or Latin at or above the 300 level.
- (f) Classical Studies 330 or 3 units of Greek History chosen from Greek 390, 490, 491, and Classical Studies 480A.
- (g) Classical Studies 340 or 3 units of Roman History chosen from Latin 390, 490, 491, and Classical Studies 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 305.

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 programme, 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 programme, 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 programme 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 in summer session or in inter-session should apply to the Department for permission. Each subdivision of these courses (as Latin 490A, Greek 390B, etc.) 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

Unless indicated otherwise, courses begin in September and end in April.

NOTE: Students who obtained credit for Greek 350 in previous years may not enrol in Greek 390C for credit; those with credit for Latin 350 may not enrol for credit in Latin 390D; and those with credit for Latin 301, 302, 303, 304 or 305/306 may not enrol for credit in Latin 390C, 490K, 390A, 390B or 490G respectively.

### CLASSICAL STUDIES

**A knowledge of the Greek and Latin languages is not required for the following courses.**

Classical Studies 100 is designed primarily as an elective for students in all fields. However, it is also a prerequisite for Classical Studies 300 and one among a choice of prerequisites for Classical Studies 320. Any student in Second Year who has successfully completed Classical Studies 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, except for 300 and 320 (see below for prerequisites). Classical Studies 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 Classical Studies 330 or 340 or 480A or 480C. Philosophy 421 and 422 are acceptable for credit in all programmes 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, fifth-century Athens, and Augustan Rome.

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*, Virgil's *Aeneid* and part of Ovid's *Metamorphoses*.

Essays will be required and there will be a written examination.

D. A. Campbell, G. S. Shrimpton. (3-0; 3-0)

#### CLAS 200 (formerly 301). (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 Lendardson, *Classical Mythology*. September-December. (3-0)

#### CLAS 201. (1½) Tradition and Originality in Classical Literature

A comparative study of the content and form of major works by Greek and Roman writers. After a brief introduction to the genres of classical literature, the course will concentrate on the two important genres of tragedy and the poetry of instruction, together with not more than two others to be chosen from the following: philosophy, lyric poetry, biography, 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 'make it new' while working within a strong tradition?

Texts: (a) Euripides, *Hippolytus* and *Trojan Women*; Seneca, *Phaedra* and *Trojan Women*;

(b) Hesiod, *Works and Days*; Lucretius, *The Way Things Are*; Virgil, *Georgics*; Ovid, *The Art of Love*;

together with one or two of the following groups:

(c) Plato, *Symposium* or *Republic X*; Cicero, *On the Good Life*;

(d) Greek Lyric Poetry; Catullus, *Poems*; Horace, *Odes*;

(e) Plutarch, *The Rise and Fall of Athens*; Suetonius, *The Twelve Caesars*;

(f) Theocritus, *Idylls*; Virgil, *Eclogues*;

(g) Demosthenes, *Political Oratory*; Cicero, *Selected Political Speeches*.

January-April. (3-0)

(Offered in alternate years to Classics 250. Not offered in 1978-79; intend to offer 1979-80.)

#### CLAS 207 (Philosophy 207). (3) Greek Historical and Philosophical Thought

A study of the parallel development of systematic historical and philosophical thought out of the common ground of the prescientific, mythical world views. The effort to develop acceptable models of explanation for human as well as natural events will be seen to be a point common to the two strands of Greek thought. The philosophical emphasis will be on metaphysical and epistemological issues, and the ideas singled out for study

will relate to the structure of the cosmos, the nature of man, and man's relationship to the universe.

Texts: Hesiod, *Theogony* (tr. Wnder, Penguin), Aeschylus, *Oresteia*; Herodotus (tr. de Selincourt, Penguin), Thucydides (tr. Warner, Penguin), Plato (ed. Rouse, Mentor), Aristotle (ed. Bambrough, Mentor), Aristotle, *Constitution of Athens* (ed. Hafner).

G. S. Shrimpton, J. M. Michelson. (3-0; 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 come 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.

(Offered in alternate years to Classics 201.)

H. H. Huxley.

January-April. (3-0)

#### CLAS 300 (formerly 310). (1½) Classical Epic

A study of Greek and Roman epic poetry from the time of Homer to the 5th century A.D. In addition to Homer and Virgil the following authors will be represented: 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: Classical Studies 100.

(Not offered 1978-79; intend to offer 1979-80.) (3-0)

#### CLAS 320 (formerly 315). (1½) Greek Tragedy

The origins and development of tragic drama in ancient Greece. The study, in English translation, of representative plays of Aeschylus, Sophocles and Euripides.

Prerequisite: Classical Studies 100 or 200 or 201 or permission of the Department.

S. E. Scully.

September-December. (3-0)

#### CLAS 321. (1½) Classical Comedy and Satirical Writing

A critical survey through the reading in translation of the major works in comedy of the Greco-Roman world together with a survey of the origin and development of satire in classical times.

(Not offered in 1978-79).

September-December. (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 fifth and fourth centuries B.C.; the Hellenistic world.

Outside reading includes selected works listed on the bibliographical sheets distributed at the beginning of lectures. One essay is required in the first term and one in the second term.

Texts: N. G. L. Hammond, *A History of Greece to 322 B.C.*; Plutarch, ed. Edmund Fuller, *Lives of the Noble Greeks*; Herodotus, *The Histories*; Thucydides, *The History of the Peloponnesian War*.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

#### CLAS 340. (3) Roman History

The growth of Rome and the development of her political institutions during the Republic; the social and economic history of the Empire; the transition from the classical to the medieval world.

Outside reading includes selected works listed on the bibliographical sheets distributed at the beginning of lectures. One essay is required in the first term and one in the second term.

Texts: M. Rostovtzeff, *Rome*; Plutarch, ed. Edmund Fuller, *Lives of the Noble Romans*; W. G. Sinnigen, *Rome*.

G. J. D. Archbold.

(3-0; 3-0)

#### CLAS 370. (1½) Greek and Roman Thought

A study of Greek and Roman ideas about society, morality and the state as they are evidenced in the works of literature and history. Topics include the status of women in Greece and Rome; slavery; marriage and the family; athletics; the relationship between gods and men and between the gods and ethics; and briefly, the changes brought by Christianity to Greek and Roman thinking. Authors to be studied include Homer, Hesiod, the tragic and comic poets, the historians, Plato, Lucretius, Cicero's philosophical works, Pliny's letters and the New Testament.

(Not offered 1978-79; intend to offer 1979-80).

January-April. (3-0)

**CLAS 371 (formerly 350). (1½) Art and Archaeology of Ancient Greece and the Aegean**

A study of the Minoan and Mycenaean Ages with emphasis on architecture, frescoes and pottery. Some consideration of the origins of early Greek religion and mythology as traceable in archaeological remains. Examination of the principles of Greek architecture through a study of the monuments on the Acropolis at Athens.

J. P. Oleson. September-December. (3-0)

**CLAS 372. (1½) Art and Archaeology of the Roman World**

The beginnings of the Roman cultural experience as seen through Etruscan remains. Some consideration of the Hellenistic age and its influence upon Rome. The Roman city with concentration on one or more of Pompeii, Herculaneum and Ostia. A study of Roman fresco painting and mosaics.

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 need 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.

J. P. Oleson. January-April. (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.

S. E. Scully. January-April. (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, Virgil, 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.

(Not offered 1978-79; intend to offer 1979-80.) (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.

(480A not open to students with credit in Classical Studies 430, or 460. 480C not open to students with credit in Classical Studies 440, or 460.)

Prerequisite or corequisite: for 480A, Classical Studies 330; for 480B, Classical Studies 371; for 480C, Classical Studies 340; for 480D, Classical Studies 372; or, in each case, permission of the Department.

(1978-79: 480A and B; 1979-80: 480C and D.) (2-0)

480A: G. S. Shrimpton. September-December.  
480B: J. P. Oleson. January-April.

**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.* (4-0; 4-0)

**GREE 200. (3) Introduction to Greek Literature**

Greek 200 is open to students who have completed Greek 100 or its equivalent, and is a prerequisite to Greek courses at the 300 level. Review of grammar mainly through reading; some sight translation and prose composition. Careful reading of the following works: either Plato, *Crito*, or Xenophon *Memorabilia* (selections); Euripides, *Alceste*; Thucydides, *History of the Peloponnesian War*, Book I, Chapters 89-118. Also required are North and

Hillard, *Greek Prose Composition*; Liddell and Scott, *Intermediate Greek-English Lexicon*; and Goodwin and Gulick, *Greek Grammar*. Tests and examinations will be given during the course of the year.

(4-0; 4-0)

**GREE 300. (3) Readings in Greek Prose, Drama and Epic**

Prerequisite: Greek 200. 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.

Texts: Homer, *Odyssey*, Books IX-XI; Herodotus, *History* (40-50 chapters to be announced); Sophocles, *Antigone*; Thucydides, *History of the Peloponnesian War*, Book VI (40-50 chapters to be announced); and Plato, *Apology*.

(3-0; 3-0)

**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: Greek 200.

(1978-79: 390B and 390D; 1979-80: 390A and 390C.) (See note page 48.)

One term only, to be announced. (3-0)

**GREE 400. (3) Advanced Reading in Greek Oratory, Philosophy and Drama**

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: Greek 300.

Texts (subject to some variation from year to year): A careful reading of selected private speeches of Demosthenes; Plato, *Republic*, Book I; Aeschylus, *Prometheus Vinculus*; and Aristophanes, *Clouds*. (3-0; 3-0)

**GREE 490. (1½) Directed Studies in Greek**

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 490A Homeric Corpus; 490B Hesiod; 490C Greek Lyric Poetry; 490D Greek Tragedy; 490E Greek Comedy; 490F Thucydides.

Prerequisite: Completion of at least 3 units of Greek at the 300 level or above, and Department permission. (2-0)

**GREE 491. (3) Directed Studies in Greek**

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 491A Homeric Corpus; 491B Hesiod; 491C Greek Lyric Poetry; 491D Greek Tragedy; 491E Greek Comedy; 491F Thucydides.

Prerequisite: Department permission. Students will normally not be permitted to take, concurrently or successively, Greek 490 and 491 courses in the same area. (2-0; 2-0)

**LATIN**

Students with no previous study of Latin or 1 year of high school Latin will register for Latin 100. Students with 2 or more years of high school Latin will normally register for Latin 200. *Latin 200 is a prerequisite for all Latin courses at the 300 level.* Second year students who have completed Latin 200 may register for any Latin course at the 300 level.

**LATI 100. (3) Beginners' Latin**

No previous knowledge of Latin is required. An introduction to the Latin language with easy readings from Roman authors.

Text: To be announced. (4-0; 4-0)

**All work at the 200 level or beyond will require a Cassell's New Latin Dictionary and Allen & Greenough, New Latin Grammar.**

**LATI 200. (3) Latin Language and Literature**

Prerequisite: Latin 100 or equivalent; not open to students who have completed Latin 140. The emphasis will be on an increased understanding of the language through a reading of the authors.

Texts: Selected readings from Latin authors; *Cassell's New Latin Dictionary*; Allen & Greenough, *New Latin Grammar*. (4-0; 4-0)

**LATI 300. (3) Latin Literature, especially of the Golden Age**

The basic third-year course of Major and Honours students; advanced Latin 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, principally of the Ciceronian and Augustan ages. 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.

Texts: Cicero, *Pro Caelio*; Livy, Book XXI or Book XXX; Virgil, *Aeneid* VI, or IV, or II or XII; Horace, selected *Odes*. (3-0; 3-0)

#### 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 Virgil, *Eclogues and Georgics*; 390B Virgil, *Aeneid*; 390C Horace; 390D Roman Historians.

Prerequisite: Latin 200.

(See Note on page 48.)

(1978-79: 390B and 390D; 1979-80: 390A and 390C.)

One term only, to be announced. (3-0)

#### LATI 400. (3) Latin Literature, especially of the Silver Age

The basic fourth-year course for Honours students. The authors studied (subject to some variation from year to year) will be drawn mostly from Silver Latin. Problems of syntax, metre and stylistics will be examined. Sight translation from more difficult authors will be regularly practised, and unprepared translation will be included in the final examination.

Prerequisite: Latin 300.

Texts: Seneca, *Select Letters*, or Seneca, *De Vita Beata*; Tacitus, *Agricola*, or *Annals* I or XIV; Lucretius, V, III, or I; Juvenal, *Satires* I, III, and X.

(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, studies may be selected in one or more of the following: 490A Roman Comedy, 490B Satire and Invective, 490C Lucretius, 490D Roman Elegy, 490E Ovid, 490F Medieval Latin, 490G Cicero, 490H Roman Historians, 490J History of the Latin Language, 490K Literary Criticism and Rhetoric.

Prerequisite: Completion of at least 3 units of Latin at the 300 level or above, and permission of the Department.

(See Note on page 48.)

(2-0)

#### LATI 491. (3) Directed Studies in Latin

Depending on the student's interests and on the availability of a supervising instructor, studies may be selected in one or more of the following: 491A Roman Comedy; 491B Satire and Invective; 491C Lucretius; 491D Roman Elegy; 491E Ovid; 491F Medieval Latin; 491G Cicero; 491H Roman Historians; 491J History of the Latin Language; 491K Literary Criticism and Rhetoric.

Prerequisite: Permission of the Department. Students will normally not be permitted to take, concurrently or successively, Latin 490 and 491 courses in the same area. (2-0; 2-0)

### GRADUATE COURSES

A selection of the following courses will be given, depending on the availability of members of faculty. Students should consult the Graduate Advisor before making choices. The Graduate Advisor for 1978-79 is Professor D. A. Campbell.

**CLAS 510. (3) Classical Epic**

**CLAS 520. (3) Classical Drama**

**CLAS 530. (3) Ancient Historiography**

**CLAS 540. (3) Seminar in Greek Poetry**

**CLAS 560. (3) Seminar in Latin Poetry**

**CLAS 580. (1½) Greek Composition, Stylistics and Metre**

**CLAS 581. (1½) Latin Composition, Stylistics and Metre**

**CLAS 590. (1½) Individual Study**

**CLAS 591. (1½) Individual Study**

Classics 590 and 591 are available in the following areas: A Greek Poetry; B Greek Tragedy; C The Greek Anthology; D Aspects of 5th-4th century B.C. Greek History; E Greek Historians of the 5th and 4th centuries B.C.; F Roman Comedy; G Augustan Latin Poetry; H Post-Augustan Latin Poetry; J Roman Tragedy; K Roman Imperial History.

#### CLAS 599. M.A. Thesis

The unit value of the thesis will normally be 3 or 6. In exceptional cases more than 6 units may be awarded. Before the thesis is begun, the candidate must arrange with his advisors and the Department the number of units to be assigned for it.

## DEPARTMENT OF CREATIVE WRITING

W. David Godfrey, B.A. (*Iowa*), M.A. (*Stanford*), Ph.D. (*Iowa*), Associate Professor and Chairman of the Department.

Robin Skelton, B.A., M.A. (*Leeds*), F.R.S.L., Professor.

William D. Valgardson, B.A., B.Ed. (*Man.*), M.F.A. (*Iowa*), Associate Professor.

Lawrence W. Russell, B.A. (*U. of Vic.*), M.A. (*Calif.*), Assistant Professor.

Derk Wynand, B.A., M.A. (*Brit. Col.*), Assistant Professor. (On study leave 1978-79.)

Rona J. Dexter, B.A., M.A. (*Brit. Col.*), Ph.D. (*Kent, U.K.*), Sessional Lecturer (1977-78).

Alexander Hutchison, M.A. (*Aberdeen*), Ph.D. (*Northwestern*), Part-time Sessional Lecturer (1977-78).

Charles M. Lillard, B.A., M.F.A. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

P.K. Page, Part-time Sessional Lecturer (1977-78).

Phyllis Webb, B.A. (*Brit. Col.*), Part-time Sessional Lecturer (January-April 1978).

### GENERAL AND MAJOR PROGRAMMES

Although the programmes 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-writing students. Entrance to these courses (marked \*) is unrestricted. Other courses have specific Creative Writing prerequisites and/or corequisites. Students wishing to take these restricted courses should, when applying for entrance to them, provide some samples of their written work.

In normal circumstances, Creative Writing 100 is prerequisite to all Creative Writing workshops. However, students who satisfy the Department's standards, 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 General or Major Programme at an appropriate level.

The Creative Writing Programme should include a coherently organized group of courses from related disciplines. Members of the Creative Writing Department are available to help students in the appropriate selection of their courses. A guide to useful courses for writers is available in the Department.

Students wishing to take a General Programme 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 not less than 9 units of Creative Writing numbered 300 or above and including at least one of Creative Writing 303, 304, 305, or 315.

Students wishing to take a Major Programme in Creative Writing will be required to take Creative Writing 100, English 121/122 or 115/116, and 6 units from Creative Writing 201, 202, 203, 205, 212, and not less than 15 units of Creative Writing courses numbered 300 or above, including at least one of Creative Writing 303, 304, 305, or 315 and at least one workshop numbered at the 400 level.

No student will be permitted to take more than two workshops in any given year.

Subject to the regulations relating to prerequisites, courses in the Creative Writing Programme are open to any student who satisfies the Department as to his or her ability, regardless of the faculty in which the student is registered. Students in the Faculty of Fine Arts and the Faculty of Education, subject to the regulations of those faculties, may take Creative Writing courses for credit.

### COURSES

#### FIRST YEAR

#### \*C W 100. (3) Introduction to Creative Writing

This course consists of a one hour weekly lecture and a weekly two-hour workshop. The lectures will present a non-historical survey of some of the basic structures in English Poetry, Drama, and Fiction, together with a preliminary discussion of the nature of the creative process as regards

literature. The workshop will involve the students in the study of "models" in poetry, fiction, and drama, and in the writing of compositions in all three genres. Each workshop will contain not more than 15 students.

Corequisite: English 121 and 122 (or English 099 and 115 by permission of the Department).

Texts: To be announced.

Members of the Department. (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 Ghiselin: *The Creative Process*; Anthony Ostroff: *The Contemporary Poet as Artist and Critic*; Rosemary Harding: *The Anatomy of Inspiration*; Joseph Langford: *Poet's Choice*.

(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.

Prerequisite: Creative Writing 100 or permission.

Text: Robin Skelton: *The Practice of Poetry*.

Members of the Department. (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.

Prerequisite: Creative Writing 100 or permission.

W. D. Valgardson. (0-2; 0-2)

### C W 203. (3) Drama Workshop

A workshop seminar in which students are instructed and guided in the writing of drama.

Prerequisite: Creative Writing 100 or permission.

L. W. Russell. (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 Creative Writing 404.

Prerequisite: English 115/116 or 121/122 or Creative Writing 100 or by permission.

Members of the Department. (0-2; 0-2)

### \*C W 212. (3) Multi-Media

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.

L. W. Russell. (0-2; 0-2)

## THIRD YEAR

### C W 303 (formerly ENGL 401). (3) Poetry Workshop

Prerequisite: Creative Writing 201 or permission. (0-3; 0-3)

### C W 304 (formerly ENGL 402). (3) Fiction Workshop

Prerequisite: Creative Writing 202 or permission. (0-3; 0-3)

W. D. Godfrey.

### C W 305 (formerly ENGL 403). (3) Drama Workshop

Prerequisite: Creative Writing 203 or permission. (0-3; 0-3)

\*See page 50, first paragraph.

### C W 306. (3) Seminar in Literary Procedures

This workshop-seminar will instruct students in editorial skills which may be of use to them in pursuing either an academic or non-academic career. Matters dealt with will include the compiling of anthologies and symposia, copy-editing, the collating of texts, the editing of letters and archival materials, indexing, editing of periodicals, the selecting of illustrations, the arranging of appendices and footnotes, and the basis preparation of copy for the printer. Some fundamental aspects of copyright law, book design, and publishing practices will be introduced. (0-3; 0-3)

### \*C W 307 (formerly one-half of 300). (1½) Basic Forms and Techniques in Poetry

A lecture course surveying the structural composition and the function of techniques in a representative group of poems. Aspects of poetics discussed will include prosody, diction, imagery, abstract form and sound patterns.

R. Skelton. September-December. (3-0)

### \*C W 308 (formerly one-half of 300). (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: Creative Writing 307.

R. Skelton. January-April. (3-0)

### \*C W 309 (formerly one-half of 301). (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.

W. D. Valgardson. September-December. (3-0)

### \*C W 310 (formerly one-half of 301). (1½) Advanced Forms and Techniques in Narrative

This seminar will examine advanced and unusual forms and techniques in narrative and major influences on contemporary narrative.

Prerequisite: Creative Writing 309.

W. D. Godfrey. January-April (3-0)

### \*C W 311 (formerly one-half of 302). (1½) Structure in Stage Drama

A lecture course surveying the structural characteristics of stage drama.

L. W. Russell. September-December only. (3-0)

### \*C W 312 (formerly one-half of 302). (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.

L. W. Russell. January-April (3-0)

### \*C W 313 (formerly one-half of 204). (1½) Recurrent Themes in Literature

A lecture course surveying recurrent themes in English Literature and in other literatures in translation.

L. W. Russell. September-December (3-0)

### \*C W 314 (formerly one-half of 204). (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.

L. W. Russell. January-April (3-0)

### C W 315. (3) Seminar in Journalism

After a brief refresher programme in general news reporting, students will be introduced to more specialized aspects of news reporting including municipal affairs, cultural events, court and business reporting, and the "higher journalism". Attention will also be paid to radio and television journalism. 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 technology of newspapers and magazines in Canada. Each student will be responsible for a research report on a specific area of the journalistic world as well as written stories and features.

Prerequisite: Creative Writing 205, or permission of the instructor. (0-3; 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 founts, 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 student 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: Creative Writing 306, or (with permission) Creative Writing 205.

(May not be offered 1978-79.) 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.

Prerequisite: 6 units in Creative Writing.

**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.

Prerequisite: 6 units in Creative Writing and the permission of the instructor.

#### FOURTH YEAR

NOTE: Every student in a fourth year workshop will be required to present a substantial body of work organized in book form. The creation of this work will be supervised by an appropriate member of the Department.

**C W 401 (formerly ENGL 404). (3) Advanced Poetry Workshop**

Prerequisite: Creative Writing 303.

R. Skelton. (0-3; 0-3)

**C W 402 (formerly ENGL 405). (3) Advanced Fiction Workshop**

Prerequisite: Creative Writing 304.

(0-3; 0-3)

**C W 403 (formerly ENGL 406). (3) Advanced Drama Workshop**

Prerequisite: Creative Writing 305.

L. W. Russell. (0-3; 0-3)

**C W 404. (3) Special Studies Seminar**

This seminar exists for students who wish to specialize in fields outside the three main categories of Poetry, Fiction and Drama. It will cater to students working in Psycho-Linguistics, and in Multi-Media, and in the field of Translation. It will also cater to students in Journalism. It will be taught on a tutorial basis.

Members of the Department and others. (0-0-3; 0-0-3)

**\*C W 405 (formerly one-half of 400). (1½) Innovations in Twentieth Century Poetry**

A lecture course surveying key works in twentieth century poetry and discussing experimental writing. The material discussed will be taken from the literature of a number of countries.

(Not offered 1978-79.) (3-0)

**\*C W 406 (formerly one-half of 400). (1½) Innovations in Twentieth Century Fiction and Drama**

A lecture course surveying key works in twentieth century fiction and drama and discussing experimental writing. The material discussed will be taken from the literature of a number of countries.

(Not offered 1978-79.) (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: Creative Writing 306 or Creative Writing 315 or permission.

(Offered in alternate years. Next offered 1979-80.) (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.

\*See page 50, first paragraph.

**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.

## DEPARTMENT OF ECONOMICS

Leonard Laudadio, B.A. (*Puget Sound*), M.A., Ph.D. (*Wash.*), Professor and Chairman of the Department.

Leo I. Bakony, B.A. (*Brit. Col.*), Ph.D. (*Wash.*), Professor.

Gordon W. Bertram, B.A. (*Brit. Col.*), Ph.D. (*Calif.*), Professor.

Robert V. Cherneff, B.A. (*U. of Vic.*), M.A., Ph.D. (*Wash.*), Associate Professor.

J. Colin H. Jones, B.A. (*Wales*), M.A. (*Montana St.*), Ph.D. (*Queen's*), Associate Professor.

Izzud-Din Pal, M.A. (*Panjab*), M.Sc.Econ. (*London*), Ph.D. (*McGill*), Associate Professor.

William D. Walsh, B.Com. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Associate Professor.

Gerald R. Walter, B.A., M.A., Ph.D. (*Calif.*), Associate Professor.

Kenneth L. Avio, B.Sc. (*Ore.*), M.S. Ph.D. (*Purdue*), Assistant Professor.

Donald G. Ferguson, B.A., M.A., Ph.D. (*Tor.*), Assistant Professor.

Joseph Schaaafsma, B.A., M.A. (*McMaster*), Ph.D. (*Tor.*), Assistant Professor.

John A. Schofield, B.A. (*Durham*), M.B.A. (*Indiana*), M.A., Ph.D. (*S. Fraser*), Assistant Professor.

James E. Currie, B.Com. (*Brit. Col.*), M.B.A. (*McMaster*), Part-time Lecturer (1977-78).

Latif T. Ghobrial, B.A. (*Monmouth Coll.*), M.B.A. (*Penn.*), Part-time Lecturer (1977-78).

Mark K. Loken, B.A. (*Concordia Coll.*), M.A. (*Calgary*), Ph.D. (*Duke*), Sessional Lecturer (1977-78).

J. Trevor Matthews, B.A. (*Brit. Col.*), M.B.A. (*Stanford*), Part-time Lecturer (1977-78).

Robert W. McQueen, B.Com. (*Brit. Col.*), C.A. Part-time Lecturer (1977-78).

Colin Crisp, B.A. (*U. of Vic.*), M.A. (*Queen's*), Part-time Sessional Lecturer (1977-78).

Andrew Mirlin, B.A., M.A. (*W. Ont.*), Sessional Lecturer (1977-78).

Malcolm Rutherford, B.A. (*Heriot-Watt*), M.A. (*S. Fraser*), Sessional Lecturer (1977-78).

J.H. Duncan Smeaton, B.A. (*St. Johns Coll.*), M.A. (*Man.*), Sessional Lecturer (1977-78).

### GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 155; for graduate studies, see page 55.

### GENERAL, MAJOR AND HONOURS PROGRAMMES

#### Requirements:

- (i) For General Programme with 9 units in Economics:
  - (a) Economics 201 and 202 (or 200).
  - (b) Economics 302 and 303, and 6 additional units in Economics courses numbered 300 or above.
- (ii) For Major:
  - (a) Economics 201 and 202 (or 200) with at least a second class standing, or permission of the Department; and Economics 240.
  - (b) A total of 15 units in courses numbered 300 and above, including 321, and one of the following options: 302 and 303, or 302 and 301, or 300 and 303, or 300 and 301.
  - (c) Mathematics 130 (or 100 and 101) or 151 and 102 (formerly 140) unless permitted by the Department to omit this requirement in special circumstances.
- (iii) For Honours:
  - (a) Mathematics 130 (or 100 and 101) or 151 and 102 (formerly 140) unless permitted by the Department to omit this requirement in special circumstances.
  - (b) Economics 201 and 202 (formerly 200) with at least a high second class standing, or permission of the Department.

- (c) Economics 240 (formerly 340).  
 (d) A total of 36 units in Third and Fourth Years, including Economics 300, 301, 321, 340\* (formerly 341), 470, and at least 12 additional units in Economics courses numbered above 300, and at least 6 units in another subject or subjects with the approval of the Department.

\*Note: Economics 340 is not open to students who have credit in Statistics 253. Students with credit in Statistics 253 are required to take a 1½ unit upper level course in Economics instead of Economics 340.

Recommended: Commerce 151 (1½ units) and 190 (1½ units), 3 units of Mathematics in addition to Mathematics 151 and 102 (formerly 140), Political Science 100 or 201.

- (e) Admission to the Honours programme, which should be sought at the end of the Second Year, requires permission of the Department. Interested students should consult 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 Economics courses taken in the Third and Fourth Years. Economics 470 is required for all Fourth Year Honours students. Third Year Honours students will be required to attend the seminars.
- (f) To obtain a First Class Honours degree the requirements will be: a graduating average of at least 6.50; a first class average computed on the basis of all upper level Economics courses, except Economics 470; and at least a second class grade in Economics 470.
- (g) To obtain a Second Class Honours degree, the requirements will be: a graduating average of at least 3.50; a second class average computed on the basis of all upper level Economics courses, except Economics 470; and at least a C in Economics 470.
- (h) A student who fails to meet Departmental requirements for a First Class standing in the Honours programme 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 the Honours programme but has a Second Class graduating average will be offered a Second Class Major Degree.

## UNDERGRADUATE COURSES

### ECONOMICS

Unless indicated otherwise, courses begin in September and end in April.

#### INTRODUCTORY AND INDIVIDUAL COURSES

Students who wish to take only one course in Economics should consider Economics 100. Upper division courses may also be taken subject to the following regulations governing the prerequisite courses.

Economics 201 and 202 are prerequisites for all Third Year courses, but in special cases, Economics 201 and 202 may be taken concurrently with Economics courses numbered 305 and above with the permission of the Department. Economics 302 and 303, or 300 and 301 (or any of the options listed under Major (b) above) are prerequisites for all courses numbered 400 and above unless permission is granted by the Department.

#### **ECON 100. (3) The Canadian Economy — Principles, Problems and Policies**

An introduction to the basic concepts of economic analysis. Discussion of the process of decision making by consumers and producers. The meaning of equilibrium and the determination of national income. Some discussion of Canadian institutions and economic policies, cycles, growth, and international trade.

Prerequisite: None; credit cannot be obtained by those who have previous credit in Economics; Economics 100 and 201/202 cannot be taken concurrently.

Text: To be announced.

Members of the Department. (3-0; 3-0)

#### **ECON 201 (formerly one-half of 200). (1½) Principles of Microeconomics**

The principles of microeconomics analysis with special reference to the theory of demand, the theory of the firm and the theory of distribution.

Prerequisite: None; Economics 100 and 201 cannot be taken concurrently; not open to first-year students.

Members of the Department.

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

#### **ECON 202 (formerly one-half of 200). (1½) Principles of Macroeconomics**

The principles of macroeconomics analysis with special reference to fluctuations in income and prices, monetary and fiscal policies for economic stabilization.

Prerequisite: None; Economics 100 and 202 cannot be taken concurrently; not open to first-year students.

Members of the Department.

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

#### **ECON 240 (formerly 340). (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.

Text: To be announced. Problems assigned weekly.

NOTES: Prerequisites: Mathematics 151 and 102 (formerly 140), or Mathematics 180 (formerly 150) or permission of the Department; Economics 100; or this course may be taken concurrently with Economics 201 and 202 (formerly 200).

L. I. Bakony. January-April. (3-0)

#### **ECON 300. (3) Microeconomics**

Theories of demand and production; pricing of factors of production; general equilibrium theory; welfare economics; some applications of price theory.

Text: To be announced.

L. Laudadio. (3-0; 3-0)

#### **ECON 301 (formerly 400). (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.

Text: To be announced.

R. V. Cherneff. (3-0; 3-0)

#### **ECON 302. (1½) Intermediate Microeconomic Theory**

The allocation of resources under competitive and non-competitive 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 Economics 300.

Text: To be announced.

I.-D. Pal. September-December. (3-0)

#### **ECON 303 (formerly one-half of 302). (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 for Economics 301 or 302 (3).

Text: To be announced.

W. D. Walsh. 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.

Text: To be announced. Supplemental Reading.

R. V. Cherneff. 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.

Text: To be announced. Supplementary reading and term paper.

J. C. H. Jones. (3-0; 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.

Text: To be announced. Supplementary reading.

W. D. Walsh. (3-0; 3-0)

**ECON 320 (formerly one-half of 420). (1½) Economic Development**

Some characteristics of the process of development; measurement of economic development and problems of international comparison; problems of transformation of less developed economies in the national and international framework. An examination of Canada's economic relations with some developing countries.

Text: To be announced.

I.-D. Pal. September-December. (3-0)

**ECON 321. (3) The Economic History of Canada**

The study 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.

Text: To be announced. Term paper. Supplemental reading.

G. W. Bertram. (3-0; 3-0)

**ECON 323. (3) Comparative Economic Systems**

A study of the economic systems of societies at all levels of economic and social development. The first term concentrates on the economic systems of tribal and peasant societies, and the emergence of the market as a form of social and economic organization. The second term is devoted to the analysis of modern economic systems. The roles of the market and economic planning as forms of economic organization and control are examined in detail for several representative countries, e.g. Canada, U.S.S.R., France, China.

Text: To be announced. Supplementary reading.

D. G. Ferguson. (3-0; 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.

Text: To be announced.

J. Schaafsma. September-December. (3-0)

**ECON 326. (1½) Fiscal Policy and Related Issues**

A discussion of the fiscal and debt-management policy. This course would examine the historical record of Canadian policy since the depression and theoretical possibilities for the present and future.

Text: To be announced. Term paper.

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: Economics 100 or 201 or permission of the Department.

Not open to those students having credit for Economics 430.

Text: To be announced.

L. Laudadio. September-December. (3-0)

**ECON 340 (formerly 341). (1½) Statistical Inference**

Probability Theory, Sampling Theory, Confidence Limits, Tests of Hypotheses, Regression and Correlation. Not open to students who have credit for Statistics 253.

Prerequisite: Economics 240 and Mathematics 130, or 151\* and 102\* or permission of the Department. (\*Formerly Mathematics 140.)

Text: To be announced.

J. Schaafsma. September-December. (3-0)

**ECON 402 (formerly 401). (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. Not open to students who have credit for Economics 401 (3).

Prerequisites: Economics 201 and 202 (formerly 200).

Texts: Taylor, *A History of Economic Thought*; Newman, Gayer, Spencer, *Source Readings in Economic Thought*.

J. Schaafsma. September-December. (3-0)

**ECON 405. (3) International Economics**

Theory of international trade; comparative costs and general equilibrium theory, balance of payments; international stability; trade policy;

international aspects of economic development of under-developed countries.

Text: To be announced. Supplementary reading.

I.-D. Pal. (3-0; 3-0)

**ECON 406. (1½) Monetary Theory and Policy**

The examination of the comparative efficacy of the instruments of monetary control; the objectives and effectiveness of monetary policy; the theory of the demand for money; money supply theory; and international monetary problems.

Prerequisite: Economics 303 or 301 or permission of the Department. Economics 305 is recommended.

Text: To be announced. Supplementary reading.

K. Avio. January-April. (3-0)

**ECON 410. (3) Principles and Problems of Economic Policy**

Consideration of agricultural policy, monetary policy, fiscal policy, commercial policy, anti-monopoly policy, labour policy, social security and economic planning. An essay will be assigned during the session on a topic dealing with an aspect of government economic policy in Canada.

Text: To be announced.

J. C. H. Jones. (3-0; 3-0)

**ECON 412. (1½) Urban Economics**

Application of economic theory to the form and structure of urban areas. External effects and public policy in the urban context. Topics include: intraurban location, systems of cities, economic function and the specialization within the city, the economics of urban transport, housing and public services.

Text: To be announced. Term paper.

G. R. Walter. January-April. (3-0)

**ECON 414. (1½) Regional Economics**

Consideration of economic factors controlling regional income and population growth. The problem of regional economic disparities. Models for evaluating and forecasting subnational economic growth. Topics include: regional accounting, migration, comparative advantage, application of input-output, economic base, industry complex models, and associated public policies.

Text: To be announced. Term paper.

J. A. Schofield. September-December. (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, non-efficiency 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. A. Schofield. (3-0)

(Not offered 1978-79.)

**ECON 420. (1½, formerly 3) 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.

Text: To be announced. Supplementary reading.

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.

Text: To be announced.

(Not offered 1978-79.) (3-0)

**ECON 430. (3) Economics of Natural Resources and Environmental Policy**

The application of economic theory to the use and exploitation of natural resources. A discussion of economic theory in relation to problems of allocation, distribution, stability, and economic growth as they relate to resource management is undertaken, followed by an investigation of particular problems in various resource industries, and questions relating to environmental quality. Particular attention is paid to analytical questions

concerning resource management to achieve increased economic welfare and to problems of utilizing resources over time.

Prerequisite: Economics 300 or 302, or permission of the Department.

Text: To be announced. Term papers First and Second terms.

G. R. Walter. (3-0; 3-0)

#### **ECON 440. (3) Mathematical Economics**

The use of mathematics to derive economic theory. Topics include optimization theory for the consumer and the firm using calculus and linear programming, input-output analysis and dynamics. Very little outside reading is required. Problems are assigned every week.

Prerequisite: Mathematics 240, or permission of the Department.

Text: A. C. Chiang, *Fundamental Methods of Mathematical Economics*.

D. G. Ferguson. (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: Economics 340 and 341 and either Mathematics 240 or 100, 101 and 110.

Text: To be announced.

L. I. Bakony. (3-0; 3-0)

#### **ECON 470. (3) Honours Seminar**

NOTE: For Honours Students only.

J. A. Schofield.

#### **ECON 495. (3) Directed Studies**

An elective course for selected Honours students which may, with the permission of the Department, be substituted for another elective course numbered above 400.

Members of the Department.

### **COMMERCE**

#### **COMM 151. (1½, formerly 3) Fundamentals of Accounting**

The analysis and communication of financial events and an examination of the accounting postulates underlying the preparation and presentation of financial statements.

Prerequisite: Commerce 190 or permission.

Text: To be announced. January-April. (3-0)

#### **COMM 190. (1½) Fundamentals of Business**

An examination of the legal, financial and organizational structure of business enterprise with particular respect to the Canadian environment. Not open to students with 3 units credit in Commerce 151.

Prerequisite: Second-year standing.

September-December. (3-0)

### **GRADUATE COURSES**

(Consult Department for Courses offered in any given year.)

#### **ECON 500. (1½) Micro Economic Theory**

Analysis of decision making by consumers and firms; study of equilibrium positions in different market structures: welfare economics; recent contributions to price theory.

#### **ECON 501. (1½) Macro Economic Theory**

Macro economic relationships, static and dynamic models, properties of dynamic models, policy analysis with large dynamic models.

#### **ECON 505. (1½) International Trade**

Selected theoretical issues in international trade, such as trade and relative prices and factor supply, theory of customs unions exchange rate, trade and economic growth, and adequacy of international reserves.

#### **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 514. (1½) Regional and Urban Economic Growth**

Seminar in analytical approaches to understanding subnational economic growth including growth poles, comparative advantage, capital and labour migration and related topics. Methods of impact analysis and forecasting regional and urban disparities in wealth and income and approaches to their alleviation.

Prerequisite: Elementary calculus and macro economic theory.

#### **ECON 515. (1½) Labour Economics**

Seminar in labour economics and collective bargaining, including wage and employment theory, collective bargaining systems, theory of the labour movement, and public policy in collective bargaining.

#### **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 programmes 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 in resource industries.

#### **ECON 540. (1½) Quantitative Methods**

Review of basic statistical inference techniques with extensions relevant to economic analysis. Application to specific problems.

Prerequisite: Economics 340 or equivalent.

#### **ECON 545. (1½) Econometrics**

Seminar in single equation and simultaneous equation techniques and applications. Simulation experiments with large econometric models. Optimal decision procedures.

Prerequisite: Economics 445 or equivalent.

#### **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 595. (1½) Directed Studies**

May be offered in areas A or B, each for 1½ units. Students may elect to take either or both in any one Winter Session.

#### **ECON 599. (3) Thesis**

## **DEPARTMENT OF ENGLISH**

Michael R. Best, B.A., Ph.D. (*Adelaide*), Associate Professor and Chairman of the Department.

Roger J. Bishop, B.A., Dip. Ed. (*Brit. Col.*), B.L.S., M.A. (*Tor.*), Professor Emeritus.

Charles Doyle, B.A., M.A. (*N.Z.*), Ph.D. (*Auckland*), Professor.

Roy F. Leslie, B.A., M.A., Ph.D. (*Manchester*), Professor.

Frederick Mayne, B.A., Ph.D. (*Witwatersrand*), Professor.

John D. Peter, M.A. (*Cantab.*), B.A., LL.B., D.Litt. (*S. Africa*), D.Litt. (*Rhodes*), 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; and Director of Honours Programme (1977-78).

Anthony B. England, B.A., M.A. (*Manchester*), Ph.D. (*Yale*), Associate Professor.

M. D. Faber, B.A. (*Chicago*), M.A., Ph.D. (*Calif., Los Angeles*), 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.

Velma L. Gooch, B.Ed., M.A. (*Alta.*), Ph.D. (*Manchester*), Associate Professor.

Patrick J. Grant, B.A. (*Queen's, Belfast*), D.Phil. (*Sussex*), Associate Professor.

John G. Hayman, B.A., M.A. (*Oxon.*), M.A. (*Cornell*), Ph.D. (*Northwestern*), Associate Professor.

David L. Jeffrey, B.A. (*Wheaton*), M.A., Ph.D. (*Princeton*), Associate Professor.

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. Köster, 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.

Samuel L. Macey, B.A. (*Brit. Col.*), Ph.D. (*Wash.*), F.W.S.O.M., Associate Professor.

G. Grant McOrmond, C.D., M.A. (*Sask.*), Associate Professor.

Colin J. Partridge, B.A. (*Nott.*), Cert. Ed. (*London*), Ph.D. (*Nott.*), Associate Professor.

Herbert F. Smith, A.B., A.M. (*Boston*), Ph.D. (*Rutgers*), Associate Professor.

Henry E. Summerfield, B.A., M.A. (*Oxon.*), M.Litt. (*Durham*), Associate Professor.

Reginald C. Terry, B.A. (*Leicester*), M.A. (*Bristol*), Ph.D. (*London*), Associate Professor.

David S. Thatcher, B.A. (*Cantab.*), M.A. (*McMaster*), Ph.D. (*Alta.*), Associate Professor; and Director of Graduate Studies (1977-78).

Bruce E. Wallis, B.A. (*Rutgers*), M.A. (*Harvard*), Ph.D. (*Princeton*), Associate Professor.

Edward R. Zietlow, B.A. (*Dakota Wesleyan*), M.A. (*Boston*), Ph.D. (*Wash.*), Associate Professor. (On study leave 1978-79.)

Norman W. Alford, B.A. (*London*), Ph.D. (*Texas*), Assistant Professor. (On study leave 1978-79.)

Thomas R. Cleary, B.A. (*Queen's Coll.*), M.A., Ph.D. (*Princeton*), Assistant Professor.

John D. Cox, B.A. (*Hope Coll.*), M.A., Ph.D. (*Chicago*), Assistant Professor. (On leave of absence 1978-79.)

Anthony S. G. Edwards, B.A. (*Reading*), M.A. (*McMaster*), Ph.D. (*London*), Assistant Professor.

George H. Forbes, B.A. (*Brit. Col.*), M.A., Phil.M. (*Tor.*), Assistant Professor.

Victor A. Neufeldt, B.A. (*Brit. Col.*), Ph.D. (*Ill.*), Assistant Professor; and Director of the Language Programme. (1977-78).

Constance M. Rooke, B.A. (*Smith Coll.*), M.A. (*Tulane*), Ph.D. (*N. Carolina*), Assistant Professor.

Norma Rowen, B.A. (*Oxon.*), Ph.D. (*Calif., Berkeley*), Assistant Professor. (On study leave 1978-79.)

Robert M. Schuler, B.A. (*Bellarmine*), M.A., Ph.D. (*Colo.*), Assistant Professor. (On study leave 1978-79.)

Terry G. Sherwood, B.A. (*Ore.*), M.A., Ph.D. (*Calif., Berkeley*), Assistant Professor.

Nelson C. Smith, A.B. (*Princeton*), M.A.T. (*Oberlin*), Ph.D. (*Wash.*), Assistant Professor; and Director of Major and General Programmes (1977-78).

Diane Tolomeo, B.A. (*Rochester*), M.A., Ph.D. (*Princeton*), Assistant Professor. (On leave of absence 1978-79.)

Trevor L. Williams, B.A., M.A. (*Manchester*), Ph.D. (*Wales*), Assistant Professor.

R. Clark Cook, B.A. (*Brit. Col.*), Sessional Lecturer, Correctional Education Programme (1977-78).

Hendrick Hoekema, B.A. (*S. Fraser*), Sessional Lecturer, Correctional Education Programme (1978-79).

Norman L. Amor, B.A., M.A. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

Eileen L. Dombrowski, B.A. (*U. of Vic.*), M.A. (*London*), Part-time Sessional Lecturer (1977-78).

Jane L. Gooch, B.A. (*Brit. Col.*), M.A., Ph.D. (*Tor.*), Part-time Sessional Lecturer (1977-78).

Maidie M. Hilmo, B.A., M.A. (*Brit. Col.*), Part-time Sessional Lecturer (September-December 1977).

Alexander N. Hutchison, M.A. (*Aberdeen*), Ph.D. (*Northwestern*), Part-time Sessional Lecturer (1977-78).

Timothy P. Moreton, B.Phil., B.A. (*York*), Part-time Sessional Lecturer (1977-78).

Audrey J. Neufeldt, B.A. (*Brit. Col.*), M.A. (*Wash.*), Part-time Sessional Lecturer (September-December 1977).

Phyllis J. Webb, B.A. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

Maureen E. Baird, B.Com. (*Tor.*), Administrative Officer.

## GRADUATE PROGRAMMES

For information on studies leading to the M.A. and Ph.D. degrees, see page 157; for graduate courses, see page 61.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

### 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 English 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 programme should take in their First Year: 3 units from English 115, 116, 121, or 122; Second Year: English 200, 201, 203, 204, 205, 210, or 238; Third and Fourth Years: a total of 9 units in English courses numbered 350 and above. (English 400 is not acceptable). Students desiring advice about their choice of courses are invited to see the secretary of the Department, who will arrange consultation with Departmental advisors.

### 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, not including English 400. 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 (353, 362, 372, 380, 385, 388, 391, 392, 393, 394, 395, 398, 448).

Course Structure for English Majors:

- At least one course (3 units) from: 200, 201, 203, 204, 205, 210, 238. Students planning to major in English are strongly recommended to take English 200, or 204/205.
- At least 3 units from: 351, 352, 413, 419.
- At least 1½ units in addition to (b) requirement, from courses in literature before 1700.
- At least 1½ units from courses in literature covering the period 1700-1800.
- At least 1½ units from literature 1800-1900.
- At least 1½ units from Twentieth Century Canadian, American, or British Literature.

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 post-graduate work are reminded that graduate schools generally require competence in at least one language other than English.

### Honours:

The Honours Programme allows students of proven ability to study English Language and Literature more comprehensively than is possible in the General or Major programmes. Courses range more widely over the whole field of English studies, and the approach within the special Honours courses is more intensive. These classes are normally small enough to meet as seminar groups. Individual tutors are assigned to offer guidance on each student's requirements. Students who take a special interest in English Language or Literature, or who are contemplating post-graduate study in English, are strongly advised to enrol in the Honours rather than in the General or Major programmes. Those who contemplate an Honours programme are strongly advised to take English 345 in their Second Year, if possible; otherwise English 345 must be taken in their Third Year.

Prerequisites for admission to Third Year Honours include a First or high Second Class mark in English 200 or in English 204 and/or English 205, and the approval of the Chairman of the Department. In the last three years candidates will offer at least 45 units of credit of which 30 must be English courses specified below.

The programmes of Honours students are subject to the approval of the Director of Honours Programmes, and the choice of electives is subject to modification in the light of a student's entire programme. 24 units must be taken from English courses numbered 345 and above (English 400 is not acceptable) and must include 6 units consisting of the following English courses: 440: The History of the English Language; 445 and 446: Honours Seminars; 449: Graduating Essay or Directed Reading. The programme *must* also include at least 3 units of Chaucer or medieval literature; Shakespeare; at least 1½ units in the Renaissance; and 3 units in each in the 18th and 19th centuries. The Department strongly recommends that Honours students take at least 3 units in American, Canadian, or 20th Century British Literature. Special counselling for students entering the Honours programme, as well as for those already enrolled in it, will be offered at duly announced times in the Second Term and before and during Registration.

At the end of the Fourth Year there will be an interview, at which students may be required to defend their Graduating Essay or discuss the work undertaken for their Directed Reading project.

All students wishing to honour in English 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.

An Honours degree is either first or second class. A first class degree requires a first class graduating average (6.50 and above) and at least a B+ in English 499 (The Graduating Essay). If an Honours student has a first class graduating average but has scored lower than B+ in English 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 a B- in English 499.

### Intersession Courses

Intersession courses may be offered at the discretion of the Department. These courses, normally offered only to majors and honours students, consist of individual tutorials given during May and June. Students must demonstrate both a competence to take such a course (third and fourth year standing with a G.P.A. or 5.50 or better in the previous year) and the need for such a course to complete their programmes. Variable-content courses and composition courses shall not be permissible as Intersession courses. Requests for an Intersession course shall be made in the first instance to the Director of Majors or the Director of Honours, as applicable.

### Directed Reading

English 490 and 491 (Directed Reading) are tutorials of 1½ units each which are set up by students and individual instructors and approved by the Director of Majors or Honours *and* by the Chairman of the Department. Only students with Honours standing or a G.P.A. or 6.00 or better may be allowed to pursue studies in Directed Reading.

### Course Challenge

The English Department does not permit students to gain credit by course challenge; students may, however, apply for advanced standing.

### Suggested Electives

The Department encourages its students to take elective courses supportive to their General, Major or Honours programmes. In making their choice of electives, students may wish to give special consideration to: Classics 100, 200; History 220; History in Art 120, 221; Philosophy 100, 102; as well as to courses in the literature of other languages.

## UNDERGRADUATE COURSES

*Unless indicated otherwise, courses begin in September and end in April. With the exception of first-year courses and English 200, specific reading lists for each course can be obtained from the instructor or the Department office before or during registration week.*

### FIRST YEAR

For students who achieve satisfactory standing in the British Columbia English Placement Test or the Scholarship Examination in English Composition, or the University's English Qualifying Examination, the English Department offers First Year courses, all of which pay attention to the need of students to acquire proficiency in writing. Students who wish, in addition to the study of composition, to take a balanced programme of literature should enrol in English 121 in the First Term and 122 in the Second; students who would prefer a more intensive study of expository writing should take English 115 in the First Term and 116 in the Second. At least 3 units of credit in First Year English are prerequisite to future work in

the Department. After consultation with the Department, students may also take English 204 or 205 concurrently with First Year English. If they obtain a grade of A or higher in English 099, they may drop English 115 unless it is required for their degree programme.

Students who do not achieve an acceptable standing on the British Columbia English Placement Test or the Scholarship Examination in English Composition, or the University's English Qualifying Examination, must register in English 099 for the First Term and in English 115 for the Second Term. If they obtain a grade of A or higher in English 099, they may drop English 115 unless it is required for their degree programme. A student in English 099 may not take any other English course until he has 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 and, 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 evidence of attainment of the required level of competence in English, such denials being subject to appeal to the Senate Committee on Admission and Re-registration.

Students must have a grade of C+ or better in English 099 to take 116 in the Second Term.

No student may take more than one First Year English course in his First Term. However, students may take 3 units of First Year English in the Second Term with the permission of the Director of the Language Programme.

NOTE: The normal sequences for first year English are 115/116 or 121/122. Permission of the Department is required for any other combination. Completion of either sequence qualifies a student to register for further courses in the Department.

### ENGL 099 (formerly 111). (0) Remedial English Composition (1½ fee units)

A remedial course in expository writing required of those who fail the English Qualifying Examination. A workshop approach will be used to provide instruction and drill in the fundamentals of reading comprehension and composition, including grammar, mechanics, sentence structure, paragraphing, and vocabulary. Students who achieve a satisfactory level of performance may be excused from the course after a mid-term examination. Those students required to register in this course may not take another English course until they have completed 099. Limited space may be available for other students with difficulties in writing who may be placed in the course on the recommendation of the Department of English.

Members of the Department.

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

### ENGL 115 (formerly one-half of 110). (1½) College Composition

An examination of composition and English prose. In addition to the study of prose, attention will be paid to the writing and documenting of research papers, to logical thinking in exposition, and to the effective presentation of ideas in exposition.

Members of the Department.

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

### ENGL 116. (1½) Introduction to Literature

A study of prose fiction, poetry, and drama, with attention to the writing of critical essays. Students will be assigned a minimum of four essays. Not open to students with credit in English 121 or 122.

Prerequisite: English 115, or permission of the Department.

Texts: Barnet, Berman, Burto, *An Introduction to Literature*. Instructors, with the option of adding one work of their own choice, will select one of the following: Dickens, *Great Expectations*; Laurence, *The Stone Angel*.

Members of the Department.

January-April. (3-0)

### ENGL 121 (formerly one-half of 120). (1½) Literature: Prose Fiction

A study of literary genres, focusing upon the Short Story and the Novel, with attention to the writing of critical essays. Students will be assigned a minimum of four essays.

Texts: Mizener, *Modern Short Stories* or Timko and Oliver, *38 Short Stories*. Individual Instructors, with the option of substituting one work of their own choice, will select texts from the following list: Dickens, *Great Expectations*; Faulkner, *Light in August*; Hardy, *Far From the Madding Crowd*; Lawrence, *Sons and Lovers*; Davies, *Fifth Business*; Laurence, *The Stone Angel*. (This list is subject to change.)

Prerequisite: None; but see note above.

Members of the Department.

September-December. (3-0)

### ENGL 122 (formerly one-half of 120). (1½) Literature: Poetry and Drama

A study of literary genres, focusing upon Poetry and Drama, with attention to the writing of critical essays. Students will be assigned a minimum of four essays.

Individual instructors, with the option of substituting up to two works of their own choice, will select texts from the following list: Geddes, *Twentieth Century Poetry and Poetics*; *The Norton Anthology of Poetry* (Shorter ed.); Beckett, *Waiting for Godot*; Corrigan, ed., *Masterpieces of British Drama - The Nineteenth Century*; Ibsen, *Hedda Gabler*; Pinter, *The Caretaker*; Reinert, ed., *Modern Drama*; Shakespeare, *Hamlet*, *Othello*; Stoppard, *Rosencrantz and Guildenstern Are Dead*. (This list is subject to change.)

Prerequisite: None; but see note above.

Members of the Department. January-April. (3-0)

NOTE: English 204 or 205 may be taken concurrently with three units of first-year English by qualified students who have done superior work in Literature 12 or the equivalent.

## SECOND YEAR

### 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 English 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.

Members of the Department. (3-0; 3-0)

### ENGL 201. (3) Studies in Modern Literature

The emphasis will be upon themes important in twentieth century literature.

Authors to be studied may include Shakespeare, Joyce, Forster, Fitzgerald, Hardy, Hemingway, Camus, Cary, Beckett, Lawrence, Conrad, Tolkein, Bellow, T. S. Eliot.

Members of the Department. (3-0; 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.

Text: To be announced.

H. F. Smith. (3-0; 3-0)

### ENGL 204. (3) British Literature from Chaucer to Milton

In addition to providing an introduction to the major figures, themes and movements of the period, the course may include an extended study of a special topic. Essays will be required.

Among the major authors to be studied are Chaucer, More, Sidney, Spenser, Marlowe, Shakespeare, Bacon, Donne, and Milton. Texts will be announced.

Not open to students with credit for English 200.

(Not offered 1978-79.) (3-0; 3-0)

### ENGL 205. (3) British Literature from the Restoration to 1900

In addition to providing an introduction to the major figures, themes and movements of the period, the course will include an extended study of a special topic. Essays will be required.

Among the major authors to be studied are Blake, Swift, Pope, Dryden, Johnson, Wordsworth and Coleridge.

Not open to students with credit for English 200.

(Not offered 1978-79.) (3-0; 3-0)

### ENGL 210 (formerly 410). (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.

T.G. Sherwood. (3-0; 3-0)

### ENGL 215. (1½, formerly 3) The Writing of Expository Prose

This course pays attention to the styles and methods of non-fiction 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 English 300.

Members of the Department.

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

### ENGL 238 (formerly 438). (3) Canadian Literature

A general survey of Canadian literature from 1770 to the present, with special emphasis on the literature of the twentieth century. This course will concentrate on major figures and major themes in English Canadian literature and on selected works in translation from French Canada.

Members of the Department. (3-0; 3-0)

## THIRD AND FOURTH YEARS

1½ unit courses are numbered 350 and above for convenience, and are at the same level as upper-division courses numbered 400 and above.

### ENGL 301. (3) Children's Literature

A survey of children's literature, including sources and development, with emphasis on the study of selected 19th and 20th century works. The course is designed to develop critical awareness and to extend knowledge of what books are presently available for children and adolescents.

This course and Education 341 offer inter-changeable credit in the Intermediate Language Arts area of the Faculty of Education. English 301 offers credit in the Faculty of Arts and Science only as a free elective, under the conditions specified on page 29 (Other Courses outside the Faculty of Arts and Science).

Texts: List available on application to the Department of English.

L. Adey. (3-0; 3-0)

### ENGL 302. (3) Literary Approaches to Childhood and Adolescence

The course will illustrate an increasing awareness since 1800 of childhood and adolescence as distinctive phases in human life. The main emphasis will be on works of literature but some attention will be paid to related issues in philosophy and psychology.

Texts: List available in the Department of English.

(Offered in alternate years).

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

### ENGL 345 (formerly 245). (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 English Honours.

Members of the Department. (3-0; 3-0)

### ENGL 351 (formerly one-half of 443). (1½) The Canterbury Tales

An introductory study of Chaucer's poetry focusing specifically on *The Canterbury Tales*.

A. S. G. Edwards. September-December. (3-0)

### ENGL 352 (formerly one-half of 443). (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: English 351.

A. W. Jenkins. January-April. (3-0)

### ENGL 353 (formerly 407 and 444). (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.

(Not offered 1978-79; intend to offer 1979-80.) (3-0)

### ENGL 360 (formerly 414). (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.

This Year: A study of Shakespeare's plays of love and jealousy. Readings will include *Love's Labour's Lost*, *Romeo and Juliet*, *As You Like It*, *Measure for Measure*, *Troilus and Cressida*, *Othello*, *Antony and Cleopatra*, and *The Winter's Tale*.

M. R. Best. January-April. (3-0)

### ENGL 361 (formerly 418). (1½) The Metaphysical Poets

Major emphasis will be on Donne, Herbert, Marvell, Vaughan 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.

(Not offered 1978-79; intend to offer 1979-80.) (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 non-dramatic works.

(Not offered 1978-79; intend to offer 1979-80.) (3-0)

**ENGL 363. (1½) Magic, Science & Religion in Renaissance Literature**

A study of late sixteenth- and seventeenth-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, Donne, Jonson, Bacon, Browne, Vaughan, Burton, and Milton.

Texts: To be announced.

P. J. Grant. September-December. (3-0)

**ENGL 364 (formerly 411). (1½) Elizabethan and Jacobean Drama**

Main emphasis is on such major Elizabethan and Jacobean dramatists as Marlowe, Webster, Jonson, Middleton and Ford.

E.I. Berry. September-December. (3-0)

**ENGL 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 Majors and Honours students.)

January-April. (3-0)

**ENGL 370 (formerly 421). (1½) Blake and the Age of Sensibility**

Readings in Thomson, Collins, Gray, Cowper and Burns will lead up to a study of William Blake.

H. E. Summerfield. September-December. (3-0)

**ENGL 371 (formerly 422). (1½) Restoration and 18th Century Drama**

A study of the major types of drama: Restoration comedy and tragedy, heroic drama, "laughing and sentimental" comedy of the 18th century, ballad-opera, opera, burlesque, bourgeois tragedy.

Texts: To be announced.

B. E. Wallis. 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.

(Not offered 1978-79; intend to offer 1979-80.) (3-0)

**ENGL 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, and advertised annually.

(Not offered 1978-79.) (3-0)

**ENGL 385. (1½) Special Studies in 19th Century English Literature**

A study of a specific theme, problem or author of the nineteenth century. The specific topic will be determined by the instructor and advertised annually.

This Year: Two traditions of fantasy will be traced, the one from folk-tale, via translations of the Arabian Nights and Grimm stories to collections of fairy-tales (with variants by Macdonald and Lewis Carroll), the other from the Gothic novel to fictional studies in alienation and the supernatural.

Texts to be chosen from: *Thousand and One Nights*, Grimm's Fairy Stories; George Macdonald, *The Princess and the Goblin*, *Phantastes* (with *Lilith*); Lewis Carroll, *Alice in Wonderland*; Mary Shelley, *Frankenstein*; James Hogg, *Confessions of a Justified Sinner*; Edgar Allan Poe, *Tales* (selection); R. L. Stevenson, *Dr. Jekyll and Mr. Hyde*.

L. Adey. September-December. (3-0)

**ENGL 386 (formerly part of 431). (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. September-December. (3-0)

**ENGL 387 (formerly part of 431). (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.

V. L. Gooch. September-December. (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.

This Year: D. H. Lawrence. A general conspectus of Lawrence's Literary career, and an assessment of his significance. Some attention will be given to his letters, essays, poems and (more particularly) short stories, but the chief emphasis will be on his novels, especially *Women In Love* and the ideas which it embodies.

Texts: *Sons and Lovers*, *The Rainbow*, *Women In Love*, *Aaron's Rod*, *Kangaroo*, *Collected Short Stories*.

J. D. Peter. September-December. (3-0)

**ENGL 389 (formerly 433). (1½) Anglo-Irish Literature**

A study of the literature of the Irish Renaissance.

Texts by all or most of the following authors will be prescribed: W. B. Yeats (as dramatist and poet), James Joyce, John M. Synge, George Moore, James Stephens, Austin Clarke, Frank O'Connor, Standish O'Grady, Sean O'Casey, Lady Gregory and "AE".

P. J. Grant. January-April. (3-0)

**ENGL 391. (1½) Studies in Literary Genre**

This Year: British prose fiction of the late 19th and early 20th Centuries. The course will be a discussion of selected authors and fictional works (fantasies and novels) of the period designated. Important relationships will be drawn with the contemporaneous development of modern poetry and drama, and with other expressive arts (painting, architecture, artifacts and design). The renewed interest in medieval and Renaissance life and art will be shown as a stimulus to the emergence of modern forms and techniques (Time and Space, 'epical' allusive form, etc.).

Texts: Morris, *The Wood Beyond the World* and Tolkein, *The Hobbit* (both fantasies); Hardy, *Jude the Obscure*, Conrad, *Under Western Eyes*; Lawrence, *The Rainbow*; Joyce, *Ulysses* (extracts); Woolf, *Mrs. Dalloway*.

V. L. Gooch. January-April. (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.

(Not offered 1978-79.) (3-0)

**ENGL 393. (1½) Myth and Literature**

(Not offered 1978-79.) (3-0)

**ENGL 394. (1½) Thematic Approaches to Literature: I**

(Not offered 1978-79.) (3-0)

**ENGL 395. (1½) Thematic Approaches to Literature: II**

This Year: History as Literature. The word "History" has two meanings: the telling of a tale, a story, and the tale itself, the facts of the story. The course will be more interested in the first definition than in the second, more interested in how the story is told and why it is told than in the facts. By studying a series of good historians, the course will investigate literary sources, literary techniques, literary styles, and points of view. Readings will include selections from the works of Herodotus, Thucydides, Tacitus, Gibbon, Boswell, Macaulay, Carlyle, and Ruskin.

Texts: To be announced. January-April. (3-0)

**ENGL 396. (1½) Modern Canadian Fiction**

A study in depth of selected novels and short stories of the modern period, including the work of major French Canadian authors in translation.

R. G. Lawrence. January-April. (3-0)

**ENGL 397. (1½) Modern Canadian Drama and Poetry**

A study of major poets and dramatists of the modern period, including the work of French Canadian writers in translation.

September-December. (3-0)

**ENGL 398 (formerly 426). (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.

This Year: North American Writers on the Environment. A survey of American and Canadian writers' attitudes towards nature and the environment during the Colonial period and the expansion westward across the continent. Emphasis will be on the historical context, on the conflict of ideas about the conversion of the continent to use, and on the origins and growth of modern concepts of environmental protection, conservation, and ecology. There will be readings from Bradford, Beverley, Roger Williams, Byrd, Cooke, Jefferson, Franklin, Cooper, Emerson, Thoreau, Whitman, Burroughs, Parkman, and John Muir. There will also be extensive readings in secondary writers like Roderick Nash, *Wilderness and the American Mind*, Norman Foerster, *Nature and American Literature*, Henry Nash Smith, *Virgin Land, The Strange Empire of Louis Riel*, Edmund Wilson, *O Canada*.

H.F. Smith. January-April. (3-0)

**ENGL 400. (3) Advanced English Composition**

This course offers students practice in the writing and criticism of essays and prose composition in general. Competence in the English language is a prerequisite. This course is not acceptable for General, Major or Honours programmes in English.

Texts: A good dictionary, such as *The Concise Oxford, Webster's Collegiate, Random House; Roget's Thesaurus*; an appropriate English handbook; a selected book of essays.

W. Benzie. (3-0; 3-0)

**ENGL 413. (3) Shakespeare Survey**

Lectures on the development of Shakespeare's art in the histories, comedies and tragedies.

Texts: To be announced.

M. D. Faber, B. O. Kurth. (3-0; 3-0)

**ENGL 419. (3) Spenser and Milton: The Renaissance Epic**

The course concentrates on the major poems of Edmund Spenser and John Milton in relation to the tradition of Epic poetry in Renaissance England.

T. G. Sherwood. (3-0; 3-0)

**ENGL 420. (3) Literature of the Restoration and the Augustan Periods**

An examination of the literature of the Restoration and eighteenth century in the light of the social, political and economic background against which it develops. Particular emphasis will be placed on Restoration Comedy, Dryden, Pope, Swift and Dr. Johnson.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**ENGL 423. (3) The Beginning of the British Novel in the 17th and 18th Centuries**

Main emphasis is placed on the eighteenth century novel — with some attention to the social and intellectual background of the period, when this appears to illuminate the novels.

Texts: Bunyan, *Pilgrim's Progress*; Defoe, *Journal of the Plague Year* and *Moll Flanders*; Richardson, *Pamela*; Fielding, *Shamela*, *Joseph Andrews*, and *Tom Jones*; Smollett, *Roderick Random*; Sterne, *Tristram Shandy* and *Sentimental Journey*; Johnson, *Rasselas*; Walpole, *Castle of Otranto*; Beckford, *Vathek*; Austen, *Northanger Abbey* and *Sense and Sensibility*.

Background reading: Walter Allen, *The English Novel*, or Ian Watt, *The Rise of the Novel*.

S. L. Macey. (3-0; 3-0)

**ENGL 424. (3) The British Novel in the 19th Century**

Authors to be studied may include Mary Shelley, Austen, Scott, Brontë, Disraeli, Collins, Dickens, Thackeray, Eliot, Trollope, Meredith, Hardy, Butler, and Stevenson.

V. A. Neufeldt. (3-0; 3-0)

**ENGL 427. (1½) Nineteenth Century American Prose and Poetry**

A survey of American non-fiction prose and poetry, including Poe's poetry and criticism; the Transcendentalists, with emphasis on Emerson, Thoreau, and Whitman; the Brahmin Critics, with emphasis on Holmes, Lowell, Howells, and Jones; and concluding with the poems of Emily Dickinson and the prose of Henry Adams.

(Not offered 1978-79.) (3-0)

**ENGL 428. (3) American Fiction to 1900**

A study of major American fiction in the nineteenth 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.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**ENGL 429. (3) Twentieth 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. M. Rooke. (3-0; 3-0)

**ENGL 430. (3) The Romantic Period (1790-1830)**

Chiefly Wordsworth, Coleridge, Byron, Shelley and Keats. Some attention is paid to the prose writers of the period.

A. B. England. (3-0; 3-0)

**ENGL 434. (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, including Wilfred Owen, T. S. Eliot, David Jones, Dylan Thomas, W. H. Auden, W.B. Yeats, D. H. Lawrence, Hugh MacDiarmid, and others.

(Not offered 1978-79.) (3-0; 3-0)

**ENGL 435. (3) Modern American Poetry**

Detailed study of the poetry of Pound, Stevens, W. C. Williams and the Black Mountain poets (Charles Olson, Robert Creeley, Robert Duncan, Denise Levertov, Paul Blackburn), and selected studies from the following: Hart Crane, Marianne Moore, Theodore Roethke, John Berryman, Robert Lowell, H. D., John Crowe Ransom, Allen Tate, Frank O'Hara, Gary Snyder, Allen Ginsberg, Robert Bly, and Jack Spicer.

C. D. Doyle. (3-0; 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.

D. S. Thatcher. (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 twentieth-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.

Texts: Ibsen, *The Wild Duck*; Strindberg, *Miss Julie*; Shaw, *Major Barbara*, *Heartbreak House*; O'Casey, *Juno and the Paycock*; Coward, *Private Lives*; Auden, *The Ascent of F.6*; O'Neill, *The Emperor Jones*, *The Iceman Cometh*; Rice, *The Adding Machine*; Odets, *Awake and Sing*; Anderson, *Winterset*; Eliot, *The Cocktail Party*; Miller, *A View from the Bridge*; Williams, *The Glass Menagerie*; Beckett, *Waiting for Godot*; Wesker, *Roots*; Delaney, *A Taste of Honey*; Behan, *The Quare Fellow*; Osborne, *Look Back in Anger*; Bolt, *A Man for All Seasons*; Arden, *Sergeant Musgrave's Dance*; Pinter, *The Caretaker*; *The Homecoming*; Albee, *Who's Afraid of Virginia Woolf?*; Joe Orton, *Loot*; Stoppard, *Rosencrantz and Guildenstern are Dead*.

Background reading: Brecht, *The Caucasian Chalk Circle*; Chekov, *Uncle Vanya*; Ionesco, *The Bald Soprano*.

F. Mayne, D. S. Thatcher. (3-0; 3-0)

**ENGL 438. (3) Traditions in Canadian Literature**

This course will emphasize 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 nineteenth and twentieth centuries. Amongst the authors to be included: Moodie, Hémon, Leacock, Grove, Pratt, MacLennan, Blais, Laurence, Davies, Ryga, Reaney, Hébert, Atwood, Layton, Birney, Avison, and selected contemporary writers.

Not open to students with credit in English 238. (Either English 238 or 438 is recommended as background to English 396 and 397).

Texts: To be announced.

R. G. Lawrence. (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;

comparison will be made with aspects of Canadian cultural development.

Texts include: Keneally, *Bring Larks and Heroes*; Snow, *To the Islands*; White, *Riders in the Chariot*; Mulgan, *Man Alone*; Sargeson, *That Summer*; Naipaul, *A House for Mr. Biswas*; Achebe, *Things Fall Apart*; Okara, *The Voice*; Ngugi, *Weep Not Child*.

C. J. Partridge. (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: Honour standing in Third or Fourth Year.

Texts: A. C. Baugh, *A History of the English Language*.

R. F. Leslie. January-April. (3-0)

**ENGL 441. (3) Old English Literature**

A study of the language and major literary texts of the Anglo-Saxons, including *Beowulf*.

R. F. Leslie. (3-0; 3-0)

**ENGL 445 (formerly one-half of 446). (1½) Honours Seminar.  
The History of English  
Prose Style**

A historical and critical survey of English prose style from Malory 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 credit for English 446 (3).

W. Benzie. January-April. (3-0)

**ENGL 446. (1½, formerly 3) Third Year Honours Seminar**

A seminar in the history of critical theory, with a study of its relation in practice to specific genres and styles.

T. R. Cleary. September-December. (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.

This Year: A study of the English Canadian novel to 1945. Special attention will be given to two major figures, Frederick P. Grove and Morley Callaghan, and to the important works of the nineteenth century. In addition, selections from works of lesser interest but of historical significance will also be studied.

Texts: Richardson, *Wacousta*; Kirby, *The Golden Dog*; de Mille, *A Strange MS Found in a Copper Cylinder*; Duncan, *The Imperialist*; Grove, *Fruits of the Earth and Master of the Mill*; Callaghan, *Such is my Beloved and More Joy in Heaven*; MacLennan, *Barometer Rising*. Selections from Brooke, Connor, Montgomery, de la Roche, Leacock.

N. C. Smith. January-April. (3-0)

**ENGL 490. (1½, formerly 3) Directed Reading in English**

A specified reading project in some area of English literature to be determined by the student and 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.

(3-0)

**ENGL 491 (formerly one-half of 490). (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 Majors or Honours, and the Chairman of the Department. (Note: Persons who have received 3 units of credit for English 490 prior to 1976-77 will not be allowed to take English 491.)

(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: Honour standing in Fourth year. (0-0-2; 0-0-2)

Use of standard reference works and bibliographies; of bibliographies; compilation of bibliographies on given topics; theory of book production; bibliographical descriptions; exercises in editorial theory and practice. Exercises will be required.

H. F. Smith. September-December. (3-0)

**ENGL 501 (formerly one-half of 500). (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 toward the editing project may be done through exercises for English 500).

P. J. Köster. January-April. (3-0)

**ENGL 503. (1½) Special Studies: I**

1978-79: "Problems in the Teaching of English" — The seminar will provide an opportunity for the exploration of problems that arise in the teaching of both literature and composition at various levels. The specific problems to be dealt with will be decided in consultation with the students.

This course will be offered subject to approval of the Department.

V. A. Neufeldt. January-April. (3-0)

**ENGL 504. (1½) Special Studies: II**

(3-0)

**ENGL 505. (1½) Studies in Literary Theory: I**

1978-79: "Theory of the Novel" — A study of the theoretical backgrounds of the novel, with emphasis on the major critical texts which have influenced the development of the genre. Various approaches — as expressed by both novelists and critics — toward such elements of fiction as plot, theme, character, language, and method of narration will be considered; in addition, a selected group of important novels will be read as illustrations of differing approaches.

N. C. Smith. September-December. (3-0)

**ENGL 506. (1½) Studies in Literary Theory: II**

(3-0)

**ENGL 510. (1½, formerly 3) Studies in Old English Literature: I**

(3-0)

**ENGL 511 (formerly one-half of 510). (1½) Studies in Old English  
Literature: II**

(3-0)

**ENGL 515. (1½, formerly 3) Studies in Middle English Literature: I**

1978-79: This seminar will cover readings in English Poetry from 1200-1500.

D. L. Jeffrey. September-December. (3-0)

**ENGL 516 (formerly one-half of 515). (1½) Studies in Middle English  
Literature: II**

(3-0)

**ENGL 520. (1½, formerly 3) Studies in Renaissance Literature: I**

1978-79: "Images and Iconoclasm: Readings in Poetry of the English Renaissance" — Selections from Spenser, Shakespeare, Milton and the Metaphysicals will be considered in an attempt to assess some achievements of literature in an age when science, philosophy and theology were rapidly discovering a discontinuity between mental images and the structure of the world.

P. J. Grant. September-December. (3-0)

**ENGL 521 (formerly one-half of 520). (1½) Studies in Renaissance  
Literature: II**

1978-79: "Shakespeare's Romantic Comedies" — A study of all the romantic comedies — from *The Comedy of Errors* to *Twelfth Night* — with some attention to the critical issues surrounding them. We will consider the plays in relation to Elizabethan comic and romantic conventions, but the emphasis will be upon a close reading of the plays themselves.

E. I. Berry. January-April. (3-0)

**ENGL 530. (1½, formerly 3) Studies in the Literature of the  
17th Century: I**

(3-0)

**ENGL 531 (formerly one-half of 530). (1½) Studies in the Literature of  
the 17th Century: II**

(3-0)

**ENGL 540. (1½, formerly 3) Studies in the Literature of the  
18th Century: I**

1978-79: "Eighteenth Century Satire — Swift and Pope."

S. L. Macey. January-April. (3-0)

**ENGL 541 (formerly one-half of 540). (1½) Studies in the Literature of  
the 18th Century: II**

(3-0)

**ENGL 550. (1½, formerly 3) Studies in the Literature of the  
19th Century: I**

**GRADUATE COURSES AND SEMINARS**

All courses except 500 and 501 are variable content.

**ENGL 500. (1½, formerly 3) Introduction to Bibliography and Methods  
of Research**

1978-79: "Social Problems in Victorian Fiction" — This course deals with Victorian novelists who made the problems of industrialized society the focus of their writing. Guidance will be given in the economic, religious, political, scientific and philosophic forces that shaped the period.

R. C. Terry. January-April. (3-0)

**ENGL 551 (formerly one-half of 550). (1½) Studies in the Literature of the 19th Century: II** (3-0)

**ENGL 560. (1½, formerly 3) Studies in the Literature of the 20th Century: I** (3-0)

**ENGL 561 (formerly one-half of 560). (1½) Studies in the Literature of the 20th Century: II** (3-0)

**ENGL 570. (1½, formerly 3) Studies in American Literature: I**

1978-79: "Wallace Stevens and Robert Frost" — Intensive study of the technical and "philosophical" aspects of these poets, through a range of poems from each.

C. D. Doyle. September-December. (3-0)

**ENGL 571 (formerly one-half of 570). (1½) Studies in American Literature: II** (3-0)

**ENGL 580. (1½, formerly 3) Studies in Commonwealth Literature: I** (3-0)

**ENGL 581 (formerly one-half of 580). (1½) Studies in Commonwealth Literature: II** (3-0)

**ENGL 585. (1½) Studies in Canadian Literature: I** (3-0)

**ENGL 586. (1½) Studies in Canadian Literature: II** (3-0)

**ENGL 590. (1½, formerly 3) Directed Reading: I** (3-0)

**ENGL 591 (formerly one-half of 590). (1½) Directed Reading: II** (3-0)

**ENGL 598. (3) M.A. (non-thesis) Reading Project**

**ENGL 599. (3-6) M.A. Thesis**

**ENGL 699. (Credit to be determined) Ph.D. Dissertation**

## ENVIRONMENTAL STUDIES PROGRAMME

*Programme Chairman, 1978-79; To be appointed.*

*Programme Chairman, 1977-78: Alan R. Drengson, B.A., M.A. (Wash.), Ph.D. (Ore.), Assistant Professor, Philosophy.*

The interdisciplinary Environmental Studies Programme is designed to provide the student with a concentration of courses in the area of environmental topics. The programme is structured to serve the interests of students with a general academic interest in environmental topics and students with a professional interest in the environment.

Two approaches to this interdisciplinary programme are offered: a conceptual one, which give an introduction to environmentally-related areas of a range of disciplines, and a topical one, which focuses a selection of courses on to a particular problem area.

The requirement basic to both approaches is a Major programme leading to either: a B.Sc. in Biology, Chemistry, Geography, Mathematics, Physics, or Psychology, or a B.A. in Anthropology, Economics, Geography, Philosophy, Political Science, Psychology or Sociology. In addition, the requirements for one of the Conceptual or Topical Options given in the following outlines must be met in order to obtain a notation on the student's permanent record showing completion of the programme. A student interested in entering the programme should contact a member of the Environmental Studies Programme Committee for counselling, in order to obtain approval of his specific programme.

The Programme Committee for 1977-78 was as follows:

Alan P. Austin, B.Sc., Ph.D. (*Wales*), Associate Professor, Biology.

Marcus A.M. Bell, B.S.F. (*Brit. Col.*), M.F. (*Yale*), Ph.D. (*Brit. Col.*), R.P.F., Associate Professor, Biology.

Alan R. Drengson, B.A., M.A. (*Wash.*), Ph.D. (*Ore.*), Assistant Professor, Philosophy.

James P. Elliott, B.S. (*Ill. Inst. of Tech.*), Ph.D. (*Stanford*), Associate Professor, Physics.

Martin B. Hocking, B.Sc. (*Atta.*), Ph.D. (*Southampton*), Associate Professor, Chemistry.

William M. Ross, B.Ed. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*Wash.*), Assistant Professor, Geography.

Mark H. Sproule-Jones, B.Sc. (Econ.) (*London*), M.A., Ph.D. (*Indiana*), Associate Professor, Political Science.

Gerald R. Walter, B.A., M.A., Ph.D. (*Calif.*), Associate Professor, Economics.

Stephen D. Webb, B.A. (*William and Mary*), M.A. (*George Washington*), Ph.D. (*Tennessee*), Associate Professor, Sociology.

### TOPICAL OPTIONS

#### URBAN ENVIRONMENT

Requirements:

1. Fifteen units selected from one of the lists below, including Environmental Studies 300, and not forming a part of the Major requirements.

#### SOCIAL SCIENCE EMPHASIS

Anthropology 401 (1½) Cultural Ecology (Prerequisite: Anthropology 100, or 200, or permission).

Biology 306 (1½) Ecology (Prerequisites: Biology 150, or equivalent).

Biology 316 (1½) Environmental Issues (Prerequisites: 2 years University or equivalent).

Biology 427 (1½) Population Ecology (Prerequisite: Biology 306; pre- or corequisite, Biology 304 or equivalent).

Economics 201 (1½) Principles of Microeconomics } (formerly 200)

Economics 202 (1½) Principles of Macroeconomics }

Economics 330 (1½) Environmental Economics.

Economics 412 (1½) Urban Economics (Prerequisites: Economics 200 or 201 and 202, and permission).

Economics 414 (1½) Regional Economics (Prerequisites: Economics 200 or 201 and 202, and permission).

Environmental Studies 300 (1½) Environmental Studies.

Environmental Studies 400 (1½) Topics in Environmental Studies.

Geography 340 (3) Introduction to Urban Geography.

Geography 444 (1½) Urban Transportation and Land Use Planning (Prerequisite: Geography 340 (formerly 305) or permission).

Geography 446 (1½) Development and Planning of the Urban Region (Prerequisite: Geography 340 (formerly 305) or permission).

Political Science 450 (formerly 454 and 455) (3) An Introduction to Local, Regional and Metropolitan Government and Politics.

Political Science 456 (3) Political Institutions and Urban and Environmental Policies.

Psychology 350 (3) Environmental Psychology.

Sociology 340 (1½) Demography (Prerequisite: Sociology 100, or permission).

Sociology 341 (1½) Human Ecology (Prerequisite: Sociology 100, or permission).

Sociology 441 (1½) Urban Sociology (Prerequisite: Sociology 100, or permission).

#### SCIENCE EMPHASIS

Biology 306 (1½) Ecology (Prerequisites: Biology 150 or equivalent).

Biology 316 (1½) Environmental Issues (Prerequisite: 2 years University or equivalent).

Biology 408 (1½) Biology of Pollution (Prerequisites: Biology 203, Biology 206, or permission).

Chemistry 230 (3) General Organic Chemistry (Prerequisite: Chemistry 120).

Chemistry 302 (formerly one-half of 301) (1½) Industrial Chemistry with special reference to Air Pollution (Prerequisite: Chemistry 120 or 124).

Chemistry 303 (formerly one-half of 301) (1½) Industrial Chemistry with special reference to Water Pollution (Prerequisite: Chemistry 120 or 124).

Chemistry 310 (1½) Chemical Instrumentation for Environmental Sciences (Prerequisite: Any 200 level course in Chemistry).

Chemistry 316 (1½) (formerly one-half of 314) Spectroscopic Techniques of Analysis (Prerequisite: Chemistry 224, or a grade of at least B minus in Chemistry 230 or 233 and permission of the Department).

Chemistry 317 (1½) (formerly one-half of 314) Instrumental Techniques of Analysis (Prerequisite: Chemistry 224, or a grade of at least B minus in

Chemistry 230 or 233 and permission of the Department).

Economics 330 (1½) Environmental Economics.

Economics 430 (3) Economics of Natural Resources and Environmental Policy (Prerequisites: Economics 200 or 201 and 202, and permission).

Environmental Studies 300 (1½) Environmental Studies.

Environmental Studies 400 (1½) Topics in Environmental Studies.

Geography 340 (3) Introduction to Urban Geography.

Geography 341 (1½) Industrial Geography.

Geography 374 (1½) Biogeography.

Geography 375 (1½) Biospheric Resources (Prerequisite: Geography 374, or Biology 306).

Statistics 253 (3) Introduction to Probability and Statistics (Prerequisite: Mathematics 130, or Mathematics 102/151).

Physics 310 (3) Physics of the Environment (Prerequisite: Physics 101, 121, or permission).

## NATURAL RESOURCE MANAGEMENT

Requirements:

1. Three units in quantitative concepts and methods, preferably through Statistics 253 (Introduction to Probability and Statistics), but this requirement may also be met by any of the following: Anthropology 416/417, Biology 304, Economics 240/340, Geography 421, Psychology 300, Sociology 371/372. This requirement may form a part of the majors programme.
2. A minimum of fifteen units, including Environmental Studies 300 and nine units to be selected by taking at least one course from each of the four sections in the core; remainder, if any, to be taken after consultation, and with the approval of a member of the Steering Committee. None of the courses selected are to form part of the Major requirements.

Core:

- (i) *Environmental Aspects of Regional Development*
  - Economics 414 (1½) Regional Economics (Prerequisite: Economics 200 or 201 and 202).
  - Geography 343 (1½) Regional Analysis (Prerequisite: Geography 201 or permission).
  - Political Science 450 (3) An Introduction to Local, Regional and Metropolitan Government and Politics.
- (ii) *Goal Conflict*
  - Economics 430 (3) Economics of Natural Resources & Environmental Policy (Prerequisite: Economics 200 or 201 and 202).
  - Geography 450 (3) Decision-Making in Resources Management (Prerequisite: Geography 350).
  - Political Science 456 (3) Political Institutions and Urban and Environmental Policies.
- (iii) *Philosophical Aspects*
  - Economics 402 (1½) History of Economic Thought (Prerequisite: Economics 200 or 201 and 202).
  - Biology 316 (1½) Environmental Issues (Prerequisite: 2 years university experience).
  - Philosophy 232 (1½) Moral Problems of Contemporary Society. (Students should check with the Department of Philosophy for specific topics from year to year.)
  - Philosophy 327 (1½) Social and Political Philosophy: II - Marx (Prerequisite: A previous course in Philosophy or Political Science 300 or permission).
  - Philosophy 333 (1½) Philosophy and the Environment (Prerequisite: One course in Philosophy or permission of Instructor).
  - Political Science 304 (1½) Political Thought from Hobbes to Bentham (This course was offered for the last time in 1973-74).
- (iv) *Natural Science Aspects of Environment Impact*
  - Biology 306 (1½) Ecology, and Biology 408 (1½) The Biology of Pollution (Prerequisites: Biology 203 and 206, or permission).
  - Biology 420 (1½) Applied Vegetation Science.
  - Chemistry 302 (formerly one-half of 301) (1½) Industrial Chemistry with special reference to Air Pollution (Prerequisite: Chemistry 120 or 124).
  - Chemistry 303 (formerly one-half of 301) (1½) Industrial Chemistry with special reference to Water Pollution (Prerequisite: Chemistry 120 or 124).
  - Physics 310 (3) Physics of the Environment (Prerequisite: Physics 101, or 121, or permission).

NOTES: It is recommended, where the student finds he has electives available over and above the Major and Environmental Studies Programme requirements, that he take courses in French to obtain some facility in the other national language.

Where two courses cannot both be taken for credit in the department, either would be acceptable alternatives for the Environmental Studies Programme providing later year departmental course prerequisites are met.

## CONCEPTUAL OPTION

### Requirements

1. Three units in quantitative concepts and methods, preferably through Statistics 253 (Introduction to Probability and Statistics), but this requirement may also be met by any of the following: Anthropology 416/417, Biology 304, Economics 240/340, Geography 421, Psychology 300, Sociology 371/372. This requirement may form a part of the Major requirements.
2. Fifteen units selected from one of the lists below, including Environmental Studies 300, and not forming a part of the Major requirements.

## SOCIAL SCIENCE EMPHASIS

- Anthropology 401 (1½) Cultural Ecology (Prerequisite: Anthropology 100, or 200, or permission).
- Anthropology 418 or Sociology 418 (1½) Social Change (Prerequisite: Anthropology 100, or 200, or permission).
- Biology 306 (1½) Ecology (Prerequisite: Biology 150 or equivalent).
- Biology 316 (1½) Environmental Issues (Prerequisite: 2 years University or equivalent).
- Chemistry 120 (3) General Chemistry.
- Economics 330 (1½) Environmental Economics.
- Economics 412 (1½) Urban Economics (Prerequisites: Economics 200 or 201 and 202, and permission).
- Economics 414 (1½) Regional Economics (Prerequisites: Economics 200 or 201 and 202, and permission).
- Environmental Studies 300 (1½) Environmental Studies.
- Environmental Studies 400 (1½) Topics in Environmental Studies.
- Geography 350 (3) Introduction to Resource Geography (Prerequisites: Geography 203 and 201, 204, or 205, or permission).
- Physics 103 (3) A Survey of Physics.
- Political Science 350 (3) Public Administration (Prerequisite: Political Science 200 or permission).
- Psychology 350 (3) Environmental Psychology.
- Sociology 340 (1½) Demography (Prerequisite: Sociology 100 or permission).
- Sociology 341 (1½) Human Ecology (Prerequisite: Sociology 100 or permission).
- Anthropology 350 (3) Evolution and Adaption in Human Populations.
- Bacteriology 200 (3) Introductory Bacteriology.
- Biology 306 (1½) Ecology (Prerequisite: Biology 150 equivalent).
- Biology 316 (1½) Environmental Issues (Prerequisite: 2 years University or equivalent).
- Chemistry 302 (formerly one-half of 301) (1½) Industrial Chemistry with special reference to Air Pollution (Prerequisite: Chemistry 120 or 124).
- Chemistry 303 (formerly one-half of 301) (1½) Industrial Chemistry with special reference to Water Pollution (Prerequisite: Chemistry 120 or 124).
- Economics 201 (1½) Principles of Microeconomics } (formerly 200)
- Economics 202 (1½) Principles of Macroeconomics }
- Economics 330 (1½) Environmental Economics
- Environmental Studies 300 (1½) Environmental Studies.
- Environmental Studies 400 (1½) Topics in Environmental Studies.
- Geography 350 (3) Introduction to Resource Geography (Prerequisites: Geography 203 and 201, 204 or 205, or permission).
- Physics 310 (3) Physics of the Environment (Prerequisite: Physics 101, 121, or permission).
- Political Science 100 (3) Canadian Government and Politics.
- Sociology 200 (3) Canadian Society.

NOTES: It is recommended, where the student finds he has electives available over and above the Major and Environmental Studies Programme requirements, that he take courses in French to obtain some facility in the other national language.

Where two courses cannot both be taken for credit in the department, either would be acceptable alternatives for the Environmental Studies Programme providing later year departmental course prerequisites are met.

**ES 300. (1½) Environmental Studies**

An interdisciplinary seminar to examine environmental issues. Course will include lectures by visiting speakers and seminar presentations of student projects.

Students to register for audit during all years in the programme, and for credit in their third or fourth year. In the credit year students will be expected to conduct a supervised project and present a seminar based on their study.

Prerequisite: For registered Environmental Studies Programme students only. Open for credit in student's third or fourth year.

January-April (3-0)

**ES 400. (1½) Topics in Environmental Studies**

The topics covered in this course illustrate issues and methods of environmental studies through consideration of representative problems. Possible topics include: land impact assessment; scientific measures of environment quality; social evaluation of environmental stress; advanced questions of natural resource or urban environmental management.

May be taken as part of the 15 elective units for any of the options.

Prerequisite: A grade of B or better in Environmental Studies 300 or Biology 316, or permission of the Instructor. For students registered in the Environmental Studies Programme only.

Members of the Faculty. (0-0-3)

## DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

Elaine Limbrick, B.A. (*London*), D. de III<sup>e</sup> cycle (*Poitiers*), Associate Professor and Chairman of the Department.

Olivier M. Abrioux, L. ès L., D.E.S. (*Paris*), Ph.D. (*Aberdeen*), Professor. (On leave of absence January-June 1979.)

Gwladys V. Downes, B.A., M.A. (*Brit. Col.*), D.U. (*Paris*), Professor.

David A. Griffiths, B.A., M.A. (*Brit. Col.*), D.U. (*Paris*), Professor. (On study leave 1978-79.)

Ralph W. Baldner, A.B. (*Miami U., Ohio*), M.A. (*Vanderbilt*), Ph.D. (*Calif.*), Associate Professor.

P.M.H. Edwards, F.T.C.L., A.R.C.M., L.R.A.M. (*London*), B.A. (*Brit. Col.*), M.A. (*Columbia*), M.A. (*Harvard*), Ph.D. (*Penn.*) Associate Professor.

Gérald E. Moreau, B.A. (*Man.*), M.A. (*Laval*), D.U. (*Poitiers*), Associate Professor.

Jennifer R. Waelti-Walters, B.A. (*London*), L. ès L. (*Lille*), Ph.D. (*London*), Associate Professor.

Jeanne E. Adam, L. ès L. (*Toulouse*), D. de III<sup>e</sup> cycle (*Bordeaux*), Assistant Professor.

Barrington F. Beardmore, B.A. (*Liverpool*), M.A. (*McMaster*), Ph.D. (*Brit. Col.*), Assistant Professor.

John C. E. Greene, B.A., M.A. (*Alta.*), D. de l'Univ. (*Grenoble*), Assistant Professor.

Jean-Pierre Mentha, L. ès Sc. Soc. (*Geneva*), M.Ed. (*Brit. Col.*), Assistant Professor.

Derek J. Turton, B.A. (*Leeds*), Cert. Ed. (*Nott.*), M. Phil. (*Leeds*), Assistant Professor.

Ann Dybikowski, B.A. (*London*), Sessional Lecturer (1977-78).

### GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 158; for graduate courses, see page 66.

### GENERAL, MAJOR AND HONOURS PROGRAMMES

Students wishing to take courses at the Third and Fourth Year level are reminded that they must have the prerequisites of the first two years.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level (usually French 285 and 290). Normally the course numbered 302 must be taken in the Third Year.

An Honours programme in French normally requires a total of 63 units over a four-year period. A comprehensive examination, written and oral, is also required (see French 490). 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 programme; and (3) at least a B+ average in French 390 and French 490 (Honours Tutorials). 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 programme; and (3) at least a C+ average in French 390 and 490.

A student who fails to meet departmental requirements for First Class standing in the Honours programme 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.

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 Department Chairman will be happy to assist students with their selection of courses.

### PROGRAMMES IN FRENCH

General — First Year: French 180; Second Year: French 285 and 290; Third and Fourth Years: French 302 and six units of French courses numbered above 400.

Major — First Year: French 180; Second Year: French 285 and 290; Third and Fourth Years: French 302 and at least twelve units of French courses numbered above 400.

Honours — First Year: French 180 and one year of Latin (if Latin 12 has not been passed in secondary school); Second Year: French 285 and 290; Third and Fourth Years: French 302, 390, 402 and 490 and at least 12 more units (French courses numbered above 400), selected with the approval of the Chairman of the Department.

### UNDERGRADUATE COURSES

*Unless indicated otherwise, courses begin in September and end in April.*

The full sequence of language courses in French is: French 100, 160, 180, 290, 302, 402. (N.B. French 180 is the prerequisite for 200-level language and literature courses.)

Advice to students registering in their first university courses in French.

Students who have no French at all should register in French 100. Students with Grade 11 French or its equivalent should register in French 160. Students with Grade 12 French or its equivalent should register in French 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 French 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, the student may challenge the lower level course from which he has transferred during the first two weeks of classes, and if the challenge is successful, he 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 French 180, the higher-level course would normally be French 290 and the lower-level course would normally be French 160. For students who first registered in French 160, the higher-level course would be French 180 and the lower-level course would be French 100.

Advice to Francophone students

Francophone students may not obtain credit for French 100, 160, 180, 280, 300 or 350. They will normally begin French studies with French 285 and/or 302. They may only take French 290 with special permission. A Francophone is defined in this context as a person who has spoken French since childhood and who has received a substantial amount of education in French, including three years of secondary school.

### FREN 100. (3) Beginner's 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 French 160.

Prerequisite: None. Not normally open to students having credit in French 11 or its equivalent.

Texts: To be announced.

Members of the Department. (3-1; 3-1)

**FREN 160 (formerly 140). (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 Grade XII French.

Prerequisite: French 11.

Texts: Greene, Faucher, Healy, *Reflex French*; others to be announced.

J.C.E. Greene, E. Limbrick and members of the Department. (3-1; 3-1)

**FREN 180. (3) French Language and Literature**

A study of French texts, grammar, composition, and pronunciation.

Prerequisite: French 12.

Texts: To be announced.

Members of the Department. (3-1; 3-1)

**FREN 260 (formerly 240). (3) Intermediate Composition and Contemporary Literature**

Study of contemporary French and French-Canadian texts, and a review of grammar. Regular composition assignments will be required. One hour a week will be spent in seminar-style oral discussion of texts.

Prerequisite: French 160 or equivalent.

Texts: Carlut and Meiden, *French for Oral and Written Review*; Larousse, *French-English, English-French Dictionary*; G. Simenon, *Maigret et le pendu de Saint-Pholien*; G. Bessette, *Le Libraire*.

(Not offered 1978-79.)

(3-1; 3-1)

**\*FREN 280. (3) An Introduction to Twentieth Century French-Canadian Literature**

A study of twentieth-century French-Canadian literature in its social context. Instruction, discussion and assignments will usually be in French.

Prerequisite: French 180 or equivalent. Not open to Major and Honours students in French.

Texts: To be announced.

G.E. Moreau. (3-0; 3-0)

**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: French 180.

Texts: Molière, *Le Malade imaginaire*; Corneille, *Le Cid*; Voltaire, *Candide*; Dufau, *Découverte du poème*; Mérimée, *Carmen*; Mauriac, *Thérèse Desqueyroux*; Camus, *La Peste*; *Dictionnaire moderne français-anglais (anglais-français)* Larousse.

E. Limbrick and members of the Department. (3-0; 3-0)

**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 French 180. Both written and oral proficiency are stressed through weekly assignments and discussions.

Prerequisite: French 180.

Texts: *Dictionnaire moderne, français-anglais (anglais-français)* Larousse; and others to be announced.

J. P. Mentha and members of the Department. (4-0; 4-0)

**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 and second year who have already completed French 11 (or the equivalent) or a higher course may not take French 300 for credit. Students registered in third year or a higher year may take French 300 for credit provided that they have not completed any French course higher than French 11.

Texts: Brunetti, *Read, Write, Speak French*.

P. M. H. Edwards (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; translations, stylistic commentaries; compositions.

Prerequisite: French 290 or equivalent.

Texts: *Le Micro Robert* (Société du Nouveau Littéré); Grevisse, *Précis de grammaire française* (Ed. J. Duculot, S.A. Gembloux).

O. M. Abrioux, J.-P. Mentha. (4-0; 4-0)

**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 French 285 and 290, or permission of the Chairman of the French Department.

Enrolment limited.

Credit will be given as part of a teaching area in the Faculty of Education or as an elective. It can also be taken as an elective in the Faculty of Arts and Science.

Texts: To be announced.

J.-P. Mentha. (0-6; 0-6)

**FREN 390. (1½) Honours Tutorial**

Honours students only. Students will meet one hour a week with a tutor throughout Third Year to do reading and other work beyond that assigned in lecture courses. There will be a written examination at the end of the year.

**FREN 402 (3) Composition, Translation and Stylistics**

French composition; French and English translation; Stylistic commentary on French texts.

Prerequisite: French 302.

Texts: Grevisse, *Précis de grammaire française*, (Ed. J. Duculot, S. A. Gembloux).

O. Abrioux. (3-0; 3-0)

**FREN 409. (3) Literature of the Seventeenth Century**

A study of the Baroque, Précieux and Classical periods in the theatre, poetry, novel and other prose genres.

Texts: Corneille, *Le Cid*, *Horace*, *Rodogune*; Mme de Lafayette, *La Princesse de Clèves*; La Fontaine, *Fables*; Molière, *L'Avare*, *L'École des femmes*, *Le Misanthrope*; Pascal, *Pensées*; Racine *Andromaque*, *Britannicus*, *Phèdre*; Saint-Simon, *Mémoires* (extraits); Lagarde et Michard, *XVIIe siècle* (Bordas).

O. Abrioux. (3-0; 3-0)

(Not offered 1978-79; intend to offer 1979-80.)

**FREN 410. (3) Literature of the Eighteenth Century**

A study of the leading French authors of the Eighteenth Century.

Texts: To be announced.

J. C. E. Greene. (3-0; 3-0)

(Not offered 1978-79; intend to offer 1979-80.)

**FREN 411. (3) Nineteenth Century Part I**

A study of the leading French authors of the first half of the Nineteenth Century.

Texts: Chateaubriand, *René*; Constant, *Adolphe*; Stendhal, *Le Rouge et le Noir*; Hugo, *Notre-Dame de Paris*; Balzac, *Le Père Goriot*. Further texts may be assigned.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**FREN 412. (3) Nineteenth Century Part II**

Realism, naturalism and idealism in the novel and in poetry.

First Term: Baudelaire, *Les Fleurs du Mal*, Flaubert, *Bouvard et Pécuchet*; Zola, *Germinal*.

Second Term: Verne, *L'Île mystérieuse*; Barbey d'Aurevilly, *Le Chevalier des Touches*; Hugo, *93*; France, *Les Dieux ont soif*.

J. C. E. Greene. (3-0; 3-0)

**FREN 415. (3) Modern French Theatre**

Survey of twentieth-century French Drama. Students will be expected to write two essays per term; in addition, they will prepare material for discussion in class.

Giraudoux, *La Guerre de Troie n'aura pas lieu*, *Amphitryon 38*; Anouilh, *Le Voyageur sans bagages*, *Le Bal des voleurs*; Claudel, *L'Annonce faite à Marie*; Montherlant, *La Reine morte*, *Malatesta*; Cocteau, *Les Parents terribles*, *La Machine infernale*; Sartre, *Huis Clos*, *Les Mouches*; Beauvoir, *Les Bouches inutiles*; Camus, *Caligula*, *Le Malentendu*; Ionesco, *La Cantatrice chauve*, *Rhinocéros*; Beckett, *En attendant Godot*, *Fin de partie*; Genet, *Les Bonnes*; Arrabal, *L'Architecte et l'empereur d'Assyrie*, *Et ils passèrent les menottes aux fleurs*; Sarraute, *Isma*, *Silence*, *Le Mensonge*.

J. R. Waelti-Walters. (3-0; 3-0)

**FREN 416. (3) Modern French Novel**

The changing face of the novel from Marcel Proust to the *nouveau Nouveau Roman*.

Texts: Gide, *L'Immoraliste*; Proust, *Du côté de chez Swann*; Malraux, *La Condition humaine*; Sartre, *La Nausée*; Camus, *La Chute*; Robbe-Grillet, *La Jalousie*; Butor, *L'Emploi du temps*; Le Clézio, *Le Procès-verbal*; Ricardou, *Les Lieux-dits*; Gide, *Les Faux-Monnayeurs*; Beauvoir, *Les Belles Images*.

R. W. Baldner.

(Not offered 1978-79; intend to offer 1979-1980.) (3-0; 3-0)

**FREN 418. (3) French-Canadian Literature**

A survey of French literature in Canada before 1900; a study of French-Canadian literature in the Twentieth Century with emphasis on the novel, theatre and poetry since 1945.

Texts: Bessette, Geslin, Parent, *Histoire de la littérature canadienne-française*; Hémon, *Maria Chapdelaine*; Aubert de Gaspé, *Les Anciens Canadiens*; Savard, Menaud, Maître-draveur; Bessette, *Le Libraire*; Blais, *La Belle Bête*; Hébert, *Les Chambres de bois*; Langevin, *Poussière sur la ville*; Godbout, *L'Aquarium*; Thériault, *Agaguk*; Gélinas, *Tit-Coq*; Claude Jasmin, *La Corde au cou*; and others to be announced.

Essays and classroom *exposés*.

G. E. Moreau. (3-0; 3-0)

**FREN 421. (1½ or 3) Renaissance Literature**

An introduction to the principal literary works of the Renaissance in France and a study of the history of ideas based upon selected texts.

Texts: Rabelais, *Gargantua*; Montaigne, *Essais*. (Bordas); and others to be announced.

This course will be offered for 1½ units of credit in 1978-79.

E. Limbrick September-December. (3-0)

**FREN 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.

This course will be offered for 1½ units of credit in 1978-79.

Texts: F. W. Bourdillon, Editor, *Aucassin et Nicolette*, French Classics, Manchester University Press, 1970; Chrétien de Troyes, *Yvain*, edited by Wendelin Foerster, Manchester University Press, 1974; *The Song of Roland*, Translated by D. L. Sayers, Penguin Classics, 1965.

B. F. Beardsmore. January-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.

Texts: W. von Wartburg, *Evolution et structure de la langue française*, (A. Franke, 9th edition, 1969).

B. F. Beardsmore. (3-0; 3-0)

**FREN 426 (Linguistics 426). (3) Comparative Stylistics of French and English**

A contrastive study of the semantic and stylistic resources of French and English at the structural and cultural levels.

Prerequisite: French 302.

(Not offered 1978-79.) (3-0; 3-0)

**FREN 430. (3) Directed Reading Course (3-0; 3-0)****FREN 431. (1½) Directed Reading Course September-December. (3-0)****FREN 432. (1½) Directed Reading Course January-April. (3-0)****FREN 490. (1½) Honours Tutorial**

Students will meet one hour a week with a tutor throughout Fourth Year to do reading and other work beyond that assigned in lecture courses with a view to preparing the final written and oral comprehensive examinations.

Members of the Department.

**GRADUATE COURSES**

NOTE: A selection of these courses will be given depending upon the availability of members of faculty. Students should consult the Graduate Advisor before making choices. In addition students should read carefully the entry under Faculty of Graduate Studies, French.

**FREN 501. (1½) French Literary Criticism Since Sainte-Beuve****FREN 506. (1½ or 3) Pascal in his Time****FREN 514. (3) The Theory of Poetry in France from 1850 to 1930****FREN 516. (3) Le Nouveau Roman In France****FREN 517. (3) Marcel Proust: A la recherche du temps perdu****FREN 521. (3) Montaigne's Essais and their Literary and Philosophical Influence****FREN 590. (1½ or 3) Directed Studies****FREN 599. (6) Thesis****DEPARTMENT OF GEOGRAPHY**

Charles N. Forward, B.A., M.A. (*Brit. Col.*), Ph.D. (*Clark*), Professor and Chairman of the Department.

W. R. Derrick Sewell, B.Sc.Econ. (*London*), M.A., Ph.D. (*Wash.*), Professor.

Rudolph W. A. Wikkramatileke, B.A. (*Ceylon*), M.A. (*Clark*), Ph.D. (*London*), Professor.

Michael C. R. Edgell, B.A. (*Birm.*), Conservation Dip. (*London*), Ph.D. (*Birm.*), Associate Professor.

Harold D. Foster, B.Sc., Ph.D. (*London*), Associate Professor.

Charles H. Howatson, B.A., M.A. (*Brit. Col.*), Associate Professor.

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.

J. Douglas Porteous, B.A., M.A. (*Oxon*), Ph.D. (*Hull*), Associate Professor.

Stanton E. Tuller, B.A. (*Ore.*), M.A., Ph.D. (*Calif., Los Angeles*), Associate Professor.

Robert E. Pfister, B.Sc., M.Sc. (*Mich. St.*), Ph.D. (*Ore. St.*), Assistant Professor.

William M. Ross., B.Ed. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*Wash.*), Assistant Professor.

Colin J. B. Wood, B.A. (*Wales*), M.A., Ph.D. (*McMaster*), Assistant Professor. (On study leave 1978-79.)

Peter D. C. Clark, B.A. (*Brit. Col.*), M.Sc. (*Tor.*), Ph.D. (*Cornell*), Part-time Sessional Lecturer (January-April 1978).

Wayne D. Hilmo, B.A. (*Brit. Col.*), M.A. (*Waterloo Lutheran*), Sessional Lecturer (1977-78).

Donald N. G. Stone, B.A., M.A. (*Alta.*), Sessional Lecturer (1977-78).

Gilian D. McDade, B.A. (*Witwatersrand*), Senior Laboratory Instructor.

Ian H. Norie, Senior Academic Assistant.

**GRADUATE PROGRAMMES**

For information on studies leading to the M.A. and Ph.D. degrees, see page 158, for graduate courses, see page 71.

**GENERAL, MAJOR AND HONOURS PROGRAMMES**

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 programmes for both bachelor degrees. Information about course combinations suited to specific professional objectives and about graduate programmes is available from the Department. In general, the Department recommends an appropriate first-year mathematics course, especially Computing Science 170 and 171, for the B.A. Major and Honours programmes, and considers a second-year mathematics course, chosen in consultation with the Department, desirable for B.Sc. candidates. Second year Geography Major and Honours students may take the required Geography 321 and one of 322, 323 in their second year, if they wish. Moderate fees will be charged students in Geography 323, and in certain courses with announced field trips.

An up-to-date list of courses offered and the faculty members assigned to courses will be available in the Departmental Office, Cornett Building, after September 1. Students who wish academic counselling are asked to come to the Department before or during the registration period.

**Departmental requirements for the B.A. General and Major in Geography:**

General — 15 units: 101; 3 units chosen from 201, 203 and 205; and 9

\*As many as possible of the courses marked with an asterisk will be offered in 1978-79. Before registering, students of French should consult the Chairman of the Department.

units of courses numbers 300 or above, 3 units of which selection must be a regional course.

Major — 24 units: 101; 203; 3 units chosen from 201 and 205; 321 and one of 322, 323; and 12 units of courses numbered above 300, 3 units of which selection must be a regional course.

**Departmental Requirements for the B.Sc. General and Major in Geography:**

General — 15 units: 101; 203; and 9 units of courses chosen from 321, 322, 323, 350, 370, 371, 372, 373, 374, 375, 376, 377, 421, 423, 450, 451, 452, 453, 458, 459, 470, 472, 474, and 476.

Major — 24 units: 101, 203; 3 units chosen from 201 and 205; 321, and one of 322, 323; 12 units of courses chosen from 322, 323, 350, 370, 371, 372, 373, 374, 375, 376, 377, 421, 423, 450, 451, 452, 453, 458, 459, 470, 472, 474, and 476. All major students are required to obtain:

- (a) Three units of credit from Mathematics 100 and 101 (or 130), or 180, or three units from 102, 110, and 151, or Computing Science 170 and 171.
- (b) Six units of credits chosen from the following list or from appropriate courses numbered 300 or above chosen in consultation with the Department:

- Astronomy 120, 200
- Biology 150, 200, 203, 204, 206, 207
- Chemistry 120, 124, 224, 230, 233
- Geology 200
- Mathematics 200, 201, 210, 230, 231, 232, 240, 253, Computing Science 272, 273
- Microbiology 200
- Physics 101, 103, 121, 211, 214, 215, 216, 217

**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 Programme in their third year, having applied at the end of their second year. Requirements for entry into the Honours Programme are: completion of two successful years at university (see "Faculty of Arts and Science — Honours Programme" entry in this calendar) and a grade point average of at least 4.50 in all work for the second year. A student wishing to enter the programme in the fourth year (at the end of the third year) must have a grade point average of at least 5.00 for work completed in the third year.

A grade point average of 5.00 must be achieved by an honours student to progress from third to fourth year in the Honours Programme. Students who do not maintain this average will be required to transfer to a Major Programme.

First and second class honours degrees may be awarded. A first class degree requires a first class graduating average (6.50 or higher) and at least a B+ in Geog. 499. A second class degree requires a second class graduating average and at least a B— in Geog. 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 305 (page 80) and Pacific Studies 300 (page 92) as electives in their senior years.

**GEOGRAPHY CO-OPERATIVE EDUCATION PROGRAMME**

The Co-operative Education Programme in the Faculty of Arts and Science is described on page 28.

Entry into the Geography Co-operative Programme is restricted to students who are enrolled in an Honours or Major programme in Geography. Students will be admitted either at the start of their second year (regular programme) or at the end of their second year (summer option). To enter and remain in the Geography Co-operative Programme, students must maintain a B+ average in Geography and a B average overall. A student may withdraw from the programme and graduate with the normal Geography B.A. or B.Sc. degree.

Further information concerning the Geography Co-operative Programme may be obtained from the Department.

**Work Term Transcript Entries**

Students in the Co-operative Programme will register in one of the following when undertaking a Work Term. When a Work Term is satisfactorily completed, the grade COM will be entered on the student's

academic record and transcript.

- GEOG 001. (0) Co-op Work Term: I
- GEOG 002. (0) Co-op Work Term: II
- GEOG 003. (0) Co-op Work Term: III
- GEOG 004. (0) Co-op Work Term: IV

**UNDERGRADUATE COURSE INDEX**

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<b>First Year</b>	101 (3) Introduction to Geography
<b>Second Year</b>	203 (3) Physical; 201 (3) Economics; 205 (3) Cultural

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**Third and Fourth Years**

**Techniques and Methods**

- 321 (1½) Introduction to Quantitative Methods in Geography
- 322 (1½) Air Photo Interpretation
- 323 (1½) Cartography
- 324 (1½) Directions in Geography

**Urban, Economic and Cultural**

- 340 (3) Introduction to Urban
- 341 (1½) Industrial
- 342 (1½) Transportation & Commodity Flows
- 343 (1½) Regional Analysis
- 344 (1½) Urban Systems Simulation
- 346 (1½) Community Development and Planning in Canada.
- 347 (3) Economic & Cultural Change
- 348 (3) Historical

- 421 (3) Advanced Quantitative Methods
- 490 (1 or 3) Directed Studies

- 440 (1½) Seminar on Urban Geography of Canada

- 499 (3) Honours Seminar & Essay

- 443 (1½) Geography of Regional Development
- 444 (1½) Urban Transportation and Land Use Planning
- 446 (1½) Development & Planning of the Urban Region
- 447 (1½) Urbanization in Developing Countries
- 448 (3) Urban Social Geography
- 449 (1½) Urban Historical Geography

**Resources and Physical**

- 350 (3) Introduction to Resources
- 370 (1½) Hydrology
- 371 (1½) Water Resources Management
- 372 (1½) Climatology
- 373 (1½) Applied Climatology

**Regional**

- 360 (3) Introduction W. Pacific Rim
- 361 (formerly 204) (3) Canada
- 364 (1½) Traditional China
- 365 (1½) Modern China
- 369 (3) Europe

- 374 (1½) Biogeography
- 375 (1½) Biospheric Resources
- 376 (1½) Geomorphology
- 377 (1½) Applied Geomorphology

- 450 (3) Decision-Making in Resources Management
- 451 (3) Water Resources Planning and Policy-Making
- 452 (1½) Coastal Resource Analysis
- 453 (1½) Marine Resource Analysis
- 458 (3) Seminar on Territory, Resources and Conflict
- 459 (3) Recreational Resource Analysis
- 470 (1½) Seminar in Hydrology
- 472 (1½) Seminar in Climatology
- 474 (1½) Seminar in Biogeography
- 476 (1½) Seminar in Geomorphology

- 461 (1½) E. Canada
- 462 (3) Soviet Union
- 463 (3) S. E. Asia
- 465 (3) Japan
- 466 (3) Australia
- 468 (1½) W. Canada
- 469 (3) Latin America

**UNDERGRADUATE COURSES**

*Unless indicated otherwise, courses begin in September and end in April.*

**GEOGRAPHY**

Geography 101 is prerequisite to all other geography courses. This prerequisite may be waived by the Department in certain circumstances. In the event that a student who has had Geography 101 waived proceeds to a General, Major or Honours programme in Geography, the student will be

required to take six units of second year courses in a General and nine units of second year courses in a Major or Honours programme.

**GEOG 101. (3) Introduction to Geography**

A systematic description and analysis of the surface of the earth as the home of man. First term lectures will introduce the characteristics and interactions of the atmosphere, hydrosphere, lithosphere, and biosphere, including man, and will survey the historic, global association of man and environment. Second term lectures will examine rural and urban land use, environmental quality, and the dilemma of growth on a finite earth.

Laboratory sessions will emphasize discussion of lectures and readings.

M. C. R. Edgell, W. M. Ross. (2-2; 2-2)

**GEOG 201. (3) Economic Geography**

An analysis of the areal distribution of economic activity, examining the characteristics of different industries, their inter-relationships with each other, and the characteristics of different economic regions. Theories of location and models of regional economic development are discussed and applied. Problems resulting from disparate levels of economic development, and from growth and decline of activities are considered.

R. E. Pfister. (2-2; 2-2)

**GEOG 203. (3) Physical Geography**

A study of meteorology, climatology, geomorphology, pedology, biogeography, hydrology, and their inter-relationships.

C. H. Howatson, S. E. Tuller. (2-2; 2-2)

**GEOG 205. (3) Introduction to Cultural Geography**

A comparative and historical approach to the impact of ideas and social institutions upon landscape and the evolution of geographic areas. Cultural variations in man's perceived role in his environment and the attendant ethnocentric difficulties in adapting modern resource development to areas of traditional culture. (2-2; 2-2)

**TECHNIQUES AND METHODS**

**GEOG 321 (formerly 300). (1½) Introduction to Quantitative Methods in Geography**

An introduction to statistical reasoning and methodology which may be applied to the analysis of geographic problems. The course will emphasize the structuring of a research design and will provide the student with the opportunity to use statistical techniques in the empirical analysis of assigned class topics (Not open to students with credit for Geography 300).

September-December. Also January-April. (2-2)

**GEOG 322 (formerly 300). (1½) Air Photo Interpretation**

An introduction to photogrammetry and interpretation of aerial photographs and infrared imagery. Attention is focussed on the 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; principles and operation of the multiplex stereoscopic mapping machine; and remote sensing techniques. Laboratory assignments and field work will be emphasized. (Not open to students with credit for Geography 300).

C. H. Howatson. September-December. (2-2)

**GEOG 323 (formerly 300). (1½) Cartography**

An introductory course in cartography and cartographic techniques including: the properties of map projections, techniques of terrain representation, the cartographic representation of statistics and map reproduction methods. Emphasis will be placed on the application of learned techniques to map production. (Not open to students with credit for Geography 300). January-April. (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.

Prerequisite: Geography 203 and one of 201 or 205 or permission of instructor.

(Not open to students with credit in Geography 429 or 445.) Enrolment limited to 20.

J. D. Porteous. January-April. (3-0)

**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 Geography 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**

To obtain an orientation to the nature and demands of the honours programme, third and fourth year students attend the seminar during their first term in the programme, but do not register until fourth year. For the remainder of the programme, the student works on the essay with the advice of the essay supervisor and the programme advisor. The essay will be submitted at the end of the fourth year.

**URBAN, ECONOMIC AND CULTURAL**

**GEOG 340 (formerly 305). (3) Introduction to Urban Geography**

As an introduction to the field of urban geography the course is very broad in scope. Among the topics studied are: the rise and growth of cities; location, size and spacing; economic base; population characteristics; urban transportation; residential, commercial and industrial structure of cities; the urban fringe; the metabolism of the city; urban renewal; and the planning of the urban environment. (3-0; 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 discussion 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 Geography 310.)

D. C.-Y. Lai. September-December (3-0)

**GEOG 342. (1½) Transportation and Commodity Flows**

Interregional and intercity modes of transportation are studied in terms of their function as dynamic features of the economic and cultural landscape. Railway, highway, pipeline, water, and air transport modes are considered as integrated systems that handle the movement of commodities and passengers within national and continental areas. Specific examples of commodity flows are studied in relation to economic development and the nodal function of cities. The locational attributes and functions of seaports, airports and land transportation terminals as interchange points in transport networks are fully explored. The effect of possible transport innovations also is investigated.

(May be offered 1978-79.) (3-0)

**GEOG 343. (1½) Regional Analysis**

An examination of socio-economic 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 readings and two or three short term projects.

Prerequisite: Geography 201, 204 or 205 or permission.

(Not open to students who have taken Geography 442 in 1969-70.)

M. A. Micklewright. September-December. (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 inter-relationships 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.

Prerequisite: Geography 340 (formerly 305) or permission.

Enrolment limited to 20; preference given to students in related urban courses.

J. D. Porteous. September-December. (3-0)

**GEOG 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.

P. E. Murphy. September-December. (3-0)

**GEOG 347 (formerly 311). (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.

R. W. A. Wikkramatileke. ((3-0; 3-0)

**GEOG 348 (formerly 307). (3) Historical Geography**

An introduction to the field of historical geography, specifically, the methods of interpreting landscape changes. Attention is focused on the major theories of the subject as identified in the historical geography literature. This includes the reconstruction of geographical settings for periods of particular historical significance. Local studies grounded on field and archival investigations may be undertaken. Geography 205 is recommended.

(Not offered 1978-79.) (3-0; 3-0)

**GEOG 440. (1½) Seminar on Urban Geography of Canada**

Canadian cities are studied both as a group and individually. At the group level the processes of urbanization, urban growth and economic development as well as the characteristics of size, spacing and central place relationships are investigated. Individual cities are treated as urban laboratories in which theoretical aspects of urban studies can be applied. Census data will be relied upon as major sources of information available on a uniform basis. This will facilitate comparative studies of cities. An important goal of the course is to explore fully the elements of urban structure and dynamic functions of a city.

Prerequisite: Geography 340 (formerly 305) or permission.

C. N. Forward.

(Not offered 1978-79; intend to offer 1979-80.) (3-0)

**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 the 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: Economics 200 and Geography 343 or permission.

M. A. Micklewright.

January-April (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: Geography 340 (formerly 305) or permission.

(May be offered 1978-79.) (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 topics, such as, migration and housing patterns, industrial and transportation considerations, and the influence of central government pressure and legislation.

Prerequisite: Geography 340 (formerly 305) or permission.

P. E. Murphy. January-April. (3-0)

**GEOG 447. (1½) Urbanization in Developing Countries**

The purpose of the course is to examine the fundamental differences between urban organization in the developed and developing world; to study the historic, cultural and socio-economic conditions under which cities in the developing world are growing; and to test the applicability of theories which

were founded on studies of western cities.

Prerequisite: Geography 340 (formerly 305) or permission.

(May be offered 1978-79.) (3-0)

**GEOG 448. (3) Urban Social Geography**

A behavioural approach to the study of man-environment systems in an urban context. With a base in cultural geography and environmental psychology, the course will investigate the spatial dynamics of urban behaviour in western societies, with special reference to neighbourhood interaction, community development, and perceptions, attitudes and learning within the urban system. Students should become aware of the contemporary urban social problems which are involved in planning the metropolitan environment.

Prerequisite: Geography 340 (formerly 305) or permission.

J. D. Porteous. (3-0; 3-0)

**GEOG 449. (1½) Urban Historical Geography**

The rise and growth of cities is the main theme of the course. Site characteristics and the design and development of the built environment constitute one aspect, but emphasis is placed on the evolution of the economic and social structure. The effects on city form and function of technological change in transportation, construction, manufacturing and distribution are studied. Changing attitudes to land use, building scale and density, and urban morphology are explored. An attempt is made to assess the impact of the urban planning process.

Prerequisite: Geography 340 (formerly 305) or permission.

(Not offered 1977-78; intend to offer 1979-80.) (3-0)

**RESOURCES AND PHYSICAL**

**GEOG 350. (3) Introduction to Resource Geography**

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. Contemporary problems and issues of resource management in North America will be emphasized.

W. M. Ross. (3-0; 3-0)

**GEOG 370 (formerly 320). (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 Geography 371.

Prerequisite: Geography 203 or permission.

H. D. Foster. September-December. (2-2)

**GEOG 371 (formerly 353). (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 of 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 Geography 320 before 1970-71 or Geography 353.)

Prerequisite: Geography 370 (formerly 320) or permission.

W. R. D. Sewell. January-April. (2-2)

**GEOG 372 (formerly 302). (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. Laboratory work will focus on a local, applied microclimatologic problem.

Prerequisite: Geography 203 or permission.

S. E. Tuller. September-December. (2-2)

**GEOG 373 (formerly 351). (1½) Applied Climatology**

A study of the application of physical principles to practical problems in microclimatology and the reciprocal interaction between climate and man's activities. Discussion topics will include; effects of different surface types on the microclimate, bioclimatology and agricultural climatology, climatic change, urban climatology and man's intentional and unintentional

modification of the climate on both large and small scales. (Not open to students who have taken Geography 302 before 1970-71 or Geography 351.)

Prerequisite: Geography 372 (formerly 302).

S. E. Tuller. January-April. (2-2)

**GEOG 374 (formerly 306). (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 relationships; the dynamic character of ecosystems; the impact of man upon ecological processes and ecosystem character.

Prerequisite: Geography 203 or permission.

M. C. R. Edgell. September-December. (2-2)

**GEOG 375 (formerly 352). (1½) Biospheric Resources**

The nature and results of man's interactions with the natural environment are the main foci of this course. An introductory section will outline the major influence upon the development of present day western attitudes towards the environment. This section will be followed by a selective examination of the interplay between culture, social, economic and ecologic processes in biological resource utilization. Particular emphasis will be placed upon the ecological parameters of resource systems, and the relationship to these parameters to actual and potential resource use. (Not open to students who have taken Geography 306 before 1970-71 or Geography 352.)

Prerequisite: Geography 374 (formerly 306) or permission.

M. C. R. Edgell. January-April. (2-2)

**GEOG 376 (formerly 312). (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 (Not open to students with credit for Geography 312 or 412).

Prerequisite: Geography 203 or Geology 200 or permission.

H. D. Foster. September-December. (2-2)

**GEOG 377 (formerly 354). (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: Geography 376 (formerly 312) or permission.

H. D. Foster. January-April. (2-2)

**GEOG 450. (3) Decision-Making in Resources Management**

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. The first part of the course is devoted to a review of various approaches to the analysis of resource management decisions. The second part of the course deals with a number of case studies from different parts of the world, applying methodologies developed in the first part of the course, and comparing the impacts of the human and physical landscapes.

Prerequisite: Geography 350 or permission.

W. R. D. Sewell. (3-0; 3-0)

**GEOG 451. (3) Water Resources Planning and Policy-Making**

Models of water resources planning and policy-making will be described and applied to specific cases. An attempt will be made to isolate factors which appear to account for individual approaches to planning and particular policy outcomes. Specific attention will be paid to the kinds of information needed for effective planning and policy-making. Topics will be drawn mainly from Canada, and will include problems associated with urban water supply, irrigation, floods, water-based recreation, large scale water diversion, and the relationship between water development and economic and social change. Students will be expected to undertake a research project and to attend a field trip.

Prerequisite: Geography 350, 370 (formerly 320) and 371 (formerly 353) or permission.

H. D. Foster, W. R. D. Sewell. (3-0; 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 or 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: Geography 350 or permission of instructor.

(Not offered 1978-79; intend to offer 1979-80.)

January-April. (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: Geography 350 or permission of instructor. Biology 310 or 311 is recommended.

W. M. Ross. January-April. (3-0)

**GEOG 458 (formerly 442). (3) Seminar on Territory, Resources and Conflict**

This course is concerned with the description and analysis of the geographical characteristics of conflict over natural resources allocation. Topics are examined at macro, meso and micro geographical scales and are drawn from different parts of the world. They include: common property resources (the oceans), the geography of development and aid, extraterritoriality, northern latitude development, and integrated land management at the regional scale.

Prerequisite: Geography 350 or permission.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**GEOG 459. (3) Recreational Resource Analysis**

A study of recreational resources, which range from national parks to city parks and from public beaches to summer cottaging territory, the course will analyse the methods which have been used to estimate land use capability, to identify spatial patterns of circulation and demand, and to measure environmental perceptions as they relate to recreational activity. Emphasis will be placed on questions such as — is it possible to predict future demand for recreational space; is the existing administrative framework flexible enough to respond to changing patterns of recreational resource demand; is wilderness development possible without damaging natural quality.

Prerequisite: Geography 350 or permission.

R. E. Pfister. (3-0; 3-0)

**GEOG 470. (1½) Seminar in Hydrology**

The course offers an opportunity to undertake advanced work in hydrology. The emphasis is on learning through experience. Students are expected to initiate and complete suitable research projects in close consultation with the faculty member. (Not open to students with credit for Geog. 441 or 479.)

Prerequisite: Geography 203, 370 and 371.

(Not offered 1978-79.) (3-0)

**GEOG 472. (1½) Seminar in Climatology**

The course offers an opportunity to undertake advanced work in climatology. The emphasis is on learning through experience. Students are expected to initiate and complete suitable research projects in close consultation with the faculty member. (Not open to students with credit for Geog. 441 or 479.)

Prerequisites: Geography 203, 372 and 373.

(Not offered 1978-79.) September-December. (3-0)

**GEOG 474. (1½) Seminar in Biogeography**

The course offers an opportunity to undertake advanced work in biogeography. The emphasis is on learning through experience. Students are expected to initiate and complete suitable research projects in close consultation with the faculty member. (Not open to students with credit in Geog. 441 or 479.)

Prerequisites: Geography 203, 374 and 375.

(Not offered 1978-79.) (3-0)

**GEOG 476. (1½) Seminar in Geomorphology**

The course offers an opportunity to undertake advanced work in geomorphology. The emphasis is on learning through experience. Students are expected to initiate and complete suitable research projects in close

consultation with the faculty member. (Not open to students with credit for Geog. 441 or 479.)

Prerequisites: Geography 203, 376 and 377.

H. D. Foster. September-December. (3-0)

**REGIONAL**

Pacific Studies 300, Themes and Problems of the Pacific is recommended for students intending to take regional courses on the Pacific area (462, 463, 464, 465, 466).

**GEOG 360. (3) Introduction to the Geography of the Western Pacific Rim**

The western Pacific Rim is an area which includes the Soviet Far East, China, Japan, Southeast Asia, Australia, New Zealand and Islands of the Pacific. The course will bring to students concrete applications of fundamental geographic concepts and the realities of living patterns in particular areal settings. Attention will be focussed on geographical aspects of historical development, cultural interaction, divergent attitudes to resources, and the relationships between disproportionately large populations and the habitats which support them. The course will also serve as an introduction for more advanced courses concerned with specific parts of the study area.

R. W. A. Wikkramatileke. (3-0; 3-0)

**GEOG 361 (formerly 204). (3) Geography of Canada**

The course deals with the geography of Canada both systematically and regionally. Among the topics treated systematically in the first half are: population and settlement; transportation systems; natural resources; manufacturing and services; urban characteristics and metropolitan dominance; regional planning and economic development. Regional studies of the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, British Columbia and the Yukon and Northwest Territories are emphasized in the second half, with due consideration being given to economic and social problems and development policies. The course concludes with a discussion of regionalism, nationalism and external relations.

C. N. Forward. (2-2; 2-2)

**GEOG 364 (formerly half of 464). (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 open to students who have taken Geography 464 in 1977-78 or previously.)

D. C.-Y. Lai. September-December. (3-0)

**GEOG 365 (formerly half of 464). (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. (Not open to students who have taken Geography 464 in 1977-78 or previously.)

Prerequisite: Geography 364 or permission.

D. C.-Y. Lai. January-April. (3-0)

**GEOG 369 (formerly 408). (3) Geography of Europe**

A systematic study of the economic, social and political patterns and processes which characterize Europe. Particular emphasis will be given to the themes of urbanization, industrialization and regional differentiation. Throughout, Europe will be considered as a living laboratory for testing contemporary geographic concepts.

(Not offered 1978-79.) (3-0; 3-0)

**GEOG 460 (Paci 460). (1½) Seminar on Overseas Chinese Communities in the Pacific Rim**

This seminar studies the urban overseas Chinese Communities in Canada, U.S.A., New Zealand, Australia and Southeast Asian countries. Major topics of discussion will include migration theory, concepts of culture conflict, culture tension, assimilation and acculturation, urban ethnicity, home environment of Chinese immigrants, attitudes and policies of host society towards Chinese immigrants, and imprints of Chinese culture on the urban landscape of the receiving country.

(Credit cannot be obtained for both Geography 460 and Pacific Studies 460 or for Geography 460 and Pacific Studies 412 in 1977-78.)

D. C.-Y. Lai. September-December. (3-0)

**GEOG 461. (1½) Geography of Eastern Canada**

The course is concerned with a number of geographic problems in Eastern Canada, both economic and cultural. Among important topics considered are

the characteristics and problems of the Windsor-Quebec urban axis, the ethnic, cultural and linguistic contrasts, particularly between Ontario and Quebec, and the economic disparities between the northern and eastern periphery composed of the North and the Atlantic Provinces and the heartland of southern Ontario and Quebec. Other topics of concern are natural resources development, preservation of environmental quality and transportation problems.

Prerequisite: Geography 361 (formerly 204).

M. A. Micklewright. January-April. (3-0)

**GEOG 462. (3) Geography of the Soviet Union**

An analysis of patterns, process, priorities and problems in Soviet socioeconomic development. Topics include: Soviet geopolitics; environmental management; regional organization and diversity; industrial, agricultural and trading policies; family and living patterns; and the urban milieu. Basic strategies will be identified and evaluated as models for developing countries seeking rapid growth.

(Not offered 1978-79.) (3-0; 3-0)

**GEOG 463 (formerly 308). (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.

R. W. A. Wikkramatileke. (3-0; 3-0)

**GEOG 465. (3) Geography of Japan**

An intensive survey of the physical and cultural patterns, resources, land use, agriculture, industry and economic development of Japan. Special consideration will be given to the geographic aspects of population pressure, resource management and conservation, historical phases of industrialization, and the major geographic regions of Japan.

S. E. Tuller. (3-0; 3-0)

**GEOG 466. (3) Geography of Australia**

A systematic and regional study of the geography of Australia. The country will be viewed in the overall framework of the Pacific Basin. As well as an analysis of the fundamental character of the area, attention will be paid to the geographic implications of problems, such as natural resource development, transportation, isolation, limited consumer markets and attempts to foster manufacturing industry.

M. R. C. Edgell. (3-0; 3-0)

**GEOG 468 (formerly 368, 410). (1½) Geography of Western Canada**

A study of resources and regional development in the four western provinces with emphasis on the more developed parts. Particular attention will be given to problems in the forest industry of British Columbia; the use of water for power and irrigation in Western Canada; the competition for use of land by forestry, grazing and cultivation; and diversification of agriculture on the Prairies. Comparisons will be made between British Columbia and the Prairie provinces with respect to: the historical development of settlement; the variety and availability of mineral resources; manufacturing and urban development.

Prerequisite: Geography 361 (formerly 204).

C. H. Howatson. September-December. (3-0)

**GEOG 469. (3) Geography of Latin America**

An intensive study of the physical, economic, social and political patterns and problems of Latin America. With emphasis on the Andean nations, the continent will be considered as an area in which to test concepts relating to: landscape integrity; colonialism; underdevelopment and economic dependence; monocultures; frontier development; and uncontrolled urbanization. Within the context of the Pacific, relationships with Japan, the United States, and Canada will be emphasized.

(Not offered 1978-79.) (3-0; 3-0)

**GEOLOGY**

**GEOL 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.

C. H. Howatson. (2-2; 2-2)

**GRADUATE COURSES**

All courses may not be offered in any one year. All graduate students are required to take Geography 500 and 599 or 699.

**GEOG 500. (0) Colloquium in Geography**

**GEOG 501. (3) Graduate Seminar in Physical Geography****GEOG 521. (2) Quantitative Methods in Geography: I**

The course outlines the procedures involved in research designs utilizing statistical analysis. The focus is upon hypothesis formulation, questionnaire and sampling design and preliminary analysis of the data. The students are expected to apply the methods discussed to a specific project that is either of their own choosing or supplied by the instructor.

**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 a consideration of various techniques of data collection. Particular emphasis will be placed on methods of survey research, content analysis, participant observation, and various projective techniques. The course will conclude with the design of a research project.

**GEOG 524. (2) Quantitative Methods in Geography: II**

This course continues with the procedures established in Geography 521. The emphasis is placed upon the 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 until the twentieth 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 inter-disciplines. Recommended for graduates who wish to place their specific research goals in the general context of the geographical research frontier.

**GEOG 541. (2) Seminar in Urban Analysis**

An analytical survey and review of specific topics in urban geography. Each participant will probe two or three chosen areas of the current research frontier.

**GEOG 542. (2) Seminar in Urban Problems**

A survey of the geographer's contribution to the understanding of contemporary urban problems. Each student will design and carry out a problem oriented research project.

**GEOG 543. (2) Research Seminar in Urban Historical Geography of Canada**

The principal goal of the course is the investigation and explanation of changes in the economic, social and environmental elements of Canadian cities. Students will undertake individual research projects on evolutionary aspects of specific-cities or groups of cities.

**GEOG 551. (2) Seminar in Resources Policy Analysis**

A seminar focussing on the formulation and implementation of resources policies, aiming to identify the various factors which influence such outcomes in decision-making. A variety of resource issues will be considered, including those concerned with water, energy, fisheries, and forestry. Examples will be drawn from Canada and elsewhere.

**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 programmes, and the analysis of economic and social aspects of resources development projects. Examples will be drawn from Canada and elsewhere.

**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 554. (2) Geographical Aspects of Resource Planning**

The course will be directed to analysis of human and natural resource locational problems. Speakers from government, industry and academia will be invited for seminar discussions. Readings in the theory of development planning will be required and a major paper will be written and presented for critical discussion.

**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 12 units) M.A. Thesis****GEOG 699. (credit to be determined, normal 18 units) Ph.D. Dissertation**

## DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURE

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.

Nora E. Haimberger, B.A., M.A., Ph.D. (*Wash.*), Assistant Professor.

Peter G. Liddell, M.A. (*Edin.*), Ph.D. (*Brit. Col.*), Assistant Professor.

Johannes Maczewski, Staatsexamen (*Marburg*), Ph.D. (*McGill*), Assistant Professor.

Hildegard Webber, B.A. (*Erlangen*), M.A. (*Carleton*), Sessional Lecturer (1977-78).

### GENERAL, MAJOR AND HONOURS PROGRAMMES

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 programmes 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 Programme or Major or Honours in the Department of Germanic Languages and Literature must take one of English 200, 201, 204, 205.

Students wishing to take Third or Fourth Year courses to meet requirements for a B.A. degree on the general, major or honours programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. The course numbered 300 should be taken normally in the Third Year. Students wishing to enrol in the Honours Programme will first obtain the approval of the Chairman of the Department.

An Honours programme in the Department of Germanic Languages and Literature normally requires a total of 63 units over a four-year period, including graduating essay (see German 490). 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 490. A Second Class graduating average and at least a C+ in German 490.

A student who fails to meet departmental requirements for First Class standing in the Honours programme 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 of German may give permission for individual studies and directed studies to be taken under course numbers German 430 and 490 only. No other course numbers are offered as individual studies or directed readings at any time. German 490 is specifically intended for Honours Students; German 430 may be taken for Majors 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 430 would only be approved for Spring and Summer Session if such a student required the course in order to graduate that year.

## PROGRAMMES IN GERMAN

General — German 100 or 140 (or equivalent); German 200, and 204 (or equivalent); nine units of German courses chosen from 300 and those numbered 400 or above.

Major — German 100 or 140 (or equivalent); German 200, and 204 (or equivalent); German 300, 410, plus at least nine units of other courses numbered 400 or above.

Honours — German 100 or 140 (or equivalent); German 200, and 204 (or equivalent); German 300, 410, 490 plus at least twelve units of other courses numbered 400 or above.

## 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 post-secondary 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 Langenscheidts or Cassells.

## 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.

Texts: Helbing/Gewehr/von Schmidt, *First Year German*; Ryder/McCormick, *Lebendige Literatur*.

N. E. Haimberger, J. Maczewski, W. E. Riedel, R. T. K. Symington. (3-1; 3-1)

N.B. Credit cannot be granted for both German 100 and German 140.

### GER 140. (3) Elementary German

Survey of grammar; readings in German literature; practice in spoken and written German; films on German-speaking countries. (For students who have completed one or two years of German in secondary school, and for students whose standing in Beginners' German is unsatisfactory for admission to a higher course.)

Texts: As for German 100.

P. G. Liddell. (3-1; 3-1)

## INTERMEDIATE AND ADVANCED COURSES

### GER 200 (formerly 290). (3) Intermediate German

Using such diversified approaches as conversation groups, reading and analysis of modern prose, and basic exercises in simultaneous interpretation, this course aims at improving the student's practical mastery of the spoken and written language. The course commences at the level attained in German 100. (Not open to students who have credit for German 290.)

Prerequisite: German 100 or 140 or equivalent.

Texts: Lederer, et al, *Fortschritt Deutsch*; Ryder/McCormick, *Lebendige Literatur*.

M. L. Hadley, N. E. Haimberger. (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 German 240, 260, 201 or 202.

Texts: To be announced.

Prerequisite: German 100 or 140 or equivalent: German 200 is normally prerequisite to, or corequisite with, this course.

W. E. Riedel. (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.

N. E. Haimberger. (3-0; 3-0)

### GER 300 (formerly 302). (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, style analysis, and to introduce him to simultaneous interpretation in the Language Laboratory.

Prerequisite: German 200 or equivalent.

Texts: Steinhauer, *Stilvolles Deutsch*; L. J. Russon, *Complete German Course*.

R. T. Symington. (3-1; 3-1)

### 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, *Great Writings of Goethe*; Spender (ed.), *Great German Short Stories*; Büchner, *Danton's Death*; *Woyzeck*; Mann, *Tonio Kröger*; Kafka, *The Metamorphosis*; Hesse, *Steppenwolf*; Brecht, *The Life of Galileo*; Dürrenmatt, *The Visit*; Weiss, *Marat/Sade*; Grass, *Cat and Mouse*; and others.

(Not offered 1978-79.) (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 English 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 programmes, 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*, *Confessions of Felix Krull*, *Confidence Man*; Herman Hesse, *Steppenwolf*, *Siddhartha*; Günter Grass, *The Tin Drum*.

R. T. K. Symington. (3-0; 3-0)

### GER 390 (formerly 190). (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 3rd or 4th year or in graduate studies. (Credit cannot be granted both for German 100 (or 140) and 390.)

Texts: van de Luyster, *German Readings in Science*; additional reading material on astronomy, chemistry, ecology, history, linguistics, anthropology, philosophy, physics, psychology, sociology, or other area readings as required will be provided by the Department.

P. G. Liddell. (3-0; 3-0)

### GER 400. (3) Advanced Composition, Stylistics and Translation (II)

The aim of this course is to advance the student's mastery of the German language by intensive practice in the use of idiom in oral and written composition, advanced translation, style analysis, and by continuing work in

simultaneous interpretation in the Language Laboratory.

Prerequisite: German 300 (formerly 302).

Text: E. P. Dickens, *German for Advanced Students* (Oxford, 2nd. Ed.).

J. Maczewski. (3-1; 3-1)

**GER 401. (3) Modern German Literature (1880-1945)**

Representative literary texts will be discussed with reference to social and intellectual background; comparisons with works in Literatures other than German will be made; manifestations of Naturalism, Expressionism and Symbolism in art-forms other than literature will also be studied.

Texts: Hauptmann, *Vor Sonnenaufgang*, *Die Weber*; Wedekind, *Frühlings Erwachen*; Kaiser, *Von morgens bis mitternachts*, *Die Bürger von Calais*; Kafka, *Die Verwandlung*; Schnitzler, *Liebele*; Hofmannsthal, *Tor und Tod*, *Jedermann*; Thomas Mann, *Tonio Kröger*, *Tod in Venedig*; Hesse, *Der Steppenwolf*; Brecht, *Die Dreigroschenoper*; Zuckmayer, *Der Hauptmann von Köpenick*; Bergengruen, *Die Feuerprobe*.

W. E. Riedel. (3-0; 3-0)

**GER 402. (3) Contemporary German Literature (1945 to the present)**

The course will investigate some of the significant and representative works of German literature since 1945. These works will be considered in the light of political, social, and intellectual developments in Post-War Germany.

Texts: To be announced.

(Not offered 1978-79.) (3-0; 3-0)

**GER 404. (3) The Romantic Movement**

A study of prose and poetry of the period. Attention will also be given to the historical, social, artistic, religious and philosophical background.

Texts: Selected works of Novalis, Tieck, Schlegel, Wackenroder, E. T. A. Hoffmann and others.

(Not offered in 1978-79.) (3-0; 3-0)

**GER 408. (3) German Poetry from 1830 to the Present**

Studies in Realism, Naturalism, Impressionism, Expressionism, and contemporary trends in German poetry.

Texts: Mörike, *Poems* (Blackwell's, Oxford); Heine, *Buch der Lieder* (Goldmanns Taschenbücher); C. F. Meyer, *Gedichte* (Goldmanns Taschenbücher); R. M. Rilke, *Poems* (Clarendon, Oxford); Heym, *Gedichte* (Fischer Bücherei); Bann, *Selected Poems* (Oxford); Nelly Sachs, *Ausgewählte Gedichte* (Suhrkamp); other selections may be announced.

(Not offered 1978-79.) (3-0; 3-0)

**GER 410. (3) The Classical Period**

Literature of the eighteenth and early nineteenth century with emphasis on the works of Lessing, Schiller and Goethe.

Texts: Bahr (ed.), *Was ist Aufklärung* (Reclam 9714); Albrecht v Haller, *Die Alpen* (Reclam 8963/64); Lessing, *Nathan der Weise*; Schiller, *Maria Stuart* (ed. Witte, Macmillans); Schiller, *Die Jungfrau von Orleans* (Reclam 47); Goethe, *Die Leiden des jungen Werthers* (Goldmanns), *Poems* (ed. Boyd), *Faust I* (ed. W. H. Bruford); and others.

M. L. Hadley. (3-0; 3-0)

**GER 412. (3) Baroque to Sturm and Drang**

A survey of German poetry, drama, prose fiction and literary theory from the early seventeenth century (Baroque period) to the Enlightenment and the Storm and Stress movement. Comparisons with other contemporary art forms (e.g. painting, music, architecture) will be made.

Texts: M. Szyrocki, *Die deutsche Literatur des Barock*; Martin Luther, *Ausgewählte Schriften*; H. Cysarz (ed.), *Deutsche Barock-Lyrik*; Grimmelshausen, *Der Abenteurliche Simplicissimus*; Haller, *Die Alpen*; Gerstenberg, *Ugolino*; Goethe, *Götz von Berlichingen*; Goethe, *Die Leiden des jungen Werthers*; Schiller, *Die Räuber*; Lessing, *Die Erziehung des Menschengeschlechts*; and others.

J. Maczewski. (3-0; 3-0)

**GER 413 (formerly 400). (3) Nineteenth-Century German Literature**

An investigation of major and representative works of the nineteenth century with emphasis on the drama. The works will be considered against the intellectual and social background of the Age. Some of the questions to be pursued are: reactions to the Romantic movement; the rise of Realism; the political and social involvement of the younger writers; Biedermeier and the reflection of social values in literature; the effects of the Industrial Revolution on writers; the schism between urban and rural life; pessimistic determinism and optimistic materialism; regional literature, etc.

Texts: To be announced.

P. G. Liddell. (3-0; 3-0)

**GER 417. (3) The German Novelle**

A study of the development of the German Novelle from Goethe to the present day.

Texts: Representative *Novellen* from the works of Goethe, Eichendorff, Kleist, Büchner, Tieck, Gotthelf, Droste-Hülshoff, Stifter, Grillparzer, Keller, Raabe, Meyer, Storm, Mann, Kafka, and other modern writers.

(Not offered 1978-79.) (3-0; 3-0)

**GER 430. (3) Directed Reading Course**

(By permission, for Honours or Major students.) (3-0; 3-0)

**GER 490. (3) Honours Seminar and Graduating Essay**

The seminar will meet regularly with the Honours advisor and/or the essay supervisor to help the student develop critical approaches to specialized materials, 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 may be arranged.

(3-0; 3-0)

## DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

Pablo Cabañas, Licenciado, Doctor en Filosofía y Letras (*Madrid*), Professor (Spanish) and Chairman of the Department.

Antonio Fama, B.A. (*Brock*), M.A. (*W. Ont.*), Ph.D. (*S.U.N.Y., Buffalo*), Assistant Professor (Spanish).

David F. Henn, B.A., M.A. (*Durham*), Assistant 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).

Jerrold L. Mordaunt, B.A., M.A. (*Utah*), Ph.D. (*Stanford*), Assistant Professor (Spanish).

Dolores Reventlow, B.A. (*U. of Vic.*), Ph.D. (*Brit. Col.*), Assistant Professor (Spanish).

Robert W. H. Castleton, B.A., M.A. (*Brit. Col.*), Ph.D. (*London*), Sessional Lecturer (1977-78).

Mary A. Kilmer-Tchalekian, B.A. (*Elmira Coll.*), M.A., Ph.D. (*Texas*), Sessional Lecturer (1977-78).

### GENERAL, MAJOR AND HONOURS PROGRAMMES

NOTE: All students planning to take a concentration in a general programme or Majors or Honours in the Department of Hispanic and Italian Studies must have at least *two* of the following: English at the 200 level; Linguistics 100 or 360; Latin 100 or equivalent; Classical Studies 100.

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 Programme, 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 programme in the Department of Hispanic and Italian Studies normally requires a total of 66 units over a four-year period. An Honours student's graduation standing is based on his graduating grade point 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.

### PROGRAMMES IN SPANISH

General — First Year: Spanish 100; Second Year: Spanish 260 and 290; Third and Fourth Years: Spanish 302 and six units of Spanish courses numbered 400 or above, selected with the approval of the Department.

Major — First Year: Spanish 100; Second Year: Spanish 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: Spanish 100; Second Year: Spanish 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

### SPANISH

#### SPAN 100. (3) Beginners' Spanish

Intensive oral method with grammar, composition, translation, and work in the language laboratory.

Text: Zenia Sacks da Silva, *Beginning Spanish*, 4th edition, and Tape Manual-Workbook.

Members of the Department. (3-1; 3-1)

#### SPAN 240. (3) Intermediate Spanish

Conversation, composition and grammar.

Texts: Zenia Sacks da Silva, *On with Spanish*, 2nd edition, and *Workbook*; Zayas-Bazán and Lozano, *Del amor a la revolución*; Miguel Mihura, *Carlota* (ed. Edith B. Sublette).

D. F. Henn. (4-0; 4-0)

NOTE: Students who intend to do major or honours work in Spanish should take Spanish 260 and Spanish 290.

#### SPAN 260. (3) Introduction to the Literature of Spain and Spanish America

(For students who intend to do major or honours work in Spanish. May also be taken as an elective.)

Study of modern authors, composition, and assigned themes.

Texts: Sender, *Réquiem por un campesino español*; García Lorca, *Yerma*; Lope de Vega, *Fuenteovejuna*; Alexander Coleman (ed.), *Cinco maestros*; and an anthology to be announced.

A. Fama. (4-0; 4-0)

#### SPAN 290. (3) Review Grammar and Conversation

(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.

Intensive review of grammar. Detailed study of the Spanish language.

Texts: Zenia Sacks da Silva, *A Concept Approach to Spanish*, 3rd ed.; Adrian Modern *Spanish Prose*, 3rd ed.

C. Monahan, D. A. Reventlow. (4-0; 4-0)

#### SPAN 302. (3) Advanced Composition and Stylistics

Intensive training in oral and written composition.

Texts: Tarr, Centeno and Lloyd, *A Graded Spanish Review Grammar with Composition*, 2nd ed.; Crow-Dudley, *El cuento*; Collins *Spanish Dictionary*, ed. C. Smith.

J. L. Mordaunt. (4-0; 4-0)

#### SPAN 400. (3) The Spanish Realist Novel of the Nineteenth Century

Development of the Spanish novel from Romanticism to the end of the Nineteenth Century.

Students will be required to write essays on novels by Valera, Galdós, Pereda and Clarín.

Texts: Juan Valera, *Pepita Jiménez*; Galdós, *Marianela*, *La de Bringas*, *Miau*, *Misericordia*; Pereda, *Sotileza*; Clarín, *La Regenta*.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

#### SPAN 401. (3) The Generation of 1898

A study of Spanish authors who sought a solution to the problems of Spain which followed the Spanish-American War.

Students will be required to write essays on the prescribed texts.

Texts: Unamuno, *En torno al casticismo*, *San Manuel Bueno mártir*; Azorín, *Visión de España*; Baroja, *El mayorazgo de Labraz*, *El árbol de la ciencia*; Antonio Machado, *Poesías completas*.

P. Cabañas. (3-0; 3-0)

#### SPAN 402. (3) Cervantes

The life and works of Cervantes, with emphasis on *Don Quijote* and selected *Novelas ejemplares*.

(Not offered 1978-79.) (3-0; 3-0)

#### SPAN 403. (3) Golden Age Poetry

Spanish poetry of the Golden Age (Sixteenth and Seventeenth Centuries).

Not open to students who have credit in Spanish 403 prior to 1974-75.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

#### SPAN 405. (3) The Golden Age Novel, Excepting Cervantes

Development of the Spanish novel from the beginning of the sixteenth century to the end of the seventeenth century.

Texts: *Lazarillo de Tormes*; *El Abencerraje*; Alemán, *Guzmán de Alfarache*; Quevedo, *El Buscón*; other texts to be announced.

C. Monahan. (3-0; 3-0)

#### SPAN 406. (3) Medieval Literature

Study of Spanish language and literature from 1140 to 1500.

Texts: Eugène Kohler (ed.), *Antología de la literatura española de la Edad Media (1140-1500)*; *Poema de Mio Cid*, (Clásicos Castalia); Arcipreste de Hita, *Libro de Buen Amor*, ed. María Brey Mariño; Fernando de Rojas, *La Celestina* (Clásicos Castellanos).

J. L. Mordaunt. (3-0; 3-0)

#### SPAN 410. (3) Spanish Literature, 1700-1898

Main currents of the eighteenth and nineteenth centuries: Neo-Classicism, Romanticism, Realism.

Students will be required to write essays on the prescribed texts.

Texts: Meléndez Valdés, *Poesías*; Moratín, *La comedia nueva*, *El sí de las niñas*; Espronceda, *Poesías*, *El estudiante de Salamanca*; Zorilla, *Don Juan Tenorio*; Galdós, *Fortunata y Jacinta*.

P. Cabañas. (3-0; 3-0)

#### SPAN 412. (3) Twentieth Century Spanish Literature

A study of the main trends in 20th century poetry, drama and prose with particular reference to texts detailed below.

Students will be required to write essays on the prescribed texts.

Texts: Valle-Inclán, *Sonata de primavera*, *Sonata de estío*, *Romance de lobos*, *Luces de Bohemia*; Pérez de Ayala, *Prometeo*, *Belarmino y Apolonio*; Cela, *La familia de Pascual Duarte*, *La colmena*; J. R. Jiménez, *Segunda antología poética*; García Lorca, *Romancero gitano*, *Bodas de sangre*, *La casa de Bernarda Alba*; Salinas, *La voz a ti debida*.

D. F. Henn. (3-0; 3-0)

#### SPAN 413. (3) Golden Age Drama

Development of the Spanish theatre from the beginning of the 16th Century to the end of the 17th Century.

Not open to students who have credit in Spanish 403 prior to 1974-75.

Texts: Juan de la Cueva, *Los siete infantes de Lara*; Lope de Vega, *Peribáñez and La dama boba*; Guillén de Castro, *Las mocedades del Cid*; Luis Vélez de Guevara, *Reinar después de morir*; Alarcón, *La verdad sospechosa*; Tirso de Molina, *El burlador de Sevilla*; Calderón de la Barca, *El médico de su honra*, *El alcalde de Zalamea*, *La vida es sueño*, and *La cena de Baltasar*; Moreto, *El lindo don Diego*.

(not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

#### SPAN 414. (3) Literature of Spanish America: I

The literature and literary trends of Spanish America from 1492 to c. 1880.

Texts: Selections from Cortés, *Cartas de relación* and Inca Garcilaso, *Comentarios reales*; Sor Juana, *Obras escogidas*; Fernández de Lizardi, *El periquillo sarniento*; Sarmiento, *Facundo*; Blest Gana, *Martín Rivas*; Isaacs, *María*; Hernández, *Martín Fierro*; and selected readings from anthologies.

A. Fama. (3-0; 3-0)

#### SPAN 415 (formerly 404). (3) Literature of Spanish America: II

The literature and literary trends of Spanish America from c. 1880 to the present.

Not open to students who have credit in Spanish 404 prior to 1974-75.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

#### SPAN 420. (3) Advanced Composition, Translation and Stylistics

Intensive training in oral and written Spanish by means of regular practice in composition, translation and oral expression.

Prerequisite: Spanish 302.

Texts: K. L. J. Mason, *Advanced Spanish Course*; Collins *Spanish Dictionary*, ed. C. Smith.

D. A. Reventlow. (3-0; 3-0)

#### SPAN 425. (3) History of the Spanish Language

A study of the development of the Spanish language from its beginning to the present day.

Prerequisite: 200 level in Spanish, including Spanish 290.

(Not offered 1978-79.) (3-0; 3-0)

#### SPAN 430. (3) Directed Reading Course

For Honours and Major students.

(3-0; 3-0)

## ITALIAN

**ITAL 100. (3) First Year Italian**

Introduction to the language with conversation, composition, grammar, reading exercises, and practice in the language laboratory.

Texts: Speroni-Golino, *Basic Italian* (4th ed.); Brigola, *Practicing Italian* (3rd ed.).

L. H. Howard. (3-1; 3-1)

**ITAL 200. (3) Second Year Italian**

Review of essential grammar, progressing into more advanced grammar; conversation, composition, and practice in the language laboratory.

Texts: Speroni-Golino, *Leggendo e Ripassando*; Buzzati, *Un caso clinico* (ed. Pia Raffaele and Margaret Cambone).

L. H. Howard. (3-1; 3-1)

**ITAL 302. (3) Advanced Composition and Stylistics**

Intensive training in oral and written composition.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**ITAL 403. (3) Introduction to Medieval and Renaissance Italian Literature**

A study of Italian literature from the thirteenth to the sixteenth century inclusive. Emphasis on the major works of the period. Taught in English. Some knowledge of Italian recommended.

Prerequisites: Third or Fourth Year standing, or permission of the instructor.

Texts: Dante, *The Inferno* (ed. John Ciardi), *The Purgatorio* (ed. John Ciardi), *The Paradiso* (ed. John Ciardi); Petrarch, *Selected Sonnets, Odes and Letters* (ed. Thomas G. Bergin); Boccaccio, *The Decameron* (Laurel edition); and another text to be announced.

L. H. Howard. (3-0; 3-0)

## DEPARTMENT OF HISTORY

John Money, B.A., M.A., Ph.D. (*Cantab.*), Associate Professor, and Chairman of the Department.

Ralph C. Croizier, B.A. (*Brit. Col.*), M.A. (*Wash.*), Ph.D. (*Calif., Berkeley*), Professor.

Sydney W. Jackman, B.S., M.A. (*Wash.*), A.M., Ph.D. (*Harvard*), F.S.A., F.R.Hist.S., Professor. (On study leave 1978-79.)

Reginald H. Roy, C.D., B.A., M.A. (*Brit. Col.*), Ph.D. (*Wash.*), F.R.Hist.S., Professor.

Alan F. J. Artibise, B.A. (*Man.*), Ph.D. (*Brit. Col.*), Associate Professor.

Brian W. Dippie, B.A. (*Alta.*), M.A. (*Wyo.*), Ph.D. (*Texas*), Associate Professor.

Charlotte S. M. Girard, B.A. (*Brit. Col.*), M.A., Ph.D. (*Bryn Mawr*), Associate Professor. (On study leave 1978-79.)

James E. Hendrickson, B.A. (*Sask.*), B.Ed. (*Alta.*), M.A., Ph.D. (*Ore.*), Associate Professor.

Jan Kupp, B.A., M.A., Ph.D. (*Man.*), Associate Professor.

G. R. Ian MacPherson, B.A. (*Assumption U. of Windsor*), M.A., Ph.D. (*W. Ont.*), Associate Professor.

Angus G. McLaren, B.A. (*Brit. Col.*), M.A., Ph.D. (*Harvard*), Associate Professor.

Patricia Z. Roy, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*Brit. Col.*), Associate Professor.

W. George Shelton, B.A., M.A. (*Man.*), Ph.D. (*Pa.*), Associate Professor.

David A. T. Stafford, B.A., M.A. (*Cantab.*), Ph.D. (*London*), 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.

Donald L. Senese, A.B., Ph.D. (*Harvard*), Assistant Professor.

Phyllis M. Sherrin, B.A. (*Tor.*), M.A. (*Carleton*), Ph.D. (*York*), Assistant Professor.

Wesley T. Wooley, A.B. (*Ill.*), A.M., Ph.D. (*Chicago*), Assistant Professor.

Alan A. Brookes, B.A., M.A. (*Hull*), Sessional Lecturer (1977-78).

Stephen Duguid, B.A. (*Ill.*), M.A. (*S. Fraser*). Sessional Lecturer, Correctional Education Programme (1977-78).

David F. Holm, B.A. (*U. of Vic.*), M.A. (*Yale*), Part-time Sessional Lecturer (1977-78).

Robert W. C. Shorthouse, B.A. (*Brit. Col.*), M.A. (*Johns Hopkins*), Part-time Sessional Lecturer (1977-78).

Ralph N. Skinner, B.A. (*Occidental Coll.*), M.A. (*Carleton*), Part-time Sessional Lecturer, Correctional Education Programme (1977-78).

Brian R.D. Smith, B.A., LL.B. (*Brit. Col.*), M.A. (*Queen's*), Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 158; for graduate courses, see page 80.

## UNDERGRADUATE PROGRAMMES

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 enrol in introductory courses after completing an advanced course in the same area; students may not enrol concurrently in introductory and advanced courses in the same area without written permission from the instructor in the advanced course. Please note that enrolment in seminars is limited and that the consent of the instructor is required for registration. In some instances, seminars in the fall term may be offered again in the spring term 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 Programme consists of any 9 units of history courses numbered 300 and above in the third and fourth years. Students entering the General Programme should normally complete 6 units of introductory history courses in the first and second years.

## MAJOR

To be admitted to the Major Programme, a student should have a C average in 6 units of introductory history courses. In his third and fourth years, the student must take a minimum of 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 non-history courses must be selected in consultation with the department advisor to Majors. Students interested in majoring in history are advised to consult the Majors advisor in their first year if possible. Majors must have their third and fourth year programmes approved by the Majors advisor.

## HONOURS

In the Honours Programme, students have the opportunity to study history more independently and intensively than is normally possible in the Major and General Programmes. Through small seminars, directed readings, and individual instruction in writing and research, the Honours Programme encourages students to think critically and to deepen their understanding of both the content and the craft of history. While the primary intent of the Honours Programme is to help any interested and talented student of history achieve an excellent education in the liberal arts, the Programme 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 Programme normally consists of 33 units of course work in the combined third and fourth years as follows:

Third Year		Fourth Year	
History 491 (Seminar)	1½ units	History 491 (Seminar)	1½ units
History 498	1½ units	History 499 (Essay)	4½ units
Advanced History	9 units	Advanced History	3 units
Related non-History	3 units	Related non-History	3 units
Elective	3 units	Elective	3 units
	18 units		15 units

In addition, Honours candidates before graduation must demonstrate a reading knowledge of a language other than English by passing (with at least a C) either of two hundred level language course or a special language examination.

Admission to the Honours Programme requires a high second class standing in six units of history courses or seminars. Applications for admission should normally be made in the spring, during the student's second year of study, although a small number of third year applications may also be accepted.

Honours candidates are required to have their programme of courses approved by the Honours advisor. 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 at any time to transfer from the Honours Programme to the Major Programme. Admission to the fourth year Honours Programme 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 B+ in History 499. If an honours student has a first class graduating average but has scored in the range C+ to B in History 499, 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 C+ in History 499.

## UNDERGRADUATE COURSES

*Unless indicated otherwise, courses begin in September and end in April.*

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

Please note — first year students may enrol in introductory courses at the 200 level.

#### HIST 205. (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.

(3-0; 3-0)

#### HIST 210 (formerly 212). (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.

J. E. Hendrickson. (3-0; 3-0)

#### HIST 220 (formerly 201). (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.

(3-0; 3-0)

#### HIST 230 (formerly 102). (3) History of Canada

A survey of Canadian development from the beginnings of the French regime to the present. This course is strongly recommended to students wishing to take advanced courses in Canadian history.

Members of the Department. (3-0; 3-0)

#### HIST 234 (formerly 400). (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. (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. (3-0; 3-0)

#### \*HIST 240 (formerly 200). (3) History of Modern Europe

After providing a brief background in medieval institutions, this course surveys European history from the Renaissance to the early twentieth 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. This course, or History 236, is strongly recommended to students wishing to take advanced courses in European history. There are no prerequisites.

Members of the Department. (3-0; 3-0)

#### HIST 242 (formerly 101). (3) Main Currents in Twentieth Century History

This course offers a background for contemporary world problems, surveying major historical developments of the twentieth century.

Members of the Department. (3-0; 3-0)

#### 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 of 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 Chinese 301.

E. P. Tsurumi. (3-0; 3-0)

## ADVANCED COURSES

### AMERICAN

#### HIST 300 (formerly 401; 311). (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.

(3-0; 3-0)

#### HIST 301 (formerly 312). (3) The United States in the Nineteenth Century

A study of the social, political, cultural, and economic development of the United States in the period from the framing of the Constitution of the Spanish-American War, with particular concentration on certain significant themes.

B. W. Dippie. (3-0; 3-0)

#### HIST 304 (formerly 412). (3) The United States in the Twentieth Century

A study of the personalities and problems of the United States in the twentieth century. The course will emphasize the reform tradition from the Progressive movement to the Great Society. Diplomatic, economic, and social developments will be surveyed.

W. T. Wooley. (3-0; 3-0)

#### HIST 308 (formerly 428). (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.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

#### HIST 310 (formerly 403). (3) The American West

The frontier in American history, the Trans-Mississippi West with emphasis on the Far West.

B. W. Dippie. (3-0; 3-0)

#### HIST 315 (formerly 430). (3) American Diplomatic History

A study of American foreign relations with emphasis on the twentieth century and the history of American diplomatic thought.

(Not offered 1978-79; intend to offer 1979-80.) (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.

This course may be taken more than once in different topics with permission of the Chairman of the Department.

Topic for 1978-79: "American Cold War Diplomacy" (3 units).

W. T. Wooley. (3-0; 3-0)

#### HIST 319. (1½ or 3) Seminar in American History

Selected topics in American history. Enrolment limited. Priority in registration given to honours and majors 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.

This course may be taken more than once in different topics with permission of the Chairman of the Department.

(3-0) or (3-0; 3-0)

### BRITISH

#### HIST 321 (formerly 318). (3) England, 1485-1660

England from Medieval Monarchy to political revolution: an intensive study of English history from the end of the War of Roses to the Civil War, Commonwealth, and Restoration of Charles II.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

\*History 236 and History 240 are both 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 323 (formerly 418). (3) Britain, 1660-1815**

Britain from political to industrial revolution: an intensive study of the roots of political stability and of social change, and of the consequences of their interaction in Britain during the later seventeenth and eighteenth centuries.

J. Money. (3-0; 3-0)

**HIST 325 (formerly 419). (3) Britain, 1815-1914**

Great Britain, industry and empire: an intensive study of British history during the nineteenth century.

(3-0; 3-0)

**HIST 327 (formerly 421). (3) Twentieth Century Britain**

Britain in the twentieth century - war, labour, and the aftermath of empire. The course may be a combination of lectures and class discussion. Topics to be investigated may vary from year to year, but will always include foreign policy, the rise of the Labour Party, and economic affairs.

(3-0; 3-0)

**HIST 338. (1½ or 3) Seminar in British History**

Selected topics in British history. Enrolment limited. Priority in registration given to honours and majors 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.

This course may be taken more than once in different topics with permission of the Chairman of the Department.

(3-0) or (3-0; 3'0)

**CANADIAN****HIST 340 (formerly 302). New France**

A study of the history of the French regime in Canada from 1500 to 1763. The course will deal with the 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.

J. Kupp. (3-0; 3-0)

**HIST 342 (formerly 326). (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 present-day Ontario, Quebec, and the Maritimes. Particular emphasis will be placed upon the emergence of distinct social and cultural entities in each of these areas.

(3-0; 3-0)

**HIST 344 (formerly 426). (3) 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.

A. F. J. Artibise. (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 nineteenth- and twentieth-century Canada. Students will examine original works by Canadians in a number of disciplines including history, politics, the social sciences, literature and art. A reading knowledge of French is recommended but not required.

Prerequisite: History 230 or written consent of the instructor.

(3-0; 3-0)

**HIST 350 (formerly 303). (3) The Prairies**

After a brief sketch of the fur trade and early settlement, this course concentrates on the history of the West after 1870-1871. Some of the topics examined are the treatment of the Indian and Métis peoples; the development of white societies; the emergence of a regional consciousness; ethnic diversity; and protest movements from the 1890's onwards.

G. R. I. MacPherson. (3-0; 3-0)

**HIST 352. (3) French Canada**

A study of select problems in French Canadian history stressing patterns in intellectual, social and economic development, emphasizing the nineteenth and twentieth centuries. This course will be taught as a seminar, and will be offered in alternate years only.

Prerequisite: History 230, and a reading knowledge of French, or written consent of the instructor.

(3-0; 3-0)

**HIST 354. (1½) British Columbia to 1900**

British Columbia from the coming of the white man to the emergence of

provincial political parties about the end of the nineteenth century. An examination of the foundations of modern British Columbia, including such topics as early exploration and settlement, the role of the Hudson's Bay Company, the colonies of Vancouver Island and British Columbia, and the origins of institutional life.

Prerequisite: History 230 or written consent of the instructor.

J. E. Hendrickson. September-December. Also 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.

Not open to students who have credit in History 350 prior to 1976-77.

P. E. Roy. September-December. Also January-April. (3-0)

**HIST 356 (formerly 420). (3) Canadian Constitutional History**

A study of the evolution of the Canadian Constitution from 1763 to the present.

(3-0; 3-0)

**HIST 357 (formerly 439 and 494). (3) Seminar on Canadian Defence and External Policy, 1867-1967**

An intensive study of selected aspects of Canada's role as a middle power. Emphasis will be given to the diplomatic, military, and strategic role of Canada during the twentieth century. Enrolment limited.

Prerequisite: History 230 or consent of the instructor.

R. H. Roy. (3-0; 3-0)

**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.

This course may be taken more than once in different topics with permission of the Chairman of the Department.

Topic for 1978-79: "History of Urban Canada." (3 units).

A. F. J. Artibise. (3-0; 3-0)

**HIST 359. (1½ - 6) Seminar in Canadian History**

Selected topics in Canadian history. Enrolment limited. Priority in registration given to honours and majors 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.

This course may be taken more than once in different topics with permission of the Chairman of the Department.

**EUROPEAN**

NOTE: For Major in European 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.

**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.

R. J. McCue. (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.

R. J. McCue. (3-0)

**HIST 363 (formerly 314). (3) Europe under the *Ancien Régime***

Europe from the Peace of Westphalia through the age of Louis XIV to the beginning of the revolutionary period. Emphasis will be on the political, cultural and social history of Western Europe. Students who received credit in History 362 (formerly 314) prior to 1975-76 may not enrol in this course.

Prerequisite: History 240 or written consent of the instructor.

(3-0; 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 enrol in this course.

Prerequisite: History 240, or written consent of the instructor. (3-0)

**HIST 364 (formerly 415). (3) International History of Europe in the Nineteenth Century**

An analysis of the major international developments in Europe from the Napoleonic Wars to World War One. Students who received credit in History 364 (formerly 415) prior to 1975-76 may not enrol in this course.

Prerequisite: History 240, or written consent of the instructor.

(3-0; 3-0)

**HIST 365. (3) Social, Cultural and Political History of Modern Europe**

An examination of the social, cultural and political consequences of the commercial and industrial revolutions in modern Europe. Topics to be covered will include the effects of economic change on social structure, and the influence on political institutions of the growth of cities, the evolution of common culture and the development of popular movements, both radical and conservative.

Prerequisite: History 240, or written consent of the instructor.

A. McLaren. (3-0; 3-0)

**HIST 366. (3) Europe in the Twentieth Century**

An examination of the changing nature of the relations between European states following the Treaty of Versailles and of the interaction between these and major political, social and economic changes. Approximately half the course will deal with the period since 1945.

Prerequisite: History 240 or 242, or written consent of the instructor.

D. A. T. Stafford. (3-0; 3-0)

**HIST 368. (3) Ideas and Events in Modern Europe**

Political and social thought in Europe since the seventeenth century. The emphasis will be on the interaction between thinkers and their times, with the most significant ideas and intellectual movements being examined in their social and political contexts. Although special attention will be given to the origins of twentieth century conceptions of popular sovereignty, nationalism, revolution, and the state, other aspects of culture will also be discussed.

W. G. Shelton. (3-0; 3-0)

**HIST 370 (formerly 406). (3) France, 1789-1958**

France from the end of the *Ancien Régime* to the advent of the Fourth Republic, a study in her political, social, cultural, and economic development. The emphasis will be upon the social and cultural aspects of the Third Republic (1870-1945). A reading knowledge of French is desirable but not required.

(3-0; 3-0)

**HIST 372. (3) Modern Germany, 1871-1961**

The main theme of the course will be the "German problem," defined both in terms of Germany's internal political, social, and economic development, and in terms of its relations with the rest of Europe - a problem culminating in the Nazi period but not solved by the defeat of 1945. The course will therefore include consideration of post-war Germany.

Prerequisite: History 240 or 242, or written consent of the instructor.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**HIST 374 (formerly 317). (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. (3-0; 3-0)

**HIST 376 (formerly 417). (1½) The Soviet Union**

A history of the USSR 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. (3-0)

**HIST 380. (3) Problems in Medieval Europe**

A detailed study of selected problems in the history of Medieval Europe. Among the problems to be considered are the development of feudalism, manorialism, the Pirenne thesis, the investiture controversy, and the twelfth century renaissance. Students will be required to read intensively in the problem areas and will also make a seminar presentation.

It is recommended that students have credit for History 236 before registering in this class.

(3-0; 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.

This course 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. Enrolment limited. Priority in registration given to honours and majors 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.

This course 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 (formerly 339). (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 eighteenth century to the unlimited warfare of the twentieth 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. (3-0; 3-0)

**ASIAN****HIST 433. (3) Pre-Modern China**

A study of Chinese history to approximately 1700. Major themes will include the formation and structure of the Imperial State, the social economic foundations of traditional Chinese society, class conflicts and social change, distinctive cultural features of Chinese civilization, and mutual influences on other major historical civilizations.

Prerequisites: History 252 or Chinese 301 or permission of instructor.

R. C. Croizier. (3-0; 3-0)

**HIST 434. (3) Modern China**

A study of Chinese history from approximately 1700 to the present with major emphasis on China's confrontation with the West and the unfolding of the Chinese revolution since the mid-nineteenth century. Includes the history of the Chinese People's Republic.

No prerequisite.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**HIST 436 (formerly 414). (3) Transformation of Japan from a Feudal Country to a Modern Industrial Nation**

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 nineteenth and twentieth 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.

Prerequisite: History 252 or permission of the instructor.

E. P. Tsurumi. (3-0; 3-0)

**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 more than once in different topics with permission of the Chairman of the Department.

Topics for 1978-79: "Women in the History of China and Japan." (3 units).

E. P. Tsurumi. (3-0; 3-0)

**HIST 439. (1½ or 3) Seminar in East Asian History**

Selected topics in East Asian history. Enrolment limited. Priority in registration given to honours and majors 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.

This course may be taken more than once in different topics with permission of the Chairman of the Department.

Topic for 1978-79: "The Chinese Revolution Through Art and Literature." (1½ units).

R. C. Croizier. September-December. (3-0)

**SPECIALIZED COURSES****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.

Members of the Department.

**HIST 491 (formerly 333). Honours Seminar**

A seminar devoted to studying the discipline of History, normally intended to be taken by honours students in their third and fourth years, but also open to students not in the honours programme who have the consent of the instructor.

491A Third Year Honours Seminar  
491B Fourth Year Honours Seminar

(3-0)

**HIST 492 (formerly 433). (1½ or 3) Seminar in Historiography**

This course is designed to introduce students to the history of the writing of history. Enrolment limited. Priority in registration given to honours and majors students in history, but others may be admitted with consent of instructor.

(3-0) or (3-0; 3-0)

**HIST 498. (1½) Honours Tutorial**

Directed reading offered by the instructor supervising a student's graduating essay.

Members of the Department.

**HIST 499. (4½) Graduating Essay in Honours**

The preparation of a research paper from 50-100 pages in length under the direction of a member of the Department. The essay must conform to acceptable standards of style and format, and is due one week before the final day of lectures. There is, in addition, an oral examination on the field covered in the graduating essay.

Members of the Department.

**GRADUATE COURSES**

Students should consult the Department concerning specific content of the courses offered in any given year.

**HIST 500. (3) Historiography****HIST 501. (4½) Field in American History****HIST 502. (4½) Field in British History****HIST 503. (4½) Field in Canadian History****HIST 504. (4½) Field in European History****HIST 505. (4½) Field in Asian History****HIST 508. (4½) Field in Thematic Studies: I****HIST 509. (4½) Field in Thematic Studies: II****HIST 595. (3) Extended Research Paper****HIST 599. (12) M.A. Thesis****LIBERAL STUDIES  
PROGRAMME**

*Director, 1978-79:* To be appointed.

*Director 1977-78,* S. W. Jackman, B.S., M.A. (*Wash.*), A.M., Ph.D. (*Harvard*), F.S.A., F.R.Hist.S., Professor, History.

The interdisciplinary Liberal Studies Programme is an experimental programme designed to provide a general education, thereby broadening the intellectual and cultural life of those undergraduates who participate in the Programme. To be accepted in the Programme an overall grade point average of 3.50 is required. Each undergraduate will have an individual programme of study approved by the Director. The undergraduate is required to maintain an overall grade point average of at least 3.50. Upon satisfactory completion of the Programme, the degree of Bachelor of Arts in Liberal Studies will be awarded.

Students interested in the Liberal Arts Programme should consult the Director. All programmes *must* be approved by the Director. Undergraduates may enter the Programme at any time.

The Programme Committee for 1977-80 is as follows:

**Humanities:**

Charles Doyle, B.A., M.A. (*N.Z.*), Ph.D. (*Auckland*), Professor, English.

John G. Fitch, B.A., M.A. (*Cantab.*), Cert. Ed. (*Leeds*), Ph.D. (*Cornell*), Assistant Professor, Classics.

John M. Michelsen, B.A., M.A., Ph.D. (*Wash.*), Associate Professor, Philosophy.

Wesley T. Wooley, A.B. (*Ill.*), A.M., Ph.D. (*Chicago*), Assistant Professor, History.

**Sciences:**

Arthur R. Fontaine, B.Sc. (*McGill*), D.Phil. (*Oxon.*), Professor, Biology.

Gary G. Miller, M.Sc., Ph.D. (*Missouri*), Associate Professor, Mathematics.

**Social Sciences:**

J. K. Adamowicz, B.A., M.Sc. (*Calgary*), Ph.D. (*W. Ont.*), Assistant Professor, Psychology.

J. Terence Morley, B.A. (*Dalhousie*), Ph.D. (*Queen's*), Lecturer, Political Science.

**Fine Arts:**

John Celona, B.M., M.A. (*San Francisco St.*), Lecturer, Music.

Alan Gowans, M.S. (*Tor.*), M.F.A., Ph.D. (*Princeton*), Professor, History in Art.

**PROGRAMME REQUIREMENTS**

The programme requirements for the B.A. degree in Liberal Studies, in addition to the requirements common to all Bachelor's degrees (see page 27), are as follows:

- completion of the degree requirements for the General Programme in *one* area as described for the B.A. degree on page 28 of the Calendar;
- 6 units of one language (i.e. a language sequence) other than English;
- 3 units to be selected from English 115, 116, 121, 122;
- 6 units from Art 100, Theatre 100 or Music 115 (all of these courses may be counted for credit in the Faculty of Arts and Science);
- at least 6 units from courses in the Science departments;
- at least 6 units from courses in the Social Science departments;
- Liberal Arts 305 (3 units) and Liberal Arts 405 (3 units); normally Liberal Arts 305 in Year III and Liberal Arts 405 in Year IV;
- 6 units of electives to be selected in consultation with the Director to ensure breadth in the course of studies;
- an essay as part of the graduation requirements for the degree in Liberal Studies and for the satisfactory completion of Liberal Arts 405 in Year IV.

The 21 units of upper level courses required of all students should be completed in the Third and Fourth Years. These 21 units may comprise the requirements needed for the General Programme, the Liberal Arts courses, and other courses from Science, Social Science or Humanities, or from the Faculty of Fine Arts (whose courses must count for credit in the Faculty of Arts and Science).

All student programmes are to be formally certified as meeting the degree requirements. This certification by the Director will be given to the Records Office no later than the end of the Third Year. *No changes in the programme thereafter will be permitted without the formal authorization of the Director.*

**LIBERAL ARTS COURSES****L A 305. (3) Ideas and Perspectives**

The aim of this course is to engender a substantial interdisciplinary perspective by investigating ideas and lines of development prominent in the history of civilization. The topics covered and approaches adopted in any given year depend primarily on the interests of the instructors teaching the course. The chosen theme for the fall is advertised in the preceding Spring. Further information may be obtained from the course Chairman or from Dr. S. Jackman (History, and Director of the Liberal Studies Programme).

Prerequisite: Overall standing of at least a 3.50 grade point average is required.

Liberal Arts 305 carries elective credit in any degree programme. Certain departments accept the course towards a major; students should consult their own department for advice in that regard.

(3-0; 3-0)

**L A 405. (3) Liberal Studies Seminar**

Seminar required of all undergraduates enrolled in the Liberal Studies Programme. Open to other undergraduates with the permission of the Director of the Liberal Studies Programme.

Prerequisite: Liberal Arts 305 and registration in the Liberal Studies Programme.

(3-0; 3-0)

**L A 490. (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 Director of the Programme.

Prerequisite: Liberal Arts 305 and registration in the Liberal Studies Programme. Students may not take both Liberal Arts 490 and 491.

**L A 491. (1½) 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 Director of the Programme.

Prerequisite: Liberal Arts 305 and registration in the Liberal Studies Programme. Students may not take both Liberal Arts 490 and 491.

## DEPARTMENT OF LINGUISTICS

Henry J. Warkentyne, B.A. (*W. Ont.*), M.A., Ph.D. (*London*), Associate Professor and Chairman of the Department.

Geoffrey N. O'Grady, B.A. (*Sydney*), Ph.D. (*Indiana*), Professor.

M. H. Scargill, B.A., Ph.D. (*Leeds*), F.R.S.C., Professor.

Jean-Paul Vinay, Lès L., M.A. Agrégé de l'Université de France, Officier d'Académie, D.Litt. (*Ottawa*), F.R.S.C., Professor Emeritus.

Thomas M. Hess, B.A. (*Colo.*), M.A., Ph.D. (*Wash.*), Associate Professor.

Joseph F. Kess, B.S. (*Georgetown*), M.A., Ph.D. (*Hawaii*), Associate Professor.

James Arthurs, B.A. (*Durham*), M.A. (*U. of Vic.*), Ph.D. (*Brit. Col.*), Assistant Professor.

Barry F. Carlson, B.A., M.A. (*Colo.*), Ph.D. (*Hawaii*), Assistant Professor.

Thomas E. Hukari, B.A. (*Ore.*), M.A., Ph.D. (*Wash.*), Assistant Professor.

Barbara P. Harris, B.A. (*Carleton*), M.A., Ph.D. (*U. of Vic.*), Sessional Lecturer (1977-78).

### GRADUATE PROGRAMMES

For information on studies leading to the M.A. and Ph.D. degrees, see page 159; for graduate courses, see page 83.

#### 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 third year standing or permission of the Department.

Some knowledge of a language other than English is recommended.

### GENERAL, MAJOR AND HONOURS PROGRAMMES

General — Students who wish to proceed to the B.A. degree under the regulations for the General Programme and who wish to study Linguistics as one of their fields of concentration are urged to take one of the following as their second field of concentration: Anthropology, Classical or Modern Languages, English, Mathematics, Psychology.

Students who begin the study of Linguistics as one of their fields in the General Programme in their first or second year should 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 Programme in their third or fourth years should take Linguistics 360 or 361 and at least two other senior courses in Linguistics.

Major — Students who wish to proceed to the B.A. degree with a Major in Linguistics are urged to offer supporting courses in one of Anthropology, Classical or Modern Languages, English, Mathematics, Physics, Psychology.

The requirements for a Major in Linguistics are 210, 250, 251, and 15 units of senior courses in Linguistics including either Linguistics 440 and 441 or Linguistics 410. Intending majors are recommended to take Linguistics 100.

Honours — Students who wish to take an Honours Programme in Linguistics begin the programme in the third year with 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 courses including Linguistics 410, 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 grade point 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 Linguistics 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 Linguistics 499, will be given the option of receiving a Second Class Honours or a First Class Major degree.

### UNDERGRADUATE COURSES

Unless indicated otherwise, courses begin in September and end in April.

**LING 099. (0) English as a Second Language** (3 fee units)

A non-credit course in English as a Second Language for students whose native language is not English — see page 11 for regulations governing such

students. Successful completion of this course may be required at the discretion of individual departments.

Texts: List available from the Department.

Members of the Department. (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.

Linguistics 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, except for Section 100C (Romance). Sections are offered as follows:

Sections 100A-Y01, Y02, Y03 (General); Section 100C-Y01 (Romance).

Prerequisite for 100C-01: Previous study of a Romance language (French, Spanish, Portuguese, Italian, etc.).

T. M. Hess, J. F. Kess, G. N. O'Grady; J. Arthurs.

(3-0; 3-0)

**LING 108. (3) A First Course In A Native Indian Language of Vancouver Island**

This course concentrates on basic grammar, vocabulary and pronunciation in a Native Indian language of Vancouver Island. To the extent possible at an elementary level, Native Indian culture will be introduced as well.

(Language offered 1978-79: Nitinaht)

T. M. Hess.

(3-1; 3-1)

**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 Diploma Programme.

(Not offered 1978-79.)

(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: Linguistics 120. This course is offered as part of the Native Indian Language Diploma Programme.

(Not offered 1978-79.)

(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 Diploma Programme.

(Not offered 1978-79.)

(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: Linguistics 122. This course is offered as part of the Native Indian Language Diploma Programme.

(Not offered 1978-79.)

(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 Diploma Programme.

(Not offered 1978-79.)

(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: Linguistics 124. This course is offered as part of the Native Indian Language Diploma Programme.

(Not offered 1978-79.) (3-0)

**LING 126 (formerly one-half of 240). (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 Diploma Programme.

(Not offered 1978-79.) (3-0)

**LING 127 (formerly one-half of 240). (1½) Amerindian Lexicography**

The application of linguistic and ethnoscientific principles to the preparation of dictionaries of languages indigenous to British Columbia.

Prerequisite: Linguistics 126. This course is offered as part of the Native Indian Language Diploma Programme.

(Not offered 1978-79.) (3-0)

**LING 208. (3) A Second Course in A Native Indian Language of Vancouver Island**

This course entails grammar, pronunciation and conversation, as well as literature (written and spoken). The language lessons are specifically designed to present the student with various facets of Native Indian culture.

Prerequisite: An initial course in the same language.

(Language offered 1979-80: Nitinaht)

(Not offered 1978-79.) (3-0; 3-0)

**LING 210 (formerly 340, 460). (3) Morphology and Syntax**

Techniques and theory in the analysis of words (morphology) and sentences (syntax), with emphasis on linguistic analysis, utilizing data from a wide variety of languages. Topics include basic morphological analysis, syntactic analysis, the grammatical systems of various languages (including English) and introductory transformational grammar. This course will be of interest to students who wish to study techniques of language analysis especially those in Linguistics and in Anthropology who may wish to work with languages not previously given a grammatical analysis. This course is a prerequisite to Linguistics 410.

Prerequisite: Linguistics 100 is recommended.

T. E. Hukari. (3-0; 3-0)

**LING 220. (3) Language and Culture**

Language as an expression of culture and as a means of delineating cultural boundaries.

(Not offered 1978-79.) (3-0; 3-0)

**LING 230. (3) Semantics**

This course considers the relationship between meanings and the linguistic structures that serve to express them. Fundamental questions are: What is "meaning"? What and how do words and utterances "mean"? What does a speaker "mean"? What is propaganda? Is communication necessarily difficult? Does style serve meaning? Does meaning change? Does "meaning" need language? Such questions studied mainly from the point of view of English will frequently be considered with reference to other languages also.

J. Arthurs. (3-0; 3-0)

**LING 250. (1½, formerly 3) 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: Linguistics 100 recommended.

G. N. O'Grady. September-December. (3-0)

**LING 251. (1½) (formerly one-half of 250) 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: Linguistics 250 or permission of the Department. (Not open to students with 3 units of credit in 250.)

G. N. O'Grady. January-April. (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 Linguistics 100. Not open to students with Linguistics 100.

Text: Langaker, *Fundamentals of Linguistic Analysis*.

(Not offered 1978-79.) (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.

This course is not open to students who have credit in or who are taking Linguistics 100 or 220.

Prerequisite: An introductory course in Anthropology.

Text: Langaker, *Fundamentals of Linguistic Analysis*.

B. F. Carlson. (3-0; 3-0)

**LING 370 (Psychology 370). (3) Psycholinguistics**

Linguistics 370 is 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; language acquisition, experimental psycholinguistics, and the relationship of language and cognition, language and socio-cultural factors, semantics, bilingualism, non-verbal communication, and the pathology of linguistic behaviour. (This course alternates with Linguistics 570.)

Prerequisite: Linguistics 100 or Psychology 100, or permission of the Department.

(Not offered 1978-79.) (3-0; 3-0)

**LING 372. (1½, formerly 3) Native Languages of the Pacific Northwest**

A survey of the unique and numerous languages of the Pacific Northwest. Extending from Oregon to southern Alaska and from the Queen Charlotte Islands to the prairies of the continental interior are a number of large language families. The survey will cover the structure of representative languages and outline the language history and broad areal relationships of each family.

Prerequisite: A previous course in Linguistics, or permission of the Department.

B. F. Carlson. September-December. (3-0)

**LING 374. (1½) (formerly one-half of 371) Applied Linguistics**

Theoretical approaches to second language learning and teaching; exploring and demonstrating the relevance of theoretical linguistics, psycholinguistics, sociolinguistics, and contrastive analysis to teaching and learning of language.

Prerequisite: A previous course in Linguistics or permission of the Department.

J. F. Kess. September-December. (3-0)

**LING 375. (1½) (formerly one-half of 371) Techniques in Applied Linguistics**

With special reference to the teaching of English as a second language, this course addresses problems such as course design, preparation of pedagogical materials, the use of the language laboratory, and classroom teaching techniques.

Prerequisite: Linguistics 374 or permission of the Department.

H. J. Warkentyne. January-April. (3-0)

**LING 380. (1½, formerly 3) Introduction to Acoustic Phonetics**

A study of the acoustic properties of speech sounds including an introduction to the use of experimental equipment for speech analysis.

Prerequisite: Linguistics 250 or permission of the Department.

September-December. (2-2)

**LING 381. (1½) (formerly half of 380) Introduction to Speech Physiology**

A study of the physiology of the human speech and hearing mechanisms. Laboratory projects will involve experiments in speech production or perception.

Prerequisites: Linguistics 380, or permission of the Department.

January-April. (2-2)

**LING 390. (3) The Growth and Structure of Modern English**

A descriptive approach to the structure of Modern English, designed especially for those students who are interested in the application of modern linguistic science, particularly structural and transformational theory, to an understanding of the language. Topics covered will include the following:

social and regional dialects and their significance; theories of grammatical analysis; causes of linguistic change; the history of the English language from its beginnings to the present day, including Canadian English.

Not open to students who have credit in English 390.

Texts: Pyles, *The Origins and Development of the English Language*, 2nd ed.; M. H. Scargill, *Short History of Canadian English* (1977).

M. H. Scargill. (3-0; 3-0)

**LING 392. (1½, formerly 3) 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.

M. H. Scargill. September-December. (3-0)

**LING 393. (1½) (formerly one-half of 430) 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. (Linguistics 392 recommended.)

H. J. Warkentyne. January-April. (3-0)

**LING 395. (1½) Sociolinguistics**

This course deals with language in its social context. By accounting for language variation in society, sociolinguistics is concerned with the dynamic aspects of language. Some of the topics included are: behavioral function of language, language adequacy, the normative usage of language, and research methodology.

Prerequisite: A previous course in Linguistics or permission of the Department.

J. F. Kess. January-April. (3-0)

**LING 400. (3) Field Methods and Techniques in Language Analysis**

The study of field methods and techniques in language analysis with the aid of native speakers. The Department is particularly interested in the indigenous languages of the western hemisphere.

Prerequisites: Linguistics 210 and 251.

(Not offered 1978-79.) (3-0; 3-0)

**LING 410. (3) Theories of Syntactic Description**

The emphasis will be on transformational grammar. Various current generative models of syntactic description will be employed, including N. Chomsky's early models and their extensions, generative semantics and the lexicalist hypothesis. Topics include, as well, formal aspects of transformational grammar, such as rule ordering, and the description of major grammatical constructions with emphasis on English.

This course is designed for students with prior knowledge of syntactic analysis who wish to explore current transformational grammar in preparation for independent research.

Prerequisite: Linguistics 210 and 251.

T. E. Hukari. (3-0; 3-0)

**LING 420. (1½, formerly 3) Comparative Indo-European**

This course provides an integrated account of the evolution of the principal Indo-European languages.

Prerequisites: Linguistics 210 and 251, or permission of the Department.

T. M. Hess. September-December. (3-0)

**LING 425. (1½) (formerly one-half of 420) 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.

Prerequisite: Linguistics 210 and 251, or permission of the Department.

G. N. O'Grady. January-April. (3-0)

**LING 426 (French 426). (3) Comparative Stylistics of French and English**

A contrastive study of the semantic and stylistic resources of French and English at the structural and cultural levels.

Prerequisite: French 302.

(Not offered 1978-79.) (3-0; 3-0)

**LING 440. (1½) Generative Phonology**

This course will emphasize the procedures and theoretical bases of current generative phonology. It is intended for students who have had an introduction to phonology and who wish to learn language description using distinctive features and formal ordered rules.

Prerequisite: Linguistics 251 or permission of the Department.

B. F. Carlson. September-December. (3-0)

**LING 441. (1½) Advanced Phonological Analysis**

A survey of the major issues in contemporary phonological theory. Special topics, such as the role of generative phonology in an overall grammatical description and the effect of historical change on the sound component of language will be considered. Students will present research on the language of their choice.

Prerequisite: Linguistics 440 or permission of the Department.

B. F. Carlson. January-April. (3-0)

**LING 448. (1½) Directed Reading in Linguistics**

Members of the Department. September-December. (3-0)

**LING 449. (1½) Directed Reading in Linguistics**

Members of the Department. January-April. (3-0)

**LING 450 (formerly 350). (1½) Seminar in Languages**

An elementary analysis of a language to be selected in consultation with the Department.

Prerequisite: Linguistics 210 and 251.

(Not offered 1978-79.) September-December. (3-0)

**LING 451 (formerly 350). (1½) Seminar in Languages**

An elementary analysis of a language to be selected in consultation with the Department.

Prerequisite: Linguistics 210 and 251.

(Not offered 1978-79.) 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.

Prerequisite: Permission of the Department.

(Not offered 1978-79.) (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 year.*

**LING 501. (1½) Canadian English**

A history of the phonology, syntax, and vocabulary of Canadian English.

Prerequisite: Linguistics 392 or equivalent.

M. H. Scargill. January-April. (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.

H. J. Warkentyne. September-December. (3-0)

**LING 503. (1½) Transformational-Generative Grammar**

A survey of recent developments in transformational-generative semantic-syntactic theory.

Prerequisite: Linguistics 410 or equivalent.

T. E. Hukari. September-December. (3-0)

**LING 505. (1½) Phonological Theory**

A survey of the development of phonological theory, including such topics as phonological universals.

Prerequisite: Linguistics 441 or equivalent.

G. N. O'Grady. September-December. (3-0)

**LING 506. (1½) Lexicography**

An introduction to the theory of lexicography and to the practice of dictionary-making.

(Not offered 1978-79.) (3-0)

**LING 508. (1½) Current Issues in Transformational-Generative Grammar**

Selected topics reflecting on-going work in transformational-generative theory.

Prerequisite: Linguistics 503 or equivalent.  
T. E. Hukari. January-April. (3-0)

**LING 509. (1½) Dialectology**  
Selected topics in the theory and methodology of dialect study.  
Prerequisite: Linguistics 393 or equivalent.  
(Not offered 1978-79.) (3-0)

**LING 510. (1½) Current Issues in Phonology**  
An examination of recent developments in phonological theory.  
Prerequisite: Linguistics 505 or equivalent.  
B. F. Carlson. January-April. (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. (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 in phonological analysis. (3-0)

**LING 517. (1½) Experimental Phonetics Laboratory**  
Topics in the synthesis and analysis of speech.  
Prerequisite: Linguistics 380 or equivalent.  
H. J. Warkentyne. (3-0)  
(Not offered 1978-79.)

**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: Linguistics 517 or equivalent.  
H. J. Warkentyne. (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.  
520-A: T. M. Hess. September-December.  
520-D: H. J. Warkentyne. January-April.

**LING 524. (1½) Romance Linguistics**  
Recent developments in comparative Romance linguistics; particular emphasis will be placed on contrastive features.  
J. Arthurs. January-April. (3-0)

**LING 560 (Anthropology 560). (1½) Linguistic Anthropology**  
(Not offered 1978-79.)

**LING 580. (1½-3) Linguistics Seminar**  
The contents of this course will vary.  
May be repeated for credit. (3-0)

**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 language acquisition, bilingualism, language and thought, the problem of meaning, and experimental psycholinguistics. Alternates with Linguistics 370.  
J. F. Kess. (3-0)

**LING 581. (1½ or 3) Linguistics Colloquium**  
Students will prepare and present at a linguistics colloquium one research paper per term. Topics will be of current interest, arising from the student's coursework or individual research.  
This course may be repeated for credit.  
Prerequisite: Graduate standing.

**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 for credit to a maximum of 3 units.

**LING 601. (1½ or 3) Individual Studies in Syntax**  
Prerequisites: Linguistics 502, 503 or equivalent courses, and graduate standing.

**LING 602. (1½ or 3) Individual Studies in Phonology**

Prerequisites: Linguistics 505 or an equivalent course, and graduate standing.

**LING 603. (1½ or 3) Individual Studies in Historical Linguistics**

Prerequisites: Linguistics 420 or an equivalent course, and graduate standing.

**LING 690. (1½-6) Individual Studies**

Topics (A, B, C, etc.) will be assigned at 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. programme in Linguistics and Linguistics 502, 503 and 505 or the equivalent.

**LING 699. (Credit to be determined) Ph.D. Dissertation**

## DEPARTMENT OF MATHEMATICS

Roger R. Davidson, B.Sc. (*Queen's*), M.A. (*Tor.*), Ph.D. (*Florida St.*), Associate Professor and Chairman of the Department.

Ian Barrodale, B.Sc. (*Wales*), M.A. (*Brit. Col.*), Ph.D. (*Liverpool*), Professor.

Stephen A. Jennings, B.A., M.A., Ph.D. (*Tor.*), Professor.

Robert E. Odeh, M.S., Ph.D. (*Carnegie Inst. of Tech.*), Professor.

Marvin Shinbrot, B.A., M.A. (*Syracuse*), Ph.D. (*Stanford*), Professor. (On study leave 1978-79.)

Hari M. Srivastava, B.Sc., M.Sc. (*Allahabad*), Ph.D. (*Jodhpur*), F.R.A.S. (*London*), F.N.A.Sc. (*India*), Professor.

Leon Bowden, B.Sc. (*London*), B.Litt. (*Oxon.*), Ph.D. (*London*), Associate Professor.

Stanley R. Clark, B.A.Sc. (*Brit. Col.*), M.Sc. (*Aberdeen*), Ph.D. (*Manchester*), Associate Professor. (On study leave 1978-79.)

Ernest J. Cockayne, M.A. (*Oxon.*), M.Sc. (*McGill*), Ph.D. (*Brit. Col.*), Associate Professor.

Fernand E. Deloume, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*S. Calif.*), Associate Professor.

Byron L. Ehle, A.B. (*Whitman*), M.S. (*Stanford*), Ph.D. (*Waterloo*), 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.

Lowell A. Hinrichs, M.A., Ph.D. (*Ore.*), Associate Professor.

William E. Howden, B.A. (*Calif., Riverside*), M.S. (*Rutgers*), M.S. (*Cantab.*), Ph.D. (*Calif., Irvine*), Associate Professor.

Albert E. Hurd, B.A., M.A. (*Tor.*), Ph.D. (*Stanford*) Associate Professor.

Bruce R. Johnson, B.S., M.A. (*Ore. St.*), Ph.D. (*Ore.*), Associate Professor and Graduate Advisor.

D. Elizabeth Kennedy, B.A., M.A. (*Brit. Col.*), Associate Professor.

Walter P. Kotorynski, B.A. (*W. Ont.*), M.A., Ph.D. (*Tor.*), Associate Professor.

David J. Leeming, 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.

Charles R. Miers, B.A. (*Knox Coll.*), M.A., Ph.D. (*Calif., Los Angeles*), Associate Professor.

Gary G. Miller, M.Sc., Ph.D. (*Missouri*), Associate Professor.

O. Phoebe Noble, B.A. (*Brit. Col.*), Associate Professor (to June 30, 1978).

James Ridell, M.Sc., Ph.D. (*Alta.*), Associate Professor.

Frank D. K. Roberts, M.A. (*Cantab.*), M.Sc., Ph.D. (*Liverpool*), Associate Professor.

Earl D. Rogak, B.Ch.E. (*Cooper Union*), M.S.E., Ph.D. (*Mich.*), Associate Professor.

Pauline van den Driessche, B.Sc., M.Sc. (*Imp. Coll.*), D.I.C., Ph.D. (*Wales*), Associate Professor.

Denton E. Hewgill, B.Sc., Ph.D. (*Brit. Col.*), Assistant Professor.

Fausto Milinazzo, B.Sc., Ph.D. (*Brit. Col.*), Visiting Assistant Professor (1977-78).

Donald J. Miller, B.Sc., Ph.D. (*McMaster*), Assistant Professor.

- Charles E. Murley, B.A. (*Colo.*), M.S., Ph.D. (*Wash.*), Assistant Professor.  
 D. Dale Olesky, B.Sc., M.Sc. (*Alta.*), Ph.D. (*Tor.*), Assistant Professor.  
 William E. Pfaffenberger, M.A., Ph.D. (*Ore.*), Assistant Professor. (On study leave 1978-79).  
 H. Paul Smith, B.A., M.Ed. (*Brit. Col.*), M.A. (*Wash.*), Ph.D. (*Mont.*), Assistant Professor.  
 William S. Bowie, B.Sc., M.Sc. (*Glasgow*), Ph.D. (*Waterloo*), Part-time Sessional Lecturer (1977-78).  
 Rekha Panda, B.Sc. (*Uthal*), M.Sc., Ph.D. (*Banaras*), Part-time Sessional Lecturer (January-April 1978).  
 Bahadur Singh, B.Sc. (*Agra*), M.S. (*Mich.*), Ph.D. (*Wisc.*), Sessional Lecturer (1977-78).  
 M. Elizabeth Watton, B.Sc., M.Sc. (*McMaster*), Administrative Officer; Part-time Lecturer (1977-78).

## GRADUATE PROGRAMMES

For information on studies leading to the M.A. and M.Sc. degrees, see page 160; for graduate courses, see page 90.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

### Mathematics Programmes:

For either a B.A. or B.Sc. degree in Mathematics, students may take a General, Major or Honours Mathematics programme. The Mathematics course requirements for each programme are as follows:

#### General

- Mathematics 100 and 101 (130)
- Mathematics 110 and 210
- Mathematics 200 and 201 (230)
- 9 additional units of courses numbered 300 or higher in the Department.

#### Major

- Mathematics 100 and 101 (130)
- Mathematics 110 and 210
- Mathematics 200 and 201 (230)
- Mathematics 330, 333A and at least one of Mathematics 333B, 422 or 423.
- 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 Computing Science Emphasis

- Mathematics 100 and 101 (130)
- Mathematics 110 and 210
- Computing Science 170 and 171
- Mathematics 200 and 201 (230)
- Computing Science 272 and 275 (or Mathematics 271 and Computing Science 272)
- Mathematics 330, 333A and at least one of Mathematics 333B, 422 or 423.
- Computing Science 349A and 349B
- 6 units chosen from Computing Science 370, 371, 372, 375, 471, 472, 473, 474, 475, 448A and 448B, 449A and 449B, of which at least 3 units are numbered 400 or higher.

#### Major with Probability and Statistics Emphasis

- Mathematics 100 and 101 (130)
- Mathematics 110 and 210
- Computing Science 170 and 171
- Mathematics 200 and 201 (230)
- Statistics 253
- Mathematics 330, 333A and at least one of Mathematics 333B, 422 or 423
- Mathematics 350
- 6 additional units chosen from Statistics 353, 354, 450, 451, 453, 454

#### Honours

Students who wish to be admitted to an Honours programme in the Department should apply in writing to the Head of the Department on completion of their second year. Normally a student will be admitted to the third year of an Honours programme in the Department only if the student has achieved a first class average in the second year courses taken in the Department. A student graduating in the Honours programme will be

recommended for a First Class 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 First Class Standing, but with a graduating point average of at least 3.50 will be recommended for a Second Class Honours Degree.

The Honours Programmes are as follows:

- Mathematics 100 and 101 (130)
- Mathematics 110 and 210
- Mathematics 200 and 201 (230)
- Mathematics 333A and 333B, 334, 336, 338
- Completion of one of the following emphases:
  - Pure Mathematics
    - 15 units from 309, 367, 433A and 433B, 435, 445, 460, 465, 466, 349, 350, chosen in consultation with the Department and of which at least 9 units are numbered 400 or higher. (Normally a student would take Mathematics 433A and 433B, 435, 445 and 465 as part of this requirement.)

NOTE: Honours students in Pure Mathematics are encouraged to take at least 3 units of statistics courses and at least 3 units of computing science courses.
  - Applied Mathematics
    - 15 units of courses offered by the Department chosen in consultation with the Department.

NOTE: Honours students in Applied Mathematics are encouraged to take at least three units of statistics courses and at least three units of computing science courses.
  - Probability and Statistics
    - Statistics 253, Computing Science 170, 171
    - Mathematics 350
    - 6 additional units chosen from Statistics 353, 354, 450, 451, 453, 454
    - 6 additional units of courses offered by the Department chosen in consultation with the Department.
  - Computing Science
    - Computing Science 170, 171, 272, 275, 349A, 349B, 449A, 449B
    - 9 additional units chosen from Computing Science courses numbered 300 or higher of which at least 6 units are numbered 400 or higher
  - Department approved option
    - fifteen 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.

By taking Mathematics 100 and 101 (130), 110, 200 and 201 (230), 210, Statistics 253, Computing Science 170, 171, 272, 275 in the first two years a student would maintain most options until the third year.

### Notes

- All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.
- Any student who demonstrates to the Department that he has mastered the material of a course may be granted advanced placement.
- Students from outside British Columbia, transfer students from Community Colleges and students who have obtained credit for Grade 13 Mathematics must consult the Department before enrolling in any Mathematics course.
- Students planning a career in secondary school mathematics teaching are strongly advised to include Mathematics 333B as part of their Mathematics degree programme.

## MATHEMATICS CO-OPERATIVE EDUCATION PROGRAMME

The Co-operative Education Programme in the Faculty of Arts and Science is described on page 28.

Students are normally admitted to the Mathematics Co-operative Programme in the second term of their first year and application for admission should be made to the Department of Mathematics in September of first year. They must then successfully complete three work terms and satisfy the course requirements of any of the Major or Honours degree programmes offered by the Department. The academic requirements for entering and remaining in the Co-operative Programme are the maintenance of a B average and a minimum grade of B+ in any course in the Department of Mathematics. During their first year students should enrol in Mathematics 100 and 101, Computing Science 170 and 171; students may also enrol in Mathematics 110 and 210, although these courses may be deferred until second year.

Further information concerning the Co-operative Programme in Mathematics may be obtained from the Department.

**Work Term Transcript Entries**

Students in the Co-operative Programme will register in one of the following when undertaking a Work Term. When a Work Term is satisfactorily completed, the grade COM will be entered on the student's academic record and transcript.

MATH 001. (0) Co-op Work Term: I
MATH 002. (0) Co-op Work Term: II
MATH 003. (0) Co-op Work Term: III
MATH 004. (0) Co-op Work Term: IV

**Computing Science Programme:**

*B.Sc. Major in Computing Science*

The course requirements are as follows:

(a) Mathematics 100 and 101 (130)	3 units
(b) Mathematics 110 and 210	3 units
(c) Mathematics 200 and 201 (230)	3 units
(d) Computing Science 170 and 171	3 units
(e) Computing Science 272 and 275	3 units
(f) Mathematics 333A	1½ units
(g) Computing Science 349A	1½ units
(h) 12 additional units chosen from Computing Science courses numbered 300 or higher, of which at least 3 units are numbered 400 or higher	12 units

**Combined Programmes in Chemistry and Mathematics**

For a B.Sc. degree in Combined Chemistry and Mathematics, students may take a Major or Honours programme. These programmes are not joint degrees in Chemistry and Mathematics, but a single degree programme composed of a selected combination of courses from each of the departments. Students opting for either of these combined programmes must contact the Chemistry and Mathematics Departments and each student will be assigned an advisor from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult carefully with their advisors prior to making their final choice of courses.

A student graduating in the combined Honours programme will be recommended for a first class degree if the student achieves a graduating grade point 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 grade point average of at least 4.0 and a second class standing in Chemistry 499. A student with a first class graduating grade point 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)**

Chemistry 124	3 units
Chemistry 224	3 units
Chemistry 233	3 units
Physics 121 (or 101)	3 units
Computing Science 170 and 171	3 units
Mathematics 100 and 101 (130)	3 units
Mathematics 110 and 210	3 units
Mathematics 200 and 201 (230)	3 units

**THIRD AND FOURTH YEAR (Major)**

(All courses below must be 300 level or above)

Chemistry 324	1½ units
Chemistry 325	1½ units
Chemistry 345	1½ units
Chemistry 346	1½ units
Chemistry 316 (or 317)	1½ units
Chemistry 446	1½ units
Chemistry 444 (or 422)	1½ units
Mathematics 330A and 330B	3 units
Mathematics 333A	1½ units
One of Mathematics 333B, 422 or 423	1½ units
Mathematics 325 and 326	3 units
Course chosen from the Mathematics Department in consultation with the Mathematics Department	1½ units
Course(s) chosen in consultation with the Chemistry and Mathematics departments	3 units

**THIRD AND FOURTH YEAR (Honours)**

(All courses below must be 300 level or above)

All Chemistry courses listed under Major programme plus	10½ units
Chemistry 399	1 unit

Chemistry 499	3 units
Mathematics 334 and 336	3 units
Mathematics 338	1½ units
Mathematics 333A and 333B	3 units
Mathematics 445	3 units
Course(s) chosen from the Mathematics Department in consultation with the Mathematics Department	3 units

Some possible courses which might be used to fulfill the choice units in the above programmes are:

C SC 349A, C SC 349B, MATH 350, STAT 353\*, STAT 354\*, MATH 367, MATH 466. (For Honours — MATH 325 and MATH 326), CHEM 306, CHEM 316 or 317, CHEM 335, CHEM 338, CHEM 422 or 444, CHEM 423.

**Honours in Physics and Applied Mathematics Programme:**

The B.Sc. programme will normally comprise a minimum of 66 units of work:

First Year	Physics 101 or 121 Mathematics 100 and 101 (130) Mathematics 110 Mathematics 210 Chemistry 120 or 124
Second Year	Physics 211, or 216 and 217 Physics 214 Physics 215 Mathematics 200 and 201 (230) Mathematics 333A and 333B
Third Year	Physics 316 or 325 Physics 326 Physics 321 Physics 413 Mathematics 325 Mathematics 326 Mathematics 334 Mathematics 336 Mathematics † Mathematics 338
Fourth Year	Physics 325 Physics 317 Physics 423 Physics 421 Physics 422 Physics 420 Physics 460 Physics electives Mathematics 445 Mathematics electives

Mathematics 110 and 210 may be deferred to the second year; Mathematics 333A and 333B must then be deferred to the third or fourth year. Physics 313 or its equivalent must be taken in the fourth year if credit has not been obtained for Physics 213 in the second year. The physics electives are to be chosen in consultation with the Physics Department and the Mathematics electives are to be chosen in consultation with the Mathematics Department.

**UNDERGRADUATE COURSES****MATHEMATICS**

*Unless indicated otherwise, courses begin in September and end in April.*

**MATH 012. (no credit) Pre-Calculus Mathematics** (1½ fee units)

The essentials of Algebra 12 which are prerequisite to Mathematics 100, 102, 110. 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. (first half of 130). (1½) Calculus: I**

Analytic geometry; functions and graphs; the derivative with applications; introduction to integration.

Prerequisite: Algebra 12 or its equivalent.

Not open to students who have credit in Mathematics 102 or 180.

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

**MATH 101 (second half of 130). (1½) Calculus: II**

Trigonometric, exponential and logarithmic functions; parametric equations, arc length and polar coordinates; techniques of integration with

\*These courses have STAT 253 as a prerequisite, which would have to be included in the student's programme as an option.

†1½ units

applications; Taylor's theorem, Rolle's theorem, the mean value theorem and l'Hospital's rule.

Prerequisite: Mathematics 100 or its equivalent.  
September-December. Also January-April. (3-0)

**MATH 102. (formerly one-half of 140). (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 Mathematics 100 or 180.  
September-December. Also January-April. (3-0)

**MATH 110. (1½) Theory of Equations**

Proofs by induction. Real and complex numbers. Polynomial equations. Systems of linear equations. Matrices.

Prerequisite: Algebra 12 or its equivalent.

September-December. (3-0)

**MATH 130. (3) Calculus: I and II**

Same as Mathematics 100 (first term) and Mathematics 101 (second term).

Prerequisite: Algebra 12 or its equivalent. (3-0; 3-0)

**MATH 151 (formerly one-half of 140). (1½) Finite Mathematics**

Elementary combinatorics; introduction to probability, matrix algebra, systems of linear equations.

Prerequisite: Mathematics 12 or its equivalent or Mathematics 012 (which may be taken concurrently during the fall term).

NOTE: Students who have credit for any of Statistics 253, 343, Mathematics 350 or Statistics 443 may not register in Mathematics 151 for credit.

NOTE 2: The sequences Mathematics 151 and 102 is intended primarily for students in the social and biological sciences; an alternate selection is Mathematics 151 and 100.

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

**MATH 160. (3) Fundamental Aspects of Mathematics for the Elementary Teachers**

A student who has obtained credit for any university mathematics course (except CSC 170 and CSC 171) will normally not be permitted to register for credit in Mathematics 160.

Prerequisite: Algebra 11 or consent of the Department.

NOTE: Students may not obtain credit for both Mathematics 160 and either of Mathematics 151 or Mathematics 180. (3-0; 3-0)

**MATH 180 (formerly 150). (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 Mathematics 91 or equivalent. Not open to students who have completed or are concurrently registered in Algebra 12 or Mathematics 12 or any Mathematics or Statistics course at the 100 level or above. Students may not obtain credit for both Mathematics 180 and Mathematics 160. (3-0; 3-0)

**MATH 200 (first half of 230). (1½) Calculus: III**

Vectors and vector functions; solid analytic geometry; partial differentiation, line integrals, div grad and curl of vectors; double integrals with applications, surface area.

Prerequisite: A grade of C or higher in Mathematics 101 or 130.

NOTE: Students with credit for Mathematics 231 or Mathematics 240 will not get credit for this course.

September-December. (3-0-1)

**MATH 201 (second half of 230). (1½) Calculus: IV**

The Jacobian, surface integrals, Green's theorem, triple integrals, the divergence theorem. An introduction to differential equations.

Prerequisite: Mathematics 200.

NOTE: Students with credit for Mathematics 231 or Mathematics 240 will not get credit for this course.

January-April. (3-0-1)

**MATH 210. (1½) Introductory Matrix Theory**

Determinants. Inverse of a matrix. Quadratic forms and the diagonalization of symmetric matrices. Eigenvalues and eigenvectors.

Prerequisite: Mathematics 110.

NOTE: This course is open to first year students who have taken Mathematics 110 in the first term.

Students who plan to take the combination of Mathematics 110 and Mathematics 210 and who do not need to take Mathematics 110 in their first year are advised to defer taking the combination until their second year.

January-April. (3-0)

**MATH 230. (3) Calculus: III and IV**

Same as Mathematics 200 (first term) and Mathematics 201 (second term).

Prerequisite: A grade of C or higher in Mathematics 130 (or 101).

NOTE: Students with credit for Mathematics 231 or Mathematics 240 will not get credit for this course (3-0-1; 3-0-1)

**MATH 240. (3) Mathematics for Students in the Social and Biological Sciences**

Techniques of integration; multivariable calculus; optimization; difference and differential equations with applications; linear programming; further topics in probability and linear algebra.

Prerequisite: Mathematics 151 and Mathematics 102 or Mathematics 151 and Mathematics 100.

NOTE 1: Students who have obtained credit for Mathematics 100 and 101 (130) may enrol for Mathematics 240 provided they enrol for Mathematics 151 concurrently.

NOTE 2: Students with credit for Mathematics 200, 201 (230), or 231 will not get credit for this course. (3-0; 3-0)

**Students with a D grade in Second Year Mathematics courses are advised not to register for further courses in Mathematics.**

**MATH 300T. (3) Calculus for Science Teachers**

Vectors, curves and tangents to curves; partial differentiation, chain rule, directional derivative with applications; multiple integration, line surface and volume integrals, potential functions, applications to physical problems, Fourier series expansions; differential equations of first and second order with constant coefficients.

This course is intended for those students planning to take Physics 340T and 440T and is for credit only in the M.Ed. (Science) programme.

Prerequisite: Mathematics 101 (130) or its equivalent (students are advised to review introductory calculus before taking the course).

Summer Session Only

**MATH 309. (1½) Introduction to Manifolds**

Functions on  $\mathbb{R}^n$ , differentiation, integration, integration on chains, integration on manifolds, selected topics. Not open to students who have credit for Mathematics 331.

Prerequisites: Mathematics 201 (230) and 210 (or 232).

(May not be offered 1979-80.) September-December. (3-0)

**MATH 323A (formerly one-half of 323). (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.

Prerequisites: Mathematics 201 (or 203), or 231.

NOTE: Credit may not be obtained for both Mathematics 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 (formerly one-half of 323). (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: Mathematics 323A.

NOTE: Credit may not be obtained for both Mathematics 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 (formerly one-half of 345). (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: Mathematics 201 (or 230) and 210 (or 232).

Corequisite: Mathematics 330 or 334.

NOTE: Credit may not be obtained for both Mathematics 325 and 323A.  
September-December. (3-0)

**MATH 326 (formerly one-half of 345). (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: Mathematics 325.

NOTE: Credit may not be obtained for both Mathematics 326 and 323B.  
January-April. (3-0)

**MATH 330A (formerly one-half of 330). (1½) Advanced Calculus: I**

Sequences and series of real numbers; sequences and series of real valued functions; uniform convergence; Fourier series.

Prerequisites: Mathematics 230 or 201 or 231.

September-December. (3-0)

**MATH 330B (formerly one-half of 330). (1½) Advanced Calculus: II**

Differentiation and integration of series of real valued functions; power series; Taylor series; Taylor's formula with remainder; an introduction to the theory of functions of a complex variable, analytic functions, elementary functions, integration, power series, residue theory.

Prerequisite: Mathematics 330A.

January-April. (3-0)

**MATH 332. (3) Survey of Modern Algebra**

Axiomatic approach to number systems. General algebraic structures. Introduction to the theory of groups, rings, fields and integral domains.

Prerequisite: Mathematics 210 (or 232).

(Not offered 1978-79.) (3-0; 3-0)

**MATH 333A (formerly one-half of 333). (1½) Modern Algebra: I**

Introduction to the theory of groups. Definitions and examples of rings and fields.

Prerequisite: Mathematics 210 (or 232).

September-December. (3-0)

**MATH 333B (formerly one-half of 333). (1½) Modern Algebra: II**

Introduction to the theory of rings and fields.

Prerequisite: Mathematics 333A.

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 Mathematics 335 or 430.

Prerequisite: Mathematics 201 (or 230) and 210 (or 232) 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 Mathematics 335.

Prerequisite: Mathematics 334.

January-April. (3-0)

**MATH 338. (1½) Complex Analysis: I**

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 441.

Prerequisite: Mathematics 334.

January-April. (3-0)

**MATH 350 (formerly 340). (3) Probability Theory**

Basic properties of probability as a function defined on sets; combinatorial analysis; random variables and expectation; conditional probability and independence; special discrete and continuous distributions; sums of random variables; generating functions; limit theorems. Stochastic processes: random walks, recurrent events, Markov chains, Poisson process, birth and death processes. This is a basic course for anyone interested in mathematical

or applied statistics, computer simulation or actuarial science. Not open to students who have credit for Mathematics 340.

Prerequisite: Mathematics 201 (or 230) or 231 or 240. (3-0; 3-0)

**MATH 362. (1½) Elementary Number Theory**

A brief introduction to divisibility, primes, congruences, arithmetic functions, primitive roots, quadratic residues, partitions and geometry of numbers.

For Mathematics majors in Arts and Science or Mathematics majors in Secondary Education. Not open to students who have credit for Mathematics 339 or 460.

Prerequisite: Any 200-level calculus or algebra course.

January-April. (3-0)

**MATH 366. (1½) Geometry**

Topics from polyhedral, Euclidean, projective and non-Euclidean geometries. Students should consult the Department regarding topics to be offered in any year. Students proposing to teach mathematics in secondary school are urged to take this course. Not open to students who have credit for 337.

Prerequisite: any second year Mathematics course or permission of the Instructor.  
September-December. (3-0)

**MATH 367. (1½) Introduction to Differential Geometry**

Theory of curves, surfaces, first fundamental form, tensor calculus, Gaussian and mean curvature, geodesic curvature, mappings.

Prerequisites: Mathematics 201 (or 230) and 210 (or 232).

(May not be offered 1979-80.)

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: Mathematics 333A.

September-December. (3-0)

**MATH 423. (1½) Graph Theory**

An introduction to the combinatorial, algorithmic and algebraic aspects of graph theory.

Prerequisite: Mathematics 333A.

January-April. (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 Mathematics 335 or Mathematics 334.)

Primarily for students in Secondary Education or those taking a Major in Mathematics.

Prerequisite: Mathematics 330 or consent of the Department.

September-December. (3-0)

**MATH 431. (1½) Topics in Complex Analysis**

A continuation of the complex analysis begun in Mathematics 330. (Not open to students with credit for Mathematics 338 or 441.)

Primarily for students taking a Major in Mathematics.

Prerequisite: Mathematics 330 or Honours equivalent.

(Not offered 1978-79.)

(3-0)

**MATH 433A (formerly one-half of 433). (1½) Topics in Algebra: I**

Dual space of a vector space. Tensor products. Rational and Jordan canonical forms for a linear transformation.

Prerequisite: Mathematics 333B.

September-December. (3-0)

**MATH 433B (formerly one-half of 433). (1½) Topics in Algebra: II**

Galois theory. Modules, rings with minimum condition and the Artin-Wedderburn theorem.

Prerequisite: Mathematics 433A.

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: Mathematics 334 and 336 or the consent of the Department.  
September-December. (3-0)

**MATH 445. (3) Differential Equations**

Special solutions, existence, uniqueness, continuous dependence. Series solutions, examples and convergence. The Sturm-Liouville theory, Fourier series, convergence and completeness. The Cauchy-Kowalewskaya theorem. Geometric theory of first order partial differential equations. Methods of solution. Elliptic, parabolic, and hyperbolic equations and well-posed problems.

Prerequisites: Mathematics 334 and 336, or the consent of the Department. (3-0; 3-0)

**MATH 460 (formerly 339). (3) Number Theory**

Congruences, numerical functions, elementary theory of primes, quadratic residues. Further topics to be selected from partitions, compositions, distribution of primes, geometry of numbers, rational approximations.

Prerequisite: Mathematics 332 or 333 or B- or higher in Mathematics 232 (or 210).

(May not be offered 1979-80.) (3-0; 3-0)

**MATH 465 (formerly 411). (1½) Introduction to Topology**

Basic concepts of point set topology.

Prerequisite: Mathematics 334 (which may be taken concurrently) or Mathematics 330 or the consent of the Department.

January-April. (3-0)

**MATH 466. (3) Symmetry Geometry**

An introduction to the geometry of the classical Euclidean, affine, and projective space. The geometry is studied in terms of the group structure of the symmetries on these spaces. It contains a deeper and more mathematically sophisticated treatment of the topics in Mathematics 366, and in particular the polyhedral and crystal groups.

Prerequisites: Mathematics 366 and permission of the Department; or Mathematics 333A (or Mathematics 332) (which may be taken concurrently).

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**MATH 490 (formerly 470). (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 Head of the Department.

**MATH 491A. (1½) Topics in Mathematics**

Entry to this course will normally be restricted to Honours students and Major students with first class standing. Information on the topics available in any given year will be available from the Head of the Department whose permission will be required for entry to the course. This course may be taken more than once in different topics with permission of the Head of the Department. The course may not be offered every year.

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

**MATH 491B. (1½) Topics in Mathematics**

Entry to this course will normally be restricted to Honours students and Major students with first class standing. Information on the topics available in any given year will be available from the Head of the Department whose permission will be required for entry to the course. This course may be taken more than once in different topics with permission of the Head of the Department. The course may not be offered every year.

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

**COMPUTING SCIENCE****C SC 170 (formerly MATH 170). (1½) Introduction to Computing**

This basic course is intended to teach the student FORTRAN programming, and it also provides a brief introduction to Computing Science. It should be of interest to students from all disciplines. In the laboratory the student will write programs for the IBM 370/148.

Prerequisite: Algebra 12 or its equivalent.

Students intending to take a Major or Honours in Mathematics with a computing science option should take Computing Science 170 in the first term.

September-December. Also January-April. (2-2)

**C SC 171 (formerly MATH 171). (1½) Computer Applications**

This course provides an introduction to practical applications of computers in science, engineering, and business. A student should gain considerable insight into what computers can do in these areas, and, in addition, he will develop programming skills in the laboratory.

Prerequisite: Computing Science 170.

September-December. Also January-April. (2-2)

**C SC 272 (formerly MATH 272). (1½) Assembly Language Programming**

This course is designed to introduce the student to basic computer organization, machine language programming, and the use of assembly

language programming systems. The concepts being taught are illustrated by using the IBM 370/148 computer as the example machine, however other systems are also discussed. Students are taught to program in assembler language using the IBM/370 assembler language.

Prerequisite: Computing Science 271 or 171.

September-December. Also January-April. (3-1)

**C SC 275. (1½) Data Processing Systems Design**

This course covers the design, implementation and documentation of systems of computer programs for business applications. File design, job control language and the use of utility programs will be studied and an introduction to COBOL will be given. A term project will consist of writing and documenting edit, processing and report programs.

Prerequisite: Computing Science 171.

September-December. Also January-April. (3-1)

**C SC 349A (formerly half of C SC 349, MATH 349). (1½) Numerical Methods: I**

An introduction to selected topics in Numerical Analysis. Areas covered will include error analysis, roots of equations, systems of linear equations with selected applications, one-step methods for ordinary differential equations, and linear programming.

Prerequisites: Computing Science 171, and Mathematics 201 (230) and 210 (or 232).

September-December. (3-0)

**C SC 349B (formerly half of C SC 349, MATH 239). (1½) Numerical Methods: II**

An introduction to selected topics in Numerical Analysis. Areas covered will include interpolation and extrapolation, numerical integration and differentiation, multi-step for ordinary differential equations, eigenvalue problems, approximations to functions and data, and numerical solutions of partial differential equations.

Prerequisite: Computing Science 349A.

January-April. (3-0)

**C SC 370 (formerly C SC 273, MATH 370). (1½) Programming Languages**

This course involves a survey of the significant features of existing programming languages, with particular emphasis on the underlying concepts abstracted from these languages. The relationship between source programs and their run-time representation during execution is considered, but the actual writing of compilers is taught in Computing Science 471. The concepts are illustrated by programming assignments.

Prerequisites: Computing Science 272 and 275.

January-April. (3-0)

**C SC 371 (formerly MATH 371). (1½) Operating Systems**

This course introduces the concepts and components of an operating system — the programs which supervise the execution of user programs on a computer. Various operational environments such as batch processing, multiprogramming and time-sharing will be presented together with the underlying component programs which control input/output, scheduling and servicing of user jobs.

Prerequisite: Computing Science 272.

September-December. (3-0)

**C SC 372. (1½) Computer Architecture**

A computer consists of many components. These include the central processor, I/O channels and peripheral devices, control units and memory. This course covers the design of such components and shows how they are combined in various ways to provide computers of different power and speed. Some details of circuit design will be presented and examples of maxi-, mini- and micro-computers will be studied.

Prerequisite: Computing Science 272.

January-April. (3-0)

**C SC 375 (formerly C SC 373, MATH 373). (1½) Introduction to Systems Analysis**

This one-semester course introduces the student to many of the techniques used in analysing a business data processing system. Topics discussed will include the following: man-machine systems, objectives of data processing systems, data gathering and analysis, documentation, system controls, file processing methods, system implementation, PERT and critical path, hardware selection and system evaluation.

Prerequisite: Computing Science 275 (or 273).

September-December. (3-0)

**C SC 448A (formerly half of C SC 448, MATH 448). (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: Computing Science 349 or 349A.

September-December. (3-0)

**C SC 448B (formerly half of C SC 448, MATH 448). (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: Computing Science 171 and Statistics 253.

January-April. (3-0)

**C SC 449A (formerly half of C SC 449, MATH 449). (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: Computing Science 349 or 349B.

September-December. (3-0)

**C SC 449B (formerly half of C SC 449, MATH 449). (1½) Numerical Analysis: II**

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: Computing Science 349 or 349B.

January-April. (3-0)

**C SC 471 (formerly MATH 471). (1½) Compiler Construction**

This course emphasizes the techniques involved in the analysis of source language and the generation of object code. Although some theoretical topics are discussed, the course has the practical objective of teaching students how compilers may be constructed. Programming assignments illustrate different methods of syntax analysis in addition to the translation of a simple source language into a hypothetical machine language.

Prerequisite: Computing Science 370 (or 273).

September-December. (3-0)

**C SC 472 (formerly MATH 472). (1½) Theoretical Aspects of Computing Science**

Grammars of formal languages and their relation to automata; Turing machines, computability, the halting problem; the use of formal grammars as models of programming languages.

NOTE: The programming of algorithms for syntax analysis is done in Computing Science 471.

Prerequisites: Mathematics 333A and Computing Science 171.

January-April. (3-0)

**C SC 473 (formerly MATH 473:470). (1½) Topics in Computing Science: I**

The topics covered in this one-semester course depend primarily on the interests of the Instructor. For example, the course may comprise one or more of the following topics: graph theory, combinatorics, artificial intelligence, switching theory, automata theory, information retrieval, and numerical analysis.

Prerequisite: One of Computing Science 349B, 371 or 372 (dependent upon the topic covered) or consent of the Instructor.

September-December. (3-0)

**C SC 474 (formerly MATH 474:470). (1½) Topics in Computing Science: II**

The topics covered in this one-semester course depend primarily on the interests of the Instructor. For example, the course may comprise one or more of the following topics: graph theory, combinatorics, artificial intelligence, switching theory, automata theory, information retrieval, and numerical analysis.

Prerequisite: One of Computing Science 349B, 371 or 372 (dependent upon the topic covered) or consent of the Instructor.

January-April. (3-0)

**C SC 475. (1½) Design and Analysis of Real-Time Systems**

This course extends the concepts presented in C SC 375 to cover real-time systems such as banking and airline reservations. The use of simulation and queuing theory in systems design will be covered. Topics include telecommunications, data bases and project management.

Prerequisite: Computing Science 375 (or 373).

Corequisite: Computing Science 448B.

January-April. (3-0)

## STATISTICS

**STAT 253 (formerly MATH 253:343). (3) Introduction to Probability and Statistics**

This course introduces basic theory of probability and statistics illustrated with diverse realistic applications. Topics include elementary methods of data analysis, elementary probability theory, probability distributions, expectation, sampling distributions, basic principles of statistical inference, least squares, and an introduction to analysis of variance and regression. A knowledge of computer programming is desirable but not necessary. Credit cannot be obtained for both Statistics 253 and Mathematics 343.

Prerequisite: Mathematics 101 (130) or Mathematics 151 and 102. (3-0; 3-0)

**STAT 353 (formerly MATH 353). (1½) Applied Regression Analysis**

An outline of linear regression theory with applications.

Prerequisite: Statistics 253 or Mathematics 343 or permission of the Instructor. September-December. (3-0)

**STAT 354 (formerly MATH 354). (1½) Sampling Techniques**

Principal steps in planning and conducting a sample survey. Sampling techniques including stratification, systematic sampling and multi-stage sampling. Practical survey designs with illustrations. Non-sampling errors.

Prerequisite: Statistics 253 or Mathematics 343 or permission of the Instructor. January-April. (3-0)

**STAT 450. (1½) Theory of Statistical Inference**

A study of problems in statistical inference with emphasis on the general decision problem, sufficient statistics, point and interval estimation, hypothesis testing, and normal distribution theory. The development and application of parametric and distribution-free procedures.

Prerequisites: Mathematics 350 (formerly 340) and one of Statistics 253, Mathematics 330, or Mathematics 334, 336.

September-December. (3-0)

**STAT 451. (1½) Topics in Mathematical Statistics**

Possible topics include: Nonparametric theory, theory of linear models, and stochastic modelling.

Prerequisite: Statistics 450.

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 multi-factor experiments. The use of concomitant observations. Multiple comparisons and orthogonal contrasts.

Prerequisites: Statistics 253, 353 or some experience (familiarity) with experimentation. September-December. (3-0)

**STAT 454. (1½) Topics in Applied Statistics**

Possible topics include: Multivariate analysis, multi-dimensional scaling methods, clustering methods, and time series analysis.

Prerequisites: Statistics 353 and the consent of the Instructor.

January-April. (3-0)

## GRADUATE COURSES

### MATHEMATICS

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 Math 350.

**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 Math 349 or Computing Science 349.

Except by permission by the Dean of Graduate Studies, the above courses are open only to students in the M.Ed. (Mathematics) programme.

**MATH 510A. (1½) Applied Statistics**

An introduction to statistical methodology with particular emphasis on basic statistical principles, criteria for the selection of statistical techniques, application of statistical procedures.

## CENTRE FOR ORIENTAL STUDIES

Hsini-i Hsiao, B.A. (*Tunghai*), M.A., Ph.D. (*Harvard*), Assistant Professor (Chinese). (On study leave 1978-79.)

Daniel J. Bryant, B.A. (*Brit. Col.*), Sessional Lecturer (Chinese) (1977-78).

Michiko Warkentyne, B.A. (*Toyko*), B.A. (*W. Ont.*), Part-time Sessional Lecturer (Japanese) (1977-78).

### COURSES

#### CHINESE

NOTE: Students with advanced credit from secondary schools or colleges, or those with some knowledge in Chinese will be placed at an appropriate level.

#### 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 Chinese 100 is not open to students who have a reading knowledge of Chinese.

(3-1; 3-1)

#### CHIN 200. (3) Second Year Chinese

A sequel to Chinese 100. More advanced grammar and idioms, and the introduction of an additional seven hundred Chinese characters.

Prerequisite: Chinese 100 or the equivalent. (3-1; 3-1)

#### CHIN 300. (3) Advanced Modern Chinese

A sequel to Chinese 200. Further practice in conversation together with the reading and translation of materials in modern Chinese. Introduction of elements of the classical language.

Prerequisite: Chinese 200 or the equivalent. (3-0; 3-0)

#### CHIN 301. (1½) Aspects of Chinese Culture

A survey of the development of the outstanding aspects of Han Chinese intellectual tradition from earliest to modern times, with special reference to national, social, political, artistic, religious, and thought patterns, and to problems of modern change. Such topics as the conceptualizations of the natural world, the role and nature of man, the ideal order of society, the ideal world order, the role of art and literature, and the characteristics of religion will be analyzed in depth. No knowledge of Chinese required.

Prerequisite: None, the course is open to all students.

Prescribed reading: Wm. Theodore de Bary, et al, *Sources of Chinese Tradition*; Ray Wylie, ed., *China: An Introduction for Canadians*.

September-December. (3-0)

#### 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: Liu Wu-chi, *An Introduction to Chinese Literature*; Cyril Birch, *Anthology of Chinese Literature*, Volumes 1 and 2; Liu Wu-chi and Irving Lo, *Sunflower Splendour*; David Hawkes, *Story of the Stone*.

(This course will alternate with 303; may be offered 1978-79.)

(3-0; 3-0)

#### CHIN 303. (3) Topics in Chinese Thought: Confucianism and Legalism

An analysis in depth of selected topics in Confucianism and Legalism, two dominant traditions of Chinese political and social thought. Among the areas to be discussed are: 1) early Confucianism vs. State Confucianism, 2) Pre-Han Legalism, 3) the roles of individualism and collectivism in the *Doctrine of the Mean*, 4) the Confucianization of Legalism and the influence of Legalism on Confucianism, 5) Idealist Confucianism vs. Rational Confucianism, 6) the Anti-Confucian Movement during the May Fourth Period, 7) the Anti-Confucian campaigns and the New Legalism of the 1970's, and 8) New Confucianism in the Twentieth Century. This course will be taught in English.

Prerequisite: None, the course is open to all students.

(This course will alternate with 302; next offered 1979-80.)(3-0; 3-0)

#### 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 non-linear programming, unconstrained optimization, dynamic programming, and a survey of available computer programs.

#### MATH 501E. (1½) Applied Stochastic Processes

An examination of the mathematical structures of processes 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, see page 160.

#### MATH 585. (2-4) Seminar

#### MATH 599. (4-6) Master's Thesis

The Department of Mathematics offers graduate programmes leading to the degrees of Master of Arts and Master of Science in Pure Mathematics, Applied Mathematics, Computer Science and Statistics.

### COMPUTING SCIENCE

#### C SC 570 (formerly MATH 570). (2-4) Topics in Numerical Analysis

#### C SC 571 (formerly MATH 571). (2-4) Topics in Computing Science

#### C SC 572 (formerly MATH 572). (2-4) Topics in Optimization

#### C SC 573 (formerly MATH 573). (2-4) Advanced Computer Systems

#### C SC 574 (formerly MATH 574). (2-4) Non-Numerical Computing

#### C SC 580 (formerly MATH 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 programme in the Department of Mathematics.

### STATISTICS

#### STAT 554 (formerly MATH 554). (2-4) Time Series Analysis

#### STAT 556 (formerly MATH 556). (2-4) Topics in Statistics

#### STAT 557 (formerly MATH 557). (2-4) Sampling Techniques

#### STAT 558 (formerly MATH 558). (2-4) Linear and Non-Linear Statistical Models

#### STAT 561 (formerly MATH 561). (2-4) Decision Theory and Statistical Inference

#### STAT 562 (formerly MATH 562). (2-4) Distribution-free and Rank-order Statistics

**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. Topic for 1978-79, the *Hung-lou Meng*.

Prerequisite: Chinese 300, or the equivalent, or permission of the Instructor.  
(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.

Text: Japanese Language Promotion Centre, *Intensive Course in Japanese, Elementary, Part I*. (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: Completion of Japanese 100 or its equivalent.

Text: Japanese Language Promotion Centre, *Intensive Course in Japanese, Elementary, Part II*; Sakade, *A Guide to Reading and Writing Japanese*. (3-1; 3-1)

**JAPA 301. (1½) Aspects of Japanese Culture**

A survey of the Japanese cultural developments from the Nara period to the present through an examination of selected major works of Japanese literature in translation. The selections include *The Tales of Genji*, *Noh Drama*, Basho's *Haiku*, *Bunraku* by Chikamatsu, and outstanding novels since the Meiji Restoration. No knowledge of Japanese is required.

Prerequisite: None, the course is open to all students.

Texts: Keene, *Anthology of Japanese Literature*; Murasaki, *The Tale of Genji*; Kobo, *The Woman in the Dunes*; Yasunari, *Snow-Country*; Yukio, *Temple of the Golden Pavilion*; Soseki, *I am a Cat*.

January-April. (3-0)

**PACIFIC STUDIES PROGRAMME**

Director (1978-79): To be appointed.

Programme Director (1977-78): M. C. R. Edgell, B.A. (*Birm.*), Conservation Diploma (*London*), Ph.D. (*Birm.*), Associate Professor, Geography.

The Interdisciplinary Pacific Studies Programme, 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 programme should consult the Director, Pacific Studies Programme, as soon as possible after entering the University, so guidance may be given to help in course selection during the first and second years.

Programme Requirements for a B.A. in Pacific Studies are as follows:

**GENERAL**

First and second years: one of the following is recommended: Chinese 100, 200; French 160, 260, 180, 280, 290; Japanese 100, 200; Russian 100, 200; Spanish 100, 240.

Third and fourth years: Pacific Studies 300 and 6 units chosen from Pacific Studies 411, 412, (last offered 1977-78), 413, 414, 460, 490 and six units selected from courses listed below.

**MAJOR**

First and second years: at least one of the following is highly recommended: Chinese 100, 200; French 160, 260, 180, 280, 290; Japanese 100, 200; Russian 100, 200; Spanish 100, 240.

Third and fourth years:

- 1) Pacific Studies 300, 411, 413, 414, 460, and 490;
- 2) 12 units, chosen in consultation with the Programme Director, from the supporting course list below;
- 3) 6 units of other courses not already completed, which may be chosen from those recommended for first and second years, above.

Supporting course list. Anthropology 326, 327, 329; Biology 310; Chinese 301; Economics 320, 323, 350, 405, 420; English 439; Geography 347, 360,

447, 462, 463, 464, 465, 466, 467; History 205, 252, 330, 434, 436, 438, 439; History in Art 270, 331, 370, 470; Japanese 301; Linguistics 400, 450, 451; Philosophy 287; Political Science 312, 315, 317, 445, Russian 301.

Further information may be obtained by consulting the Director or the Programme Committee. The Committee for 1977-78 was as follows:

William H. Alkire, B.A. (*Wash.*), M.A. (*Hawaii*), Ph.D. (*Ill.*), Associate Professor, Anthropology.

James A. Boutlier, B.A. (*Dalhousie*), M.A. (*McMaster*), Ph.D. (*London*), Part-time Sessional Lecturer, Pacific Studies.

Michael C. R. Edgell, B.A. (*Birm.*), Conservation Dip. (*London*), Ph.D. (*Birm.*), Associate Professor, Geography.

Hsin-i Hsiao, B.A. (*Tunghai*), M.A., Ph.D. (*Harvard*), Assistant Professor, Slavonic & Oriental Studies.

David C. Lai, B.A., M.A. (*Hong Kong*), Ph.D. (*London*), Associate Professor, Geography.

Robert B. Lane, A.B., Ph.D. (*Wash.*), Associate Professor, Anthropology.

Edward E. Owen, B.A., M.A. (*Auckland*), Ph.D. (*Edin.*), Associate Professor, Education.

E. Patricia Tsurumi, B.A. (*Brit. Col.*), A.M., Ph.D. (*Harvard*), Associate Professor, History.

**COURSES****PACI 300. (3) Themes and Problems of the Pacific**

This is an interdisciplinary course for students with an interest in the Pacific area. The course structure will be flexible to allow for lectures, discussions, reports, projects and the use of speakers outside the University on topics such as the following: trans-Pacific contacts and communications; genetical and typological relationships of language groups in the Far East, Pacific and Australia; inter-cultural contacts; Pacific settlement patterns; land organization and reform; landscape and the artist; industrialization and the emergent society; Asian nationalism; contemporary Chinese thought; and economic disparities in the Pacific. An underlying theme will be Canada's role and her relationship to Pacific problems and development.

(3-0; 3-0)

**PAC 411 (formerly half of 400). (1½) Topics in East and Southeast Asian Studies**

An intensive study of selected major issues and topics in East and/or Southeast Asia. Students should consult the Programme Director for details of the topics to be covered.

Prerequisite: Pacific Studies 300 or permission of the Instructor.

January-April. (3-0)

**PACI 413 (formerly half of 401) (1½) Topics in Australasia and Pacific Island Studies**

An intensive study of selected major issues and topics in Australasia and/or the Pacific Islands. Students should consult the Programme Director for details of the topics to be covered.

Prerequisite: Pacific Studies 300 or permission of Instructor.

M. C. R. Edgell. September-December. (3-0)

**PACI 414 (formerly half of 401). (1½) Seminar in Australasia and 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 Programme Director prior to registration.

Prerequisite: Pacific Studies 300 or permission of Instructor.

January-April. (3-0)

**PACI 460 (Geog 460). (1½) Seminar in Overseas Chinese Communities in the Pacific Rim.**

This seminar studies the urban overseas Chinese Communities in Canada, U.S.A., New Zealand, Australia and Southeast Asian countries. Major topics of discussion will include migration theory, concepts of culture conflict, culture tension, 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.

Prerequisite: Pacific Studies 300 or permission of the Instructor.

(Not open to students with credit in Pacific Studies 412 or 400. Credit cannot be obtained for both Pacific Studies 460 and Geography 460.)

September-December. (3-0)

**PACI 490 (formerly 401). (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 programme of studies will be supervised by an appropriate faculty member designated by the Pacific Studies Committee.

Prerequisite: Pacific Studies 300.

**DEPARTMENT OF PHILOSOPHY**

John M. Michelsen, B.A., M.A., Ph.D. (*Wash.*), Associate Professor and Chairman of Department.

Howard J. N. Horsburgh, M.A. (*Glasgow*), B.Litt. (*Oxon.*), B.Sc. (*Econ.*) (*London*), Professor.

Kenneth W. Rankin, M.A., Ph.D. (*Edin.*), Professor.

Charles B. Daniels, A.B. (*Chicago*), D.Phil. (*Oxon.*), Associate Professor.

Eike-Henner Kluge, B.A. (*Calgary*), A.M., Ph.D. (*Mich.*), Associate Professor.

Charles G. Morgan, B.S. (*Memphis St.*), M.S., Ph.D. (*Johns Hopkins*), M.Sc. (*Alta.*), Associate Professor and Graduate Advisor.

Rodger G. Beehler, B.A. (*Man.*), B.Phil. (*Oxon.*), Ph.D. (*Calgary*), Assistant Professor.

Alan R. Drengson, B.A., M.A. (*Wash.*), Ph.D. (*Ore.*), Assistant Professor.

Leonard Angel, B.A. (*McGill*), M.A., Ph.D. (*Brit. Col.*), Sessional Lecturer (1977-78).

John Banks, B.A. (*Cal.*), Ph.D. (*Calgary*), Part-time Sessional Lecturer (1977-78).

Jeffrey E. Foss, B.A. (*Alta.*), M.A., Ph.D. (*W. Ont.*), Sessional Lecturer (1977-78).

George Monticone, B.A. (*Wash. St.*), Ph.D. (*Calgary*), Part-time Sessional Lecturer (1977-78).

Richard L. Simpson, B.A., Ph.D. (*Brit. Col.*), Part-time Sessional Lecturer, Correctional Education Programme, (1977-78).

**GRADUATE PROGRAMME**

For information on studies leading to the M.A. degree, see page 161; for graduate courses, see page 96.

**GENERAL, MAJOR AND HONOURS PROGRAMMES**

General — 9 units in courses in Philosophy numbered 300 or above with all prerequisites satisfied.

Major — 21 units in courses in Philosophy comprising:

- (a) *either* Introduction to Philosophy (Phil. 100) *or* History of Philosophy (Phil. 102)
- (b) Argument, Fallacy and Logical Theory (Phil. 202)
- (c) Moral Philosophy (Phil. 302)
- (d) *either* The Rationalists (Phil. 306) *or* The Empiricists and Kant (Phil. 310)
- (e) Plato (Phil. 421) *and* Aristotle (Phil. 422)
- (f) 6 additional units in courses numbered 300 or higher.

NOTE: Although not required, students are encouraged to include at least one of the following: Existentialism (Phil. 211), Philosophy of Religion (Phil. 212), Philosophy of Science (Phil. 222), Aesthetics (Phil. 242), and Medieval Philosophy (Phil. 245).

Honours — 30 units in courses in Philosophy comprising:

- (a) *either* Introduction to Philosophy (Phil. 100) *or* History of Philosophy (Phil. 102)
- (b) Argument, Fallacy and Logical Theory (Phil. 202)
- (c) Moral Philosophy (Phil. 302)
- (d) The Rationalists (Phil. 306)
- (e) The Empiricists and Kant (Phil. 310)
- (f) Plato (Phil. 421) *and* Aristotle (Phil. 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 upper division credit courses taken in Philosophy. Upon completing the programme, 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**

*Unless indicated otherwise, courses begin in September and end in April.*

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 programme 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.*

**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 'just 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 over-riding concern is to teach the student how to respond in a co-ordinated, controlled, and critical way to the sorts of question which these philosophers have raised or provoked.

NOTE: This is a multi-sectioned 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.

(3-0; 3-0)

**PHIL 102. (3) History of Philosophy**

This course is intended as an introduction to the history of philosophical thought in the West. The main emphasis, therefore, will lie on a chronological discussion of the philosophies of representative figures, and on tracing lines of development. An attempt will be made to relate the various positions to the social and cultural elements predominating in the societies of the various thinkers.

(Not offered 1978-79.)

(3-0; 3-0)

**PHIL 202. (3) Argument, Fallacy and Logical Theory**

The course develops an elementary formal theory by which to represent the basic logical structure of natural languages such as English. As the theory unfolds a number of key concepts are investigated, among which are: truth, proof, validity, necessity, contradiction, consistency, meaning, existence, and generalization. After determining the theoretical characteristics of good argumentation, a review is made of various deficiencies, fallacies, and paradoxes of everyday reasoning, and their repair is attempted. Part of the design of the course is to present issues that may prove relevant to an understanding of achievements and problems in other areas of study.

Text: To be announced.

C. G. Morgan.

(3-0; 3-0)

**PHIL 207 (Classical Studies 207). (3) Greek Historical and Philosophical Thought**

A study of the parallel development of systematic historical and philosophical thought out of the common ground of the prescientific, mythical world views. The effort to develop acceptable models of explanation for human as well as natural events will be seen to be a point common to the two strands of Greek thought. The philosophical emphasis will be on metaphysical and epistemological issues, and the ideas singled out for study will relate to the structure of the cosmos, the nature of man, and man's relationship to the universe.

Texts: Hesiod, *Theogony* (tr. Wender, Penguin), Herodotus (tr. de Selincourt, Penguin), Thucydides (tr. Warner, Penguin), Plato (ed. Rouse, Mentor), Aristotle (ed. Bambrough, Mentor), Aristotle, *Constitution of Athens* (ed. Hafner), Aeschylus, *Oresteia*.

J. M. Michelsen and G. S. Shrimpton.

(3-0; 3-0)

**PHIL 211. (3) Existentialism**

A study of various answers to the central question: "How can the individual realize an authentic form of existence in a technological society dedicated to the ideals of comfort, efficiency, and security?" Topics discussed: The reality of human freedom and choice; the encounter with Nothingness and the Absurd; religious faith as a supra-rational response to the anguish and meaninglessness of existence; the problem of alienation in modern society; the problem of reconciling Existentialism's emphasis on the autonomy and absolute freedom of the individual with Marxism's emphasis on the

collectivity and historical necessity; the connections between philosophical theory, literature, and drama.

Some works studied in recent years are: Kierkegaard, *Either/Or, Fear and Trembling*; Sartre, *Being and Nothingness* (selections), *The Wall and Other Stories, Selected Plays*; Camus, *The Myth of Sisyphus, The Outsider, Selected Plays*; Paulo Freire, *Pedagogy of the Oppressed*; George Novack (ed.), *Existentialism versus Marxism: Conflicting View on Humanism*.

(3-0; 3-0)

**PHIL 212. (3) Philosophy of Religion**

There have been many estimates of religion. It has been thought of as a crutch, a gamble, an illusion, a magnificent obsession, and the final answer to man's most momentous questions. Which is it? Or is it something quite different from what it seems? Philosophy has subjected religion to searching scrutiny. This class will consider some of the things that have emerged from the philosophical examination of religion.

Texts: To be announced.

H. J. N. Horsburgh.

(3-0; 3-0)

**PHIL 222 (formerly 221 & 223). (3) Philosophy of Science**

This course examines certain of the presuppositions of, and some philosophical questions raised by, the various sciences. A central preoccupation will be the analysis of casual and statistical patterns of explanation and of the logical structure of scientific laws and theories. Some attention is given to the nature of scientific confirmation and to such classical philosophical themes as whether there can be any freedom of the will in a universe governed by scientific laws. The course will also touch upon contemporary scientific understanding of the nature of time, of space, of life and of mind, and of purpose in nature. (Unavailable for credit to students with credit in former Philosophy 221 and Philosophy 223.)

(Not offered 1978-79.)

(3-0; 3-0)

**PHIL 232. (1½) Moral Problems of Contemporary Society**

An investigation of certain moral problems which might be called social problems as well. Among the topics to be discussed are war, social protest and civil disobedience, revolution, sexual relations, abortion, suicide, poverty, destruction of the natural environment, fulfillment in work and the quality of life. Differing moral positions concerning these matters will be developed and their justifications sought out and examined.

Texts: To be announced.

C. B. Daniels.

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?

Texts: To be announced.

September-December. (3-0)

**PHIL 238. (3) Philosophy in Literature**

The purpose of this course is to acquaint the student with various philosophical theories and themes as these find expression in classical and contemporary literature. In some years the course may be devoted to an examination of a single theme as it emerges in distinct periods and writings. Overall emphasis will be upon the study of philosophy through literature rather than upon philosophy as one aspect of some literary genre, epoch, or masterpiece. Readings may range over the literature of many countries and will not be necessarily confined to works in the Western tradition.

(3-0; 3-0)

**PHIL 242. (3) Aesthetics**

This course is an introductory examination of such basic 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 problems particular to each major art form, as well as to problems arising from comparison among these art forms.

Texts: Aristotle, *Poetics*; Tolstoy, *What is Art?*; Hanslick, *The Beautiful in Music*; Gombrich, *Art and Illusion*, Goodman, *Languages of Art*.

C. B. Daniels.

(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 to him 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.

Texts: To be announced.

E.-H. W. Kluge.

(3-0; 3-0)

**PHIL 269. (3) The Self, Communication, and Understanding**

In the first term, an introductory philosophical investigation of the assumptions behind contemporary theories of the self as developed in selected works of psychologists, psychiatrists, and sociologists. One central question in terms of which these varying approaches will be examined is: Upon what does a person's conception of himself depend, and how far is this conception sensitive to the way other persons appreciate or treat him? In the second term the central topics will be the relation of the distinctively human forms of life to language, and the connection between the thought of an age and its prevailing media of expression.

Texts: R. D. Laing; *The Divided Self*; E. Goffman, *The Presentation of Self in Everyday Life*; I. Robinson, *The Survival of English*; M. McLuhan, *The Gutenberg Galaxy, Understanding Media*; L. Stevenson, *Seven Theories of Human Nature*.

(With the cooperation of members of the Linguistics and Psychology Departments.)

(Not offered 1978-79.)

(3-0; 3-0)

**PHIL 287 (formerly 332). (3) Eastern Philosophy**

The emphasis in this introductory course is on the major philosophic traditions of the East: Confucian, Taoist, Buddhist and Hindu. Comparisons are drawn between the central teachings of Eastern Philosophers and those of Western Philosophers. Among the topics discussed are major teachings about mysticism, the divine, the unified self, the nature of the cosmos, and the right of way to live. In addition, an effort is 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.

A. R. Drengson.

(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.

Texts: To be announced.

H. J. N. Horsburgh.

(3-0; 3-0)

**Not all the following courses will be offered every year. To meet the requirements for a Major or Honours Programme in the minimum number of years, students should plan accordingly. For fuller information see the Departmental handbook issued in the summer.**

**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 rationalist's preoccupation with *a priori* necessary truths and the principle of sufficient reason vis-à-vis their theories of perception and knowledge.

Prerequisite: Philosophy 100 or 102, or permission of the Instructor.

Texts: to be announced.

E.-H. W. Kluge.

(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: Philosophy 100, 102 or permission of the Instructor. Not open to students with credit in Philosophy 308 or 400.

(Not offered 1978-79.)

(3-0; 3-0)

**PHIL 322. (3) Advanced Philosophy of Science**

A study in depth of important issues in the philosophy of science. Topics may include the following: the structure of explanation; confirmation theory; concept formation and theory construction; philosophical problems in the physical, biological and social sciences; methodology; theory of models.

Prerequisite: Philosophy 202 or 222 or permission of the Instructor.

(Not offered 1978-79.)

(3-0; 3-0)

**PHIL 324. (3) Philosophy of History**

Major theories of history such as those of Hegel, Marx, Spengler, Toynbee, and Niebhuur 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: Philosophy 100 or 102, or History 234, 236, 240 or 242, or permission of the Instructor.

Texts: To be announced. (3-0; 3-0)

**PHIL 325. (1½) Social and Political Philosophy: I**  
— Hobbes and Rousseau

What, according to Hobbes, are the needs of human beings? In what kind of society are these needs best provided for? What (in contrast) is Rousseau's appreciation of human needs and aspirations? What, according to each, are the causes of social instability and unfreedom in human societies? How far can political institutions and political activity provide 'the good society'? To what extent is good government dependent upon the moral sensibility of the population? To what extent is that sensibility, and the wants and needs of persons, a function of the kind of society in which they live?

(This course will cycle with Philosophy 327 and 329. Not open to students with credit in Philosophy 326 prior to 1975-76.)

Prerequisite: A previous course in Philosophy, or Political Science 300, or permission of the Instructor.

Texts: T. Hobbes, *Leviathan*; J. J. Rousseau, *Discourse on the Origin of Inequality, The Social Contract*; further texts to be announced.

January-April. (3-0)

**PHIL 327. (1½) Social and Political Philosophy: II — Marx**

How does Marx differ from those before him in his identification of human needs? What in particular does he mean by 'alienation' as the human condition before socialism? What exactly in our society condemns human beings to this condition? Why does Marx judge human political life before socialism to be a history of corruption and illusion? What is profound and what is unsatisfactory in Marx's account of social change, and the relation of the life of an age to its economic institutions? What is living and what is dead in his prescription for transforming the world (as opposed merely to interpreting it).

(This course will cycle with Philosophy 325 and 329. Not open to students with credit in Philosophy 326 in 1975-76 and prior to 1974-75.)

Prerequisite: A previous course in Philosophy, or Political Science 300 or permission of the Instructor.

Texts: R. Tucker, *The Marx-Engels Reader*; D. McLellan, *Marx before Marxism*; S. Avineri, *The Social and Political Thought of Karl Marx*; B. Ollman, *Alienation: Marx's Conception of Man in Capitalist Society*; I. Zeitlin, *Marxism: A Re-examination*.

(Not offered 1978-79.) January-April. (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 law? Should the laws enforce morality? Should the laws protect persons from themselves?

Prerequisite: Philosophy 100 or 102, or permission of the Instructor.

Texts: To be announced. September-December. (3-0)

**PHIL 329. (1½) Social and Political Philosophy: III**  
— Contemporary Writers

Prerequisite: Is what is right or wrong, or true or false, relative to the society in which the act is done or the claim asserted? Or can all social institutions be assessed in terms of the criteria of truth and rationality of 'western society'? Are there confusions and dangers in the modern project of social engineering? Is there an irreducibly interpretative or subjective aspect to social science? What sort of theory about, and methodology for studying, human social and political life is behaviorism? Is community a human need? What are the most intransigent contemporary forms of social oppression? Is revolution a viable political option?

(This course will cycle with Philosophy 325 and 327. Not open to students with credit in Philosophy 326 prior to 1975-76.)

Prerequisite: A previous course in Philosophy, or Political Science 300, or permission of the Instructor.

Texts: R. Beehler and A.R. Drengson (eds.) *The Philosophy of Society*; and additional selected papers.

(Not offered 1978-79.) January-April. (3-0)

**PHIL 331. (1½) Medical 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 the 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.

Texts: To be announced.

E.-H. W. Kluge. September-December. (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.

Prerequisites: One course in Philosophy, or permission of instructor.

Texts: Peter Singer, *Animal Liberation*; John Passmore, *Man's Responsibility for Nature*; William Leiss, *The Limits of Satisfaction*; Aldo Leopold, *Sand Country Almanac*; G. Hardin, *Exploring Ethics for Survival*; I. G. Barbour (ed.), *Earth Might Be Fair*.

(Not offered 1978-79.) January-April. (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 adequately be 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: Philosophy 100 or 102, Philosophy 202, or permission of the Instructor.

Texts: To be announced.

K. W. Rankin. (3-0; 3-0)

**PHIL 342. (3) Minds and Machines**

Could one build a machine which thinks, reasons, learns from experience, understands natural language, is creative, feels pains, or has emotions? An intelligent response to such problems must rest upon some knowledge of the current state of the art in artificial intelligence. Thus part of the course will review major techniques and recent advances in the field. Topics will probably include game playing, theorem proving, problem solving, natural language processing, simulation of neural nets, and simulation of normal/abnormal psychological process. In addition to the practical survey, the course will consider the philosophical problems.

Prerequisite: One full-year course in at least one of the following areas: Computing science, neurophysiology, philosophy or psychology; or permission of the Instructor.

Texts: To be announced.

C. G. Morgan. (3-0; 3-0)

**PHIL 348. (1-3) Directed Studies in the History of Philosophy**

Under the supervision of a staff member and with the approval of the Chairman of the Department.

Prerequisite: 6 units in Philosophy, or permission of the Instructor.

**PHIL 401. (1½) Inductive Logic and Probabilistic Reasoning**

The course begins with a brief axiomatic presentation of the semi-interpreted probability calculus. Thereupon the primary objective is to find an acceptable semantics for the calculus. Various possibilities are reviewed, including: classical, empirical, personalist, and epistemological interpretations.

The related quest for an understanding of the structure of inductive argument will be pursued under these headings: statistical inference, confirmation theories, acceptance theories, and the hypothetico-deductive method.

Prerequisites: Phil. 202, 222 or permission of the Instructor.

(Not offered 1978-79.) (3-0)

**PHIL 403 (formerly 402). (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 prediction? (Unavailable for credit to students with credit in former Philosophy 402.)

Prerequisite: Philosophy 202 or Math. 332 or 333, and an additional 3 units of Philosophy, or permission of the Instructor.

C. G. Morgan. September-December. (3-0)

**PHIL 404 (formerly 402). (1½) Mathematical Logic**

This course reviews basic results in classical mathematical logic up to and including the Gödel incompleteness theorem for formal number theory. Topics for discussion include: the propositional calculus, standard quantification theory, first order theories with equality, the categoricity of theories, completeness and decidability, number theory, recursive functions, Gödel's theorem and Tarski's theorem. (Unavailable for credit to students with credit in former Philosophy 402.)

Prerequisite: Philosophy 202 or Math. 332 or 333, or permission of the Instructor.

(Not offered 1978-79.) (3-0)

**PHIL 405. (3) Nineteenth-Century Philosophy**

A detailed study of post-Kantian developments in Philosophy. These include the philosophy of Hegel, Fichte, Marx, and Schopenhauer, and — in the British tradition — Bentham, Austin, Mill, and Spencer. 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: 6 units in Philosophy, or permission of the Instructor.

Texts: To be announced.

J. M. Michelsen. (3-0; 3-0)

**PHIL 408. (3) Contemporary European Philosophy**

A study of some leading European philosophers of the 20th century, such as Husserl, Heidegger, Sartre, and Merleau-Ponty. 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: 6 units in Philosophy, or permission of the Instructor.

(Not offered 1978-79.) (3-0; 3-0)

**PHIL 410 (formerly 406). (1½) Designated Philosopher(s) or Topic(s): I**

Study in depth of one or more major philosopher or philosophical topic, as determined by the Department in the light of current resources. In some years this course will be preliminary to Philosophy 411. (Unavailable for credit to students with credit in Philosophy 406 (3), except by permission.)

Prerequisites: Philosophy 100 or 102 and an additional 6 units in Philosophy, or permission of the Instructor.

(Not offered 1978-79.) September-December. (3-0)

**PHIL 411 (formerly 406). (1½) Designated Philosopher(s) or Topic(s): II**

Study in depth of one or more major philosopher or philosophical topic, as determined by the Department in the light of current resources. In some years this course will be an extension of Philosophy 410. (Unavailable for credit to students with credit in Philosophy 406 (3), except by permission.)

Prerequisites: Philosophy 100 or 102, Philosophy 410 (when offered) and an additional 6 units in Philosophy, or permission of the Instructor.

(Not offered 1978-79.) January-April. (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: Philosophy 100 or 102, Philosophy 306 or 308, or permission of the Instructor.

Texts: To be announced.

K. W. Rankin. (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.

(Not offered 1978-79.) January-April. (3-0)

**PHIL 418. (1½) Theory of Perception**

A study of various theories of perception both traditional and contemporary, with special emphasis on the construction of viable models of perceptual awareness.

Prerequisite: 6 units in Philosophy or permission of the Instructor.

(Not offered 1978-79.) September-December. (3-0)

**PHIL 421 (formerly one-half of 300). (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. Philosophy 102 or 207 is recommended as a suitable background for the course.

(Not offered 1978-79.) September-December. (3-0)

**PHIL 422 (formerly one-half of 300). (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. Philosophy 102 or 207 is recommended as a suitable background for the course.

(Not offered 1978-79.) January-April. (3-0)

**PHIL 432. (3) Metaphysics**

An enquiry 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 in Philosophy or permission of the Instructor.

Text: To be announced.

(Not offered 1978-79.) (3-0; 3-0)

**PHIL 448. (1-3) Directed Studies in Philosophical Topics**

Under the supervision of a staff member and with the approval of the Chairman of the Department.

Prerequisite: 9 units of Philosophy, or permission of the Instructor.

NOTE: The Department meets at the beginning of each winter session to review its undergraduate course offerings. Students are welcome to attend these meetings, and to submit, as well as discuss, proposals for change.

## GRADUATE COURSES

For information on the Department's graduate programme and admission requirements, consult page 161.

**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. Programme.

Texts: to be announced.

(Not offered 1978.) Summer Session only. (3-0)

**PHIL 502. (3) Directed Studies**

**PHIL 599. (9-15) M.A. Thesis**

## DEPARTMENT OF PHYSICS

R. Michael Pearce, B.Sc. (*McGill*), M.A., Ph.D. (*Brit. Col.*), Professor, and Chairman of the Department. (On study leave 1978-79.)

John L. Climenhaga, B.A., M.A. (*Sask.*), Ph.D. (*Mich.*), Professor.

John M. Dewey, B.Sc., Ph.D. (*London*), Professor.

Harry W. Dosso, B.A., M.Sc., Ph.D. (*Brit. Col.*), Professor.

Howard E. Petch, B.Sc., M.Sc. (*McMaster*), Ph.D. (*Brit. Col.*), D.Sc. (*McMaster*), F.R.S.C., Professor.

Lyle P. Robertson, B.A., M.A., Ph.D. (*Brit. Col.*), Professor.

John T. Weaver, B.Sc. (*Bristol*), M.Sc., Ph.D. (*Sask.*), Professor.

Walter M. Barss, B.A., M.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor.

George A. Beer, B.A.Sc., M.Sc. (*Brit. Col.*), Ph.D. (*Sask.*), Associate Professor.

J. Anthony Burke, A.B., A.M., Ph.D. (*Harvard*), Associate Professor (Astronomy).

- Reginald M. Clements, B.A.Sc., M.A.Sc. (*Brit. Col.*), Ph.D. (*Sask.*), Associate Professor.
- Fred I. Cooperstock, B.Sc. (*Man.*), Ph.D. (*Brown*), Associate Professor.
- James P. Elliott, B.S. (*Ill. Inst. of Tech.*), Ph.D. (*Stanford*), Associate Professor.
- Gerhart B. Friedmann, B.Sc., M.A. (*Madras*), Ph.D. (*Brit. Col.*), Associate Professor.
- F. David A. Hartwick, B.Eng. (*McGill*), M.A., Ph.D. (*Tor.*), Associate Professor (Astronomy).
- Robert E. Horita, B.A.Sc., M.A.Sc., Ph.D. (*Brit. Col.*), Associate Professor.
- Donald E. Lobb, B.E., M.Sc., Ph.D. (*Sask.*), Associate Professor.
- Grenville R. Mason, B.A.Sc. (*Brit. Col.*), M.Eng. (*McMaster*), Ph.D. (*Alta.*), Associate Professor.
- Charles E. Picciotto, A.B., M.A., Ph.D. (*Calif.*), Associate Professor.
- Harbhajan S. Sandhu, B.A., B.Sc., M.Sc. (*Panjab*), Ph.D. (*Brit. Col.*), Associate Professor.
- Colin D. Scarfe, B.Sc., M.Sc., (*Brit. Col.*), Ph.D. (*Cantab.*), Associate Professor (Astronomy). (On study leave 1978-79.)
- Harry M. Sullivan, B.Sc. (*Queen's*), B.Sc. (*Carleton*), M.Sc. (*McGill*), Ph.D. (*Sask.*), Associate Professor. (On study leave 1978-79.)
- Jeremy B. Tatum, B.Sc. (*Bristol*), Ph.D. (*London*), Associate Professor (Astronomy).
- Arthur Watton, B.Sc. (*Imp. Coll., London*), Ph.D. (*McMaster*), Assistant Professor.
- Chi-Shiang Wu, B.S. (*Nat. Taiwan U.*), M.S., Ph.D. (*West. Res.*), Assistant Professor.
- John Goudy, C.D. and Bar, Administrative Officer.
- Ken Lee, B.Sc. (*U. of Vic.*), Senior Scientific Assistant.
- Donald E. Stenton, B.Sc. (*Brit. Col.-Vic. Coll.*), Senior Laboratory Instructor.
- Norman F. Moody, B.E. (*Sask.*), F.I.E.E., F.R.S.C., Visiting Honorary Professor (1977-79).
- Kenneth O. Wright, B.A., M.A. (*Tor.*), Ph.D. (*Mich.*), D.Sc. (*Copernicus*), F.R.S.C., Honorary Professor.

### PHYSICS GRADUATE PROGRAMMES

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 161; for graduate courses, see page 100.

### ENTRY INTO PHYSICS AND ASTRONOMY UNDERGRADUATE PROGRAMMES

Algebra 12 or Mathematics 12 is required for entry into the Physics and Astronomy undergraduate programmes; Physics 11 and 12 are expected, although students lacking Physics 12 may enter the programmes by registering in the special section of Physics 101, with four lectures per week. Students planning to take the Honours programmes 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 CO-OPERATIVE EDUCATION PROGRAMME

The Co-operative Education Programme in the Faculty of Arts and Science is described on page 28.

The Physics Co-operative Education Programme includes the normal Major or Honours academic programme for the B.Sc., but in addition to the normal course requirements, students enrolled in the Programme are employed by industry or in government laboratories for specific work terms off-campus. This employment is related as closely as possible to the student's course of studies and individual interest.

Students who are enrolled full time in a Physics or Astronomy programme, and who wish to join the Co-operative Programme, must obtain at least a B average and at least a second-class grade in each Physics and Astronomy course taken.

Students must complete successfully three work terms which are interspersed between academic terms, so that graduation can occur at the end of the student's fourth academic year. Year-round operation of the Programme is under way and the required second and third-year courses are being offered in an academic term from May 15 to August 15. Successfully completed work terms will be noted on the student's record and transcript.

Details of the Programme and the method of application are available in the Department.

### Work Term Transcript Entries

Students in the Co-operative Programme will register in one of the following when undertaking a Work Term. When a Work Term is satisfactorily completed, the grade COM will be entered on the student's

academic record and transcript.

- PHYS 001. (0) Co-op Work Term: I  
 PHYS 002. (0) Co-op Work Term: II  
 PHYS 003. (0) Co-op Work Term: III  
 PHYS 004. (0) Co-op Work Term: IV

### PHYSICS UNDERGRADUATE PROGRAMMES

For a B.Sc. degree, students have a choice of four programmes: General, Major, Honours Physics and Honours in Physics and Applied Mathematics. For a B.A. degree, students may choose the General Programme in Physics for one of their fields of concentration.

Year	General and Major	Honours Phys.	Honours in Phys. and Applied Math.
I.	[Phys. 101] or 121 Math 100/101	[Phys. 101] or 121 Math 100/101 Chem. 120 or 124	[Phys. 101] or 121 Math 100/101 Chem. 120 or 124 Math. 110/210*
	[Phys. 211] or 216/217 Phys. 214/215 Math. 200/201	[Phys. 211] or 216/217 Phys. 214/215 Math. 200/201 Math. 110/210*	[Phys. 211] or 216/217 Phys. 214/215 Math. 200/201 Math. 333A/333B*
III.	[Phys. 316/317] Phys. 325, 326 Math. 330A/330B Math. 323A/323B or 325/326	[Phys. 316/317] Phys. 325, 326 Phys. 321A/321B Phys. 413A/41413B Math. 330A/330B Math. 323A/323B or 325/326	[Phys. 316], or 325 Phys. 326 Phys. 321A/321B Phys. 413A/413B Math. 325/326 Math. 334/336 Math.—†, 338
IV.	Phys. 413A/413B Phys. electives	Phys. 410/420 Phys. 423, 421 Phys. 422 Phys. 429 Phys. electives (7½) Phys. 460	[Phys. 325, 317] Phys. 422, 420 Phys. 423, 421 Phys. 460 Phys. electives Math. 445 Math. electives

- Students taking a major or general degree in Physics are strongly advised to take Mathematics 110, and preferably Mathematics 110/210. These two 1½ unit courses are equivalent to the former Mathematics 232.
- Students enrolling in a Physics programme who have had no experience with computer programming should consider taking Computing Science 170 as a first-year elective.
- Astronomy 200 is a recommended elective in the second year.

Students who obtained credit for Physics 121 rather than 101 omit the courses in square brackets.

### Physics 121, 214/215, 216/217 Sequence

Physics 121 is restricted to students who have obtained at least a B standing in B.C. Secondary School Physics 12 and Algebra 12 or Mathematics 12. Physics 121 will normally be followed by Physics 214/215, 216/217 in the second year. Physics 211 and 316/317 will be omitted.

### Physics 101, 211, 214/215, 316/317 Sequence

Physics 101 is intended for students who have credit for B.C. Secondary School Physics 12 but who do not qualify for, or do not wish to take, Physics 121. Students who have credit for Physics 11 but not Physics 12, and who satisfy the Mathematics prerequisites, may take Physics 101 but must register in Section Y01 with four lectures per week. Physics 101 will normally be followed by Physics 211 and 214/215 in the second year and by Physics 316/317 in a subsequent year. Physics 216, 217 will be omitted.

### GENERAL AND MAJOR PROGRAMMES

Specified Physics courses and acceptable electives must comprise at least 9 units of third- and fourth-year courses in the General programme and 15 units in the Major programme. The electives are normally chosen from Physics 321A/321B, 410, 411, 415, 425, 426, 427, 428 and Astronomy courses. Physics 413A/413B may be taken in the third year. Fourth year students are invited to attend Physics 460 (Seminar).

\*Mathematics 110/210 may be deferred to the second year, in which case Mathematics 333A/333B must be deferred to the third or fourth year.

† — 1½ units.

## HONOURS PROGRAMMES

Admission to the third and fourth years of the Honours programmes requires the permission of the Department. Students in the Honours programmes will be expected to maintain at least second class standing. Normally 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 in the Honours programme. 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.

The Honours programmes normally consist of 18 units in each of the third and fourth years, with the exception that if Physics 216/217 are taken in the second year (Physics 316/317 are then omitted in the third year) only 15 units are required in the third year of the Honours Physics programme. In the Honours Physics programme the Physics electives are normally chosen from Physics 411, 415, 424, 425, 426, 427, 428, and Astronomy courses. In the Honours Physics and Applied Mathematics Programme Physics 429 is an additional elective.

## PHYSICS UNDERGRADUATE COURSES

Where *consent of the Department* is specified as a course prerequisite, this consent must be obtained from the Department Chairman or his nominee.

Credit can be obtained for only one of the courses Physics 101, Physics 102 and Physics 103. Physics 101 or Physics 121 with Mathematics 100/101 are the prerequisites for second year Physics courses, although students with Mathematics 100/101 and a Grade B or higher in Physics 102 will also be admitted to second year Physics courses with Departmental consent.

Attention is drawn to Physics 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 Physics 310.

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 101. (3) Elementary Physics

Mechanics, heat, sound, light, electricity and magnetism, and modern physics. This is a basic course in physics for students planning a programme of study in the physical sciences.

Prerequisites: B.C. Secondary School Physics 12; Mathematics 100/101 (may be taken concurrently), or Mathematics 130.

Students who have completed B.C. Secondary School Physics 11 or its equivalent, but who do not have credit for Physics 12, should register in Section 1 with 4 lectures per week. (Students with at least a B standing in both Physics 12 and Algebra 12 or Mathematics 12 may, with the permission of the Department, take Physics 121 instead of Physics 101.)

Texts: Tipler, *Physics*, 1st ed.

R. M. Clements, C. E. Picciotto, A. Watton. (3-3; 3-3)

### PHYS 102. (3) General Physics

This course will meet the minimum requirements in Physics of students in the life sciences. The topics covered are similar to those in Physics 101, but they are treated at the somewhat more elementary level consistent with the prerequisites for this course. Sections 1 and 2, with 4 lectures per week, are 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 Physics 101 rather than Physics 102.

Prerequisite: B.C. Secondary School Physics 11 (except for Sections 1 and 2), or equivalent; Mathematics 102, or 100/101 (or 130) (may be taken concurrently).

Text: To be announced. (3-3; 3-3)

R. E. Horita, G. R. Mason, L. P. Robertson, H. S. Sandhu, C.-S. Wu.

### 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.

Text: Gamo and Cleveland, *Physics Foundations and Frontiers*, 3rd ed.

G. A. Beer, G. B. Friedmann, R. L. Williams (Education). (3-3; 3-3)

### PHYS 121. (3) Mechanics

Vectors, statics, kinematics, relative motion, Lorentz transformation, particle dynamics, momentum, angular momentum, energy, central forces, dynamics of a system of particles, collisions, many-particle systems, heat and temperature, equation of state of an ideal gas, moment of inertia, rigid-body dynamics, relativistic dynamics, high energy collisions, oscillating motion, gravitation

Prerequisites: At least a B standing in B.C. Secondary School Algebra 12 or Mathematics 12 and Physics 12, Mathematics 100/101 (or 130) (may be taken concurrently) and consent of the Department, which may be obtained during registration.

Text: Alonso and Finn, *Fundamental University Physics*, Vol. 1.

H. W. Dosso. (3-3; 3-3)

### PHYS 211. (3) Mechanics

This course is similar in content to Physics 121 but the treatment assumes a background consistent with the listed prerequisites. Laboratories on alternate weeks. Credit cannot be obtained for both Physics 121 and Physics 211.

Prerequisites: Physics 101, Mathematics 200/201 (or 230) (may be taken concurrently) or 231.

Texts: Kleppner and Kolenkow, *Introduction to Mechanics*.

(3-3\*; 3-3\*)

### PHYS 214. (1½) Circuit Analysis and Introductory Electronics

Fundamentals of DC and AC circuits. Properties of vacuum tubes and semiconductor devices. General consideration of vacuum tube and solid state amplifiers. Laboratories on alternate weeks. Not open to students with credit in Physics 212.

Prerequisites: Physics 101 or 121; Mathematics 200/201 (or 230) (may be taken concurrently) or 231.

Texts: Malmstadt-Enke-Grouch, *Electronic Analog Measurements and Transducers, Control of Electrical Quantities in Instrumentation, Digital and Analog Data Conversions*.

R. E. Horita. September-December. (3-3\*)

### PHYS 215. (1½) Waves and Introductory Modern Physics

Wave motion; an introduction to topics in modern physics. Laboratories on alternate weeks. Not open to students with credit in Physics 212.

Prerequisites: Physics 101 or 121; Mathematics 200/201 (or 230) (may be taken concurrently) or 231.

Text: Beiser, *Concepts of Modern Physics*, 2nd ed.

R. M. Clements. January-April. (3-3\*)

### PHYS 216. (1½) Introductory Electricity and Magnetism

Electrostatics; magnetostatics; dielectrics; magnetic materials; steady currents; Faraday's Law of Induction. Laboratories on alternate weeks. Not open to students with credit in Physics 212.

Prerequisites: Physics 101 or 121; Mathematics 200/201 (or 230) (may be taken concurrently) or 231.

Text: Arthur S. Kip, *Fundamentals of Electricity and Magnetism*.

C. E. Picciotto. September-December. (3-3\*)

### PHYS 217. (1½) Introductory Thermodynamics

Introduction to equilibrium thermodynamics, with additional treatment of calorimetry and heat transfer. Laboratories on alternate weeks. Not open to students with credit in Physics 213.

Prerequisites: Physics 101 or 121; Mathematics 200/201 (or 230) (may be taken concurrently) or 231.

Text: Adkins, *Equilibrium Thermodynamics*, 2nd Ed.

W. M. Barss. (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 programmes. Students must obtain the consent of the Department before registering.

### PHYS 310. (3) Physics of the Environment

Physical aspects of the natural environment, the management of energy resources, and the environmental effects of technology. This course is intended for both science and non-science students, and in particular may be taken by Physics and Astronomy students as a free elective outside the prescribed programmes in Physics and Astronomy.

Prerequisites: Credit for 15 units at university level; one of Physics 101, 121 or equivalent, or permission of the Department.

Texts: To be announced.

G. A. Beer. (3-0; 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 Physics 216 or 322.

Prerequisites: Physics 121 or 211; Mathematics 200/201 (or 230) or 231.

Text: To be announced.

H. S. Sandhu.

September-December. (3-3)

**PHYS 317. (1½) Thermodynamics**

The theory and applications of thermodynamics. Not open to students with credit in Physics 213, 217, or 313.

Prerequisites: Physics 121 or 211; Mathematics 200/201 (or 230), or 231.

Texts: Sears and Salinger, *Thermodynamics, Kinetic Theory and Statistical Thermodynamics*, 3rd Ed.

H. S. Sandu.

January-April. (3-3)

**PHYS 321A (formerly one-half of 321). (1½) Classical Mechanics: I**

Topics covered include oscillatory motion, motion under a central force, dynamics of a system of particles, gravitational potential theory.

Prerequisites: Physics 121 or 211; Mathematics 330A (may be taken concurrently), or 303; Mathematics 323A or 325.

Text: Symon, *Mechanics*, 3rd Ed.

F. I. Cooperstock.

September-December. (3-0)

**PHYS 321B (formerly one-half of 321). (1½) Classical Mechanics: II**

Rigid body dynamics, an introduction to analytical mechanics including Lagrange's and Hamilton's equations, theory of small oscillations, special relativity.

Prerequisites: Physics 321A, Mathematics 303 or 330B; Mathematics 323B or 326 (the mathematics courses may be taken concurrently).

Text: Symon, *Mechanics*, 3rd Ed.

F. I. Cooperstock.

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 Physics 313 or 412.

Prerequisites: Physics 121 or 211, Mathematics 200/201 (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 Physics 322.

Prerequisites: Physics 214, Physics 216 or 316; Mathematics 330B; Mathematics 323B or 326 (all the Mathematics courses may be taken concurrently).

Text: To be announced.

January-April. (3-3)

**PHYS 340T. (3) Physics for Science Teachers: I**

This course may be taken for credit in the Faculty of Education (M.Ed. programme) only. Mechanics of particles and rigid bodies, relativity, wave motion, heat, thermodynamics, optics. This course will include laboratory work.

Prerequisites: At least first year university level Physics and Mathematics, Mathematics 300T, or permission of the Department.

Summer Session only. (Not offered 1979.)

**PHYS 410. (1½) Topics in Mathematical Physics: I**

Elementary topics in functions of a complex variable applied to physical problems.

Prerequisites: Physics 121 or 211, Mathematics 303 or 330B; Mathematics 323B, or 326.

Text: Butkov, *Mathematical Physics* (which will also serve for Physics 420), or selected paperbacks, to be announced.

J. P. Elliott.

September-December. (3-0)

**PHYS 411. (1½) Stochastic Processes in Physics**

Random walk and random excitation of linear systems, including power and cross spectral analysis, with applications.

Prerequisites: Physics 326 (or 322); Mathematics 330B, Mathematics 323B or 326.

A. Watton.

September-December. (3-0)

**PHYS 413A (formerly one-half of 413). (1½) Modern Physics: I**

An introduction to quantum mechanics; the hydrogen atom; optical spectra and electronic structures; x-rays; lasers

Prerequisites: Either (i) Physics 215 and either Physics 216 or 316 (the latter may be taken concurrently), or (ii) Physics 212 and either Physics 213 or 313; Mathematics 330A; Mathematics 323A or 325 (the mathematics courses may be taken concurrently).

Text: Semat and Albright, *Introduction to Atomic and Nuclear Physics*, 5th Ed.

September-December. (3-3)

**PHYS 413B (formerly one-half of 413). (1½) Modern Physics: II**

Selected applications of quantum mechanics to molecular physics, statistical mechanics and solid state physics; nuclear physics; fundamental particles.

Prerequisites: Physics 413A; Mathematics 330B; Mathematics 323B or 326 (the mathematics courses may be taken concurrently).

Text: Semat and Albright, *Introduction to Atomic and Nuclear Physics*, 5th Ed.

January-April. (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: Physics 321B; Mathematics 330B; or consent of the Department.

F. I. Cooperstock.

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: Physics 410 or equivalent; Mathematics 110/210 or 232. Primarily for Honours students; other must seek Departmental advice before registering in this course.

Text: Butkov, *Mathematical Physics*, or selected paperbacks to be announced.

J. T. Weaver.

January-April. (3-0)

**PHYS 421. (1½) Statistical Mechanics**

Boltzmann, Bose-Einstein and Fermi-Dirac statistics.

Prerequisites: Physics 217 or 317 (or 213 or 313); Physics 321B; Mathematics 330B; Mathematics 323B or 326.

Text: Reif, *Fundamentals of Statistics and Thermal Physics*.

D. E. Lobb.

January-April. (3-0)

**PHYS 422. (1½) Electromagnetic Theory**

Potential theory, Maxwell's equations, electromagnetic waves.

Prerequisites: Physics 326 (or 322); Mathematics 330B; Mathematics 323B or 326. Primarily for Honours students; others must seek Departmental advice before registering in this course.

Text: Corson and Lorrain, *Electromagnetic Fields and Waves*.

R. M. Clements.

September-December. (3-0)

**PHYS 423. (1½) Quantum Mechanics**

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin.

Prerequisites: Physics 321B and 413B; Mathematics 330A; Mathematics 323A or 326, (the Mathematics courses may be taken concurrently). Primarily for Honours students; others must seek Departmental advice before registering in this course.

Text: McGervey, *Introduction to Modern Physics*.

C.-S. Wu.

September-December. (3-0)

**PHYS 424. (1½) Atomic, Nuclear and Particle Physics**

Time-independent perturbation theory, identical particles, Fermi gas, multi-electron atoms, nuclear models, collision theory. Topics in nuclear, atomic, and particle physics.

Prerequisite: Physics 423.

Text: McGervey, *Introduction to Modern Physics*.

C.-S. Wu.

January-April. (3-0)

**PHYS 425. (1½) Electronics**

Electronic circuit theory with applications.

Prerequisites: Physics 214, Physics 216 or 316 (or 322); Mathematics 330B.

Text: Simpson, *Introductory Electronics for Scientists and Engineers*.

H. M. Sullivan.

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: Physics 217 or 317 (or 213 or 313); Mathematics 330B; Mathematics 323B or 326 (the Mathematics courses may be taken concurrently).

Text: Michelson, *The Science of Fluids*.

J. P. Elliott.

January-April. (3-0)

**PHYS 427. (1½) Geophysics**

Physics of the earth, including atmospheric studies and extra-terrestrial effects. Structure and composition of the earth, elementary seismology, and geomagnetism.

Prerequisites: Physics 326 (or 322) (may be taken concurrently); Mathematics 330B; Mathematics 323B or 326 (the Mathematics courses may be taken concurrently).

Text: Garland, *Introduction to Geophysics*.

R. E. Horita. 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: Physic 326 (or 322); Physics 413A; Mathematics 330B; Mathematics 323B or 326.

Text: Kittell, *Introduction to Solid State Physics*.

A. Watton. January-April. (3-0)

**PHYS 429. (3) Senior Laboratory and Theory of Measurement**

Advanced experiments including student projects. Instruction on experimental techniques and theory of measurement.

Prerequisites: Physics 413B; Physics 421, 422 and 423 (all three may be taken concurrently). Primarily for Honours students; others must seek Departmental advice before registering in this course.

Text: One of: Barford, *Experimental Measurements: Precision, Error and Truth*; Squires, *Practical Physics*; Melissinos, *Experiments in Modern Physics*.

H. M. Sullivan. (0-6; 0-6)

**PHYS 440T. (3) Physics for Science Teachers: II**

This course may be taken for credit in the Faculty of Education (M.Ed. programme) only. Fundamentals of electricity and magnetism, concepts of electric and magnetic fields leading up to Maxwell's equations, basic circuit theory, electronics, modern physics to include topics in atomic, solid state, and nuclear physics. This course will include laboratory work.

Prerequisite: Physics 340T.

Summer Session only. (Not offered 1979.)

**PHYS 460. (0) Physics Seminar**

Talks by students, faculty and outside speakers.

(Grading: COM, N or F.) (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 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 516. (3) Acoustics****PHYS 517. (3) Magnetism****PHYS 518. (3) Plasma Physics****PHYS 519. (3) Selected Topics in Geophysics****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 (Physics 599 or 699) applies to all students in the Department, both Physics and Astronomy.

**ASTRONOMY GRADUATE PROGRAMMES**

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 161; for graduate courses, see page 101.

**ASTRONOMY UNDERGRADUATE PROGRAMMES**

Major and Honours Astronomy programmes are offered for the B.Sc. degree. The first two years of the Major and Honours Astronomy programmes are the same as the corresponding Physics programmes, with the addition of Astronomy 200. It is recommended that students planning a Major in Astronomy take Chemistry 120 or 124. 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 316/317]	Astr 429
Phys 325/326	Astr 460
Phys 413A/413B	[Phys 316/317]
Math 330A/330B	Phys 321A/321B
Math 323, or 325/326	Phys 325/326
	Phys 410/420
	Phys 413A/413B
	Phys 422 or 423
	Phys electives
	Math 330A/330B
	Math 323 or 325/326

Students wishing to enter the third year of the Majors or Honours programme without having completed Astronomy 200 will normally be required to take Astronomy 200 in their third year. Astronomy 303/304 should then be deferred to the fourth year. Students electing to take Astronomy 400 or 402 in the third year may then defer Astronomy 303 to the fourth year. Students who have not obtained credit for Physics 216 and 217 must take Physics 316/317 in their third year.

**MAJOR PROGRAMME**

Third and fourth year students are invited to attend Astronomy 460, Astronomy Seminar.

**HONOURS PROGRAMME**

Admission to the third and fourth years of the Honours programmes requires the permission of the Physics Department. Students in the Honours programmes will be expected to maintain at least second class standing. Normally 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 in the Honours programme. If the 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.

The Honours programme normally consists of 18 units in each of the third and fourth years. This may include Astronomy 200 in the third year if credit has not been obtained for this course in the second year. The electives, chosen in consultation with the Physics Department, are normally selected from Physics 411, 415, 421, 422, 423, 424, 425, 426, 427, 428.

**ASTRONOMY UNDERGRADUATE COURSES**

Attention is drawn to Astronomy 120, 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 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, cosmogony, 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 Astronomy 200 rather than Astronomy 120.

Text: To be announced. (3-3\*;3-3\*)

### ASTR 200. (3) General Astronomy

Astronomical co-ordinate systems, time, the earth-moon system, the solar system, stellar distances, spectral classification, stellar evolution, variable stars, stellar motions, star clusters, interstellar medium, structure and rotation of the galaxy, external galaxies and cosmology.

Prerequisites: Physics 101 or 121, Mathematics 100/102 (Or 130).

Text: Smith and Jacobs, *Introductory Astronomy and Astrophysics*.

J. L. Climenhaga. (3-3; 3-3)

### ASTR 303. (1½) Introductory Extragalactic Astronomy

The distance scale, properties of galaxies, observational cosmology.

Prerequisites: Astronomy 200, Physics 215, Physics 216 or 316 (may be taken concurrently), Mathematics 303 or 330A, Mathematics 323A, or 325/326 (the Mathematics courses may be taken concurrently). Physics 217 (or 317) is desirable.

Not open to students with credit in Astronomy 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: Astronomy 200, Physics 215, Physics 216 or 316, Physics 217 or 317 (may be taken concurrently). Mathematics 303 or 330B; Mathematics 323B, or 326 (the Mathematics courses may be taken concurrently).

Not open to students with credit in Astronomy 301 or 401.

Text: To be announced. 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: Astronomy 200 or the consent of the Department, Physics 326 (or 322), 413B (may be taken concurrently), Mathematics 303 or 330B; Mathematics 323B, or 326.

Text (Optional): Steinberg and Lequeux, *Radio Astronomy* (translated by Bracewell).

(Offered 1978-79; will not be offered 1979-80.) 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 Astronomy 300 in 1974 or earlier.

Prerequisites: Astronomy 200 or the consent of the Department; Physics 321A/321B (may be taken concurrently); Mathematics 303 or 330B; Mathematics 323B or 326 (the Mathematics courses may be taken concurrently).

Text: Mihalas and Routley, *Galactic Astronomy*.

J. B. Tatum. January-April. (3-0)

(Not offered 1978-79; intend to offer 1979-80.)

### ASTR 403. (1½) Introduction to Astrophysics: I

The observational data of astrophysics; stellar atmospheres and the production of stellar spectra.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 213, or 313, or 217 and 325B or 317 and 325, Physics 413A (may be taken concurrently), Mathematics 303 or 330B; Mathematics 323B or 326.

Text: Unsöld, *The New Cosmos*. September-December. (3-0)

### ASTR 404. (1½) Introduction to Astrophysics: II

The structure and evolution of the stars: interstellar matter; high energy astrophysics.

Prerequisite: Astronomy 403 or consent of the Department; Physics 413B (may be taken concurrently).

Text: Rose, *Astrophysics*. January-April. (3-0)

### ASTR 429. (3) Observational Astronomy

Observational and practical work, directed reading. Normally open to Honours students only. Others by consent of the Department.

No text required.

J. B. Tatum. (0-6; 0-6)

### ASTR 460. (0) Astronomy Seminar

Talks by students, faculty and outside speakers.

(Grading: COM, N or F.) (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 (Physics 599 or 699) applies to all students in the Department, both Physics and Astronomy.

## DEPARTMENT OF POLITICAL SCIENCE

Walter D. Young, B.A. *Brit. Col.*, B.A., M.A. (*Oxon.*), Ph.D. (*Tor.*), Professor and Chairman of the Department.

Anthony H. Birch, B.Sc. (*Econ.*), Ph.D. (*London*), Professor.

Neil A. Swainson, B.A., B.Ed., M.A. (*Brit. Col.*), Ph.D. (*Stanford*), 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.

Mark H. Sproule-Jones, B.Sc. (*Econ.*), (*London*), M.A., Ph.D. (*Indiana*), Associate Professor.

Howard L. Biddulph, B.S. (*Brigham Young*), M.A., Ph.D. (*Indiana*), Assistant Professor.

Martin Levin, B.A., M.A. (*Man.*), Ph.D. (*Cornell*), Assistant Professor.

Norman J. Ruff., B.Sc. (*Econ.*), (*Southampton*), M.A. (*McMaster*), Ph.D. (*McGill*), Assistant Professor.

J. Terence Morley, B.A. (*Dalhousie*), Lecturer.

R. Jeremy Wilson, B.A., M.A. (*Alta.*), Lecturer.

David B. Dewitt, B.A. (*Brit. Col.*), M.A., Ph.D. (*Stanford*), Part-time Sessional Lecturer (September-December 1977).

Gerald L. Kristianson, B.A. (*Brit. Col.*), Ph.D. (*Australian Nat. U.*), Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 162; for graduate courses, see page 104.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

The Department of Political Science offers General, Major and Honours programmes leading to the B.A. and an M.A. graduate programme. Third and Fourth Year students not enrolled in the general, major or honours programmes 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 programme 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 programme 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 with a minimum of 3 units from each of at least three of the Groups I-VI.

Honours — The Honours programme in Political Science is open to third year students who have a 'B' average in 6 units of Political Science courses numbered at the 100 or 200 level. An overall 'B' average is required to continue the programme in the Fourth Year. Students seeking admission to this programme should apply to the Department by August 1.

The Honours programme requires completion of 24 units of Political Science courses numbered at the 300 and 400 level with a minimum of 3 units from each of at least three of the Groups I-VI. The 24 units must include Poli. 337 and Poli. 499.

All Honours students are required to attend and participate in the Departmental Seminar and Fourth Year Honours students must successfully complete a programme of directed research and a graduating essay (Poli. 499).

The class of an Honours degree in Political Science is determined by a student's overall average in the 24 units of Political Science required at the 300 and 400 level and the grade obtained in Poli. 499. A First Class Honours requires a first class graduating average (a GPA of at least 6.50) and an overall first class average of 6.50 in 24 upper division units of Political Science with a letter grade of at least "A—" in Poli. 499. Where an Honours student does not meet the requirements for a First Class Honours but has a first class graduating average, the Department will recommend that the student be given the option of graduation with Second Class Honours or a Major with Distinction. A Second Class Honours requires a second class graduating average (a GPA of at least 3.50) and an overall second class graduating average of at least 4.50 in 24 upper division units of Political Science with a letter grade of at least "B" in Poli. 499.

Students should note the availability of Liberal Arts 305 as an elective in their senior years. Students considering graduate work in Political Science are *strongly* advised to take Poli. 300 and 337, and some course work in statistical methods. Major and Honours students are urged to consult a faculty member in the Department prior to the planning of the Third and Fourth Year's programmes.

## DEPARTMENT OF POLITICAL SCIENCE — UNDERGRADUATE COURSE INDEX

### First and Second Year

100 (3)

201 (1½) 210 (1½) 220 (1½) 230 (1½) 240 (1½) 250 (1½) 260 (1½)

### Third and Fourth Year

I	II	III	IV	V	VI	VII
<i>Political Theory</i>	<i>Comparative Government</i>	<i>Contemporary Political Analysis</i>	<i>International Relations and Policy Analysis</i>	<i>Public Administration and Policy Analysis</i>	<i>Canadian Government and Politics</i>	<i>Honours</i>
300 (3)	311 (3)	330 (1½)	340 (3)	325 (1½)	320 (3)	490 (1½ or 3)
400 (3)	312 (3)	331 (1½)	342 (1½)	350 (3)	360 (1½)	499 (3)
407 (3)	313 (3)	337 (3)	343 (1½)	450 (3)	361 (1½)	
408 (1½)	314 (3)	430 (1½)	445 (3)	456 (3)	362 (1½)	
409 (1½)	315 (1½)		446 (1½)		465 (3)	
	317 (3)				466 (1½)	
	417 (1½)					

### PROGRAMME 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. These must include 3 units in each of at least 3 of the Groups I-VI.	337, 499 and additional units to a total of 24 at the 300 or 400 level. These must include 3 units in each of at least 3 of the Groups I-VI.

## UNDERGRADUATE COURSES

*For a list identifying which of these courses will be offered in 1978-79; in the case of one and one-half unit courses, the term in which they will be offered; and the names of course instructors; prospective students are referred to the Department of Political Science Guidebook to be published in May, 1978. Copies will be available at the Department of Political Science office, at the Records Office, 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 Political Science 216 or 318 or 410 in previous years may not enrol in this course for credit.

(3-0; 3-0)

### POLI 201. (1½) Political Ideologies

An introduction to the study of politics through an examination of the major twentieth century political doctrines and ideologies. Emphasis will be given to those which are most relevant to Canadian political life: nationalism, conservatism, liberalism and socialism. Some attention will be paid to problems raised by indoctrination and ideological thinking.

(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., USA, UK, USSR.

(3-0)

### POLI 220. (1½) Law and Politics

An introduction to the study of the role of law in the political process. 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. The relationship between the judiciary and other parts of the political system. The problems of order and legal change will be discussed with illustrations drawn from criminal and constitutional law. Emphasis will be placed on legislation and delegation as instruments of legal change and social reform. There will be one written assignment and one formal examination at the end of the term.

(3-0)

### POLI 230. (1½) Political Behaviour

An introduction to the contemporary analysis of politics. Topics will include elections, parties, groups, bureaucracies, public enterprise, and legislatures. Topics will emphasize federal, British Columbia provincial and local government experience.

(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) Urban Governments and Politics

An introduction to the structure, process and policies of local governments, with emphasis on British Columbia. Topics will include an examination of the legal and administrative structures of municipal governments, regional districts, special districts and improvement districts; the relationships between local governments and with the Provincial and Federal Governments; local finance; electoral and legislative politics at the local level; and the interrelationships between local governments and urban social processes.

(3-0)

## GROUP I — POLITICAL THEORY

### POLI 300. (3) Traditional Political Thought

An examination of "classic" writings and persistent themes in the history of western political thought. Emphasis will be placed upon the development of normative political theory through the work of certain key figures, such as Plato, Hobbes, Rousseau and Marx.

(3-0; 3-0)

### POLI 400. (3) Nineteenth Century Political Thought

A close study of nineteenth century social and political thought, both as a

basis for understanding contemporary ideologies and as a source of explanatory political ideas. The centre of gravity will be the thought of Hegel, Marx, J. S. Mill and T. H. Green. The major doctrines — conservatism, utilitarianism, positivism, liberalism, socialism, nationalism, social Darwinism and anarchism — will also be discussed.

**POLI 407. (3) Contemporary Political Thought**

An examination of some of the major twentieth century contributions to the development of normative political theory. Some of the material to be discussed is outside the confines of traditional political discourse and reflects the fragmented nature of contemporary political thought. Emphasis will be placed more upon the theoretical and philosophical than upon the doctrinal and ideological modes of political thought. Most of it, no matter how analytical, is primarily evaluational and the expression of a commitment.

(3-0; 3-0)

**POLI 408. (1½) Communist Political Thought: I**

An analysis of the contributions to political thought of Marx, Engels, and the "Lenin tradition" of Marxism: Lenin, Trotsky, Bukharin, Lukacs, Gramsci, and others. Analytic emphasis will be given to the critique of society, the justification of revolutionary change, and conception of political man contained in the "classics" of communist thought.

Prerequisite: It is strongly recommended that students take at least one of the following prior to enrolling in this course: Political Science 201, 300 or 400.

(3-0)

**POLI 409. (1½) Communist Political Thought: II**

An examination of the major contributions to political thought of contemporary thinkers in the Communist world. The fragmentation of political values and the decline of utopian ideas among thinkers in Yugoslavia, Poland, Czechoslovakia, Hungary and the U.S.S.R. will be examined.

Restricted to students in Third Year or above.

(Not offered 1978-79.)

(3-0)

**GROUP II — COMPARATIVE GOVERNMENT**

**POLI 311. (3) Western European Governments and Politics**

A comparative analysis of the political culture, political behaviour, parties and interest groups, governmental institutions and policy-making processes of Western European democracies. Primary emphasis will be given France, the German Federal Republic, Italy and the United Kingdom.

(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.

(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 federal framework.

Not open to students who have credit in Political Science 310.

(3-0; 3-0)

**POLI 314. (3) British Government and Politics**

An analysis of the politics and institutions of government in the United Kingdom. Areas of study will include such topics as: the development of the parliamentary system; the monarchy, prime minister and cabinet; the public service; parliament, the electoral system, voting behaviour and political parties.

Not open to students who have credit in Political Science 310.

(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 317 (formerly 411). (3) Politics of Developing Nations**

An examination of the current political development and the political processes in developing countries, with emphasis on Asia and Latin America. The course is organized on a seminar basis; each participant is required to prepare a research report on a topic chosen in consultation with the instructor.

(Not offered 1978-79.)

(3-0; 3-0)

**POLI 417. (1½) Government and Politics in Sub-Saharan Africa**

An introduction to the politics of the African nation-states south of the Sahara. Particular attention is devoted to the comparative facets of governments, political ideologies, modernization, aid and trade, and Canadian involvement.

(3-0)

**GROUP III — CONTEMPORARY POLITICAL ANALYSIS**

**POLI 330. (1½) Public Opinion and Electoral Behaviour**

The course is designed to give the student a close familiarity with the key theoretical and research studies on (a) the factors underlying the formation of individual political opinions and the making of electoral decisions; (b) the formation and effectiveness of party and candidate strategy for electoral purposes; and (c) the relation of elections to the political system. Emphasis will be given to B.C. data based studies, and a research project on some aspect of B.C. public opinion and electoral behaviour will be part of the course obligations.

(3-0)

**POLI 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)

**POLI 337. (3) The Scope and Methods of Political Science**

The purpose of the course is twofold: (a) to acquaint the student with the activities of modern political scientists, in particular their attempts to devise empirical theories of politics, and the problems they face in undertaking any empirical research project; and (b) to afford the student an opportunity to conceptualize and experiment with a political problem area of interest to himself. Course obligations include one examination at Christmas time, and one paper due at the end of the Spring Term. (Not recommended as a general elective; recommended for Honours students in their third academic year.)

(3-0; 3-0)

**POLI 430. (1½) Mass Media and Politics**

An examination of communication and the dissemination of information in the Canadian political system. The course will cover both historical and contemporary questions and deal with the work of such scholars as Wallas, Innis, and McLuhan.

(3-0)

**GROUP IV — INTERNATIONAL RELATIONS**

**POLI 340. (3) International Studies**

Seminar in the theory and practice of relations among 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.

(3-0; 3-0)

**POLI 342. (1½) International Law**

An introductory seminar in the principles and practices of international law. Focus will be both historical and contemporary, and the emphasis will be in the political implications of international law.

(May not be offered 1978-79.)

(3-0)

**POLI 343. (1½) International Organization**

An introductory seminar in the theory and development of international organizations. Primary attention will be devoted to the League of Nations and the United Nations; however, regional and subordinate intergovernmental organizations will be examined.

(3-0)

**POLI 445. (3) Comparative Foreign Policy**

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; 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.

Each student, in addition to gaining a general appreciation of Canada's international position, will be expected to research some particular aspect or relationship of Canadian foreign relations.

(3-0)

**GROUP V — PUBLIC ADMINISTRATION****POLI 325. (1½) Law and Public Policy**

This course continues the examination of the role of law in the political process begun in Political Science 220. The course will examine in greater depth the part played by the judiciary in the control of power exercised by other participants in a political system. There will be an examination of legal philosophy and its impact on policy formation in the modern state. In particular, the nature and definition of justice will be examined and its importance in modern society. There will be an examination of law and morals and the limits of effective legal action.

(3-0)

**POLI 350. (1) Public Administration**

An introduction to the evolution of the administration process in the English-speaking world; approaches to bureaucracy; the theory and practice of administrative decision-making; a review of substantive issues in budgeting, organizational structure, personnel administration; administrative power and responsibility. Two essays plus fortnightly colloquium sessions.

(3-0; 3-0)

**POLI 450 (formerly 454/455). (3) An Introduction to Local, Regional and Metropolitan Government and Politics**

A seminar dealing with such topics as: the theory of local government; its emergence in England, Continental Europe, the United States, and Canada; variable approaches to legislative, executive and administrative processes at the local level; politics of local government finance; power, politics and policy response in some representative local jurisdictions; the uniqueness and the complexity of governing metropolitan areas; formal and informal approaches to integrating governmental action in metropolis; the politics of governmental reform; metropolis and 'superior' level governments.

(3-0; 3-0)

**POLI 456 (formerly 435). (3) Political Institutions and Urban and Environmental Policies**

This course will focus on the effects of politics and the design of political and administrative arrangements on the provision of urban and environmental policies in British Columbia (in particular). It will also provide an introduction to public policy evaluation in general through the application of key concepts of political economy, such as those of efficiency, effectiveness and responsiveness to the public sector.

(3-0; 3-0)

**GROUP VI — CANADIAN GOVERNMENT AND POLITICS****POLI 320. (3) Constitutional Law**

An introduction to the basic problems of Canadian constitutional law; federalism; constitutional amendment; distribution of authority; judicial review; the protection of civil liberties; and related problems. The primary method of grading will be by written examinations at the end of the first and second terms. It is strongly recommended that students take Political Science 100 or have credit for Political Science 216, before taking this course.

(3-0; 3-0)

**POLI 360 (formerly 316/419). (1½ formerly 3) Canadian Federalism**

This course is intended to provide an understanding of the policy processes of Canadian federalism and the nature of current public outcomes with special attention to their implications for British Columbia and the other Western Provinces. The course will review interpretations of the cultural and political bases of the federal system, and the structures and dynamics of the conduct of intergovernmental relations. Areas of public policy to be analyzed in some depth from a federal-provincial perspective will include such topics as Continentalism and Resource Development; Oil and Energy Policy; Western Regional Economic Growth; Communications; Post-Secondary Education; Urban and Environmental Policies; Human Resources; Social Services and Anti-Poverty Programmes; and Federal Provincial Financial Arrangements.

(3-0)

**POLI 361 (formerly 332). (1½) Interest Groups and Parties in Canada**

A survey of the major theoretical studies of political parties, interest groups and theories of representation in the Canadian context. Particular attention will be paid to the development, structure and activity of Canadian political 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 (formerly 415). (3 formerly 1½) British Columbia Government and Politics**

This course examines the primary features of the political process and political institutions in British Columbia seen in the context of the political and economic development of the province. The course will examine the socio-economic bases of the political system, the nature of major political cleavages and their manifestation in the provincial and federal dimensions of B.C. political life and public policy. Attention will be given to their influences on the development of the provincial party system and party organization, the growth of provincial parliamentary institutions, cabinet government and the provincial bureaucracy, and the interactions between the political executive and the Legislative Assembly.

(3-0; 3-0)

**POLI 466 (formerly 416/418) (1½) Issues in Canadian Politics**

An analysis of selected issues in the Canadian political process with a primary focus on the formulation of public policy and party politics at the federal or provincial level.

(3-0)

**GROUP VII — HONOURS****POLI 490 (formerly 480). (1½) 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 (formerly 490). (3) Directed Research and Graduation Essay**

Individual direction for fourth-year Honours Students only.

**GRADUATE COURSES**

Students should consult the Department to determine the graduate courses offered in any particular term.

**POLI 500. (1½ or r 3) Seminar in Political Theory****POLI 505. (1½) M.A. Seminar: Contemporary Political Analysis****POLI 511. (1½ or 3) Seminar in Political Behaviour****POLI 512. (1½ or 3) Seminar in Communist Political Development****POLI 516. (1½ or 3) Seminar in Canadian Politics****POLI 517. (1½ or 3) Seminar in African Politics****POLI 520. (1½ or 3) Seminar in Canadian Constitutional Problems****POLI 535. (1½ or 3) Seminar in Public Choice****POLI 540. (1½ or 3) Seminar in International Relations****POLI 550. (1½ or 3) Seminar in the Administrative Process****POLI 580. (6) Legislative Internship****POLI 585. (1½) M.A. Seminar: Selected Political Problems****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. (3) Thesis****DEPARTMENT OF PSYCHOLOGY**

Gordon N. Hobson, B.A., M.A., Ph.D. (*Alta.*), Professor and Chairman of the Department.

Alex Bavelas, B.S. (*Springfield*), M.A. (*Iowa*), Ph.D. (*M.I.T.*), Professor.

Horace D. Beach, B.S.A., B.A. (*Sask.*), M.A. (*Oxon.*), Ph.D. (*McGill*), Professor.

- Louis D. Costa, A.B. (*New York*), M.A., Ph.D. (*Teachers Coll., N.Y.*), Professor.  
 G. Alexander Milton, B.A. (*W. Wash.*), M.S. (*Ore.*), Ph.D. (*Stanford*), Professor.  
 J. Douglas Noll, B.S. (*Ill.*), M.A., Ph.D. (*Iowa*), Visiting Professor (July-December 1978).  
 Otfried Spreen, B.A. (*Bonn*), Dipl.-Psych., Ph.D. (*Freiburg*), Professor.  
 Janet B. Bavelas, A.B., M.A., Ph.D. (*Stanford*), Associate Professor.  
 Ronald A. Hoppe, A.B. (*Mich.*), M.A., Ph.D. (*Mich. St. U.*), Associate Professor.  
 Richard B. May, B.A. (*Whitman*), M.A., Ph.D. (*Claremont*), Associate Professor and Assistant Chairman of the Department.  
 Charles W. Tolman, B.S., M.S., Ph.D. (*Wash.*), Associate Professor.  
 R. Leslie D. Wright, B.A., M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Associate Professor.  
 Loren E. Acker, A.A., B.A., M.A., Ph.D. (*Calif., Los Angeles*), Assistant Professor.  
 J. K. Adamowicz, B.A., M.Sc. (*Calgary*), Ph.D. (*W. Ont.*), Assistant Professor.  
 Pam Duncan, B.A. (*Wis. St.*), M.A. (*Chicago*), Ph.D. (*Wis.*), Assistant Professor.  
 Bram C. Goldwater, B.A. (*McGill*), M.A. (*Cornell*), Ph.D. (*Bowling Green*), Assistant Professor.  
 Clare K. Porac, B.A. (*Duquesne*), M.A., Ph.D. (*New School for Social Research*), Assistant Professor.  
 Lorne K. Rosenblood, B.S. (*Case West. Res.*), M.A., Ph.D. (*Ohio*), Assistant Professor.  
 Frank J. Spellacy, B.A. (*W. Wash.*), M.Sc. (*Ore.*), Ph.D. (*U. of Vic.*), Assistant Professor.  
 Fouad A. Hamdi, M.D. (*Alexandria*), Ph.D. (*Edin.*), Honorary Professor.  
 D. Walter Ayers, B.A., M.A. (*Alta.*), Sessional Lecturer, Correctional Education Programme (1977-78).  
 Beverley J. Riddell, B.Sc. (*Alta.*), M.Sc., Ph.D. (*Calgary*), Sessional Lecturer (1977-78).  
 Roderick A. Borrie, B.Sc. (*Denison*), M.A. (*Temple*), Part-time Sessional Lecturer, Correctional Education Programme (Aug.-Dec., 1977).  
 Lawrence E. Dettweiler, B.A. (*Calif., Berkeley*), Ph.D. (*Minn.*), Part-time Sessional Lecturer (1977-78).  
 Jacqueline M. Nelson-Seens, B.Sc. (*Iowa*), M.Sc. (*U. of Vic.*), Part-time Sessional Lecturer, Correctional Education Programme (Dec. 1977-Mar. 1978).  
 Alison Schwartzentruber, B.A. (*Brit. Col.*), M.A. (*Delhi*), Ph.D. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMMES

For information on studies leading to the M.A., M.Sc., Ph.D. degrees, see page 162; for graduate courses, see page 108.

## GENERAL, MAJOR AND HONOURS PROGRAMMES

Several undergraduate programmes are offered by the Department of Psychology. The concentration in the General programme is designed to provide flexibility and a general background for students planning to enter other fields such as social work or journalism. The Honours programme is recommended for students planning graduate work in scientific or professional psychology. The Major programme 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 programme 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 programme leading to the B.Sc. degree (e.g. 6 units of Mathematics plus 6 units of Biology would satisfy this requirement).

General — Psychology 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 — Psychology 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. Major students must take Psychology 300 plus a minimum of 12 units numbered above 300.

Honours — Students seeking an honours degree in Psychology must apply to the Honours Advisor of the Department before the start of their fourth year. All interested students should seek the advice of the Advisor 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 programme requires a minimum 5.50 grade point average in all psychology courses and a grade point average of 3.50 in non-psychology courses. Psychology 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. Psychology 300, 301, 499 and either 400 or 401 are required, plus an additional 9 units numbered above 300. At least three units must be chosen from each group (A and B).

A	B
Psychology 311 Learning, and either 312 or 313	Psychology 330 Personality
Psychology 411 Perception	Psychology 331 Social Psychology
Psychology 414 Motivation	Psychology 335 Developmental Psychology
Psychology 415 Human Neuropsychology	Psychology 402 Experimental Social Psychology
Psychology 423 Physiological Psychology	Psychology 430 Abnormal Psychology
Psychology 424 Psychophysiology	Psychology 339 Psychology of Aging

To graduate with an Honours degree, a student must have obtained a minimum 3.50 grade point average for all work completed outside the department, and a minimum 5.50 grade point average in Psychology courses numbered 300 and above. The class of Honours (1st or 2nd) will be determined by the student's grade point average obtained in Psychology courses numbered 300 and above. Students with an average of 6.50 or higher will receive a first-class Honours degree; those with an average of 5.50 to 6.49 will receive a second-class Honours degree. A student in the Honours programme whose grade point average in Psychology courses numbered 300 and above is 5.49 or lower will be graduated in the Major programme. An Honours student who qualifies for a Second Class Honours degree but whose graduating grade point average is First Class, will be given the choice of graduating with a Second Class Honours degree or a First Class Major degree.

## 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 first year mathematics course or recent completion of Mathematics 12 or its equivalent is prerequisite for Psychology 300. Students who plan to take Psychology 230, 315, 415, 423, or 424 are encouraged to take Biology 150 and Biology 207 and 305 are recommended. A second-year Psychology course is recommended but not required in the second year. *Students may receive credit for no more than two second-year Psychology courses.* Members of the department will be pleased to recommend other courses to fit individual programmes.

### 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; Psychology 311, 330, 331, 335, 415, 430 or 432, 450, plus courses in philosophy and social sciences.

Students planning careers in business and industry, civil service, government, personnel work: Psychology 311, 330, 331, 334, 401, 414, 432, plus courses in economics, political science, geography, mathematics.

Students planning to pursue advanced degrees in Psychology, but not enrolling in Honours: Psychology 300, 301, 311, 400 or 401, and at least one course from each group (A and B) listed above in the description of the honours programme.

NOTE: The Bachelors degree in Psychology is intended primarily to prepared the student for further advanced study in Psychology or related fields (Education, Social Welfare, etc.), and in no way implies 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 Psychology 390 and Psychology 490. Other course numbers are not offered as individual studies or directed readings at any time. During intersession and Summer Session, Psychology 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**

## NOTES:

1. Psychology 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 Psychology 100 prerequisite to all except first year students, although it is recommended that the student first take Psychology 100 whenever possible. Students are cautioned that enrolment in a second year Psychology course without Psychology 100 could mean that they will be required to take Psychology 100 at a later date in order to qualify for admission to a course at the 300 or 400 level.
2. Students may receive credit for no more than two second-year Psychology courses.
3. Students who have completed Psychology 100 may enroll in one course numbered 300 and above in their second year, but may take a total of no more than six units of Psychology courses at this time.

**PSYC 100. (3) General Psychology**

A survey of the history and current status of selected problems in psychology including motivation, learning, perception, brain processes, psychological testing, and applied psychology. Regular laboratory periods, involving demonstrations and student experiments, will be held throughout the year to introduce the student to basic methodological principles in relation to the various lecture topics.

Members of the Department. (3-1; 3-1)

**\*PSYC 200. (3) Introduction to Experimental Psychology**

A study of empirical approaches to the understanding of human behaviour and methods of its control. Topics in learning, perception and motivation will be explored, with an examination of psychological theories of the processes underlying these phenomena, experimental findings, and applications outside the laboratory. Related methodological techniques will be integrated with these topics throughout the course.

Prerequisite: Psychology 100 or at least second-year standing. (3-1; 3-1)

**\*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: Psychology 100 or at least second-year standing. (3-0; 3-0)

**\*PSYC 230. (3) Introduction to Psychobiology**

A study of empirical approaches to the understanding of the relationships between biological functions and of behaviour. Topics will include the study of the brain mechanisms underlying human and animal behaviour, psychological effects of brain damage and such contemporary problems as drug and behaviour, behaviour genetics, physiological correlates of emotion, sleep and dreaming, and the treatment of behaviour disorders. An attempt will be made to integrate many of these topics within the context of the physiology of memory. Related methodological techniques will be integrated with these topics throughout the course.

Prerequisite: Psychology 100 or at least second-year standing. F. J. Spellacy. (3-0; 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: Psychology 100 or at least second-year standing. L. Rosenblood. (3-1; 3-1)

**\*PSYC 250. (3) Introduction to Applied Psychology**

The course covers aspects of social psychology, abnormal psychology, personality, environmental psychology, industrial and personnel psychology as pertinent to the study of social welfare, social work, child welfare, public administration and law.

Prerequisite: Psychology 100 or at least second-year standing. (3-0; 3-0)

**PSYC 300. (3) Research Methods in Psychology**

Intensive development of statistical reasoning and methodology in the

application of research procedures to various areas of psychology. Emphasis upon meaningful actual usage of such techniques in the planning, conduct, analysis, interpretation, and reporting of empirical research by the class and individual students. Potential Honours students are encouraged to enrol in Psychology 300 in their second year.

Prerequisite: Mathematics 12 or equivalent or permission of the instructor. Mathematics 151 is recommended, especially for students who plan to continue on to Psychology 400 or 401 after completing Psychology 300.

C. K. Porac, C. W. Tolman, R. L. D. Wright. (3-1; 3-1)

**PSYC 301 (3) Philosophical and 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 topics in the philosophy of science, theoretical models in modern psychology, controversial issues, and a comparison of different approaches to the study of human behaviour.

C. W. Tolman. (3-0; 3-0)

**PSYC 311. (1½) Basic Topics in Conditioning and Learning**

An introduction to the basic concepts, principles, and phenomena of the learning process. Topics covered will include the distinction between classical and instrumental conditioning, the nature and role of reinforcement. Some attention will be given to a review of theoretical positions and applications of learning principles outside the laboratory. Students may take both Psychology 312 and 313 but Psychology 311 is prerequisite for both of these more advanced courses.

Section 1: B. C. Goldwater.

Section 2: R. B. May. September-December. (3-0)

**PSYC 312 (formerly part of 311). (1½) Advanced Topics in Conditioning and Learning**

A more advanced and in-depth treatment of topics introduced in Psychology 311. Areas covered will include schedules of reinforcement, stimulus generalization, aversive control and conditioned reinforcement. Emphasis will be placed upon both animal research and applications to human behaviour. Laboratory and/or take-home assignments will be given.

Prerequisite: Psychology 311 (1½ units).

B. C. Goldwater. January-April. (3-1)

**PSYC 313. (1½) Concept Learning and Memory**

An introduction to cognitive processes related to learning. Consideration will be given to man as an information processor and how he selects, stores, and retrieves information about his environment. Emphasis will be placed upon the role of stimulus attributes and strategies of the learner in discrimination and concept learning, as well as recall and recognition memory. Some implications for applied situations will be discussed. Group and/or individual laboratory projects will be assigned.

Prerequisite: Psychology 311 (1½ units).

R. B. May. January-April. (3-1)

**PSYC 315. (3) Introduction to Neuropsychology**

An introduction to neuroanatomy, neurophysiology and clinical neurology as related to human and animal brain function and behaviour. Integrates psychological and neuroanatomical/physiological aspects in sequence of areas of the human brain and includes discussion of research antibodyology.

Should be taken as a prerequisite to Psychology 415.

Prerequisite: Psychology 230 is strongly recommended.

L. D. Costa. (2-2; 2-2)

**PSYC 330. (3) 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. Several exams; one or two term projects. (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. Each student prepares one paper each term.

R. A. Hoppe. (3-0; 3-0)

**PSYC 334. (3) Industrial Psychology**

An exploration of various applications of psychology to organizational behaviour and personnel selection with special emphasis on industry. Typical subjects for discussion: work environment, reward structures, training and counselling, problems of change and transition, advertising and marketing,

human engineering, administrative process, organizational communications. Basis for grades: Objective exams on independent readings, short essay quizzes based on lectures, group projects.

A. Bavelas. (3-1; 3-1)

**PSYC 335. (3) Developmental Psychology**

Psychological development; determiners of psychological growth; motor, emotional, social, intellectual, language and personality development. Implications for the guidance of psychological development are indicated. (Faculty of Education does not recognize this course for credit for Education students.)

NOTE: Some sections of this course may substitute laboratory time for lecture time. Laboratory times will be announced during the term.

L. Acker, P. Duncan, G. A. Milton. (3-0; 3-0)

**PSYC 339. (1½) Psychology of Aging**

Examination of psychological processes associated with old age. Topics to include physiological concomitants of the aging process, cognitive functioning, personality change, sexual functioning, work and leisure, sources of stress, psychopathology, and death and dying.

Prerequisite: Psychology 100 and at least third year standing.

J. Adamowicz. (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 man-made habitat; (d) ecological psychology and man as part of an ecological system.

Prerequisite: Psychology 100 or registration in Environmental Studies programme.

A. Bavelas. (3-1; 3-1)

**PSYC 370 (LING 370). (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, language acquisition, experimental psycholinguistics, the relationship of language and cognition, language and socio-cultural factors, semantics, bilingualism, non-verbal communication, and the pathology of linguistic behaviour.

Prerequisites: Linguistics 100 and Psychology 100 or permission of the Department.

(Not offered 1978-79.) (3-0; 3-0)

**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 Psychology 390 and 490 together must not exceed six units unless permission of the Chairman of the Department is obtained.

Members of the Department.

**PSYC 400. (3) Advanced Methods**

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 use of the analysis of variance. The first half of the course will emphasize the relative merits of various designs involving multiple independent variables. The second half of the course will emphasize designs involving multiple dependent variables (regression analysis, factor analysis, multivariate analysis of variance). The general orientation throughout the course will be towards problems of application.

Prerequisite: Psychology 300 or equivalent.

L. Rosenblood. (2-2; 2-2)

**PSYC 401. (3) Psychometrics**

The application of quantitative methods to problems in applied psychology. Topics to be covered include the measurement of individual differences, scaling, correlational analysis, test construction, and research issues in psychological assessment. Individual research projects may be conducted. A formal written report of the student's completed research project is required.

Prerequisite: Psychology 300 or equivalent. (3-1; 3-1)

**PSYC 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: psycho-physics, sensory

physiology, information processing, visual distortion and cognitive involvement in human perception. This is a research oriented course and data collection is emphasized.

C. P. Porac. (2-2; 2-2)

**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.

Prerequisite: Psychology 311 (with instructor's approval, may be taken concurrently).

G. N. Hobson. (3-0; 3-0)

**PSYC 415. (3) Human Neuropsychology**

The study of brain-behaviour relationships with emphasis on clinical aspects. The course assumes basic knowledge acquired in Psyc. 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. Questions of assessment of psychological impairment, reaction to brain damage and rehabilitation will be considered. Demonstrations of selected patients with cerebral lesions at the Royal Jubilee Hospital and group instruction in neuropsychological testing will be arranged during the second term. One term paper is required.

Prerequisite: Psychology 315 or permission of Instructor. Restricted to fourth-year students in 1978-79.

O. Spreen. (2-2; 2-2)

**PSYC 423. (1½, formerly 3) Advanced Topics in Physiological Psychology**

Topics will include the physiology of the sensory systems, memory, and attention, with special emphasis upon the relationship between brain processes and experience.

Prerequisite: Psychology 230 or Biology 150. (3-0)

**PSYC 424. (formerly one-half of 423). (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.

Prerequisite: Psychology 230 or Biology 150 is recommended, but not required.

B. C. Goldwater. (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. Emphases are on both the behavioural and humanistic approaches to problems in abnormal psychology. Tentative structure of the course includes one formal term paper. This course is intended for Psychology Majors and Honours. Credit will not be given for both Psychology 430 and 432.

L. D. Costa, P. Duncan, F. J. Spellacy. (3-0; 3-0)

**PSYC 450. (3) Mental Deficiency**

A survey of research theory and applied aspects of mental subnormality. Open to non-psychology students in related fields. Includes visits to several institutions. One term paper required.

Prerequisite: Psychology 100 and either fourth-year standing or written permission of the Instructor.

O. Spreen. (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 the instructor in the Department before registering.

The maximum credit for Psychology 390 and 490 together must not exceed six units unless permission of the Chairman of the Department is obtained.

Members of the Department.

**PSYC 499. (3) Honours Thesis and Seminar**

Students are required to complete an Honours Thesis. Class meetings will be centered around seminar discussions of student research.

Prerequisite: Honours standing. Laboratory hours will be arranged.

Members of the Department. (2-2; 2-2)

human engineering, administrative process, organizational communications. Basis for grades: Objective exams on independent readings, short essay quizzes based on lectures, group projects.

A. Bavelas. (3-1; 3-1)

**PSYC 335. (3) Developmental Psychology**

Psychological development; determiners of psychological growth; motor, emotional, social, intellectual, language and personality development. Implications for the guidance of psychological development are indicated. (Faculty of Education does not recognize this course for credit for Education students.)

NOTE: Some sections of this course may substitute laboratory time for lecture time. Laboratory times will be announced during the term.

L. Acker, P. Duncan, G. A. Milton. (3-0; 3-0)

**PSYC 339. (1½) Psychology of Aging**

Examination of psychological processes associated with old age. Topics to include physiological concomitants of the aging process, cognitive functioning, personality change, sexual functioning, work and leisure, sources of stress, psychopathology, and death and dying.

Prerequisite: Psychology 100 and at least third year standing.

J. Adamowicz. (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 man-made habitat; (d) ecological psychology and man as part of an ecological system.

Prerequisite: Psychology 100 or registration in Environmental Studies programme.

A. Bavelas. (3-1; 3-1)

**PSYC 370 (LING 370). (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, language acquisition, experimental psycholinguistics, the relationship of language and cognition, language and socio-cultural factors, semantics, bilingualism, non-verbal communication, and the pathology of linguistic behaviour.

Prerequisites: Linguistics 100 and Psychology 100 or permission of the Department.

(Not offered 1978-79.) (3-0; 3-0)

**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 Psychology 390 and 490 together must not exceed six units unless permission of the Chairman of the Department is obtained.

Members of the Department.

**PSYC 400. (3) Advanced Methods**

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 use of the analysis of variance. The first half of the course will emphasize the relative merits of various designs involving multiple independent variables. The second half of the course will emphasize designs involving multiple dependent variables (regression analysis, factor analysis, multivariate analysis of variance). The general orientation throughout the course will be towards problems of application.

Prerequisite: Psychology 300 or equivalent.

L. Rosenblood. (2-2; 2-2)

**PSYC 401. (3) Psychometrics**

The application of quantitative methods to problems in applied psychology. Topics to be covered include the measurement of individual differences, scaling, correlational analysis, test construction, and research issues in psychological assessment. Individual research projects may be conducted. A formal written report of the student's completed research project is required.

Prerequisite: Psychology 300 or equivalent. (3-1; 3-1)

**PSYC 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: psycho-physics, sensory

physiology, information processing, visual distortion and cognitive involvement in human perception. This is a research oriented course and data collection is emphasized.

C. P. Porac. (2-2; 2-2)

**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.

Prerequisite: Psychology 311 (with instructor's approval, may be taken concurrently).

G. N. Hobson. (3-0; 3-0)

**PSYC 415. (3) Human Neuropsychology**

The study of brain-behaviour relationships with emphasis on clinical aspects. The course assumes basic knowledge acquired in Psyc. 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. Questions of assessment of psychological impairment, reaction to brain damage and rehabilitation will be considered. Demonstrations of selected patients with cerebral lesions at the Royal Jubilee Hospital and group instruction in neuropsychological testing will be arranged during the second term. One term paper is required.

Prerequisite: Psychology 315 or permission of Instructor. Restricted to fourth-year students in 1978-79.

O. Spreen. (2-2; 2-2)

**PSYC 423. (1½, formerly 3) Advanced Topics in Physiological Psychology**

Topics will include the physiology of the sensory systems, memory, and attention, with special emphasis upon the relationship between brain processes and experience.

Prerequisite: Psychology 230 or Biology 150. (3-0)

**PSYC 424. (formerly one-half of 423). (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.

Prerequisite: Psychology 230 or Biology 150 is recommended, but not required.

B. C. Goldwater. (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. Emphases are on both the behavioural and humanistic approaches to problems in abnormal psychology. Tentative structure of the course includes one formal term paper. This course is intended for Psychology Majors and Honours. Credit will not be given for both Psychology 430 and 432.

L. D. Costa, P. Duncan, F. J. Spellacy. (3-0; 3-0)

**PSYC 450. (3) Mental Deficiency**

A survey of research theory and applied aspects of mental subnormality. Open to non-psychology students in related fields. Includes visits to several institutions. One term paper required.

Prerequisite: Psychology 100 and either fourth-year standing or written permission of the Instructor.

O. Spreen. (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 the instructor in the Department before registering.

The maximum credit for Psychology 390 and 490 together must not exceed six units unless permission of the Chairman of the Department is obtained.

Members of the Department.

**PSYC 499. (3) Honours Thesis and Seminar**

Students are required to complete an Honours Thesis. Class meetings will be centered around seminar discussions of student research.

Prerequisite: Honours standing. Laboratory hours will be arranged.

Members of the Department. (2-2; 2-2)

## GRADUATE COURSES

Students must consult the Department concerning courses offered in any year.

- PSYC 501. (1½-4½)** 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 PSYC 504 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.

- PSYC 505. (1½-6)** Animal Learning  
**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 511. (1½-6)** Comparative Psychology  
**PSYC 512. (1½-6)** Physiological Psychology  
**PSYC 513. (1½-6)** Sensory 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 521. (1½-6)** Human Factors  
**PSYC 522. (1½-6)** Personnel 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 530. (1½-6)** Animal Motivation and Conflict  
**PSYC 531. (1½-6)** Environmental Psychology  
**PSYC 532. (1½-6)** Pharmacopsychology

Courses PSYC 505 to 532 inclusive may be taken in areas A, B, C and/or D. More than one area may be taken if 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 570. (1½-3)** Psycholinguistics  
**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 PSYC 604 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.

- PSYC 605. (0)** Practicum in the Teaching of Psychology  
**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.*), Assistant Professor (Russian and Serbo-Croatian); and Chairman of the Department to June 30, 1978.

Andrew Donskov, B.A., M.A. (*Brit. Col.*), Ph.D. (*Helsinki*), Associate Professor (Russian).

Nicholas V. Galichenko, B.A., M.A. (*Brit. Col.*), Ph.D. (*McGill*), Assistant Professor (Russian). (On study leave 1978-79.)

Terence M. Rickwood, B.A., Ph.D. (*Liverpool*), Assistant Professor (Russian).

Victoria Speers, B.A. (*Brit. Col.*), M.A., (*Colo.*), Part-time Sessional Lecturer (Russian) (1977-78).

## GENERAL, MAJOR AND HONOURS PROGRAMMES

All students planning a programme in the Department of Slavonic Studies are advised to consult with the Departmental advisor concerning their selection of elective courses, both within and outside the Department, supportive to their programme.

## GENERAL, MAJOR AND HONOURS IN RUSSIAN

The Department offers General, Major, and Honours programmes with emphasis on Russian language, Russian literature and culture. Students specializing in particular programmes will find that they have sufficient electives to enable them to concentrate (double Majors, double Honours) in a second field, in such recommended areas as History, Political Science or a second 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 wishing to take Third or Fourth Year courses to meet requirements for a B.A. degree in the General, Major or Honours programme, must satisfy the Department that they have satisfactory standing in appropriate courses at the 200 level. Students with advanced credit from secondary schools or colleges, or those who are competent in Russian will be placed at an appropriate level.

Admission to the Honours programme, which should be sought at the end of the Second Year, requires permission of the Department, and interested students should consult the Department as early as possible in the first two years. Students will be admitted to the Honours programme only if they have obtained at least a second class standing in the Second Year. They will be required to maintain at least a second class average in Russian courses taken in Third and Fourth Years. An Honours programme in the Department of Slavonic Studies normally requires a total of 66 units in a four year period. A First Class Honours degree requires a grade point average of 6.50 or better in upper level Russian courses. A Second Class Honours degree will be awarded for a grade point average between 3.50 and 6.49 in upper level Russian courses. A student who fails to attain a grade point average of 3.50 or better but who completes the requirements for the Major degree will be allowed to transfer to the Major programme.

For students in Russian, Serbo-Croatian 300 is recommended as an elective course.

Students wishing to take Russian as a teaching area in the Faculty of Education's Secondary Curriculum should consult page 124 of the Calendar.

## PROGRAMMES IN RUSSIAN

GENERAL	MAJOR	HONOURS
<i>First Year</i>		
Russian 100 (3)	Russian 100 (3)	Russian 100 (3)
Other Courses (12)	Other courses (12)	Other courses (12)
<i>Second Year</i>		
Russian 200 (3)	Russian 200 (3)	Russian 200 (3)
Russian 201 (3)	Russian 201 (3)	Russian 201 (3)
Other courses (9)	Other courses (9)	Other courses (9)
<i>Third and Fourth Years</i>		
Russian 302 (3)	Russian 302 (3)	Russian 302 (3)
6 units of Russian courses numbered 400 and above* (6)	Russian 306 (3)	Russian 306 (3)
Other courses (21)	Russian 406 (3)	Russian 406 (3)
	6 additional units of Russian courses numbered 400 and above* (6)	Russian 499 (3)
	Other courses (15)	At least 9 units of Russian courses numbered 400 and above* (9)
		Other courses (15)

\*Selected with the approval of the Department.

**COURSES****RUSSIAN****RUSS 100. (3) First Year Russian**

This is a beginners' course concentrating on the basic grammar and vocabulary. The aim of the course is to lead the student quickly into reading, writing and oral work. The course is designed to meet the needs of students in a variety of fields.

Prerequisite: None, the course is open to all students.

Text: N. Potapova, *Fifty Lessons in Russian*.

(3-1; 3-1)

**RUSS 200. (3) Second Year Russian**

This course is the sequel to Russian 100. In the first term the grammar is completed. The second term is devoted to the study of an original literary text in Russian as well as wide reading of modern Soviet periodicals.

Prerequisite: Completion of Russian 100, or the permission of the Instructor.

Texts: Stilman and Harkins, *Introductory Russian Grammar*; S. Khavronina, *Russian As We Speak It*; additional reading material to be announced.

Z. B. Juricic. (4-0; 4-0)

**RUSS 201 (formerly 300). (3) Nineteenth Century Russian Literature Part I: Romanticism and Naturalism**

This course is intended as an introduction to Russian literature from 1800-1830. Short stories and poetry of the period will be read in the original Russian, and there will be lectures on the Romantic and Naturalist movements as well as material on individual writers. There will be one major paper per term.

Prerequisite: Completion of Russian 100. (Credit cannot be obtained for both Russian 201 and Russian 300.)

Texts: Pushkin, *Pilovaya Dama, Tsygany*; Lermontov, *Demon, Geroy Nashego Vremeni; Desyat' russkikh poetov*; Mirsky, *A History of Russian Literature*.

(3-0; 3-0)

**RUSS 301. (1½) Aspects of Russian Culture**

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 religion, philosophy, folklore, literature, art, architecture and music in an attempt to give students a cultural perspective for viewing the Russian way of life. Other areas of discussion will include an assessment of Western attitudes towards Russia. No knowledge of Russian is required.

Prerequisite: None, the course is open to all students.

Prescribed reading: Lawrence, *History of Russia*; Kamen, ed., *Great Russian Stories*; F. D. Reeve, ed., *Great Soviet Short Stories*; Miliukov, *Outlines of Russian Culture*, Vols. I, II and III.

January-April. (3-0)

**RUSS 302. (3) Intermediate Composition and Stylistics**

This course, conducted in Russian, stresses translation of selected passages, the regular composition of essays and conversational skill. A basic knowledge of Russian grammar is assumed. A broad selected of reading material is provided aiming at comprehension and discussion.

Prerequisite: Completion of Russian 200.

Texts: Borras and Christian, *Russian Syntax*; Borras and Christian, *Russian Prose Composition*; Rosental and Telenkova, *Practical Stylistics of Russian*; Paulkina, Zakhava-Nekrasova, *Grammar with Exercises*.

T. M. Rickwood. (3-0; 3-0)

**RUSS 304. (1½) Literature and Cinema in the USSR**

A survey of selected films that are adaptations of significant literary works or illustrate important cultural event or movements. Among the films and texts studied will be: *War and Peace* (Tolstoy/Bondarchuk), *The Quiet Don* (Sholokhov/Gerasimov), "Uncle Vanya" (Chekhov/Konchalovsky), *My Universities* (Gorky/Donskoi), "Ballad of a Soldier" (Chukhrai). This course is taught in English.

Prerequisite: None, this course is open to all students.

September-December. (3-0)

**RUSS 305. (1½) Dissent in Russian Literature**

A study of Russian literature as a vehicle for religious, social and political protest in Tsarist and Soviet times. From the 16th to the 19th centuries this tradition of dissent, with its affirmation of human rights and dignity, is reflected in a large body of literary material containing indictments of autocratic abuses, serfdom, religious persecution, and governmental corruption. This expression of moral criticism in literary form has continued into the Soviet period, focussing on the conflict between official Marxist doctrine and the exercise of individual conscience. This course is taught in English.

Prerequisite: None, the course is open to all students.

January-April. (3-0)

**RUSS 306. (3) Nineteenth Century Russian Literature Part II: Realism**

This course is the sequel to Russian 201 and is a study of Russian literature from 1830 to the end of the nineteenth century. There will be lectures on the development of Russian realist prose as well as material on the social and historical background of the time. There will be class assignments and one major paper per term.

Prerequisite: Completion of Russian 200 or Russian 201.

Texts to be selected from the following titles: Pushkin, *Evgenii Onegin*; Lermontov, *Geroy Nashego Vremeni*; Gogol, *Mertvye Dushi, Shinel'*; Turgenyev, *Otsy i deti*; Tolstoy, *Sevastopol'skie Rasskazy*; Goncharov, *Oblomov*; Dostoevsky, *Zapiski iz Mertvogo Doma*; Chekhov, *Muzhiki, Chelovek v Futlyare*.

A. Donskov. (3-0; 3-0)

**RUSS 390. (3) Russian Reading Course**

This is a one-year, terminal course, intended for students who wish to acquire rapidly a reading knowledge of modern Russian. During the first term basic Russian grammar is covered while in the second term students read material from current Soviet journals in the fields of the Natural and Social sciences and the Humanities. Material is chosen corresponding to the students' areas of interest. This course is of special interest to students contemplating advanced work since most North American graduate schools require a reading knowledge of at least one foreign language.

Prerequisite: None, the course is open to all students. (Students who have passed Russian 100 cannot receive credit for this course.)

Text: Beresford, *Complete Russian Course for Scientists*. (3-0; 3-0)

**RUSS 400. (3) Structure of Modern Russian**

A study of modern Russian grammatical structures, followed by an examination of Russian phonology, phonetics, morphology, lexicology and syntax.

Prerequisite: Russian 200 or permission of the instructor.

Texts: Vinokur, *The Russian Language: A Brief History*; Ward, *The Russian Language Today: System and Anomaly*; Townsend, *Russian Word-Formation*; Launer, *Elementary Russian Syntax*.

T. M. Rickwood. (3-0; 3-0)

**RUSS 401. (3) Soviet Literature, in Translation**

The course examines selected major works and trends in Russian literature since the Revolution: Symbolism, Imagism and Futurism (Blok, Esenin and Mayakovsky), the Utopian and Anti-Utopian novel (Zamyatin, Olesha), Soviet Science Fiction (A. Tolstoy, Efremov), the Revival of Romanticism (Gorky), and the Psychological novel (Babel, Sholokhov), Socialist Realism (Gadkov, N. Ostrovsky), the Symbolist novel and Post-Stalinist literature (Pasternak), the Cryptographical novel (Bulgakov, Solzhenitsyn). The focus is on early modern and contemporary authors with particular consideration of Solzhenitsyn. There will be lectures and discussions and one essay per term.

Prerequisite: None, the course is open to all students.

Texts: Zamyatin, *We*; Babel, *Red Cavalry*; Olesha, *Envy*; Sholokhov, *The Quiet Don*; Bulgakov, *The Master and Margarita*; Pasternak, *Doctor Zhivago*; Solzhenitsyn, *One Day in the Life of Ivan Denisovich, The Cancer Ward, First Circle*; Blake, *Half-Way to the Moon*; Brown, *Russian Literature Since the Revolution*; Ilf and Petrov, *The Golden Calf*; Zoshchenko, *Stories from the Bathhouse*; Guerny, *Anthology of Russian Literature in the Soviet Period*.

(3-0; 3-0)

**RUSS 402. (3) History of Russian Drama**

The course, given in Russian, deals with the evolution of Russian drama from its beginnings to the Soviet period. Special emphasis is given to the most important Russian dramatists. Fonvizin (*Brigadir*), Griboedov (*Gore ot uma*), Pushkin (*Boris Godunov*), Gogol (*Revizor*), Ostrovsky (*Groza*), L. Tolstoy (*Vlast' t-my*), Gorky (*Na dne*), Chekhov (*Vishnyevyi sad*), Mayakovsky (*Klop*), Andreyev (*Tot, kotoryi poluchaet poshochiny*), Bulgakov (*Dni Turbinykh*).

Prerequisite: Russian 200 or 201.

Texts: Slonim Marc, *Russian Theatre From the Empire to the Soviets*.

(Not offered 1978-79.) (3-0; 3-0)

**RUSS 406. (1) Advanced Composition and Stylistics**

The course is conducted entirely in Russian and emphasizes written composition, stylistic analysis and conversational fluency. Formal reading material includes works by Chekhov, Bunin, Kazakov and other. Taking into account the student's discipline and area of interest, appropriate articles from the contemporary press are supplied. Exercises in syntax and stylistics are also provided. The course involves daily reading assignments and weekly written work. No language laboratory is required, but tapes are used in class. One essay per term in Russian is required.

Prerequisite: Completion of Russian 302.

Texts: Borras and Christian, *Russian Syntax* and *Russian Prose Composition*; Belevitskaya-Khalizeva, *Exercises in Russian Syntax*; Pulkina, *Russian*; Townsend, *Continuing with Russian*; Gerhart, *The Russian's World: Life and Language*.

A. Donskov. (3-0; 3-0)

### **RUSS 407. (3) Old Church Slavonic**

An introduction to Old Church Slavonic and its origins. The Cyrillic and Glagolitic alphabets. St. Cyril and Methodius. The influence of Old Church Slavonic on Russian and other Slavic languages. Readings in Old Church Slavonic.

Prerequisite: Russian 200.

(Not offered 1978-79.) (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. The first Russian grammars and dictionaries. The role of Lomonosov and Pushkin in the formation of the Russian language. Students should take this course in conjunction with Russian 409.

Prerequisite: Russian 200 or permission of the instructor.

Texts: Chernykh, *Istoricheskaya grammatika russkogo yazyka*; P. Yefimov, *Istoriya russkogo literaturnogo yazyka*.

(Not offered 1978-79.) September-December. (3-0)

### **RUSS 409. (1½) Early Russian Literature; Kievan Period to the End of the Eighteenth Century**

Readings from Old, Medieval and Eighteenth Century Russian literature. Students should take this course in conjunction with Russian 408.

Prerequisite: Russian 200 or permission of the instructor.

Texts: N. Gudziĭ, *Khrestomatiya po drevnei russkoi literature, Istoriya drevnei russkoi literatury*; Stender-Petersen, *Anthology of Old Russian Literature*; A. Kokorev, *Khrestomatiya po russkoi literature XVIII veka*; D. Blagoi, *Istoriya russkoi literatury XVIII veka*.

(Not offered 1978-79.) January-April. (3-0)

### **RUSS 410. (3) Comparative Slavonic Linguistics**

A comparative and contrastive study of the three Slavic language groups and their development from Common Slavonic.

Prerequisite: Russian 200.

(Not offered 1978-79.) (3-0; 3-0)

### **RUSS 411. (3) Russian Prose 1880-1917**

This course, given in Russian, is devoted to a study of major trends in Russian fiction from 1880 to the Revolution. Emphasis will be placed on the short story, and the reading will be selected from the works of the following writers: Tolstoy, Garshin, Chekhov, Andreev, Kuprin, Artsybashev, Korolenko, Bely, Zaitsev, Bunin and Gorky.

Prerequisite: Russian 200 or 201.

Texts: To be announced. (3-0; 3-0)

### **RUSS 412 (formerly one-half of 403). (1½) Dostoevsky, in Translation**

This course undertakes a detailed study of Dostoevsky with special emphasis on analysis of literary devices employed in his major novels.

Prerequisite: None; this course is open to all students.

Texts: *Poor Folk, Crime and Punishment, The Idiot, The Devils, The Brothers Karamazov*.

January-April. (3-0)

### **RUSS 413 (formerly one-half of 403). (1½) Tolstoy, in Translation**

This course will deal with Leo Tolstoy's life and works, with special emphasis on his artistic method through a study of selected major works, as well as Tolstoy's religious and ethical ideas.

Prerequisite: None; the course is open to all students.

Texts: *Childhood, Boyhood and Youth, War and Peace, Anna Karenina, Resurrection*.

A. Donskov. September-December. (3-0)

### **RUSS 430. (3) Directed Reading**

A directed reading project on a major theme, problem, genre or author in some area of Russian literature, or a specific topic in Slavonic linguistics under the supervision of a member of faculty. By permission, for Honours or Major students. This course will be offered depending on the availability of a supervising instructor in the student's area of interest. Students will be permitted to take Russian 430 once only.

### **RUSS 499. (3) Honours Essay**

## SERBO-CROATIAN

### **SERB 300. (3) First Year Serbo-Croatian**

This course is designed for students of Russian wishing to acquire basic reading and translating competence in a *second Slavic language* and reasonable familiarity with its literature. Knowledge of a second Slavic language is imperative for candidates in Russian Language and Literature seeking admission to a higher degree in Slavic studies. Through carefully selected literary texts and scholarly materials other students will broaden their understanding and appreciation of Yugoslavia's rich culture, history, literature, language and peoples. Tapes are provided of some of the texts handled in class. The two best students will be awarded the Yugoslav Government scholarships for Summer Study in Yugoslavia (Zagreb and Dubrovnik).

Prerequisite: Completion of 200 level course in a foreign language or its equivalent, or the permission of the Instructor.

Texts: Babic, Slavina, *Serbo-Croatian Reading Passages*; Partridge, Monica, *Serbo-Croatian: Practical Grammar and Reader*.

Z. B. Juricic.

(May be offered 1978-79.) (3-0; 3-0)

### **SERB 400. (3) Directed Reading**

This Directed Reading Course will survey major trends and authors in Croatian and Serbian literatures from the Renaissance period to the present. Required reading will be drawn from the following texts: Javarek, Vera, *Serbo-Croatian Prose and Verse*; Franges, Sichel, Rosandic, *Pristup Knjizevnom Djelu*; Sichel, Rosandic, *Pregled Knjizevnosti s Citankom*; Zaninovic, Vice, *Citanka s Pregledom Jugoslavenskih Knjizevnosti*, Vols. III, IV.

Prerequisite: Completion of Serbo-Croatian 300, or its equivalent, or the permission of the Instructor.

Texts: Kadic, *Contemporary Serbian Literature*; Kadic, *Contemporary Croatian Literature*; Johnson, ed., *New Writing in Yugoslavia*; Mikasinovich, *Introduction to Yugoslav Literature*.

(Not offered 1978-79.)

## SOCIAL WORK

### **S W 400. (3) Social Work**

Introduction to the philosophy, concepts, and practice of social work in modern society.

This course is a required part of the B.A. with Major in Social Welfare but is open as an elective to students in Arts and Science.

Students may not receive credit for both Social Work 200 and Social Work 400.

(Not offered 1978-79.) (3-0; 3-0)

(Students who still require this course should consult the Advising Centre.)

## DEPARTMENT OF SOCIOLOGY

R. Alan Hedley, B.A., M.A. (*Brit. Col.*), Ph.D. (*Ore.*), Associate Professor and Chairman of the Department.

M. Elaine Cumming, B.A., M.A. (*Sask.*), Ph.D. (*Radcliffe-Harvard*), Professor.  
Robert B. Hagedorn, B.A. (*San Fran. St.*), M.A. (*Wash.*), Ph.D. (*Texas*), Professor.

Daniel J. Koenig, A.B. (*Notre Dame*), M.Sc. (*Florida*), Ph.D. (*Illinois*), Associate Professor (On study leave 1978-79).

T. Rennie Warburton, B.A. (*Leeds*), Ph.D. (*London*), Associate Professor.

Roy E. L. Watson, B.A., M.A., Ph.D. (*Tor.*), Associate Professor.

Stephen D. Webb, B.A. (*William and Mary*), M.A. (*George Washington*), Ph.D. (*Tennessee*), Associate Professor.

Paul M. Baker, B.A. (*U. of Vic.*), M.A., Ph.D. (*Minn.*), Assistant Professor.

Richard L. Ogmundson, B.A. (*U. of Vic.*), M.A., Ph.D. (*Mich.*), Assistant Professor (On leave of absence 1978-79.)

Nicholas W. Poushinsky, B.A., M.A. (*Guelph*), Ph.D. (*York*), Assistant Professor.

Elena S. H. Yu, B.A. (*San Carlos-Philippines*), M.A., Ph.D. (*Notre Dame*), Assistant Professor.

Ellen T. Gee, B.A. (*Brit. Col.*), Sessional Lecturer (1977-78).

Neil E. Lindquist, B.A. (*Winn.*), M.A., Ph.D. (*Alta.*), Sessional Lecturer (1977-78).

Tomoko Makabe, B.A. (*Aoyama Gakuin*), M.A. (*W. Ont.*), Ph.D. (*Tor.*), Sessional Lecturer (1977-78).

Timothy J. Segger, B.A., M.A. (*U. of Vic.*), Sessional Lecturer (1977-78).

Bernardo Berdichewsky, B.A. (*Chile*), Ph.D. (*Madrid*), Part-time Sessional Lecturer (1977-78).

Douglas F. Cousineau, B.A., M.A., Ph.D. (*Alta.*), Part-time Sessional Lecturer, Correctional Education Programme (1977-78).

Yuen-Fong Woon, B.A., M.A. (*Hong Kong*), Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMME

For information on studies leading to the M.A. degree, see page 163; for graduate courses, see page 112.

## UNDERGRADUATE PROGRAMMES

The Department offers General, Major, and Honours programmes. Students interested in any of these programmes are urged to consult the department undergraduate advisor as early as possible.

Sociology 100 is required for all three programmes. Sociology 209 or Sociology 200 (or both 209 and 200 at the student's discretion) are also required in all three programmes. 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 programme requires nine additional units of Sociology from courses numbered 300 and above.

*Major:* In addition to the Sociology 100 and Sociology 209 or 200 or both, the Major programme requires Sociology 300, 371, 375 and 7½ additional units of Sociology numbered 300 and above.

*Honours:* In addition to Sociology 100 and Sociology 209 or 200 or both, the Honours programme requires Sociology 300, 371, 372, 375, 499, and nine additional units of Sociology numbered 300 and above. It is recommended that Honours students take Sociology 371 and 372 as early as possible.

To receive a First-Class Honours degree a student must obtain a grade of at least A — in Sociology 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 Sociology 499, and have 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.

## COURSES

*Unless indicated otherwise, courses begin in September and end in April.*

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 Sociology 100
- The student has at least Third Year standing and the permission of the course Instructor.

### **SOCI 100 (formerly 200). (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. (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 completion of Sociology 100. (3-0; 3-0)

### **SOCI 209. (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 nineteenth century to the present. Students will participate in research projects in order to gain familiarity with sociological research techniques and strategies.

Prerequisite: Sociology 100. (3-0; 3-0)

### **SOCI 300 (formerly 400). (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. (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. (3-0; 3-0)

### **SOCI 304 (formerly 305). Interaction and Socialization**

Models of interaction and socialization; transmission and learning of sociocultural categories and roles; self, identity and society; psychological sociology and social psychology; naturalistic and quantitative approaches to the study of interaction; ethnomethodology and studies in everyday life. (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. (3-0; 3-0)

### **SOCI 310. (3) Religion in Society**

A critical examination of theories and research on the relationship of religion to 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, oriental and other religions will be considered, including religio-political independence movements in the Third World. (3-0; 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. (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 (formerly one-half of Sociology 320). (1½) Industrial Sociology**

Individual-work linkages; labour force trends; organizational, technological, and work group determinants of industrial behaviour.

Credit cannot be obtained for Sociology 319 (1½ units) and Sociology 320 (3 units). September-December or January-April. (3-0)

### **SOCI 321 (formerly 320). (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 Sociology 320 (3 units) and Sociology 321 (1½ units). September-December or January-April. (3-0)

### **SOCI 323 (formerly 420). (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. (3) Small Groups**

An introduction to the structural principles of small groups. Discussions of the problems of order in terms of group size, goals, and role allocations. Consideration of both experimental and natural groups. Introduction to the techniques of microsociological research. (2-2; 2-2)

**SOCI 335 (Anthropology 335). (3) Minority and Ethnic Group Relations**

Minority and ethnic groups within complex societies with special reference to Canada. (3-0; 3-0)

**SOCI 340. (1½) Demography**

Study of the growth, distribution, and movement of human populations with special emphasis on the social causes and consequences.

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

**SOCI 341. (1½) Human Ecology**

Study of the form and development of human communities as adaptations to continuously changing conditions of life.

September-December or January-April. (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. (3-0; 3-0)

**SOCI 360. (1½) Sociology of Sport**

Conceptual and empirical analyses of the social nature of sport and games. The relation of these phenomena to the sociocultural environment. Analysis of selected sports and games as social systems.

September-December or January-April. (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.

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

**SOCI 371 (formerly 370). (1½) Statistics and Social Research: I**

The logic and interpretation of statistical concepts and techniques in the Social Sciences. Basic probability, distributions, sampling, parametric and non-parametric statistics, tests of hypotheses.

Credit cannot be obtained for Sociology 370 (3 units) and Sociology 371 (1½ units). September-December or January-April. (3-0)

**SOCI 372 (formerly 370). (1½) Statistics and Social Research: II**

Techniques of multivariate analysis, including correlation and regression.

Credit cannot be obtained for Sociology 370 (3 units) and Sociology 372 (1½ units).

Prerequisite: Sociology 371, or consent of Instructor.

January-April. (3-0)

**SOCI 375 (formerly 430). (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. (3-0; 3-0)

**SOCI 380. (1½) Sociology of the Life Cycle**

A general discussion of the concept of generation. Selected demographic aspects of cultural generations since 1900. The role structure and institutional connections typical of different stages in the individual life cycle.

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

**SOCI 390. (1½) Selected Problems in Sociology**

Presentation of current interests of various faculty members.

Students interested in this course should inquire at Registration when the course is to be offered and what the substantive presentation will involve.

NOTE: Students may enrol in this course in different areas for a maximum of 3 units. (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.

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

**SOCI 415 (formerly 330). (3) Political Sociology**

A discussion of conflict and cooption, the distribution of power, voting behaviour, extremist political behaviour, international stratification and political change. (3-0; 3-0)

**SOCI 418 (Anthropology 418). (1½) Social Change**

General theory of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas.

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

**SOCI 419 (Anthropology 419). (1½) Modernization and Development**

Process of modernization. Industrialization and urbanization in the contemporary world.

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

**SOCI 427. (3) Sociology of Education**

Sociological data, concepts, and theories as applied to educational systems and processes. Two perspectives will be emphasized: (1) the school as an institution of and in the micro-society and (2) the school and classroom as microsystems.

Not open to students with credit in Education 427. (3-0; 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.

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

**SOCI 445 (formerly 345). (1½) Sociology of Health and Medicine**

Seminar in the social implications of illness, the health professions, systems of health care, epidemiology.

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

**SOCI 490. (1-3) Directed Studies**

This course may be substituted for an elective course in Sociology in the Fourth Year of the Honours Programme 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****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****W S 200. (1½) Women's Studies**

The aim of this course is to employ interdisciplinary perspectives in the investigation of ideas and lines of development pertaining to women and their place in the history of civilization. One hour of each week will be devoted to a lecture attended by all members of the course; two hours will be spent in seminar groups organized by discipline. An interdisciplinary topic (such as Women and the Family, Women in Canada, Women and Ideology, Images of Women, Women and Work, etc.) will be used to integrate each term's lecture series and to ensure co-ordination between the lectures and the seminars. In any year in which this course is offered, further information may be obtained from the course co-ordinator. Maximum credit: 3 units.

Prerequisite: 15 units of university credit.

200A September-December; 200B January-April.

(Not offered 1978-79.)

(3-0)

# FACULTY OF EDUCATION

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## FACULTY AND OTHER OFFICERS

Norma I. Mickelson, B.Ed. (*Brit. Col.-Vic. Coll.*), M.A. (*U. of Vic.*), Ph.D. (*Wash.*), Professor, and Dean of the Faculty.

Robert D. Armstrong, B.Ed., M.A., M.Ed. (*Alta.*), Ed.D. (*Calif.*), Professor; and Chairman, Division of Communication and Social Foundations to June 30, 1978.

J. Douglas Ayers, B.A., B.Ed. (*Brit. Col.*), Ph.D. (*Tor.*), Professor.

David J. Chabassol, B.A., B.Ed. (*Acadia*), M.Ed. (*Tor.*), Ph.D. (*Alta.*), Professor; and Chairman, Division of Psychological Foundations to June 30, 1978.

Franklin E. Churchley, A.R.C.T., L.R.C.T. (*Royal Cons. Mus.*), B.Mus. (*Tor.*), M.A., Ed.D. (*Columbia*), Professor and Chairman, Division of Art and Music.

Martin L. Collis, Dip. P.E. (*Loughborough*), M.S. (*Idaho*), Ph.D. (*Stanford*), Professor.

John A. Downing, B.A., Ph.D. (*London*), Professor.

Cary F. Goulson, M.A. (*Brit. Col.*), Ed.D. (*Tor.*), Professor; and Chairman, Division of Social and Natural Sciences to June 30, 1978.

Arthur Kratzmann, B.Ed. (*Sask.*), M.Ed. (*Alta.*), Ph.D. (*Chicago*), Professor.

Geoffrey P. Mason, B.A., M.A. (*Brit. Col.*), Ph.D. (*Wash. St.*), Professor. (On study leave 1978-79.)

John McLeish, B.Sc., Ed.B., M.Ed. (*Glasgow*), Ph.D. (*Leeds*), Professor.

Richard H. J. Monk, B.A. (*Brit. Col.*), M.Ed., Ph.D. (*Wash.*), Professor. (On leave of absence 1978-79.)

Arthur V. Olson, B.S. (*Mass. St. Coll.*), M.S. (*Mass.*), Ed.D. (*Boston*), Professor.

K. George Pedersen, B.A. (*Brit. Col.*), M.A. (*Wash.*), Ph.D. (*Chicago*), F.C.C.T., Professor.

Alan D. Bowd, B.A., Dip. Ed., M.A. (*Sydney*), Ph.D. (*Calgary*), Associate Professor.

Irvin K. Burbank, B.Ed. (*Alta.*), M.S., Ed.D. (*Utah St.*), Associate Professor.

Gerald A. Carr, Dip. P.E. (*Loughborough*), B.A., M.S. (*Calif., Los Angeles*), Ph.D. (*Stellenbosch*), Associate Professor. (On study leave 1978-79.)

William K. Cross, B.Ed. (*Brit. Col.*), M.A., Ed.D. (*Wash. St.*), Associate Professor.

Jean D. Dey, B.Ed., M.Ed. (*Alta.*), Ed.D. (*Calif., Berkeley*), Associate Professor.

David Docherty, B.S., M.S., Ph.D. (*Ore.*), Associate Professor.

John D. Eckerson, B.S., M.A. (*Wash.*), Ph.D. (*Ore.*), Associate Professor.

Peter O. Evans, B.Ed., M.Ed., Ph.D. (*Alta.*), Associate Professor.

Robert H. Fowler, B.A., M.A. (*Queen's*), Ph.D. (*Duke*), Associate Professor.

John F. Hall, A.B., A.M. (*Stanford*), M.S., Ph.D. (*Ore. St.*), Associate Professor.

W. John Harker, B.A. (*Vic. Coll.*), M.A. (*Wash.*), Ed.D. (*Brit. Col.*), Associate Professor.

Christopher E. Hodgkinson, B.Sc.Econ. (*London*), M.Ed., Ed.D. (*Brit. Col.*), Associate Professor.

Edgar B. Horne, B.A.Sc., B.A., M.A. (*Brit. Col.*), Ph.D. (*Ill.*), Associate Professor.

Bruce L. Howe, Dip. Ed. (*Dunedin Teachers' Coll.*), B.S., M.S., Ph.D. (*Ore.*), Associate Professor and Chairman, Division of Physical Education to June 30, 1978.

Terry D. Johnson, B.Ed., M.A., Ed.D. (*Brit. Col.*), Associate Professor. (On study leave 1978-79.)

A. Richard King, B.A. (*W. Wash. Coll. of Ed.*), Ph.D. (*Stanford*), Associate Professor.

Donald W. Knowles, B.A., B.Ed., M.Ed., Ph.D. (*Alta.*), Associate Professor.

Werner W. Liedtke, B.Ed., M.Ed., Ph.D. (*Alta.*), Associate Professor. (On study leave 1978-79.)

Fred L. Martens, B.A., B.Ed. (*Brit. Col.*), M.S. In P.E. (*Wash.*), Ph.D. (*Ore.*), Associate Professor.

Walter Muir, B.Ed., M.Ed., Ph.D. (*Alta.*), Associate Professor. (On study leave 1978-79.)

Lloyd O. Ollila, B.S., M.A., Ph.D. (*Minn.*), Associate Professor; and Associate Dean of the Faculty to June 30, 1978.

Edward E. Owen, B.A., M.A. (*Auckland*), Ph.D. (*Edin.*), Associate Professor.

R. Vance Peavy, B.A., M.A. (*Colo. St. Coll.*), D.Ed. (*Ore.*), Associate Professor.

Roger A. Ruth, B.S., M.S. (*Kansas St. Teachers' Coll.*), Ph.D. (*Calif., Berkeley*), Associate Professor.

Marion A. Small, B.Ed. (*Brit. Col.*), M.Ed. (*W. Wash. Coll. of Ed.*), Associate Professor.

Hugh Taylor, B.A. (*Brit. Col.*), M.Ed. (*Ore. St.*), Ed.D. (*Wash. St.*), Associate Professor.

Henry G. Timko, B.S. (*Kutztown St. Coll.*), M.A., Ed.D. (*Ill.*), Associate Professor.

Beverly A. Timmons, B.A. (*Chico St. Coll.*), M.S., D.Ed. (*Ore.*), Associate Professor.

Ronald E. Tinney, B.A. (*Brit. Col.*), Ph.D. (*Minn.*), Associate Professor. (On study leave 1978-79.)

Margaret M. Travis, M.Sc., D.Ed. (*Ore.*), Associate Professor.

James H. Vance, B.Sc. (*Alta.*), M.A. (*Wash.*), Ph.D. (*Alta.*), 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.

Larry D. Yore, B.S., M.A., Ph.D. (*Minn.*), Associate Professor.

William M. Zuk, B.Ed., B.A., M.Ed. (*Alta.*), Ph.D. (*Ore.*), Associate Professor.

Robert D. Bell, B.A. (P.E.) (*Sask.*), M.A., Ph.D. (*Ore.*), Assistant Professor.

Ian L. Bradley, B.Ed. (*Brit. Col.*), M.Ed. (*W. Wash. St. Coll.*), Ed.D. (*Brit. Col.*), Assistant Professor. (On study leave 1978-79.)

Rey A. Carr, B.A. (*Calif., Los Angeles*), M.A. (*San. Fran. St.*), Ph.D. (*Calif., Berkeley*), Assistant Professor.

John C. Cawood, B.Ed., M.Ed. (*Brit. Col.*), M.F.A. (*Gto.*), Assistant Professor.

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- Yvonne M. Martin, B.A., Dip.Ed. (*W. Indies*), M.A., Ph.D. (*McGill*), Assistant Professor.
- Margie I. Mayfield, B.A. (*Macalester Coll.*), M.A., Ph.D. (*Minn.*), Assistant Professor.
- R. Anne McLaughlin, B.Com. (*Brit. Col.*), M.S. (*Ore.*), Assistant Professor.
- Antoinette A. Oberg, B.A., M.A. (*Wash.*), Ph.D. (*Alta.*), Assistant Professor.
- Leslie H. Peake, Dip. in P.E. (*St. Paul's Coll., Bristol*), M.Sc. (*Springfield Coll.*), Assistant Professor.
- Geoffrey D. Potter, B.A., M.A. (*Sir George Williams*), Assistant Professor. (On study leave 1978-79.)
- Kerry Quorn, B.A. (*Whitworth Coll.*), M.A. (*Guam*), Ph.D. (*Wash. St.*), Assistant Professor.
- John J. Sheppy, B.A., M.Ed. (*Brit. Col.*), Assistant Professor; and Coordinator of Academic Advising (Education) to June 30, 1978.
- Peter Shostak, B.Ed., M.Ed. (*Alta.*), Assistant Professor.
- Jay L. Steele, B.A. (*Stanford*), M.S., M.F.A., Ph.D. (*Ore.*), Visiting Assistant Professor. (1977-78).
- Robert Swailes, B.S.A. (*Man.*), M.Ed. (*Brit. Col.*), Assistant Professor; and Assistant Dean of the Faculty to June 30, 1978.
- Richard L. Williams, B.S. (*St. Cloud St. Coll.*), M.S. (*Cornell*), Assistant Professor.
- R. Dale McIntosh, A.R.C.T. (*Tor.*), B.Ed. (*Alta.*), M.Ed. (*Sask.*), M.Mus. (*Alta.*), Lecturer.
- David C. Bird, Dip. Ed. (*Durham*), B.Ed. (*Brit. Col.*), Sessional Lecturer (1977-78).
- Ruth A. Black, B.Sc. (*Brandon*), M.S.P.E., M.Sc. (*Sask.*), Sessional Lecturer (1977-78).
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- George R. Koski, B.Ed. (P.E.) (*McGill*), M.A., Ph.D. (*Mich. St.*), Sessional Lecturer (1977-78).
- Richard W. Lawson, B.A. (*Brit. Col.*), M.Ed. (*U. of Vic.*), Sessional Lecturer (1977-78).
- Bertha Martin, B.Ed., M.A. (*San Jose*), Sessional Lecturer (1977-78).
- Bernie Moore, B.S. (*Mayville St. Coll.*), M.S. (*S. Dak. St.*), Sessional Lecturer (1977-78).
- Michael J. Padilla, B.S. (*Detroit*), M.Ed. (*Wayne St.*), Ph.D. (*Mich. St.*), Sessional Lecturer (1977-78).
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- John R. Taylor, B.Sc. (Hons.), M.Sc. (*Monash.*), B.Ed. (*Tor.*), Ed.D. (*Brit. Col.*), (1977-78).
- Gary Walmsley, B.Ed. (*Brit. Col.*), Dip.Ed. (*Vancouver Vocational Inst.*), Sessional Lecturer (1977-78).
- Ulah B. Watson, B.Ed. (*Brit. Col.*), Sessional Lecturer (1977-78).
- B. Barbara Adams, B.Ed., M.A. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
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- Shirley E. Brinkhurst, B.Sc. (Hons.) (*University Coll.*), Dip.Ed. (*London*), Part-time Sessional Lecturer (1977-78).
- Ivan Buchanan, Part-time Sessional Lecturer (1977-78).
- Jean Bullard, B.Sc., B.Ed. (*U.N.B.*), Part-time Sessional Lecturer (September-December 1977).
- Betty A. Collis, B.A., (*Mich.*), Teach. Cert. (*Mich. St.*), M.A. (*Stanford*), Part-time Sessional Lecturer (1977-78).
- Lawrence M. Cross, B.Ed. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Brian K. Davis, B.Ed. (*U. of Vic.*), Part-time Sessional Lecturer (February-May 1978).
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- James M. Fulton, B.Ed. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Noel Gantly, B.A., M.Ed. (*Ottawa*), Part-time Sessional Lecturer (1977-78).
- John Godfreyson, B.A. (*Sir George Williams*), Part-time Sessional Lecturer (January-April 1978).
- Geoff Goodship, B.Ed. (*U. of Vic.*), Part-time Sessional Lecturer (January-April 1978).
- Donald E. Hamilton, B.A. (*Mt. Allison*), M.S.L. (*W. Mich.*), Part-time Sessional Lecturer (1977-78).
- Keith Hooley, Part-time Sessional Lecturer (1977-78).
- Geoffrey Horridge, B.Ed., M.A. (*U. of Vic.*), Part-time Sessional Lecturer (January-April 1978).
- Phyllis Huggett, B.A. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Enid Jackson, Dip. P.E. (*London*), Part-time Sessional Lecturer (1977-78).
- Joy Joslin, B.A., B.Ed. (*Calgary*), Part-time Sessional Lecturer (1977-78).
- William Karny, B.A. (*Fraser*), Part-time Sessional Lecturer (1977-78).
- Judith Koltai, B.F.A., M.A. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Victor E. Lindal, Teach. Cert. (*B.C.*), Part-time Sessional Lecturer (1977-78).
- J. Beattie MacLean, B.A. (*Brit. Col.*), M.A., Ph.D. (*Wash.*), Part-time Sessional Lecturer (1977-78).
- Constance F. More, B.Mus. (*N. Carolina*), Cert. (*Litz Academy*), M.Mus. (*Holy Name Coll., Calif.*), Part-time Sessional Lecturer (1977-78).
- Peter J. Murphy, B.A., B.Ed., M.Ed. (*Man.*), Ph.D. (*Alta.*), Part-time Sessional Lecturer (1977-78).
- Beverley A. Ralphs, B.Ed., M.A. (*U. of Vic.*), Kg. Spec. Dipl. (*McGill*), Part-time Sessional Lecturer (1977-78).
- Richard Rollins, B.A. (*U. of Vic.*), B.Sc. (*Alta.*), Part-time Sessional Lecturer (January-May 1978).
- Donald W. Samuelson, B.Ed. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Linda Schlechte, B.Sc. (*Nebraska*), M.A. (*Calif. St.*), Part-time Sessional Lecturer (1977-78).
- Bonita Smith, B.Mus. (Ed.), (*Montana*), Part-time Sessional Lecturer (1977-78).
- Karen Smith, B.A. (*Oberland*), M.A. (*Wash.*), Part-time Sessional Lecturer (1977-78).
- Ronald D. Smith, B.S. (*Ore. Coll. of Ed.*), M.Ed., Ed.D. (*Ore.*), Part-time Sessional Lecturer (1977-78).
- Hilary Spicer, B.A. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Richard D. Steinberg, B.A. (*Calif., Berkeley*), M.A., Ph.D. (*York*), Part-time Sessional Lecturer (1977-78).
- Dennis Stevens, B.A. (*Brit. Col.*), Part-time Sessional Lecturer (January-April 1978).
- Sister Bede Sullivan, A.B. (*Mount St. Scholastica Coll.*), M.A. (*Notre Dame*), Part-time Sessional Lecturer (1977-78).
- Judith Terry, B.A. (*Leicester*), M.Phil. (*London*), Part-time Sessional Lecturer (1977-78).
- Ann R. Vicente, B.A. (*Calif. St.*), M.A. (*E. Tenn. St.*), Ed.D. (*Virginia*), Part-time Sessional Lecturer (January-April 1978).
- Paul J. Viel, B.A., M.A. (*Calif., Northridge*), Ph.D. (*U. of Vic.*), Part-time Sessional Lecturer (January-April 1978).
- Rita Wallis, L.R.S.M. (*Royal Sc. of Music*), A.R.C.T. (*Tor.*), Mus.G. (Paed) (*W. Ont.*), Part-time Sessional Lecturer (1977-78).
- Alan W. Wilmott, B.Ed. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).
- David Wolsk, B.A. (*Allegheny Coll.*), M.A., Ph.D. (*Mich.*), Part-time Sessional Lecturer (1977-78).
- Leandre Lacroix, M.C., B.A., B.Phil. (*Laval*), Administrative Officer.
- Diana F. McBratney, C.D., Advising Officer.
- Opal Mills, B.A. (*Brit. Col.*), D.C.S. (*Tor.*), Senior Academic Assistant, Learning Assistance Centre.
- Richard M. Pearce, B.A. (*Brit. Col.*), M.S., Ph.D. (*Ore. St.*), Coordinator of Professional Programmes (Undergraduate), and Part-time Sessional Lecturer (1977-78).
- John E. Smith, B.A. (*Brit. Col.*), M.Ed. (*Ore.*), Coordinator of School Experiences, and Part-time Sessional Lecturer (1977-78).
- E. Keith Clamp, B.Ed. (*Alta.*), Advising Assistant.

## PROGRAMMES AND DEGREES OFFERED BY THE FACULTY OF EDUCATION

The Faculty of Education offers programmes leading to degrees in Education awarded by the University and to teaching certificates issued by the Provincial Department of Education. The following degrees and programmes are offered:

- A. THE BACHELOR OF EDUCATION DEGREE:**
  - A1. ELEMENTARY CURRICULUM**
    - a. Regular Programme
    - b. Transitional Programme
  - A2. SECONDARY CURRICULUM**
- B. DIPLOMA PROGRAMMES FOR GRADUATES:**
  - B1. ELEMENTARY CURRICULUM**
  - B2. SECONDARY CURRICULUM**
- C. INTERNSHIP PROGRAMMES:**
  - C1. ELEMENTARY CURRICULUM**
  - C2. SECONDARY CURRICULUM**
- D. DEGREES IN HUMAN PERFORMANCE**
  - D1. THE BACHELOR OF SCIENCE DEGREE, MAJOR IN HUMAN PERFORMANCE**
  - D2. THE BACHELOR OF ARTS DEGREE, MAJOR IN HUMAN PERFORMANCE**
- E. POST-BACHELOR OF EDUCATION (ELEMENTARY) DEGREE PROGRAMME**
- F. GRADUATE STUDIES IN EDUCATION**
- G. DIPLOMA PROGRAMME IN NATIVE INDIAN LANGUAGES (NON-CERTIFICATE)**

## ADMISSION TO THE FACULTY OF EDUCATION

Applicants for admission to the Faculty of Education must meet the general University requirements described on pages 8 - 11, as well as general Faculty and specific programme requirements described below.

Initial admission to a degree programme other than in the area of Physical Education in this Faculty will not be granted prior to completion of at least one year of university-level studies acceptable to the Faculty.

The University of Victoria reserves the right to limit enrolment in the Faculty of Education and to refuse admission to the various programmes of the Faculty, taking into account such factors as available space and facilities, teaching positions available in the schools, academic qualifications, general suitability of the applicant for teaching, physical disabilities, and faulty English.

### INTERVIEW

Those 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. Teachers holding valid British Columbia teaching credentials are exempted from the interview requirement. Applicants whose residence makes it difficult to travel to Victoria for the interview should write to the Office of the Assistant Dean for additional information.

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.

### QUOTA RESTRICTIONS

Admission to this Faculty may be restricted by quotas. If quotas are placed on any year or programme, not all qualified applicants will necessarily be accepted.

At the time of writing this Calendar (January 1978), quotas are currently in effect for acceptance into the "professional year" of the Transitional Programme and the Elementary and Secondary Diploma Programmes.

Selection criteria have been approved by the Senate. Further details are available from the Faculty of Education Academic Advising Centre. Quotas also apply to the Physical Education teaching areas.

### LIMITATION ON CREDIT AND PROGRAMMES

Applicants for admission or acceptance on a degree programme who have completed basic professional training may, at the discretion of the Faculty Admissions and Adjudication Committee, be granted up to 15 units of credit for their basic professional training towards the Bachelor of Education degree.

Those whose professional training was not completed within the ten years prior to their application to the Faculty must submit the following for the Committee's consideration:

- (1) a résumé of all teaching experience indicating dates, locations, and grade levels; and
- (2) a copy of the most recent Superintendents' and/or Principals' Reports.

The Committee will determine what credit for work already completed will be applied to the candidate's chosen programme.

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.

### ADMISSION TO MUSIC EDUCATION TEACHING AREA

Students wishing to enter the Music Education area on the elementary or the secondary degree programme must first consult with the Chairman of the Division of Art and Music in Education regarding acceptance.

Accepted candidates who present an A.R.C.T. or equivalent diploma may be awarded up to 6 units of credit at the discretion of the Division Chairman.

### ADMISSION TO PHYSICAL EDUCATION TEACHING AREA

Entry to the Physical Education teaching area on both the elementary programme and the secondary programme is limited. Secondary school students seeking a Physical Education programme are advised to include chemistry and biology in their school programmes. Those who do not have Chemistry 11 and Biology 11 may be denied acceptance. Students applying for admission to the University and who intend to seek entry into Physical Education must state this intention clearly on the application form. Re-registering students who wish to apply should consult the Physical Education Division office. All enquiries regarding this area should be directed to this office prior to April 30 of the year in which entry is desired.

Following submission of the Application for Admission or the Application for Re-registration, the candidate should obtain, from the Admissions Office or the Physical Education Division office, a Physical Education Experience form. This form should be submitted to the Physical Education Division by *May 31*.

All candidates for this area will be required to undergo a selection procedure including a physical proficiency test. For 1978 entry, this testing will take place at the University on *June 27 and 28, 1978*. Attendance over both days is required of all candidates.

Successful candidates will receive provisional notification immediately following the testing, subject to medical clearance and satisfactory grade point average. These provisionally accepted candidates must undergo medical examination by their own doctors and also by the University Health Service. This should be done as soon as possible after provisional acceptance.

Candidates who fail to qualify for acceptance into this area on first application and who intend to re-apply in their second year, should consult the Education Advising Centre to determine a first-year programme that will allow entry into the area without loss of credit.

### ACADEMIC REQUIREMENTS FOR ADMISSION

Applications for admission to the Faculty of Education, other than for a "professional year" or Physical Education, will be considered from students who meet the following requirements:

- (1) at least 12 units of credit; and
  - (2) a sessional G.P.A. of at least 3.00 on the most recent session (minimum of 12 units); if a candidate has taken fewer than 12 units in the most recent session, the G.P.A. will be computed for a cumulative total of at least 12 units; and
  - (3) fulfilment of the interview requirement designated by the Faculty or satisfactory completion of Education 197;
- and, in addition, for admission to a pre-professional year in the elementary programme:
- (4) a. Mathematics 11 or Algebra 11 or 3 units of acceptable first-year mathematics, and a science to the Grade XI level or 3 units of an acceptable laboratory science; and
  - b. English 115 (or substitute approved by the Education Advising Centre) and Psychology 100.

### ACADEMIC REQUIREMENTS FOR ACCEPTANCE INTO "PROFESSIONAL YEARS"

#### NOTES:

1. *The deadline for applications is March 31, 1978.*
2. Some "professional year" programmes have quotas; therefore, the Faculty cannot guarantee that all qualified candidates will necessarily be accepted.
3. Accepted candidates will be notified as early as possible, but this very likely may be mid-July.
4. Registration in all "professional years" will take place on Tuesday, September 5, 1978, and all accepted candidates should note that *no registrations will be accepted after that date* as school opening orientation begins on Wednesday, September 6.

5. Students on a Bachelor of Education degree programme who are admitted to a "professional year" *with only minimum requirements* (see below) will not qualify for a teaching credential until all specified work has been completed.

**A. The Bachelor of Education Degree**

**A1. Elementary Curriculum**

- (a) (i) Regular Programme, for September 1978 only

Credit in at least 25½ units that must include:

EDUC 297 .....	1½ units
ED-D 200 .....	3 units
Core course(s) in art education, music education, or physical education .....	3 units
ENGL 115, and 121 or 122* .....	3 units
MATH 160 or other approved mathematics .....	3 units
Laboratory science .....	3 units
GEOG 101 (or other 200-level laboratory courses taken with permission of the Department of Geography) or HIST 230 (or other Canadian history with permission of the Education Advising Centre) or ANTH 100 or 200 .....	3 units

\*or substitute approved by the Education Advising Centre.

A G.P.A. of at least 3.00 in the immediately preceding year (15 units) is required.

- (ii) Regular Programme, beginning September 1979.

Credit in at least 28½ units that must include:

EDUC 197 .....	1½ units
ED-D 200A .....	1½ units
EDUC 297 .....	1½ units
ENGL 115*, 116 *, and 215 .....	4½ units
GEOG 101 or 205, ANTH 100 or 200, or SOCI 100 or 200 .....	3 units
HIST 230 (or other Canadian history with permission of the Education Advising Centre) .....	3 units
Laboratory Science .....	3 units
MATH 160 or other approved mathematics .....	3 units
PSYC 100 .....	3 units
THEA 150 .....	1½ units
3 units from AE 100; ME 106 and one of ME 105, 207, 208, 209, 303A, 303B, 303C; PE 149, or PE 345 and 446 .....	3 units

\*With permission of the Education Advising Centre, students may substitute ENGL 121 and 122 for 115 and 116.

A G.P.A. of at least 3.00 on the last 28½ or 30 units completed prior to June 30 of the year of application is required.

Normally applicants must have fulfilled the requirements above by June 30 of the year of application. Students who believe their circumstances are exceptional may appeal to the Faculty Admissions and Adjudication Committee for permission to meet the minimum requirements through attendance at the summer session prior to commencement of the programme.

- (b) (i) Transitional Programme for September 1978 (Normally for college students transferring to this programme after second year.)

Credit in at least 24 units that must include:

ENGL 115, and 121 or 122; and one of 200, 201, 203, 204, 205, 215, or 238 (equivalent); or other approved English .....	6 units
Mathematics .....	3 units
Laboratory science .....	3 units
Two of: Geography (must normally include a laboratory session), History (Canadian content; other only with permission of Education Advising Centre), Anthropology (100 equivalent) .....	6 units

A G.P.A. of 3.00 (UVic C+) in the immediately preceding year (15 units) is required.

- (ii) Transitional Programme, beginning September 1979. (Normally for college students transferring to this programme after second year.)

Credit in at least 30 units that must include: (equivalents of)

ENGL 115*, 116* .....	3 units
One of ENGL 200, 201, 203, 204, 205, or 238; or ENGL 215 and THEA 150 .....	3 units
GEOG 101 or 205, or ANTH 100 or 200, or SOCI 100 or 200 .....	3 units
HIST 230 (or other Canadian history with permission of the Education Advising Centre) .....	3 units
Laboratory science (Astronomy, Biology, Chemistry, Geology, Physics) .....	3 units
MATH 160 or other approved mathematics .....	3 units

PSYC 100 .....	3 units
Teaching area courses, prerequisites, or electives .....	9 units

\*With permission of the Education Advising Centre, students may substitute ENGL 121 and 122 for 115 and 116.

A G.P.A. of at least 3.00 (UVic C+) on the last 30 units completed prior to June 30 of the year of application is required.

Normally applicants must have fulfilled the requirements above by June 30 of the year of application. Students who believe their circumstances are exceptional 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 programme.

**A2. Secondary Curriculum**

Completion of:

- (a) two teaching areas with a G.P.A. of 3.00 in the senior courses of each (except where fewer than 9 units of senior work is taken in which case the senior-level courses and one or more of the 200-level courses in the area will be included to a total of 9 units); or an expanded teaching area as defined on page 125 with a G.P.A. of 3.00 in the teaching area of years Three and Four (minimum 18 units);
- (b) the specified corequisites;
- (c) the courses in Education required in the first four years of the programme.

In addition, a G.P.A. of 3.00 in the immediately preceding two years (30 units) is required.

**B. Diploma Programmes for Graduates**

Commencing in 1979, these programmes may run from August through May inclusive.

**B1. Elementary Curriculum**

The applicant must possess a degree from a recognized university acceptable in content to the Faculty Admissions and Adjudication Committee with a minimum G.P.A. of 3.00 (UVic C+) in the immediately preceding two years (30 units).

The academic preparation for the Elementary Diploma Programme normally shall include the following:

For 1978/79:

English .....	6 units
Mathematics .....	3 units
Laboratory Science .....	3 units
Geography (must normally include a laboratory session) or History (Canadian content; or other only with permission of the Education Advising Centre) or Anthropology (100 equivalent) .....	3 units

Students of exceptional ability who do not meet the stated admission requirements may apply 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).

Commencing 1979/80: (equivalents of)

ENGL 115 .....	1½ units
and 116 or 121 or 122 .....	1½ units
and 215 .....	1½ units
PSYC 100 .....	3 units
Canadian History .....	3 units
Approved Geography, Anthropology or Sociology .....	3 units
MATH 160 or approved Mathematics .....	3 units
Laboratory Science .....	3 units
THEA 150 is recommended.	

Prospective students should note that they must meet the admission requirements by June 30 of the year of application.

Students of exceptional ability who do not meet the stated admission requirements may apply 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.)

**B2. Secondary Curriculum**

Students are advised that it is highly desirable to offer two teaching subjects. Those with only one teaching subject may find it difficult to obtain a teaching position. Recommended courses are listed on pages 122 - 125. Expanded teaching areas are found on page 125.

For 1978-79, the applicant must possess:

## GENERAL INFORMATION

1. A degree from a recognized university acceptable in content to the Faculty Admissions and Adjudication Committee with a minimum G.P.A. of 3.00 (UVic C+) in the immediately preceding two years (30 units).
2. Credit for ENGL 115 (1½) and 121 or 122 (1½) or equivalent standing.
3. Academic preparation as described below.

Commencing 1979/80 the applicant must possess:

1. A degree from a recognized university acceptable in content to the Faculty Admissions and Adjudication Committee with a minimum G.P.A. of 3.00 (UVic C+) on the last 30 units completed prior to June 30 of the year of application.
2. Credit for ENGL 115 (1½), and 215 (1½) or equivalent standing\*.
3. Academic preparation as described below.

THEA 150 and PSYC 100 are recommended.

\*Subject to the availability of a procedure for establishing equivalent standing.

The academic preparation must also include one of the following:

- (a) the equivalent of at least 9 units in senior courses in each of two of the following subjects: art, biological sciences\*, chemistry\*, English, French, general science\*, geography\*\*\*, German, history\*\*\*, Latin, mathematics, music\*\*, physical education, physics\*, Russian, Spanish, theatre\*\*\*\*, or with special approval of the Dean, other subject areas normally taught in the secondary schools of British Columbia; with a G.P.A. of 3.00 (UVic C+) on the best 9 units of senior courses in each subject area; or
- (b) a Master's or Honours degree in one of the subjects listed in (a) with the exception of German, Latin, Russian, Spanish and Theatre, all of which require a second teaching area; or
- (c) the equivalent of at least 15 units in senior courses in any one of the subjects listed in (a) (with the exception of German, Latin, Russian, Spanish and Theatre, all of which require a second teaching area) with a G.P.A. of 3.00 (UVic C+) in these courses and an additional 9-unit sequence of junior and senior courses in a second teaching subject area; or
- (d) the equivalent of at least 9 units in senior courses in one of the subjects listed in (a) and an approved 15 unit Outdoor Education teaching area (see page 124) containing at least 9 senior units plus the prescribed corequisites; with a G.P.A. of 3.00 (UVic C+) on the best 9 units of senior courses in each subject area; or
- (e) an approved expanded teaching area (see pages 125 - 126) with a grade point level of 3.00; or
- (f) a Bachelor of Music with a major in Music Education from the University of Victoria including EDUC 398, ED-D 303, 406, ME 101, 201, 301 and ME 401 (Instrumental only), with a G.P.A. of 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.)

\*All science courses must be acceptable to the Division of Social and Natural Sciences.

\*\* All music courses must be acceptable to the Division of Art and Music in Education. Students are strongly advised to include 3 units of Music Education in their undergraduate programmes.

\*\*\* Students presenting geography must also have at least one appropriate introductory course in history (for example, History 230, 240, or 242); and students presenting history must include at least 3 units of Canadian history at lower or upper level and also have at least one appropriate introductory course in geography (for example, Geography 101, 201, 203, or 205).

\*\*\*\* All theatre courses must be acceptable to the Chairman of the Division of Communication and Social Foundations.

Students of exceptional ability who do not meet the stated admission requirements may apply 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.)

### C. Internship Programmes

#### C1. Elementary Curriculum

This programme will not be offered in 1978-79. Admission requirements are under consideration.

#### C2. Secondary Curriculum

This programme will likely be offered in 1978-79. Admission requirements for this programme are identical to those for the Diploma Programme, B2., Secondary Curriculum.

### ACADEMIC ADVICE

Students wishing advice about any of the undergraduate courses or programmes (including the Diploma programmes) offered in the Faculty of Education should consult the Education Advising Centre, Room 250, MacLaurin Building, or write to that office for information.

All undergraduate students registered in the Faculty are expected to make a commitment to a particular programme. The Education Advising Centre will prepare a Programme Outline for each student based on current Faculty regulations. In preparing the Programme Outline the Advising Centre will consider all previously completed work in relation to the student's choice of programme and teaching areas.

All Programme Outlines prepared by the Advising Centre will be subject to revision in the light of current requirements if not completed within ten years and may, on occasion, be lengthened.

All students are advised to confirm programme requirements with the Advising Centre before they register in any session in order to learn of changes in course numbers and teaching areas.

### STANDING AND CREDIT

**Professional Year.** Successful completion of the professional year (including Diploma programmes as well as regular and transitional professional years) requires a G.P.A. of 3.00 on all courses taken during that year for the purpose of determining eligibility for a teaching credential.

**Post-Professional Transfer.** Teachers accepted on the Elementary Degree Programme must obtain a G.P.A. of 3.00 on at least 30 units of courses required to complete Years 1-3 in order to establish eligibility for a teaching credential.

**Graduation Requirements.** Students should refer to the general statements on page of this Calendar. In exceptional cases when teaching areas do not include enough 300 and 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:

- (a) a passing grade in each of the courses comprising the degree programme;
- (b) a G.P.A. of 3.00 on the work of the professional year;
- (c) a G.P.A. of 3.00 on the courses of the teaching areas on the elementary programme; or a G.P.A. of 3.00 as specified on page 121 for the teaching areas on the secondary programme;
- (d) a G.P.A. of 3.00 on all work taken subsequent to the professional year. Failed courses will be counted in computing the G.P.A.

**Graduating Average.** The graduating average of a student graduating from 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 acceptable for credit in the student's degree programme 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:

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

**Probation.** Students registered in the Faculty of Education who do not obtain a sessional grade point average of 3.00 will be placed on Academic Probation. A student who is on Academic Probation and whose sessional grade point average falls below 3.00 will be required to withdraw from the Faculty. A sessional grade point average of 3.00 is sufficient to remove a student from Academic Probation.

If a student fails to qualify for acceptance into the professional year, a year's extension on probation may be granted to complete these requirements. Students who fail to meet the stated requirements normally shall be required to withdraw from the Faculty.

### 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 given on pages 8 - 11

## REGULATION CONCERNING PRACTICUM

Students are referred to the university regulation on page 13.

## SCHOOL EXPERIENCE, STUDENT TEACHING AND SEMINARS

School experience, student teaching and seminars form an integral part of the elementary and secondary programmes. Requirements for the elementary programme are outlined in the course descriptions of Education 197, 297 and 797, and for the secondary programme in the course descriptions of Education 398, 498, and the 750-770 methods series.

Students should be aware that *all arrangements* for school experience and student teaching are made through the seminars and/or the School Experiences Office which is located in the MacLaurin Building.

Professional year students should note that *all* elementary and secondary programmes commence with a two-week school experience. Orientation and placement for these activities will take place on Tuesday, September 5. In order to provide for sufficient school placements it will be necessary for each professional year student to apply for school experience on a form provided by the Records Office when authorization for registration has been granted. This application must reach the School Experiences Office by August 15 if a school placement is to be guaranteed. Students will only be admitted into the professional year programmes after this date if placements can be arranged.

**Absolutely no professional year students will be permitted to register after September 5, 1978 for the Winter Session 1978-79.**

All Education students undertaking school experience during the year must be prepared to travel to any school in the three Greater Victoria school districts. In order to do this, students should budget an additional \$50.00 to \$100.00 for transportation. Because of the possible heavy use of Greater Victoria classrooms for school experience in the fall and winter, students should note they may be required to undertake the final practicum in selected districts outside School Districts No. 61, 62 and 63.

## 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 the Ministry.

### Teaching Credentials

- The Ministry of Education requires that all persons employed as teachers in the Public Schools of British Columbia have a valid teaching credential.
- 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.
- Credentials*
  - Standard Certificate:*  
Requires a minimum 3-year approved programme of post-secondary school studies beyond Grade XII, including appropriate teacher education.
  - Professional Certificate:*  
Requires a minimum 4-year approved programme of post-secondary 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 now 5 years.)
- Application for a teaching credential must be made to the Director of Teacher Services, Ministry of Education, Victoria, B.C. The Records Office of the University provides the Ministry of Education with verification of the applicant's standing, based on completion of the appropriate years of a degree programme or all requirements of the Diploma Programme for Graduates. Obviously in the case of undergraduates such verification can only be provided when the student has registered in a degree programme through the appropriate academic advising centre.
- Application Procedure*  
The procedure varies with the time of the academic year at which the qualification for a certificate is reached.

(a) *By attendance at Winter Session:*

- In June of each year the Records Office of the University sends a Confidential Annual Report to the Director of Teacher Services, Ministry of Education, with copies to the District Superintendents of Schools. An up-to-date transcript for each student is forwarded to the Ministry with the Report. Unless a student has requested to remain unreported, this includes all regular full-time students of the Faculty of Education who have completed a basic professional year and have registered a degree programme, and reports degree, teaching areas, years completed, and grade results in student teaching.
- To secure a first teaching credential on the basis of Winter Session work, the student must apply to the Director of Teacher Services, Ministry of Education, Victoria, B.C., on a form distributed by the University or available by request from the Ministry. A copy of birth or baptismal certificate must accompany a first application.
- Students on degree programmes for other than B.Ed. degrees should apply in the same way, but must also request that the Records Office forward a statement of years of degree completed, together with a transcript, to the Ministry of Education.
- Application to change to a Professional from a Standard Certificate is to be made to the Ministry in writing using the application form, or by letter, and following the same procedure.

(b) *By May-June studies, by Summer Session or by Supplemental or Deferred Examination:*

A Card Application for Teaching Credential should be secured from, completed, and returned to the Records Office of the University. In September the Card is processed and the applicant's standing forwarded to the Ministry of Education.

- If coursework done with permission elsewhere, reported by official transcript from the other institution to the Records Office, should alter a student's qualification for certification, the Records Office reports this by letter to the Ministry. The student is responsible for applying in writing to the Ministry for the change in certification.
  - In all other cases, the student should request the Records Office of the University to report to the Ministry of Education on the level of degree programme completed, and also should apply to the Ministry of Education for the appropriate Certificate.
- 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 programme at a British Columbia post-secondary institution.

NOTE: Teachers holding Interim Standard or Interim Professional Certificates issued under previous regulations should apply to the Ministry of Education for a non-expiring credential.

### Teacher Qualification Service Category

Many school boards base salary on 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 of Education. Categories are assigned on the basis of complete years of professional preparation.

Transcripts of University of Victoria coursework and application forms may be obtained from the Records Office of the University. Requests for additional information should be directed to:

Teacher Qualification Service,  
220-1070 W. Broadway,  
Vancouver, B.C. V6H 1E7

### Statement of Degree Completion

On request to the Records Office, a statement verifying the completion of a degree will be provided should this be required in the interval between completion of degree requirements, the granting of the degree, and its entry on official transcripts.

## A. THE BACHELOR OF EDUCATION DEGREE

### A1. ELEMENTARY CURRICULUM

#### GENERAL INFORMATION

The elementary programme is currently in the process of revision. At the time of revision of this Calendar (January 1978) the first two years of a new programme and revised admission requirements for the "professional" phase

of the current and proposed programmes had been approved by Faculty and Senate. It is expected that the complete new programme will be approved in time for inclusion in the 1979-80 Calendar. Information regarding implications of the proposed new programme is included here for the benefit of students.

1. Students who have completed the "professional year" and who have a Programme Outline will complete their degrees by fulfilling the requirements in accordance with their Programme Outline. Those who have completed the "professional year" but who do not have a Programme Outline should obtain one from the Education Advising Centre.
2. Students who attain entry to the "professional year" in 1978-79 or 1979-80 and successfully complete it should obtain a Programme Outline from the Education Advising Centre. This Programme Outline will specify degree requirements as stated under "Course Requirements" below.
3. Students who commence their programmes in September 1978 or who, although already enrolled at the University, fail to complete the "professional year" by September 1980 may have to meet the requirements of a new programme. The first two years of this programme are outlined in the "Course Requirements" below. A two-year "professional component" may be required. This would have the effect of lengthening the work required for certification from three to four years. It is also likely that the proposed new programme will include one teaching area, rather than two as currently required, and 76½ units rather than 75.

### CURRENT DEGREE PROGRAMME

Candidates for this degree are required to complete a minimum of 75 units; however, the number of units will vary according to the number of units required in their professional year and regulations in effect at the time of their admission. The current regular programme requires 75 units to complete the degree while the transitional programme requires 77½ units.

In addition to the specified education and core courses, completion of this degree will require specialization in two teaching areas as described on pages 120 - 121 and selection of either the primary or intermediate option.

When two areas that overlap in content are chosen, a minimum of 18 units in the combined areas will be required. Where the choice of areas involves more than 27 units, the Faculty will reduce the requirements of one area accordingly.

Students on the physical education teaching area, accepted in 1975 and subsequently, will be required to complete 4½ units in addition to their basic degree requirement. A proportion of this requirement will be added to the programmes of students whose degree is presently underway but who have not completed their activity courses.

The elementary programme is designed to be taken over five regular winter sessions; however, because permanent certification is granted after completion of Year Three, the Faculty attempts to offer as many courses as possible during summer sessions in order to assist those teachers who wish to upgrade their qualifications and obtain their degrees while maintaining their teaching positions.

The transitional programme is a modification of the regular programme, designed especially to accommodate students who attend colleges in the Province for two years before coming to the University to take their professional year. College students should make special note of the courses and G.P.A. required for admission to the transitional professional year as specified on page 116.

The third, or professional year is normally taken as a "package", i.e. all courses listed for that year are taken as a coordinated unit during one full winter session. Admission requirements are specified on page 115. 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. It should be noted that a G.P.A. of 3.00 must be obtained on this year in order to complete the year and qualify for certification.

For graduation requirements, please refer to page 117.

### COURSE REQUIREMENTS

#### NOTES:

1. The courses listed under Years One and Two below are required for programmes commenced September 1977 or 1978. For Years One and Two of the Regular and Transitional programmes begun prior to 1977, see page 113 of the 1976-77 Calendar.
2. MATH 160 normally is not acceptable for credit when Mathematics Education or Mathematics/Science teaching areas are chosen.
3. A minimum of 21 units of credit in courses numbered 300 or 400 is required.
4. PSYC 335 (or any similar college course) normally is not acceptable for credit in the Faculty of Education because the course content is similar to ED-D 305 and 406.
5. Not more than 3 units of additional courses applicable to a student's

particular teaching area may be taken unless permission is first obtained from the Education Advising Centre.

The degree requires completion of the following or approved substitutes:

#### a. Regular Programme

##### (i) All teaching areas except Physical Education

###### Year One: Arts and Science, or Fine Arts

* EDUC 197 .....	1½	
ENGL 115 .....	1½	
PSYC 100 .....	3	
From courses below .....	10½	16½

###### Year Two: Education, Conditional Status\*\*

* ED-D 200A .....	1½	
* EDUC 297 .....	1½	
ENGL 215 .....	1½	
From courses below .....	10½	15

###### Years One and Two

All of these courses must be taken to complete second year

ENGL 116 .....	1½
HIST 230 .....	3
Laboratory science .....	3
MATH 160 or other approved mathematics ...	3
THEA 150 .....	1½

One of: ANTH 100 or 200;

GEOG 101 or 205;

SOCI 100 or 200 .....
 3 |

\*\*\* Approved 3 units from the following:

AE 100; ME 106, and one of

105, 207, 208, 209, 303A, 303B, 303C;

PE 149, or 345 and 446 .....
 3 |

Elective or area pre-requisite .....
 3 |

\* These courses 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.

\*\* Full status in the Faculty of Education will be accorded when students have completed this year in the Faculty with a G.P.A. of 3.00 and have completed EDUC 197, 297, and ED-D 200A.

\*\*\* Those who wish the Art area should take AE 100 in Year One and those who wish the Music area should take ME as approved by the Music Advisor. Students accepted on the PE teaching area must take PE 345 and 446 in Year Two.

###### Year Three: Professional Year 1978-79 and 1979-80

NOTE: Students accepted in the Professional Year normally must take all courses in this programme in one session, and are not permitted to register in additional work.

ED-D 305 .....	3
ED-D 337 .....	1½
ED-B 742 (Primary or Intermediate) .....	2
ED-E 744 .....	1½
ED-E 745 .....	1
ED-E 746 .....	1
EDUC 797 .....	3

\* Two of: ED-A 701

ED-A 705 or 706

ED-C 747 .....
 2 | 15 |

\* Students are required to complete 1-unit courses in the areas they have not already covered in depth, i.e. normally ED-A 705 or 706 and ED-C 747 if AE 100 has already been taken; or ED-A 701 and ED-C 747 if ME 105/106 or other approved Music Education has already been taken; or ED-A 701 and ED-A 705 or 706 if PE 149 or PE 345/446 has already been taken. Music Education students should consult that Division regarding additional requirements.

###### Years Four and Five

ED-B 320 .....	1½	
ED-B 340 (Primary option), or 342 and		
343 (Intermediate option) .....	3	
Education elective .....	1½	
Courses to complete teaching areas, and		
electives if applicable .....	24	30

TOTAL UNITS 76½

##### (ii) Physical Education teaching area only

###### Year One: Education, Conditional Status

* EDUC 197 .....	1½
ENGL 115 .....	1½
ENGL 116 .....	1½
PSYC 100 .....	3
PE 142 .....	1½
PE 143 .....	1½

PE activities approved by PE Division	2	
From courses below	3-4½	15½-17

**Year Two: Education, Conditional Status\*\***

* ED-D 200A	1½	
* EDUC 297	1½	
ENGL 215	1½	
THEA 150	1½	
PE 345	1½	
PE 446	1½	
PE activities approved by PE Division	1½	
From courses below	6-7½	16½-18

Years One and Two Total Units 33½

**Years One and Two**

All of these courses must be taken to complete second year

HIST 230	3
Laboratory science	3
MATH 160 or other approved mathematics	3
PE activities approved by PE Division	1½

\* These courses 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.

\*\* Full status in the Faculty of Education will be accorded when students have completed this year in the Faculty with a G.P.A. of 3.00 and have completed EDUC 197, 297, and ED-D 200A.

**Years Three, Four and Five**

As shown above under (i) but must include in Year Four one of:

ANTH 100 or 200	
GEOG 101 or 205	
SOCI 100 or 200	3
	47½

TOTAL UNITS 81

b. **Transitional Programme** (Normally for college students transferring directly into the professional component after second year; see page 116 for admission requirements.)

NOTE: The Physical Education area is not possible on this programme. College students who wish Physical Education as a teaching area should plan to transfer to the University of Victoria for second year on the Regular Programme.

**Years One and Two:** College equivalents, or approved substitutes:

ENGL 115 and 116	3	
ENGL 200, 201, 203, 204, 205, or 238;		
or ENGL 215 and THEA 150	3	
HIST 230 (or other Canadian history with permission of the Education Advising Centre)	3	
Laboratory science (Astr, Biol, Chem, Geol, Phys)	3	
MATH 160 or other approved mathematics	3	
PSYC 100	3	
One of: ANTH 100 or 200		
GEOG 101 or 205		
SOCI 100 or 200	3	
Teaching area, prerequisites, or electives if applicable	9	30

**Year Three:** Transitional Professional Year 1978-79 only

ED-D 200B	3	
ED-D 305	3	
ED-A 701	1	
ED-A 705 or 706	1	
ED-B 742 (Primary or Intermediate)	2	
ED-E 744	1½	
ED-E 745	1	
ED-E 746	1	
ED-C 747	1	
EDUC 797	3	17½

**Years Four and Five**

ED-B 320	1½	
ED-D 337 (required in Year Four)	1½	
ED-B 340 (Primary option), or 342 and 343 (Intermediate option)	3	
Education electives	3	
Courses to complete teaching areas, and electives if applicable	21	30
TOTAL UNITS	77½	

**TEACHING AREAS (ELEMENTARY)**

**ART EDUCATION**

Core: AE 100

Area:

HA 120	3	
AE 300	3	
AE 301	3	
AE 302 or Visual Arts elective	3	
AE 400	3	15

**CREATIVE DRAMA**

THEA 181	3	
Two of THEA 382, 383, 330	6	
Two of: ED-D 316 or 317;		
ED-B 344; 360	3	12

**EARLY CHILDHOOD EDUCATION (PRIMARY OPTION ONLY)**

ED-B 341	3	
Approved optional courses	6	
One of the following:	3	
Kindergarten		
ED-B 440, 441	3	
Primary		
ED-B 440, 342	3	12

**LANGUAGE ARTS**

* ED.B 341	3	
LING 390	3	
ED-B 342/343 (A or B)	3	
ED-B 347/348	3	12

\* Students on the Intermediate Option may substitute ENGL 301 if they wish.

**LIBRARY EDUCATION**

LE 432	1½	
LE 433	1½	
LE 434	1½	
LE 435	1½	
ED-B 360	1½	
One of ED-B 341* or ENGL 301	3	
Approved optional courses**	1½	12

\* Students on the primary option must take ED-B 341.

\*\* ED-B 342 must be included as part of the degree programme of all students in this area.

**MATHEMATICS EDUCATION**

Core: 3 units of approved mathematics chosen from 130 (or 100/101); 151/102, 110/210; or other 3 units of Mathematics by special permission.

Area:

ED-E 443	1½	
ED-E 444	1½	
ED-E 484	1½	
Approved mathematics	7½	12

In planning a sequence of courses, students must consider prerequisites. MATH 102, 151, 240, 110, 210, and C SC 170 and 171 would be an appropriate selection of courses. Students with at least a B standing in Mathematics 12 might consider courses suggested for prospective secondary teachers: MATH 130, 110, 210, 362, 366; C SC 170, 171; STAT 253.

The following courses are not acceptable for credit in the Mathematics teaching area or in the core when the teaching area is mathematics: MATH 012, 180, 203, 360. Only in exceptional circumstances is MATH 160 acceptable for credit in the Mathematics teaching area or in the core.

**MATHEMATICS/SCIENCE**

Core: Approved mathematics chosen from 151/102; 130 (or 100/101); 110/210 (or 232); or other mathematics courses by special permission. Approved laboratory science.

Area:

ED-E 443/444	3	
ED-E 345	3	
Approved mathematics	3	
ED-E 445 or approved science	3	12

The following courses are not acceptable for credit in Mathematics/Science teaching area or in the core when Mathematics/Science is the teaching area: MATH 012, 180, 203, 360. In exceptional circumstances MATH 160 may be acceptable for credit in the Mathematics/Science teaching area or in the core.

**MUSIC EDUCATION**

Core: ME 106 and one of ME 105, 207, 208, 209, 303A, 303B, 303C.

Area:	
ME 300	1½
ME 306	3
Approved Music and/or ME	10½

All students accepted in this area will be required to complete one of the following:

- one year in a University performance group; or
- equivalent participation in an off-campus performance group approved by the Chairman of the Division of Art and Music in Education.

Students wishing to enter the Music Education teaching area should refer to page 115.

**OUTDOOR EDUCATION**

ED-E 345	3
ED-E 370	3
PE 371 or 372	1½
Approved optional courses*	6

\* Students will elect at least six additional units from approved courses in Education, Biology, Geography, Anthropology or History. Selection must include courses in two of these subject areas.

**PHYSICAL EDUCATION**

Basic degree requirements will be increased by 4½ units for students taking this area.

Core: PE 345, 446.

Area:	
Basic skills (chosen from PE 104-125; refer to Notes on page )	6
PE 141	1½
PE 142	1½
PE 143	1½
PE 241	3
PE 346	1½
3 units from PE 341, 342, 442, 444, 445, 461, 463	3

Entry into the Physical Education teaching area is limited. Students applying should refer to page 115 regarding acceptance.

Students who fail to qualify for acceptance into this area on first application and who intend to re-apply in their second year are warned that PE 149 is not acceptable for credit on a Physical Education teaching area. Any student who has elected to do PE 149 and is then accepted into the Physical Education teaching area cannot count the credit for this course toward his degree.

Completion of a Physical Education teaching area normally requires attendance in at least three regular winter sessions, exclusive of the professional year.

If a student does not choose PE 344 as one of his electives he will be required to produce a First Aid Certificate dated within two years prior to graduation.

Students who have completed activities under PE 100/101 are not eligible to repeat such activities for credit.

Regulation uniforms, which may be obtained at the University Campus Shop, are required by all students specializing in physical education.

**REMEDIAL**

ED-D 316	1½
ED-D 402	1½
ED-D 415	3
ED-D 417	3
ED-B 342 and 343*	0-3
Approved remedial optional courses	3-6

\*ED-B 342 and 343 may not be included if they form part of the core.

**SCIENCE**

Core: A laboratory science chosen from one of the following groups:

- ED-E 145, Physics, or Chemistry
- Biology or Microbiology
- ASTR 120, 200, GEOL 200 or, with permission, GEOG 203.

Area:	
3 units in each of the two remaining groups above	6
Science elective chosen from any subject listed above (except ED-E 145) or from ED-E 345, 370; BIOC 300; CHEM 301; GEOG 372;	
PE 241; PHYS 310	3
ED-E 445	3

**SOCIAL STUDIES**

ED-E 346	3
Nine units of approved courses in History, Geography, Anthropology, or other social science	9

Courses must be approved by the Chairman of the Division of Social and Natural Sciences.

ANTH 100 (or 339), GEOG 101, and HIST 230 must be completed as part of this teaching area if not included in the 6 units anthropology/geography/history requirement for the elementary programme.

ED-B 432, Value Education, is a preferred elective.

**SPECIAL CLASSES**

ED-D 405	3
ED-D 415	3
3 units chosen from ED-D 402, 409A, 409C, 409D, 409E, 484, 496A, 496D, 496F	3

Normally one of the 409 courses with included or supplementary practicum should be selected to complete the 9 units of teaching area.

**ACADEMIC SUBJECT AREAS**

With prior approval of the Education Advising Centre, 15 units of a General Programme 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 (elementary).

**SOCIAL SCIENCES**

This 15-unit teaching area is intended for students who have specific career teaching aspirations which make it desirable that their first teaching area be supplemented by greater depth of social science knowledge. Generally, the first teaching areas will be social studies, early childhood or special classes, although, with adequate rationale, any other professional area may also be used.

The 15 units may be any combination of courses from Anthropology, Linguistics or Sociology as listed below. This may be a second teaching area for the elementary programme. No courses may be used for application to both teaching areas.

Students may propose any combinations of the following courses which they consider to be relevant to and consistent with their needs and interests. However, each student will be required to comply with any specific departmental prerequisites or admission standards and to obtain departmental approval in advance for proposed course programmes, and for any changes which may be proposed after initial approval.

Course possibilities include: ANTH 100, 200, 240, 250, 305, 306, 310, 322, 323, 326, 328, 329, 335, 339, 350, 401, 418, 419, 449; LING 100 or 360, 220, 240, 250, 340, 361, 370, 371, 390, 392, 400, 426, 430; SOCI 200, 305, 310, 321, 335, 340, 360, 365, 380, 418, 419.

**A2. SECONDARY CURRICULUM**

Candidates for this degree are required to complete a minimum of 75 units which will include specialization in one or two teaching subject areas normally taught in the secondary schools of British Columbia. The teaching areas are described on pages 122-126. With approval of the Faculty of Admissions and Adjudication Committee and 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.

Students who commenced the Secondary Programme prior to September 1976 normally will be expected to complete years 1-4 of the degree according to requirements set out in the 1977-78 and previous issues of the Calendar unless changes are approved through the Education Advising Centre.

Students on the physical education teaching area, accepted in 1975 and subsequently, will be required to complete 4½ units in addition to their basic degree requirement. A proportion of this requirement will be added to the programmes of students whose degree is presently underway but who have not completed their activity courses.

The programme ordinarily requires attendance at five winter sessions; however, depending upon the choice of teaching area(s), students may transfer into the programme following completion of courses taken at British Columbia colleges or elsewhere. Seminars and professional experience are part of the third and fourth years as well as the fifth, or professional year.

The professional year is normally taken as a "package", i.e. all courses listed for that year are taken as a coordinated unit during one full winter session. Admission requirements are specified on page 115. Because of the professional involvement off-campus during this year, students are not usually permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre. It should be noted that a G.P.A. of 3.00 must be attained on this year in order to complete the programme and qualify for certification and graduation.

For acceptance into the professional year and for graduation, the teaching area G.P.A. requirement is calculated as follows:

- (a) *for students choosing two teaching areas:* a G.P.A. of 3.00 must be obtained on the senior courses of each of the two subject areas. All senior courses, both area and additional area, will be included. When fewer than 9 units of senior courses are taken, the calculation will include one or more of the 200-level courses in the area to a total of 9 units.
- (b) *for students choosing one expanded teaching area:* a G.P.A. of 3.00 must be obtained on all area courses taken in the third and fourth years. If fewer than 18 units of area courses are taken, then the calculation will include sufficient area courses from second year to total 18 units.

For graduation requirements, please refer to page 117, and for minimum requirements for acceptance into the professional year, please refer to A2. on page 116.

### COURSE REQUIREMENTS

For students entering Year 2 of the Programme in 1978, the degree requires successful completion of the following as a minimum:

a. Education	22½ units
ED-D 303	1½
ED-B 320	1½
ED-D 337	1½
EDUC 398	1½
ED-D 406	3
ED-B 430	1½
EDUC 498	1½
Education electives	3 or 4½
Curriculum, Instruction & Practicum 750-770	7½ or 6
b. Teaching area(s) (including prerequisites and corequisites)	37½ units
c. Core (or approved alternatives)	9 units
ENGL 115*	1½
ENGL 116	1½
ENGL 215**	1½
THEA 150*	1½
PSYC 100	3
d. Electives***	6 units
TOTAL	75 units

\* If these courses are waived by the Education Advising Centre, students may substitute electives.

\*\* Except English Teaching Area.

\*\*\* When choosing electives students should note the following:

- ENGL 111 taken after July 1, 1975 is not acceptable for credit in the Faculty of Education.
- PSYC 335 is not normally acceptable for credit in the Faculty of Education because the course content is similar to ED-D 305 and 406.
- General University regulations require a minimum of 21 units of courses numbered 300 or 400.

### PROGRAMME BY YEARS

#### Year One: Arts and Science; Fine Arts; or if PE area, Education

ENGL 115 (or substitute approved by Education Advising Centre)	1½
ENGL 116 (or substitute approved by Education Advising Centre)	1½
PSYC 100	3
A first year programme acceptable to the Faculty in which registered	9
TOTAL	15

Notes:

- Students who intend to pursue a secondary education programme should include in their first year, courses that meet requirements of their choice of teaching area(s) (see pages 122-126). Advice may be obtained from the Education Advising Centre.
- Those accepted in the PE teaching area must seek advice (from the Education Advising Centre or the PE Division) regarding first year courses as they will be required to take more than 15 units.
- PSYC 100 and THEA 150 must be taken in Year One or Year Two.
- Students accepted into PE in Year One and all students in Year Two of this programme will have Conditional Status in the Faculty of Education.
- Full status in the Faculty of Education will be accorded when students have completed at least 27 units with a G.P.A. of 3.00 including successful completion of required and teaching area courses in Years One and Two.

#### Year Two: Conditional Status in Education

ENGL 215 (or substitute approved by Education Advising Centre)	1½
THEA 150 (or substitute approved by Education Advising Centre)	1½
Courses chosen from teaching area(s), corequisites and/or electives	12
TOTAL	15

#### Year Three:

EDUC 398	1½
ED-D 406	3
Courses chosen from teaching area(s), corequisites and/or electives	10½
TOTAL	15

#### Year Four:

EDUC 498	1½
ED-D 303	1½
Teaching area(s) and/or electives	12
TOTAL	15

#### Year Five: Professional Year (Regular Option)

ED-D 337	1½
ED-B 320	1½
ED-B 430	1½
Approved Curriculum, Instruction and Practicum in Secondary School Subject(s)	6-7½
Approved Education electives	3-4½
TOTAL	15

The Faculty of Education is in the process of restructuring its Professional Year programme. It is expected that commencing in September 1979 the Professional Year will be significantly different from that stated above.

#### Year Five: Alternative Professional Year (Sequential Option)

For 1978-79, two of: ED-B 753, ED-C 764, ED-E 755, 758, 761, 769	6
EDUC 799A	9
TOTAL	15

#### Year Five: Alternative Professional Year (Saanich Project)

Courses as outlined above under Regular Option	15
TOTAL	75

### PROGRAMME FOR THOSE WHO HAVE COMPLETED PROFESSIONAL TRAINING

Students who have completed two or three years of university study including a professional year at this university or who hold a teaching certificate issued by the Ministry of Education may transfer to the Bachelor of Education (Secondary Curriculum) programme and complete the degree and requirements for teaching in the secondary schools. The following specific conditions will apply:

- As a minimum the student must meet the unit requirements, teaching area requirements, and the G.P.A. requirements as stated in section A2, page 117.
- Education courses will be determined by the Faculty Admissions and Adjudication Committee.
- A student will be considered to have met requirements for (a) Year Three when 30 units in addition to the professional year are complete, provided no more than 33 units remain to the degree; and (b) Year Four when 45 units in addition to the professional year (including ED-D 337) are complete, provided no more than 18 units remain to the degree.

#### TEACHING AREAS (SECONDARY)

Students will choose either two teaching areas from those listed below or one expanded area from those listed on pages 125-126.

Where two teaching areas are chosen, the minimum required in each area is 15 units. In addition to these 30 units a total of 7½ units is required made up of corequisites and additional area courses. Where one expanded area is chosen, 37½ units of area and corequisite work is required. Only with prior permission of the Education Advising Centre may exceptions be permitted to any of the following subject and course requirements. The six units normally reserved for electives may be used to strengthen a teaching area.

#### ART

Corequisites:	
ENGL 200, 201, 203, or 238	3
Area:	
HA 120	3
AE 100	3
AE 300	3
AE 301	3
AE 400	3
TOTAL	15

Additional courses may be chosen from AE 302, 303, 304; or, with prior approval of the Chairman of the Division of Art and Music in Education, from courses in Visual Arts or History in Art.

### BIOLOGICAL SCIENCES

Corequisites:		
CHEM 124	3	
CHEM 230 or 233	3	6

#### Area:

BIOL 150*	3	
BIOC 200	1½	
BIOL 200	1½	
Two of BIOL 203, 204, 206, 207	3	
BIOL 300 or 320	1½	
Electives from Biology, Microbiology		
Biochemistry, ED-E 370**	4½	15

\* Students excused BIOL 150 by the Biology Department (see page 35) will substitute 3 units in 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 from those numbered 300 or higher.

### CHEMISTRY

Area:		
CHEM 124	3	
CHEM 224	3	
CHEM 230 or 233	3	
Approved Chemistry electives	6	15

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

### COMMERCE

A teaching area in Commerce is possible within the secondary degree. This programme would require the student to spend at least one full winter session at The University of British Columbia. Those interested should consult the Education Advising Centre for details.

### ENGLISH

Corequisites:		
ED-B 342 and 343C	3	
LING 390	3	6

#### Area:

ENGL 115* and 116*	3	
ENGL 200	3	
ENGL 400	3	
ENGL 438 (or 396 and 397)	3	
ENGL 437	3	15

\* or ENGL 121 and 122 with permission of the Education Advising Centre.

Additional area courses must be chosen from those numbered 350 or higher. In selecting additional courses students are advised to develop a balanced programme 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 350*	3	15

\* Where a student can demonstrate competence in oral French satisfactory to the instructor in ED-B 754A, 3 units of French numbered 400 or higher may be substituted for FREN 350.

Additional area courses will be chosen from those numbered 400 or higher.

### GEOGRAPHY

Corequisite:		
HIST 230, 240 or 242	3	3

#### Area:

GEOG 101	3	
GEOG 203	3	
GEOG 361 (formerly 204)	3	
GEOG 340 (formerly 305) or 350	3	
Senior Geography	3	15

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

One senior course in regional geography is strongly recommended.

Students taking 21 units of geography are advised to take both GEOG 340 and 350. Students in this area may not elect Geography/Social Science or Social Studies as their second area.

### GEOGRAPHY/SOCIAL SCIENCE

Corequisite:		
HIST 230, 240 or 242	3	3

#### Area:

GEOG 101	3	
GEOG 203	3	
GEOG 361 (formerly 204)	3	
GEOG 340 (formerly 305) or 350	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 the social sciences as one teaching area. Students in this area may not elect Geography or Social Studies as their second area.

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

### GERMAN

Corequisite:		
ENGL 200, 201, 204, 205, or 238	3	3

#### Area:

GER 100 or 140	3	
GER 200	3	
GER 204	3	
GER 300	3	
Senior German (400 or higher)	3	15

Additional area courses will be chosen from those numbered 400 or higher.

### HISTORY

Corequisites:		
ENGL 200, 201, 204, 205, or 238	3	
GEOG 101	3	6

#### Area:

Courses in History chosen to meet the following requirements:		
1. at least 3 units in Canada History		
2. at least 3 units in modern European or contemporary world history		
3. POLI 100, or 360 and one of 361 or 362		
4. at least 6 units lower-level	15	
5. at least 9 units upper-level	15	15

Students in this area may not elect History/History in Art, History/Social Science, or Social Studies as their second area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

ED-B 432, Value Education, is a preferred elective.

### HISTORY/HISTORY IN ART

Corequisite:		
GEOG 101	3	3

#### Area:

History courses chosen to meet the following requirements (including at least 3 units upper level):	9-12	
1. at least 3 units of Canadian History		
2. at least 3 units of modern European or contemporary world history		
History in Art courses including		
HA 120 or HA 390	9-12	21

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 elect History or History/Social Science as their second area.

ED-B 432, Value Education, is a preferred elective.

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

### HISTORY/SOCIAL SCIENCE

Corequisite:		
GEOG 101	3	3

Area: (minimum of 6 units upper level)		
Canadian History	3	

Modern European or contemporary world history .....	3	
POLI 100, or 360 and one of 361 or 362 .....	3	
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

This is a 21-unit area for students wishing to take courses in history and the social sciences as one teaching area. Students in this area may not elect History, History/History in Art, or Social Studies as their second area.

ED-B 432, Value Education, is a preferred elective.

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

### INDUSTRIAL EDUCATION

Area:

Courses in Industrial Education will be taken at Burnaby. Students will register for this work in the Faculty of Education at U.B.C. normally in years three and four taking courses specified by that faculty at the time of registration. Letters of Permission must be obtained from the Education Advising Centre to be submitted with applications for admission to U.B.C. Upon completion of these two years, approved credit towards the degree (normally 27 units for technical courses and 3 units in Education) will be transferred to the University of Victoria. Students will return to the University of Victoria to complete requirements for the degree and qualify for certification.

An interview with the Chairman of U.B.C.'s Division of Industrial Education should be arranged during the first year. Interviews can be arranged through the Education Advising Centre.

Candidates for the Industrial Education programme should take Math 11 and Physics or Chemistry at the Grade XI or XII level, in addition to their Industrial Education courses.

In years one and two students will select ENGL 115, and 121 or 122, PSYC 100, courses and corequisites for the second teaching area, education courses and academic electives. Assistance in choosing appropriate courses should be obtained from the Advising Centre.

### LATIN

Corequisite:

CLAS 100 or Greek 100 .....	3	3
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Area:

Approved Latin courses (including LATI 240) .....	15	
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Additional area courses may include 3-6 units of senior Classics.

### MATHEMATICS

Area:

MATH 130 (or 100, 101) .....	3	
MATH 110 and 210 .....	3	
MATH 362 and 366 .....	3	
STAT 253 .....	3	
C SC 170 and 171 .....	3	15

Students who consider mathematics as their first teaching area subject should take a minimum of 18 units of mathematics. Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

### MUSIC

Area:

Approved Music and/or Music Education .....	15	
Music performance groups (see below) ...	0-2½	15-17½

Students wishing to enter the Music teaching area should refer to page 115 regarding acceptance.

All students accepted in this area will be required to complete one of the following:

- two years in a University performance group (MUSI 180 to 481); or
- one year in each of two University performance groups (as specified in (a) above plus ME 300); or
- equivalent participation in an off-campus performance group(s) approved by the Chairman.

Additional area courses must be approved by the Chairman of the Division of Art and Music in Education.

### OUTDOOR EDUCATION

Corequisites:

BIOL 150 .....	3	
GEOG 101 .....	3	6

Area:

ED-E 370 .....	3	
PE 371 or 372 .....	1½	
GEOG 200 .....	3	
BIOL 306 .....	1½	
Approved Optional Courses* .....	6	15

\* Approved Optional Courses include:

ANTH 240	BIOL 427	GEOG 371
ANTH 401	BIOL 428	GEOG 372
ASTR 120	BIOL 429	GEOG 374
BIOL 310	BIOL 431	GEOG 375
BIOL 311	CHEM 301	GEOG 376
BIOL 316	CHEM 303	GEOG 450
BIOL 334	ED-D 414	GEOG 451
BIOL 406	ED-D 417	GEOG 459
BIOL 408	GEOG 203	PE 371 or 372
BIOL 418	GEOG 350	PHYS 310
BIOL 426	GEOG 370	SOCI 341

### PHYSICAL EDUCATION

Basic degree requirements will be increased by 4½ units for students taking this area.

Area:

Basic Skills (chosen from PE 104-125; see note, page 133) .....	6	
PE 141 .....	1½	
PE 142 .....	1½	
PE 143 .....	1½	
PE 241 .....	3	
PE 443 .....	1½	
PE 452 .....	3	
PE 461 in two areas .....	1	
PE 463 .....	½	
One of PE 341, 342, 346, 441, 444 .....	1½	21

NOTES:

- REFER TO PAGE 115 FOR INFORMATION REGARDING ACCEPTANCE INTO THIS AREA.
- If a student does not choose PE 344 as one of his electives he will be required to produce a First Aid certificate dated within two years prior to graduation.
- Students who have completed activities under PE 100/101 are not eligible to repeat such activities for credit.
- Students who wish to take a stronger concentration in Physical Education are advised to take the following:
 

PE 344 .....	1½	
PE 442 .....	1½	
PE 343, 371 or 372 .....	1½	
Another two of PE 341, 342, 346, 441, 444 .....	3	7½
- The following areas of emphasis are available:
  - Recreation
  - Fitness Management
  - Science of Human Performance
  - Socio-Cultural Foundations of Physical Education
  - Teaching and Coaching

Additional area courses must be chosen from those courses numbered 300 or higher.

### PHYSICS

Corequisite:

MATH 130 .....	3	
MATH 230 .....	3	6

Area:

PHYS 101, 211, 214, 215, 316 and 317 ...	12	
or PHYS 121, 214, 215, 216 and 271 .....	or 9	
Approved Physics electives .....	3-6	15

Students are urged to seek advice from the Chairman of the Division of Social and Natural Sciences regarding this area. Additional area courses must be approved by the Chairman.

### RUSSIAN

Area:

RUSS 100 .....	3	
RUSS 200 .....	3	
RUSS 201 .....	3	
RUSS 302 .....	3	
RUSS 406 .....	3	15

Additional area courses will be chosen from the following: RUSS 306, 401, 402, 403, 405.

**SOCIAL STUDIES**

Area:

GEOG 101 .....	3	
GEOG 203 .....	3	
GEOG 361 (formerly 204) .....	3	
Canadian History .....	3	
Modern European or contemporary world history .....	3	
POLI 100, or 360 and one of 361 or 362 .....	3	
(The above 9 units of history/political science must include at least 3 units upper level)		
GEOG 340 (formerly 305) or 350, or upper-level history .....	3	21

This is a 21-unit area for students wishing to take geography and history as one teaching area. In the professional year students will elect either ED-E 755 or 758. Students in this area may not elect Geography, History, History/History in Art, Geography/Social Science, or History/Social Science as their second area.

ED-B 432, Value Education, is a preferred elective.

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

**SPANISH**

Corequisite:

LING 100 or 360 .....	3	3
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Area:

SPAN 100 .....	3	
SPAN 260 .....	3	
SPAN 290 .....	3	
SPAN 302 .....	3	
SPAN at the 400 level .....	3	15

Additional area courses will be chosen from those numbered 400 or higher.

**THEATRE**

Corequisite:

ENGL 200, 201, 203, or 238 .....	3	3
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Area:

THEA 105 .....	3	
THEA 181 .....	3	
THEA 312 .....	3	
THEA 330 .....	3	
THEA 382 .....	3	15

Additional area courses may be elected from any Theatre offerings.

**NOTE:** Students should be aware that the following EXPANDED teaching areas constitute *single* teaching areas.

**ART (EXPANDED)**

Corequisite:

ENGL 200, 201, 203, or 238 .....	3	3
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Area:

HA 120 .....	3	
A E 100 .....	3	
A E 300 .....	3	
A E 301 .....	3	
A E 302 .....	3	
A E 303 .....	3	
A E 304 .....	3	
A E 400 .....	3	
Approved Senior Art or Senior Art History .....	6	30

Four and one-half units of additional area courses must be taken and must be approved by the Chairman of the Division of Art and Music in Education. Acceptance into this area is subject to approval of the Chairman.

A higher G.P.A. than that stated on page 121 of the Calendar may be required for this teaching area.

**GENERAL SCIENCE (EXPANDED)**

Corequisite:

MATH 130 .....	3	3
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Area:

ASTR 120 or 200 .....	3	
BIOL 150 (or 3 units of approved alternative courses for those with Biology 12) .....	3	
BIOL 306 .....	1½	
CHEM 124 (or 120) .....	3	
CHEM 224 .....	3	
GEOL 200 or GEOG 203 .....	3	

PHYS 101 or 121 .....	3	
Approved courses selected from the offerings in astronomy, biochemistry and microbiology, biology, chemistry, resource and physical geography, or physics .....	10½	30

At least one additional course in physics is highly recommended. Credit for MATH 230 will be included as part of the 10½ units if an additional course in physics is taken.

Four and one-half units of additional area courses must be taken and must be approved by the Chairman of the Division of Social and Natural Sciences.

**GEOGRAPHY/SOCIAL SCIENCE (EXPANDED)**

Corequisite:

HIST 230, 240 or 242 .....	3	3
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Core Area:

GEOG 101 .....	3	
GEOG 203 .....	3	
GEOG 361 (formerly 204) .....	3	
GEOG 340 (formerly 305) or 350 .....	3	
Senior Geography .....	9	

Expanded Area:

Nine units (minimum of 3 units upper level) of approved courses in one of the following areas:		
anthropology, classics, economics, history, pacific studies, political science, sociology .....	9	

Additional Area Courses:

Four and one-half further units of approved courses in anthropology, classics, economics, history, law, pacific studies, political science, sociology .....		
	4½	34½

Expanded area and additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

**HISTORY/SOCIAL SCIENCE (EXPANDED)**

Corequisites:

ENGL 200, 201, 204, 205, or 238 .....	3	
GEOG 101 .....	3	6

Core Area: (minimum of 9 units upper level)

Canadian History .....	3	
Modern European or contemporary world history .....	3	
POLI 100, or 360 and one of 361 or 362 ...	3	
History electives .....	9	

Expanded Area:

Nine units (minimum of 3 units upper level) of approved courses in one of the following areas:		
anthropology, classics, economics, geography, pacific studies, political science, sociology .....	9	

Additional Area Courses:

Four and one-half further units of approved courses in anthropology, classics, economics, geography, law, pacific studies, political science, sociology .....		
	4½	31½

Expanded area and additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

ED-B 432, Value Education, is a preferred elective.

**MUSIC EDUCATION (EXPANDED)**

*This teaching area is not open to new students.*

Students now registered in this area may complete the programme as described on their Programme Outlines.

**SOCIAL STUDIES (EXPANDED)**

Corequisite:

Engl 200, 201, 204, 205, or 238 .....	3	3
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Area:

GEOG 101 .....	3	
GEOG 203 .....	3	
GEOG 361 (formerly 204) .....	3	
GEOG 340 (formerly 305) or 350 .....	3	
Senior Geography .....	3	
Canadian history .....	3	

Modern European or contemporary world history .....	3	
POLI 100 or 360 and one of 361 or 362 .....	3	
History electives .....	6	
(Of the 15 units of history/political science, at least 6 units must be upper level.)		
Additional Area Courses:		
Four and one-half further units of approved courses in anthropology, classics, economics, geography, history, law, pacific studies, political science, sociology.		
(Further courses in geography or history must be upper level .....	4½	34½

Additional area courses must be approved by the Chairman of the Division of Social and Natural Sciences.

ED-B 432, Value Education, is a preferred elective.

## B. DIPLOMA PROGRAMMES FOR GRADUATES

Diploma programmes are one-year professional programmes for graduates of a faculty other than Education who wish to qualify for a credential enabling them to teach in the public schools of British Columbia. Programmes are offered at the elementary and secondary levels.

Admission requirements are detailed on page 115. These programmes commence with a two-week school experience at the beginning of September and terminate about the middle of May. Successful completion requires a G.P.A. of 3.00.

**Warning: Candidates for the Secondary Programme who have only one teaching subject may find it difficult to obtain a teaching position.**

Students who feel they have previously completed courses equivalent to those listed in the programmes below should consult the Education Advising Centre.

### B1. ELEMENTARY CURRICULUM

The programme stated below is for 1978-79 only. A new programme is being prepared to commence in 1979, and may run from August through May, inclusive. Prospective applicants for the 1979-80 programme should note that they must meet the admission requirements by June 30, 1979 and apply by March 31, 1979.

ED-D 200 .....	3	
ED-B 320 .....	1½	
ED-D 337 .....	1½	
ED-B 360 .....	1½	
Two of ED-A 701, 705 or 706,		
ED-C 747 .....	2	
ED-B 742 (Primary or Intermediate) .....	2	
ED-E 744 .....	1½	
ED-E 745 .....	1	
ED-E 746 .....	1	
EDUC 797 .....	3	18

### B2. SECONDARY CURRICULUM

The programme stated below is for 1978-79 only. A new programme is being prepared to commence in 1979, and may run from August through May, inclusive. Prospective applicants for the 1979-80 programme should note that they must meet the admission requirements by June 30, 1979 and apply by March 31, 1979.

ED-D 303 .....	1½	
ED-D 337 .....	1½	
ED-D 406 .....	3	
ED-B 320 .....	1½	
ED-B 430 .....	1½	
EDUC 750-770 .....	6-7½	
EDUC 790 .....	1½	
Education elective (if required) .....	1½	18

OR

Alternative Diploma Programme (Sequential Option)		
For 1978-79, two of: ED-B 753, ED-C 764, ED-E 755, 758, 761, 769 .....		
EDUC 799 B .....	12	18

OR

Alternative Diploma Programme (Saanich Teacher Training Project)		
ED-D 303 .....	1½	
ED-B 320 .....	1½	
ED-D 337 .....	1½	
ED-D 406 .....	3	

ED-B 430 .....	1½	
*EDUC 750-770 .....	6-7½	
Education elective .....	1½-3	18

OR

Special Diploma Programme for holders of a University of Victoria Bachelor of Music degree with Music Education major.

ED-B 320 .....	1½	
ED-D 337 .....	1½	
ED-B 430 .....	1½	
ED-A 762 .....	6	
Approved Education electives .....	4½	15

\*Students admitted on the basis of two teaching subjects are required to complete 7½ units of EDUC 750-770.

## D. DEGREES IN HUMAN PERFORMANCE

The Division of Physical Education is responsible for two degree programmes in the area of Human Performance. These are designed to aid students in preparing for opportunities in the broad field of physical activity outside the school setting through recreational, business and government agencies. The Division each year will accept approximately 10 students by the same selection process used for Admission to Physical Education Teaching Area described on page 115.

### D1. THE BACHELOR OF SCIENCE DEGREE WITH MAJOR IN HUMAN PERFORMANCE

#### Year One:

*P E 141 .....	1½	
P E 142 .....	1½	
P E 143 .....	1½	
P E Activities .....	3	
CHEM 124 .....	3	
BIOL 150 .....	3	
Electives .....	3	16½

#### Year Two:

*P E 241 .....	3	
P E Activities .....	3	
MATH 130 .....	3	
PHYS 101 .....	3	
Electives .....	4½	16½

#### Years Three and Four:

*P E 341 .....	1½	
*P E 344 .....	1½	
*P E 441 .....	1½	
*P E 442 .....	1½	
*P E 451 .....	1½	
ED-C 494V and 495V .....	3	
Additional Physical Education .....	7½	
Electives .....	15	33

\* Science designated units

NOTES:

- To qualify for the B.Sc. degree 33 Science designated units must be taken within the programme.
- Of the 22½ elective units, at least 9 units must be from approved Science designated courses and 6 of these at the 300 or 400 level. These should be taken as a second area of concentration. Any courses selected from the offerings in:

Biochemistry	Mathematics
Biology	Microbiology
Chemistry	Physics
Computer Science	Statistics

are acceptable. The following specific courses are also approved:

ANTH 100	PSYC 200
ANTH 250	PSYC 230
	PSYC 415
	PSYC 424

### D2. THE BACHELOR OF ARTS DEGREE WITH MAJOR IN HUMAN PERFORMANCE

#### Year One:

P E 141 .....	1½	
P E 142 .....	1½	
P E 143 .....	1½	
P E Activities .....	3	
SOCI 100 .....	3	
PSYC 100 .....	3	
Electives .....	3	16½

#### Year Two:

P E 241 .....	3	
P E Activities .....	3	

PSYC 240 .....	3	
P E 343 .....	1½	
Electives .....	6	16½

**Years Three and Four:**

P E 342 .....	1½	
P E 346 .....	1½	
P E 347 .....	1½	
P E 445 .....	1½	
ED-C 494V and 495V .....	3	
SOCI 360 .....	1½	
SOCI 365 .....	1½	
Additional Physical Education .....	9	
Electives .....	12	33

NOTE: Of the 21 units of electives, 9 units must be from the Faculty of Arts and Science, 6 of which must be at the 300 and 400 level.

### E. POST-BACHELOR OF EDUCATION (ELEMENTARY) DEGREE PROGRAMME

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 programme consisting of a minimum of 15 units. The courses must be acceptable to the University and to the Teacher Qualification Service.

As this programme must be approved in advance, students should consult the Education Advising Centre prior to beginning any courses of this programme.

The programme will include the following in the order given provided they have not been completed as part of the degree:

1. ED-D 337;
2. A second teaching area;
3. ED-B 340, or 342 and 343 (to be taken only if necessary to bring total to 15 units);
4. Approved upper-level electives (to be taken only if necessary to bring total to 15 units)

Lower level courses required as prerequisites must be taken in addition to the basic 15 units. A minimum G.P.A. of 3.00 is required on the courses of this programme before the Faculty will advise the Teacher Qualification Service that the programme has been completed.

### F. GRADUATE STUDIES IN EDUCATION

The Master of Education, and the Master of Arts and Doctor of Philosophy degrees with specialization in Education are offered through the Faculty of Graduate Studies; information about these degrees may be found on pages 151-153, and 155 of the Calendar. Enquiries concerning Graduate Studies Education should be directed to the Dean of the Faculty of Graduate Studies or to the Faculty of Education Graduate Advisors.

### G. DIPLOMA PROGRAMME IN NATIVE INDIAN LANGUAGES (NON-CERTIFICATE)

A diploma programme of courses over one academic year, begun in September 1974, prepares individuals to function as consultants, coordinators, or resource aides 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 student meets other admission criteria and has adequate access to speakers of a native language.

The courses may be taken by an individual for the one-year diploma only or they may be taken as a part of or after completion of a degree programme by students currently enrolled in the University. In cases where the courses are taken as part of a degree programme, they would be counted as electives only.

Preliminary screening will be made by a committee from the Department of Linguistics 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 page 8), each application should include two letters of reference and a letter written by the applicant outlining his personal background and future aspirations.

All students will register in the same section of the following courses:

LING 120 — Principles of Phonology
LING 121 — Principles of Morphology and Syntax
LING 122 — Phonological Analysis
LING 123 — Grammatical Analysis
LING 124 — Discovery Procedures: I

LING 125 — Discovery Procedures: II
LING 126 — Pedagogical Grammars of Amerindian Languages
LING 127 — Amerindian Lexicography
ED-B 490 — Principles of Teaching Second Languages

After admission to the programme, orientation, counselling and general University coordination of the programme will be provided by the Studies of Intercultural Education Office of the Faculty of Education. The terminal diploma, to be offered by the Faculty of Education, will carry no connotation of "certification" as a professional teacher. It will be relevant solely to functions involved in Native Language instruction.

## COURSES IN THE FACULTY OF EDUCATION

### Not all courses listed hereunder will be offered every session.

Both core and elective courses included in the professional year and in specialized programmes will be scheduled as part of a programme and may vary from the normal pattern.

Students registering in the professional year will be issued prepared timetables at registration and should therefore not attempt to make up individual timetables.

Courses numbered 300 or above are normally reserved for students registered in third or following years. Courses numbered 700 - 799 are professional year courses.

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 by permission of the instructor and, where necessary, approval of the Education Advising Centre.

### UNDERGRADUATE COURSES

Courses are designated as follows:

ED-A } A E } M E }	Division of Art and Music in Education
ED-B } L E }	Division of Communication and Social Foundations
ED-C } P E }	Division of Physical Education
ED-D	Division of Psychological Foundations in Education
ED-E	Division of Social and Natural Sciences
EDUC	General Education courses coordinated through the Office of the Associate Dean.

### ED-E 145. (3) General Science

Topics from astronomy, biology, chemistry, geology and physics selected to provide a broad background for the teaching of elementary school sciences. Laboratory exercises will emphasize the process of scientific inquiry.

(2-2; 2-2)

#### NOTE:

Open to students who have biology only or no science in high school, or who have been out of school 6 or more years.

Students who have the following high school courses are not admissible to Education-E 145. They should take the courses indicated:

Biology and Chemistry (or Chemistry only) .....	Physics 103
Biology and Physics .....	Astronomy 120 or Chemistry 120 or Geography 203
Chemistry and Physics (or Physics only) .....	Biology 150
Biology and Chemistry and Physics .....	student's choice (Astronomy 120 or Geography 203 recommended)

### EDUC 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. A two-week post-session practicum is required. (Grading: INC; COM, N, or F.)

### ED-D 200A. (1½) Introduction to Educational Psychology

The application of psychological principles to elementary classroom practice.

Credit toward a programme cannot be granted for more than one of Education-D 200A, 200B, or 303. (Grading: INC, COM, N, or F.)

Prerequisite: Psychology 100. (2-0; 2-0)

**ED-D 200B. (3) Introduction to Educational Psychology**

The application of psychological principles to elementary classroom practice.

Credit toward a programme cannot be granted for more than one of Education-D 200A, 200B or 303.

For 1978-79, students on the Transitional Professional Year and Elementary Diploma Programme will take Education-D 200B for 3 units.

(3-0; 3-0)

**ED-C 285. (1½) Human Life Science**

Background in human health specifically related to the elementary Health Education curriculum. Seminars will be oriented toward classroom methodology.

(2-2)

**EDUC 297. (1½) Pre-Professional 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 may be required. (Grading: INC; COM, N or F.)

**ED-D 303. (1½) Introduction to Psychology of Classroom Learning**

An introduction to the psychology of learning in the secondary school.

Credit toward a programme cannot be granted for more than one of Education-D 200A, 200B or 303.

(3-0)

**ED-D 305. (3) Psychology of Childhood**

Mental, social, emotional and physical characteristics of pre-school and elementary school pupils, their interests and problems; emphasis upon classroom implications.

Pre- or Corequisite: Professional Year.

(3-0; 3-0)

**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.

Not available for credit on a degree programme for students who have already completed Education 300.

(3-0)

**ED-D 317. (1½) Non-verbal Communication**

Study of non-verbal interactions: movement, posture, gesture, qualities of voice, and spacing. Analysis of implications in teaching, counselling, family relations, mental health.

Not available for credit on a degree programme for students who have already completed Education 300.

(3-0)

**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.

Prerequisite: Education 797, Education 498, or an approved degree.

(3-0)

**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.

Not available for credit on a degree programme for students who have already completed Education 401.

Pre- or Corequisite: Professional year or consent of Education Advising Centre.

(3-0)

**\*ED-B 340. (3) Research and Programme Development in Primary Education**

Trends, issues and research in primary education as the basis for curriculum development, organization, and instruction.

(3-0; 3-0)

**ED-B 341. (3) Literature in the Elementary School**

Survey of children's literature; selection of books for children; scope and sequence in the development of a literature programme in the primary or intermediate grades. Students will specialize according to their option.

Either English 301 or Education-B 341 may be used for credit in the intermediate Language Arts area.

(3-0; 3-0)

**\*\*ED-B 342. (1½) Foundations of Reading**

Consideration of the processes and psychology of reading.

(3-0)

\*The professional year is prerequisite to this course.

\*\*The professional year is prerequisite to this course for students on an elementary programme.

**\*\*ED-B 343. (1½) Reading in the School**

Components of a total reading programme: examination, evaluation, and construction of instructional materials; curricular organization.

Credit for only one of the following areas may be applied to a degree programme.

343A — Reading in the Primary Grades

343B — Reading in the Intermediate Grades

343C — Reading in the Secondary Schools

Prerequisite: Education-B 342.

(3-0)

**ED-B 344. (1½) Oral Communication and Speech Development in the Elementary School**

Factors influencing communication; improvement of oral facility in teacher and pupil; analysis of English sounds and voice characteristics; early recognition of speech problems; classroom activities for speech development.

(3-0)

**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 346. (3) Social Studies in the Elementary School**

The structural character and implication 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.

Enrolment in this course is limited.

(3-0; 3-0)

**\*ED-B 347. (1½) Foundations of Elementary Language**

A study of the development, scope and sequence of the language of elementary school children including the nature of the listening, speaking and writing process.

(3-0)

**\*ED-B 348. (1½) Language in the Elementary School**

The development of curriculum in the elementary school language programme: a study of methods and materials.

(3-0)

**ED-B 360. (1½) Educational Media**

The application of media to education. Communication theory and practical experience in production and utilization of film, photography, audio and video tapes, and classroom audio-visual materials.

(3-0)

**ED-B 361. (1½) Advanced Educational Media**

Comprehensive synthesis of audio-visual media, educational television, programmed instruction, and multimedia systems for all levels of education. Laboratory experiences in the operation of complex equipment and the preparation of video tapes, sound slides, learning programmes, and single concept films.

Prerequisite: Education-B 360.

(3-0)

**ED-E 370. (3) Introduction to Outdoor Education**

The major premise upon which this course and its content is based is the belief that there is an urgent need for individuals to re-examine and in many cases look for the first time at the relationship that exists between man and all other living things. Emphasis will be placed on having individuals look critically at the effect man's use of the outdoors has upon the living things he comes in contact with. How can man interact with the outdoors in such a way as to insure its continued existence for use by future generations? By being full participants in many activities it is intended that students will become more aware of the outdoors as well as understand how man can wisely live with his surroundings. Course content will be interdisciplinary and staffed as such. It is felt that division of content and activities into traditional subject areas is neither possible nor desirable. This course will serve all areas of education students desiring to include the outdoors as part of the learning experience.

(2-2; 2-2)

**EDUC 398. (1½) Third-Year Secondary Seminar and School Experience**

A programme of regularly scheduled seminars in which students will receive some instruction in methodology as preparation for visits to secondary school classrooms. A two-week post-session practicum may be required. (Grading: INC; COM, N or F.)

**ED-D 402. (1½) Individual Testing**

Theory and practice in the use of diagnostic tests in elementary schools. Students who enrol will be required to administer tests, under supervision, in schools near the University.

Prerequisite: Education-D 337 or equivalent.

(2-2)

**ED-D 403. (1½) Social Psychology of School and Classroom**

The application of social learning theory to school and classroom management.

Prerequisite: Education-D 200 or 303. (3-0)

**\*ED-D 405 (formerly EDUC 407/408). (3) Survey of 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: Education-D 200A or 200B, or Psychology 100.

NOTE: The Professional Year requirement is waived for students in the Child Care Programme. (3-0; 3-0)

**ED-D 406. (3) Psychology of Adolescence**

The physiological, psychological, social, and educational aspects of adolescence. (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 programmes.

Prerequisite: Education-D 405 (or 407). (3-0)

**\*ED-D 409C. (3) Education of the Exceptional Child — the Mentally Retarded**

A consideration of objectives and methods in educating the mentally retarded child, and practice in applying the instructional strategies recommended by research evidence. Students enrolling in this course should reserve a morning or an afternoon each week in their timetables for the required practicum component.

Prerequisite: Education-D 405 (or 407) or Psychology 450.

NOTE: The Professional Year prerequisite is waived for students in the Child Care Programme. (2-2; 2-2)

**\*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 programme.

Prerequisite: Education-D 405 (or 407). (3-0)

**\*ED-D 409E. (3) Education of the Exceptional Child — the Emotionally Disturbed**

A consideration of objectives and methods in working with the emotionally disturbed child, and practice in applying the instructional strategies recommended by research evidence. Students enrolling in this course should reserve a morning or an afternoon each week in their timetables for the required practicum component.

Prerequisite: Education-D 405 (or 407), Psychology 430 or 432.

NOTE: The Professional Year prerequisite is waived for students in the Child Care Programme. (2-2; 2-2)

**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 415 (formerly 415/416). (3) Diagnosis and Remediation of Learning Difficulties**

A consideration of theories and programmes relevant to the causes, correction and remediation of learning difficulties; common tests used in the diagnostic battery, and the interpretation and education implications of test results. Students will be required to spend three hours per week in the Learning Assistance Centre working with children with learning problems. This course is open to students on the elementary programme only. (3-3; 3-3)

**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)

\*The professional year is prerequisite to this course.

**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)

Pre- or Corequisite: Professional year. (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)

Pre- or Corequisite: Professional year. (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 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; 3-0)

Pre- or Corequisite: Professional year or enrolment in Industrial Education teaching area. (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. (3-0)

Pre- or Corequisite: Professional year. (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)

**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. (3-0)

**ED-D 434. (1½) Human Skills**

Topics include: family life, educational principles and practices; vocational decision-making; education for personal development and life skills learning. (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 programme development and evaluation. (3-0)

Prerequisite: Consent of the instructor. (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 programme emphases 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)

**ED-D 437. (1½) Measurement and Evaluation in Education**

Reliability and validity of educational measures; the measurement of aptitudes and affect; diagnostic, formative and summative evaluation; problems and issues in educational evaluation. (3-0; 3-0)

Not available for credit on a degree programme for students who have already completed Education 401.

Pre- or Corequisite: Education 337. (3-0)

**ED-D 438 (formerly EDUC 302). (1½) Use of Group Tests**

Study of the purposes, uses, administration, scoring, and interpretation of group tests commonly used in schools. Includes tests of aptitudes, achievement, interests, and personality.

Prerequisite: Consent granted through the Division of Psychological Foundations. (3-0)

**\*ED-B 440. (1½) Early Childhood Education**

An introduction to the philosophy underlying pre-school education. Current trends, issues, and research related to the developmental needs and behaviours of children under six years of age. (3-0)

**\*ED-B 441. (1½) Research and Programme Development in Pre-School Education**

Trends, issues, and research in pre-school education as a basis for curriculum development, organization, and instruction.

Prerequisite: Education-B 440. (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.

Pre- or Corequisite: Education-B 342. (3-0; 3-0)

**\*ED-E 443. (1½) Mathematics Curriculum in the Elementary School**

Goals of mathematics learning; evaluation and use of textbooks, supplementary and enrichment materials, games, concrete aids; individualized small group, and large group instructional settings; evaluation of learning; current issues and trends.

Prerequisite: Education-E 744 or Mathematics 203 or equivalent. (3-0)

**\*ED-E 444. (1½) Mathematics Instruction in the Elementary School**

Teaching strategies; learning activities; classroom organization; instruction materials, their function and use; laboratory methods.

Prerequisite: Education-E744 or Mathematics 203 or equivalent. (3-0)

**\*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. (3-0; 3-0)

**EDUC 450. (3) Programme Development in Education**

Trends, issues and research in education as the basis for curriculum development, organization, and instruction.

450A — Intermediate.

Pre- or Corequisite: Professional year. (3-0; 3-0)

**EDUC 480. (1½ or 3) Contemporary Issues in 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 inter-disciplinary approach.

With permission may be taken more than once for credit on a degree programme. (3-0) or (3-0; 3-0)

**ED-A 480. (1½ or 3) Contemporary Issues in Education — Art and Music**

(Description as for Education 480).

**ED-B 480. (1½ or 3) Contemporary Issues in Education — Communication and Social Foundations**

(Description as for Education 480.)

**ED-C 480. (1½ or 3) Contemporary Issues in Education — Physical Education**

(Description as for Education 480.)

**ED-D 480. (1½ or 3) Contemporary Issues in Education — Psychological Foundations**

(Description as for Education 480.)

**ED-E 480. (1½ or 3) Contemporary Issues in Education — Social and Natural Sciences**

(Description as for Education 480.)

\*The professional year is prerequisite to this course.

**\*ED-E 484. (1½) The Slow Learner in Mathematics**

Possible causes of difficulty; teacher-made diagnostic tasks and tests; published tests; analysis of common errors; lesson plans and strategies; mini case studies. (3-0)

**ED-E 485. (1½ or 3) Special Topics in General Science**

Topics of current interest or concern.

With permission may be taken more than once for credit on a degree programme. (2-2) or (2-2; 2-2)

**ED-E 486. (1½ or 3) Special Topics in Social Studies**

Topics of current interest or concern.

With permission may be taken more than once for credit on a degree programme. (3-0) or (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; graduation, presentation, repetition, and measurement in lesson development. Attention given to automated language teaching.

Prerequisite: One of Linguistics 100, 210, 360, 390. (3-0; 3-0)

**EDUC 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 in this course. Permission will not normally be given for more than three units of directed studies courses. The following areas have been approved:

494Y Student Teaching  
494Z Education

**ED-A 494. (1½) Directed Studies**

(Description as for Education 494.)

The following areas have been approved:

494A Art Education  
494T Music Education

**ED-B 494. (1½) Directed Studies**

(Description as for Education 494.)

The following areas have been approved:

494C Drama in Education  
494D Early Childhood Education  
494E Educational Administration  
494F Educational Foundations  
494G Educational Media  
494J Teaching of English  
494K Language Arts  
494L Teaching of a Second Language  
494Q Library Education

**ED-C 494. (1½) Directed Studies**

(Description as for Education 494.)

The following area has been approved:

494V Physical Education

**ED-D 494. (1½) Directed Studies**

(Description as for Education 494.)

The following areas have been approved:

494B Helping Professions  
494H Educational Psychology  
494S Special Classes  
494W Remedial

**ED-E 494. (1½) Directed Studies**

(Description as for Education 494.)

The following areas have been approved:

494M Teaching of Geography  
494N Teaching of History  
494P Social Studies  
494R Mathematics Education  
494U Outdoor Education  
494X Science Education

**EDUC 495. (1½) Directed Studies**

(Description as for Education 494.)

**ED-A 495. (1½) Directed Studies**

(Description as for Education-A 494.)

**ED-B 495. (1½) Directed Studies**  
(Description as for Education-B 494.)

**ED-C 495. (1½) Directed Studies**  
(Description as for Education-C 494.)

**ED-D 495. (1½) Directed Studies**  
(Description as for Education-D 494.)

**ED-E 495. (1½) Directed Studies**  
(Description as for Education-E 494.)

**\*ED-B 496. (1½) Practicum in Teaching the Kindergarten Child**

Supervised practice in teaching kindergarten. A post-session practicum in May normally will be required.

Students anticipating enrolment in Education-B 496 should make early enquiry to the Education Advising Centre to determine availability of supervisory personnel and school placement. Approval of the Education Advising Centre is required prior to enrolment. In general, course activities require a time commitment of one-half day per week throughout the second term.

Pre- or Corequisite: Education-B 441.

**\*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 programme will be at the discretion of the Division.

- 496A Teaching the gifted child.  
Pre- or Corequisite: Education-D 409A
- 496D Teaching the culturally disadvantaged learner  
Prerequisite: Education-D 409D
- 496F Teaching the child with learning disabilities.  
Pre- or Corequisite: Education-D 415

Students anticipating enrolment in Education-D 496 should make early enquiry to the Education Advising Centre to determine availability of supervisory personnel and school placement. Approval of the Education Advising Centre is required prior to enrolment. In general, course activities require a time commitment of one-half day per week throughout the second term.

**EDUC 498. (1½) Fourth-Year Secondary Seminar**

A programme of seminars and school experiences prerequisite to the 750-770 sequences. A two-week post-session practicum may be required. (Grading: INC; COM, N, or F.)

Prerequisite: Education 398.

**ED-A 701. (1) Curriculum and Instruction in Art**

A study of the curriculum organization and techniques of instruction in elementary art.

Not available for credit for those who have completed Art Education 100, 300, or 301. (2-0; 2-0)

**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 for those who have completed Music Education 105/106. (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. (1-1; 1-1)

**ED-B 742. (2) Curriculum and Instruction in the Language Arts (Primary or Intermediate Grade Emphasis)**

A study of the curriculum organization and techniques and materials of instruction in language arts. (3-0; 3-0)

**ED-E 744. (1½) Curriculum and Instruction in Elementary Mathematics**

A study of the curriculum organization and techniques of instruction in elementary mathematics. (1-1; 1-1)

**ED-E 745. (1) Curriculum and Instruction in Elementary Science**

A study of the curriculum organization and techniques of instruction in elementary science. (1-2)

**ED-E 746. (1) Curriculum and Instruction in Elementary Social Studies**

A study of the curriculum organization and techniques of instruction in elementary social studies. (1-2)

**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 for those who have completed Physical Education 149 or 345/446. (1-1; 1-1)

**ED-A 750. (3-6) 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.

A two-week practicum (orientation period) is required at the beginning of the school year. (Grading: INC; letter grade.)

**ED-B 753. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - English**

(Description as for Education-A 750.)

**ED-B 754. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Second Language**

- ED-B 754A (3-6) French  
ED-B 754B (3 or 4½) German  
ED-B 754C (3 or 4½) Spanish  
ED-B 754D (3 or 4½) Latin  
ED-B 754E (3 or 4½) Russian

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.

A two-week practicum (orientation period) is required at the beginning of the school year. (Grading: INC; letter grade.)

**ED-E 755. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Geography**

(Description as for Education-A 750.)

**ED-E 758. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - History**

(Description as for Education-A 750.)

**ED-E 761. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Mathematics**

(Description as for Education-A 750.)

**ED-A 762. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Music**

(Description as for Education-A 750.)

**ED-E 763. (3 or 4½) Curriculum, Instruction and Practicum in Secondary School Subjects - Outdoor Education**

(Description as for Education-A 750.)

**ED-C 764. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Physical Education**

(Description as for Education-A 750.)

**ED-B 767. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Theatre**

(Description as for Education-A 750.)

**ED-E 768. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Commerce**

Offered by special permission only.

**ED-E 769. (3-7½) Curriculum, Instruction and Practicum in Secondary School Subjects - Science**

(Description as for Education-A 750.)

Students with teaching areas in biology, chemistry, physics, or general science will enrol for this course.

**ED-E 770. (3-6) Curriculum, Instruction and Practicum in Secondary School Subjects - Home Economics**

Offered by special permission only.

**EDUC 790. (1½) Secondary Diploma Seminar: Teaching Skills**

The study, performance and evaluation of teaching skills essential to secondary teacher performance. Skills will be practised and evaluated

\*The professional year is prerequisite to this course.

through peer interaction. (Grading: INC; COM, N, or F.)

Prerequisite: Acceptance into Secondary Diploma Programme.

**EDUC 797. (3) Seminar and Elementary Student Teaching**

For students registered in the professional year, elementary programme. Consists of a weekly seminar and school experience to be arranged by the School Experiences Office. Students should note that they will be required to undertake a two-week September school orientation prior to the start of on-campus classes. (Grading: INC; letter grade.)

**EDUC 799A. (9) Integrated Professional Programme (Regular)**

Historical and Social Foundations; Administration and Management of Education in B.C.; Measurement and Evaluation; Media Education; Library Education; Directed Media or Library Project. (Grading: INC; letter grade.)  
(18-0 first term; practicum second term.)

**EDUC 799B. (12) Integrated Professional Programme (Diploma)**

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. (Grading: INC; letter grade.)  
(24-0 first term; practicum second term.)

**A E 100. (3) Introduction to Art Education**

A study of the growth and development of Art Education, classroom management, teaching techniques in art as related to elementary and/or secondary level.

Not available for credit on a degree programme for students who have already completed Education-A 701.

**A E 300. (3) Two-Dimensional and Graphic Art**

Programme planning and laboratory investigation of art media involved in handling painting, design, graphics and other two-dimensional problems at the elementary and/or secondary level.

Prerequisite: Art Education 100 or Education-A 701. (3-0; 3-0)

**A E 301. (3) Three-Dimensional Art and Crafts**

Teaching methods and techniques involving carving, modelling, constructions, and other three-dimensional problems and crafts related to elementary and/or secondary level.

Prerequisite: Art Education 100 or Education-A 701. (3-0; 3-0)

**A E 302. (3) Drawing and Painting in the Classroom**

Development of sensory perception; exploration of visual imagery found in both the natural and manmade environment; expression of an emerging personal visual imagery using drawing, painting, and projected light techniques. Emphasis throughout will be on personal experience and expression with qualifying discussion on its application to leadership in art. This may include work with children and a parallel study of the visual development of children.

Prerequisite: Art Education 100 or Education-A 701. (3-0; 3-0)

**A E 303. (1½ or 3) Ceramics in the Classroom**

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.

Prerequisite: Art Education 100 or Education-A 701. (3-0) or (3-0; 3-0)

**A E 304. (1½ or 3) Crafts in the Classroom**

An introductory course in crafts for elementary and secondary teachers; a practical investigation of various craft media which can be used in the school system.

Prerequisite: Art Education 100 or Education-A 701.  
(1½-0; 1½-0) or (3-0; 3-0)

**A E 400. (3) Special Study**

This will include a study of a particular field of Art Education carried out under the direction of a member of the Faculty. A lecture-demonstration study of the growth and development of children in relation to creative expression, including the philosophy of art education.

Prerequisites: Art Education 300 and 301. (3-0; 3-0)

**L E 432 (formerly one-half of 431). (1½) The School Library and the Teacher**

The library as a vital part of the teacher's programme, its philosophy and services. For all teachers — elementary and secondary. (3-0)

**\*L E 433 (formerly one-half of 431). (1½) The School Librarian**

The role of the school librarian, administration of a school library, staffing, supervision. (3-0)

**\*L E 434 (formerly one-half of 430). (1½) Elementary School Library Materials**

The evaluation, selection and acquisition of learning materials in all media formats, etc.

(Offered in 1978-79 and alternate years.) (3-0)

**\*L E 435 (formerly one-half of 430). (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.

(Offered in 1978-79 and alternate years.) (3-0)

**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 programmes to be included. (1-2; 1-2)

**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 programme for students who have already completed Music 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 programme. Use of materials in a sequential programme involving singing, listening, playing, rhythmic and creative activities.

Students with a considerable music background may be permitted to enter Music Education 106 without the regular Music Education 105 prerequisite.

Not available for credit on a degree programme for students who have already completed Education-A 705 or 706.

Co- or Prerequisite: Music Education 105 or equivalent. (3-0)

**M E 118. (1) Music Theatre Workshop**

In depth study of techniques and procedures related to the production of musical plays in the school. Both artistic and technical (staging, lighting, costumes, make-up) aspects will be included. Workshop productions of one or two musical plays per academic year may be included. (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: Music Education 101. (1-0; 1-2) or (2-2; 0-0)

**M E 207 (formerly 107). (1½) Educational Materials for Listening**

Continuation and development of classroom music activities with special emphasis on listening experiences. (3-0)

**M E 208 (formerly 108). (1½) Piano Class for Classroom Teachers**

Development of piano keyboard skills useful in classroom music. (2-2) or (1-1; 1-1) or (1½-0; 1½-0)

**M E 209. (1½) Creativity in Music Education**

The relationship of theories of creative behaviour to classroom music teaching. Seminars and workshops. (3-0)

**M E 216 (formerly 116). (1) Instrumental Clinic**

Practical ensemble experience on secondary instruments; techniques and materials for teaching, including conducting and instrumental repair. (0-4; 0-4)

**M E 218. (1) Music Theatre Workshop**

(Description as for Music Education 118.)

**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 300 (formerly 100). (1½) The Teaching of Choral and Classroom Singing**

Materials and rehearsal techniques for use with school choral activities. Prerequisite: Music 100, or Music Education 105, or consent of Division. (3-0)

**M E 301 (formerly 307). (1½) Music Education Seminar: II**

A study of programmes and materials for secondary schools with an

\*The professional year is prerequisite to this course.

emphasis on general music programmes. Some school experience will be required.

Prerequisite: Music Education 201. (1-0; 1-2) or (2-2; 0-0)

**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.

(Not offered 1978-79.) (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 programme will be at the discretion of the Division.

303A Guitar  
303B Recorder (Not offered 1978-79.)  
303C Ukulele (Not offered 1978-79.) (2-2)

**M E 306 (formerly 306 and 309). (3) Music in the Elementary School (Advanced)**

A study of the foundations of music education (objectives, methods and materials) for elementary schools.

Prerequisite: Music Education 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: Music Education 208 or equivalent. (2-2) or (1-1; 1-1) or (1½-0; 1½-0)

**M E 316 (formerly 216). (1) Instrumental Clinic**

(Description as for Music Education 216.)

**M E 318. (1) Music Theatre Workshop**

(Description as for Music Education 118.)

**M E 319. (1) Choral Seminar**

(Description as for Music Education 219.)

**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 programme will be at the discretion of the Division.

400A Kodaly (Not offered 1978-79.)  
400B Orff (Not offered 1978-79.)  
400 C Manhattanville  
Prerequisite: Music Education 306. (3-0)

**M E 401 (formerly 304). (1½) Music Education Seminar: III**

Initiating and maintaining instrumental programmes in the schools. School experiences (coordinated with Education 498) will be required.

Prerequisite: Music Education 301. (1-0; 1-2) or (2-2; 0-0)

**M E 416 (formerly 316). (1) Instrumental Clinic**

(Description as for Music Education 216.)

**M E 418. (1) Music Theatre Workshop**

(Description as for Music Education 118.)

**M E 419. (1) Choral Seminar**

(Description as for Music Education 219.)

**P E 104-125. Basic Skills in Physical Education Activities**

Students who have completed activities under Physical Education 100/101 are not eligible to repeat such activities for credit.

**P E 104. (½) Special Activity\***

**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: Physical Education 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) Creative Dance**

**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**

\*With special permission, may be taken more than once for credit on a degree programme.

For students accepted on the Physical Education teaching area:

1. Proficiency in skills is required in twelve activities chosen as follows:

*Elementary Programme*

(a) PE 105, 106, 107, 109, 114 or 119, 115

(b) PE 111 or 112 or 113

(c) PE 116 or 117

(d) Four activities chosen from PE 104, 108, 110, 114, 118, 119, 120, 121, 122, 123, 124, 125 or choices in (b) or (c) not taken.

(At least one outdoor and one indoor team sport must be included.)

*Secondary Programme*

(a) PE 105, 106, 107, 109, 115

(b) PE 111 or 112 or 113

(c) PE 116 or 117

(d) Five activities chosen from PE 104, 108, 110, 114, 118, 119, 120, 121, 122, 123, 124, 125 or choices in (b) or (c) not taken.

(At least one outdoor and one indoor team sport must be included.)

2. Students may challenge activity courses by demonstrating proficiency in a skills test given during the first week of lectures. Credit by course challenge must be arranged as described on page 13.

3. Not all activities may be offered every year.

4. Maximum credit for activities in a degree programme is 7½ units.

5. Each activity course is scheduled for 24 hours of instruction. Students are expected to complete the required activity courses in the first two years.

6. Activity courses completed prior to September 1, 1975 will not receive credit.

NOTE: Priority will be given in these courses to students accepted on a physical education teaching area. Other students must obtain consent of the Chairman of the Division of Physical Education.

**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. (2-2)

**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 149. (3) Physical Education in Elementary Schools**

Content of the physical education programme in the elementary school; principles and techniques of instruction; intramural organization. Reasonable performance of skills by the student is required and a percentage of the grade is based on performance.

Not available for credit on a degree programme for students who have already completed Education-D 747.

NOTE: Physical Education 149 is not acceptable for credit on a physical education teaching area. Any student who has elected to do Physical Education 149 and then is accepted into the physical education teaching area cannot count the credit for this course toward his degree. (2-2; 2-2)

**PE 241. (3) Introductory Human Physiology**

Lecture and laboratory orientation to human function. Emphasis on basic bodily processes used in production of energy and homeostasis. Labs include introduction to techniques used to assess status of selected physiological parameters, e.g. nerve condition, indirect calorimetry, and cardiopulmonary function.

Pre- or Corequisite: Physical Education 141. (2-2; 2-2)

**PE 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 muscular and mechanical analysis of motor skills.

Prerequisite: Physical Education 241. (3-0)

**PE 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)

**PE 343. (1½) Recreation in School and Community**

Nature of recreation; its function and scope; school-community administration and programmes; leadership in schools, camps, and communities; inter-relationships of these programmes. (3-0)

**PE 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 re-training of injured areas.

Prerequisite: Physical Education 241. (3-0)

**PE 345. (1½) Physical Education in Early Childhood**

The development of motor behaviour of children in the pre-school and early school years; activities and designed use of equipment for developing basic motor skills; a study of various curriculum designs for this age group.

Prerequisite: Education-C 747 or PE 149 or 3 units of PE teaching area. (3-0)

**PE 346. (1½) Motor Development and Maturation of Children**

Growth and maturational characteristics of elementary children as they relate to motor behaviour. (3-0)

**PE 347. (1½) Comparative Physical Education**

An in-depth study of physical education and sport systems in selected countries.

Prerequisite: Physical Education 342 or consent of instructor. (3-0)

**PE 350. (1½) Theory and Techniques of Teaching Skills in Team Games**

Methods of teaching softball, basketball, soccer, field hockey, volleyball, rugby.

Prerequisites: Six units of required activities (Physical Education 104-125). (3-0)

**PE 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 programmes and practical laboratory experiences in camping skills and outdoor recreation pursuits.

Not available for credit on a degree programme for students who have already completed Education 371.

Prerequisite: Consent granted through the Division of Physical Education. (3-0)

**PE 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 programmes; pool management and practical laboratory experience in water-based outdoor recreational pursuits.

Not available for credit on a degree programme for students who have already completed Education 371.

Prerequisite: Consent granted through the Division of Physical Education. (3-0)

**PE 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: Physical Education 241. (3-0)

**PE 442. (1½) Motor Learning**

Implications of perceptual-motor development for learning; psychology of motor-skill acquisition. (3-0)

**PE 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.

Prerequisite: 4th year standing or consent granted through the Division of Physical Education. (3-0)

**PE 444. (1½) Measurement & 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.

Prerequisite: 4th year standing or consent granted through the Division of Physical Education. (3-0)

**PE 445. (1½) Developmental and Adaptive Physical Education**

Methods of identifying and evaluating the atypical child and application of a physical education programme to his needs; case-study techniques, developmental programmes; basic therapeutic exercise techniques. (3-0)

**PE 446. (1½) Physical Education in the Intermediate Grades**

Acquisition of motor skills of children in the Intermediate Grades. Methods of instruction to develop basic motor skills; development of resource units; the role of outdoor education; curriculum construction and organization.

Prerequisite: Education-C 747 or PE 149 or 3 units of PE teaching area. (3-0)

**PE 450. (1½) Theory and Techniques of Teaching Skills  
in Individual Activities**

Methods of teaching minor games, swimming, badminton, tennis, wrestling, dance, track and field, gymnastics.

Prerequisites: Six units of required activities (Physical Education 104-125). (3-0)

**PE 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)

**PE 452. (3) Instructional Techniques in Physical Education  
Activities (Secondary)**

Methods of teaching physical education activities to secondary school and related groups.

Not open to students with credit in Physical Education 350 or 450.

Prerequisites: Ten required activities from Physical Education 104-125 or consent of the Instructor. (3-0)

**PE 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 programme must register in two 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 programme will be at the discretion of the Division.

461A	Badminton	461H	Softball
461B	Basketball	461J	Swimming
461C	Dance	461K	Tennis
461D	Field Hockey	461L	Track & Field
461E	Gymnastics	461M	Volleyball
461F	Rugby	461N	Wrestling
461G	Soccer		

Prerequisites: A grade of B or higher is required in the related 100 level course. Physical Education 108 is recommended for Gymnastics.

NOTE: Not every activity will be offered each year. Candidates are asked to consult the Physical Education Division before registering. (1-0; 1-0)

**PE 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. (2-0)

## GRADUATE COURSES

Students should consult the Coordinator of Graduate Studies in the Faculty of Education concerning the courses offered in any particular year;

such offerings will depend upon student programme 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, formative evaluation, teacher evaluation, grading and reporting.

**ED-D 503. (1½) Verbal Learning**

The application of methodology from verbal learning experiments to investigation of factors influencing learning.

**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 Education-D 505.

**ED-D 507. (1½) Psychology of Individual Differences**

A focus on intellectual, emotional, physical and cultural differences among 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 Behaviorist 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 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: Education-D 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: Education-D 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.

- 517A Pre-practicum 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

**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 Behavioral Counselling
- 519F Existential Counselling
- 519G Relationship Counselling
- 519H Vocational and Career Counselling

**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. (1½ or 3) Comparative Administration**

Comparative study of educational administration and systems in Canada, the Commonwealth, the U.S. and selected foreign countries. Also selected cross-organizational studies in public administration, military, hospital, and commercial administration.

**ED-B 532. (1½ or 3) Administration of the Educational Programme**

Examination of practical problem areas in the administration of schools and school programmes. Group processes. Field studies. Supervision and evaluation. Some emphasis on human relations approaches.

**ED-B 533. (3) Concepts and Theory in Administration**

Critical examination of the classical and modern literature in administrative science. The sociology and social psychology of organizations. Approaches to a philosophy of administration and some emphasis on the problem areas of values, decision-making processes, power, authority, leadership, and general systems theory.

**ED-B 534. (1½) Educational Finance**

A study of the major economic and related social problems which influence the provision of elementary and secondary educational services. Some attention will be given to practical applications of educational finance, but the major emphasis will be upon the conceptual and research base of the economics of education. Topics to be considered will include the overall provision of educational services, economics of education, taxation and governmental structure, teacher supply and demand, educational productivity, and educational planning.

**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-B 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 enrol in more than one of the areas listed below at 1½ units each.

- 540A Language
- 540B Reading

**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-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 enrol in more than one of the areas listed below at 1½ units each.

- 540C Social Studies
- 540D Mathematics
- 540E Science

**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-B 541. (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-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-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 enrol in more than one of the areas listed below at 1½ units each.

- 541B Geography
- 541C History
- 541D Mathematics
- 541E Science

**ED-B 542. (3) Processes of Reading**

An examination of the acquisition and development of reading, focusing on the cognitive and linguistic processes in the reading art.

**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.

Prerequisite: Education-B 540A; 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: Education-B 342/343 A, B, or C.

**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 programmes. The course will also consider the role of the reading consultant in programme implementation.

Prerequisite: Education-B 342/343 C.

**ED-A 551. (1½) General Music Programmes in the Schools**

An examination of the principles and procedures for developing and implementing curricula for General Music classes from the Intermediate grades through the Senior Secondary. Theories of curriculum building will be applied to this specific subject matter.

**EDUC 555. (1½) Curriculum and Evaluation in the Schools: Foundations and Developments**

Study of curriculum in Canadian schools to help Master's candidates develop a more sophisticated awareness of social, psychological, philosophical and historical elements which affect curriculum and evaluation in the schools so that they can develop a criteria for curriculum decision-making and background for further graduate study. 1) The curriculum in B.C. schools. 2) Current issues and trends related to curriculum. 3) Educational evaluation. 4) Assumptions underlying curriculum. 5) Reading the theoretical and research literature.

**EDUC 556. (1½) Curriculum Development: Principles and Foundations**

Theory and analysis of curriculum foundations and development processes with some emphasis on locally developed curriculum. 1) Sources, starting points and influences on curriculum. 2) Prescribed and actual curriculum development processes. 3) Curriculum design and evaluation at the local level.

**EDUC 557. (1½) Curriculum Implementation: Principles and Applications**

Mechanics of and experience in designing curriculum and evaluation. Principles and case studies of curriculum innovation, dissemination and supervision. 1) Curriculum, instructional and evaluation designs. 2) Designing curriculum instruction and evaluations. 3) Curriculum innovation, dissemination and supervision. 4) Implementing a curriculum.

**ED-A 558. (1½) Development and Implementation of the Curriculum in a Specific Area - Music**

Application of relevant theories and models to the design and development of school curricula in a specific area.

**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 enrol in more than one of the areas listed below at 1½ units each.

- 558A Language
- 558B Reading
- 558G English

**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-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 enrol 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-D 560. (1½) Statistical Methods in Education**

Probability theory; sampling theory; estimation; tests of hypotheses; the  $t$  distribution; analysis of variance; analysis of covariance; nonparametric statistics; introduction to computer applications.

Prerequisite: Education-D 439 or equivalent. (Offered conjointly with Education-D 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.

Prerequisite: Education-D 439 or equivalent. (Offered conjointly with Education-D 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: Education-D 560 or equivalent.

**ED-C 570. (3) Motor Learning**

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 572. (3) Advanced Exercise Physiology**

A study of the response of the human body to varying forms of exercise stress, using a variety of monitoring techniques. The role of specialized exercise equipment in assisting specific performance enhancement.

**ED-C 573. (3) Seminar, Selected Topics in Physical Education**

Choice of topics would include: Anatomical, physiological, and/or kinesiological bases of physical education; body growth and development; sociological aspects of physical education; philosophies of physical education; current problems in physical education programmes; experimental design and research in physical education; administrative problems in physical education and athletics; mechanical analysis of motor skills. It is not intended that all the above topics would be studied — a selection would be made of the topics to be emphasized.

**ED-A 590. (credit to be determined) Special Problems - Art and Music**

May be offered in Areas A through Z (excluding I and O) for credit toward a Master's 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 Education 590.

**ED-B 590. (credit to be determined) Special Problems - Communication and Social Foundations**

May be offered in Areas A through Z (excluding I and O) for credit toward a Master's 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 Education 590.

**ED-C 590. (credit to be determined) Special Problems - Physical Education**

May be offered in Areas A through Z (excluding I and O) for credit toward a Master's 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 Education 590.

**ED-D 590. (credit to be determined) Special Problems - Psychological Foundations**

May be offered in Areas A through Z (excluding I and O) for credit toward a Master's 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 Education 590.

**ED-E 590. (credit to be determined) Special Problems - Social and Natural Sciences**

May be offered in Areas A through Z (excluding I and O) for credit toward a Master's 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 Education 590.

**ED-A 597. (0) Comprehensive Examination - Art and Music**

Comprehensive examination which must be passed as required for individual Master of Education programmes within the Faculty of Education. (Grading: COM, N or F.)

**ED-B 597. (0) Comprehensive Examination - Communication and Social Foundations**

Comprehensive examination which must be passed as required for individual Master of Education programmes within the Faculty of Education. (Grading: COM, N or F.)

**ED-C 597. (0) Comprehensive Examination - Physical Education**

Comprehensive examination which must be passed as required for individual Master of Education programmes within the Faculty of Education. (Grading: COM, N or F.)

**ED-D 597. (0) Comprehensive Examination - Psychological Foundations**

Comprehensive examination which must be passed as required for individual Master of Education programmes within the Faculty of Education. (Grading: COM, N or F.)

**ED-E 597. (0) Comprehensive Examination - Social and Natural Sciences**

Comprehensive examination which must be passed as required for individual Master of Education programmes within the Faculty of Education. (Grading: COM, N or F.)

**ED-A 598. (credit to be determined) Project - Art and Music****ED-B 598. (credit to be determined) Project - Communication and Social Foundations****ED-C 598. (credit to be determined) Project - Physical Education****ED-D 598. (credit to be determined) Project - Psychological Foundations****ED-E 598. (credit to be determined) Project - Social and Natural Sciences****ED-A 599. (credit to be determined) Thesis - Art and Music****ED-B 599. (credit to be determined) Thesis - Communication and Social Foundations****ED-C 599. (credit to be determined) Thesis - Physical Education****ED-D 599. (credit to be determined) Thesis - Psychological Foundations****ED-E 599. (credit to be determined) Thesis - Social and Natural Sciences****ED-D 617. (credit to be determined) Internship in Counselling Psychology**

Fieldwork 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 (excluding I and O) 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 Education-D 690.

**ED-D 699. (credit to be determined) Ph.D. Dissertation**

# FACULTY OF FINE ARTS

Peter L. Smith, B.A. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Dean of the Faculty.

The Faculty of Fine Arts comprises the Departments of History in Art, Music, Theatre, and Visual Arts, and offers courses leading to the degree of Bachelor of Arts, in History in Art; Bachelor of Music; Bachelor of Fine Arts in Theatre and in 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 and Theatre and History in Art. (See section of calendar on Faculty of Graduate Studies for details of programmes and degrees.)

## Qualifications for Admission

See pages 8-11 inclusive of the calendar. See additional requirements under departmental entries for Music, Theatre, and Visual Arts.

Because of limited space and resources in some programmes, not all qualified candidates can be admitted; early application is therefore highly desirable.

## General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 11-19), apply to all students registered in the Faculty of Fine Arts. Special regulations are set out under the departmental offerings.

## 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 registered in the Faculty of Fine Arts who intend eventually to enter the teaching profession should note the admission requirements of the Diploma Programme of the Faculty of Education. These requirements must be kept in mind in the choice of academic electives in all undergraduate degree programmes.

Questions about academic planning in Fine Arts that do not relate to any specific departmental programme can be referred to the Dean's Office in Room 192, MacLaurin Building.

## DEPARTMENT OF HISTORY IN ART

Alan Gowans, M.A. (*Tor.*), M.F.A., Ph.D. (*Princeton*), Professor and Chairman of the Department. (Architectural History.)

Siri Gunasinghe, B.A. (*Ceylon*), D.U. (*Paris*), Professor. (Buddhist and Hindu Art History.)

S. Anthony Welch, B.A. (*Swarthmore*), M.A., Ph.D. (*Harvard*), Associate Professor. (Islamic Art History.)

Charles R. Wicke, B.A. (*Virginia*), M.A. (*Mexico City Coll.*), Ph.D. (*Ariz.*), Visiting Associate Professor (1977-78). (Pre-Columbian Art History.)

Terry Guernsey, B.A. (*U. of Vic.*), M.A. (*Wash.*), Sessional Lecturer (1977-78). (Renaissance and Medieval Art History.)

Martin J. Segger, B.A., Dip. Ed. (*U. of Vic.*), M.Phil. (*Warburg, London*), Sessional Lecturer (1977-78). (Renaissance and Baroque Art History.)

Mario Luna, B.A., M.A. (*Calif., Los Angeles*), Part-time Sessional Lecturer (1977-78). (Modern Art.)

Barrie McLean, Part-time Sessional Lecturer (1977-78). (History of the Cinema.)

## GRADUATE PROGRAMME

For information on the studies leading to the M.A. Degree, see page 159; for graduate courses, see page 140.

## UNDERGRADUATE PROGRAMMES

### B.A. Programme 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 programme could hope of 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 school.

Within these limitations, however, the Department's programme 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 21 units (seven courses) in History in Art, plus 39 units (13 courses) of free electives. The department also requires its majors to pass an examination to demonstrate their reading knowledge of a language other than their own. Students are required to pass the language test before the end of their third year as majors. This test will be administered by the department at any time on the student's request. Should students take formal grammar and conversation courses in French or a foreign language in order to pass this test, two of the courses (6 units) may count as free electives towards the degree.

An integral part of the History in Art programme will be the John and Katharine Maltwood Memorial Museum, dedicated to study of the Arts and Crafts movement from William Morris to the 1920's in all countries and media, especially architecture and furniture. With a specialized library and seminar facilities, work in its collections will give students a chance to work directly with materials and have first-hand experience in the operation of a University museum.

### Interfaculty Double Major

A Fine Arts student majoring in History in Art may concurrently satisfy the requirements for the Major Programme of a Department in the Faculty of Arts and Science. Conversely, a student pursuing a Major Programme for the B.A. degree within the Faculty of Arts and Science may concurrently satisfy the requirements for the Major Programme of the Department of History in Art 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.

### B.A. Programme in History in the Arts

In addition to the above major programme, there is offered under the department's aegis the following programme of History in the Arts, offering a wider and interdisciplinary approach to the study of history:

- 4 of any courses currently offered by the Department of History in Art
- 4 of any courses currently offered by the Department of Music, in the area of Music History and Musicology
- 4 of any courses currently offered by the Department of Theatre in the area of Theatre History
- 2 courses to be chosen among the following: History 238, 240, 400
- 2 courses to be chosen among the following: Classical Studies 100, 340, Liberal Arts 305
- 4 free electives
- Language requirement to be in accordance with the History in Art policy.

## COURSES

NOTE: Firm decisions on what courses the Department is in a position to offer cannot always be made in time for announcement in the Calendar. Students are therefore advised to check with the Department by phone or otherwise before electing senior courses especially.

### \*H A 120. (3) Language of History in Art

A theoretical course designed to provide an introduction to the understanding of art as evidence for history, and to prepare the student for qualified judgment of traditional and contemporary art forms. Preference in registration given to First and Second Year students.

Members of the Department.

(2-0; 2-0-1)

### \*H A 221. (3) History of Christianity in Art

A broad survey of the major artistic and architectural monuments of Christianity from the Early Christian works in Southern Europe, North Africa, and the Near East, through the Middle Ages and the Reformation period, to late manifestations in the Baroque and Gothic Revival styles: the

\*Approved for elective credit in the Faculty of Arts and Science.

works of the missionary expansion in America, Asia, and Africa will also be covered. The material will be considered primarily in its symbolic and iconographic contexts.

(3-0; 3-0)

**\*H A 230. (3) Introduction to the History of India in Art**

A study of major monuments of art and architecture in the Indian subcontinent from early times to the present day, in the context of historic Indian thought and civilization.

S. Gunasinghe. (3-0; 3-0)

**\*H A 260 (formerly 360). (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.

(3-0; 3-0)

**\*H A 270 (formerly 430). (3) History of the Far East in Art — China, Japan, Korea**

A comprehensive survey of the major art forms of China, Japan, and Korea. Aspects reviewed include — in China, the ancient bronzes, pottery, sculpture, calligraphy, and numerous traditions in painting; in Japan, early artifacts, early sculpture and painting, medieval narrative painting and ink painting, painting traditions of the early modern age and prints; in Korea, wall painting, sculpture, pottery and ink painting. Attention will be directed to various types of methodology, some unique to Far Eastern art, and to individual nation preference, notably where Chinese culture provides the stimulus for native developments in Japan and Korea.

(3-0; 3-0)

**\*H A 315. (3) Classical Art of Greece and Rome**

A comprehensive introductory survey of the art and architecture of ancient Greece and Rome. The approach will be art-historical rather than archaeological.

To be taught with Classics 371. (3-0; 3-0)

**\*H A 325. (3) Medieval History in Art**

A comprehensive introductory survey of medieval art and architecture in both Byzantium and the Latin West from c. 200 - c. 1420.

(3-0; 3-0)

**\*H A 331. (3) Buddhist Art**

An intensive study of Buddhist art and architecture as illustrating the major developments in Buddhist thought and its practice in the different schools — Hinayana, Mahayana, Tantra. The course will examine the beginnings of Buddhist art in India and its expansion through South and Southeast Asia and the Far East.

S. Gunasinghe. (3-0; 3-0)

**\*H A 340. (3) Renaissance and Baroque Art in Western Europe**

The evolution of art and architecture as the expression of ideas from ca. 1400-1750, with special emphasis on the art of "old Masters" such as van Eyck, Ghiberti, Donatello, van der Weyden, Leonardo, Raphael, Michelangelo, Titian, Bernini, Rembrandt, etc.

(3-0; 3-0)

**\*H A 350. (3) The Art of Egypt and the Ancient Near East**

A detailed examination of the art and architecture of Pharaonic Egypt, Mesopotamia, Anatolia, and Iran from 3500 B.C. to the beginning of the Christian era. Through artifacts and texts the course will investigate in detail the influence of social and religious thought upon the arts of these ancient cultures and upon their interrelationships at specific periods.

S. A. Welch. (3-0; 3-0)

**\*H A 351. (3) Medieval Islamic Art**

An intensive study of the art and architecture of the Islamic World (Spain, North Africa, Egypt, the Near East, Turkey, Iran, and India) from the 7th century to the Mongol invasions of the Near East in the 13th century. Special attention will be paid to the wider cultural problems in the history, philosophy, religion, and literature of the Muslim peoples and to the interrelationships of Islam, Byzantium, and Latin Christendom.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**\*H A 353. (3) Later Islamic Art**

An intensive study of the cultures of the great Islamic empires of Turkey, Iran and India from the time of the Mongol invasions in the 13th century to the domination of European powers in the 19th century. The art and

architecture of Muslim civilizations in Spain, North Africa, Egypt, the Near East, and Central Asia will also be examined. A major focus of the course will be on parallel developments in the philosophy, religion, literature, and history of the later Islamic world and on the cultural ties between Muslim peoples and the peoples of the Far East and Europe.

S. A. Welch. (3-0; 3-0)

**\*H A 362. (3) Western European Art in the 20th Century**

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. Assigned readings include H. H. Arnason, *History of Modern Art*, and H. B. Chipp, *Theories of Modern Art* (an anthology of primary source material, i.e. letters, diary entries, and manifestos).

(Not offered 1978-79.) (3-0; 3-0)

**\*H A 364. (3) Painting and Sculpture in the United States**

A general survey of painting and sculpture in the United States from the colonial period to the present day. The course will survey the work of American artists from the colonial limners through Copley, Cole, Ryder, the Ash Can School, the Armory Show, O'Keefe, and Benton to Abstract Expressionism, Happenings and Earth Art.

(Not offered 1978-79.) (3-0; 3-0)

**\*H A 366. (1½) Introduction to the History of the Cinema: I**

A general introduction to the history of film as an art form, including consideration of genres, directors' styles, the influence of film technology, and the relations to other media.

Preference given to third and fourth year students. Enrolment will be restricted.

Prerequisite: History in Art 120 and/or 362 or permission of the instructor.

Prescribed reading: Richard-Dyer McCann, *Film: a Montage of Theories*; Daniel Talbot, ed., *Film: An Anthology*; Arthur Knight, *The Loveliest Art: A Panoramic History of the Movies*; G. Mast and M. Cohen, ed., *Film Theory and Criticism: Introductory Reading*. September-December only. (1-2-2)

**\*H A 367. (1½) Introduction to the History of the Cinema: II**

The more specialized examination of selected problems, including especially significant cinema genres, directors, and national styles. Students would normally be expected to have completed HA 366.

Preference given to third and fourth year students. Enrolment will be restricted.

Prerequisite: History in Art 120 and/or 362 or permission of the instructor.

January-April only. (1-2-2)

**\*H A 368. (1½) History of Canadian Art**

A survey of Canadian painting and sculpture emphasizing developments in the 19th and 20th centuries.

(Offered May-June 1978.) (3-0)

**\*H A 370. (3) Chinese Art**

A study of the rise and development of certain major art forms in China; areas of interest will include: recent developments in sculpture and painting, secular painting and sculpture, pottery, landscape painting and development of literati painting and other schools.

P. R. Stanley-Baker. (3-0; 3-0)

**\*H A 380. (3) Architecture since 1750**

Basic developments in the theory and practice of architecture in Western Europe, Canada and U.S.A. over the last 200 years, with special emphasis on architecture as the expression of social, economic and religious ideas.

A. Gowans. (3-0; 3-0)

**\*H A 382. (1½) North American Indian Art**

An introduction to North American Indian arts and artifacts from prehistoric times to the present day. Relevant material from South American Indian cultures will also be discussed.

January-April only. (3-0)

**\*H A 390. (3) World History in Art (formerly Language of History in Art)**

This course affords an opportunity for Third- or 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.

(Offered by special permission of the Instructor, see Departmental note.)

\*Approved for elective credit in the Faculty of Arts and Science.

A. Gowans.

(Offered Summer Session 1978.) (3-0; 3-0)

**\*H A 420 (formerly 320). (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.

Prerequisite: Permission of the Instructor.

(Not offered 1978-79.) (3-0; 3-0)

**\*H A 431. (3) Hindu Art**

An intensive study of the art and architecture of Hinduism from the beginnings to the 17th century. The course will cover the major monuments of Aihole, Ellora, Mahabalipuram, Khajuraho, Kanchipuram, etc., and the works of the later schools of miniature painting.

(Not offered 1978-79.) (3-0; 3-0)

**\*H A 440. (3) Italian Renaissance Art**

An intensive survey 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.

(Not offered 1978-79.) (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.)

(3-0; 3-0)

**\*H A 450. (3) Special Studies in Islamic Art and Civilization**

This course will involve intensive study of some special aspect of Islamic civilization. Different material will be offered each year, according to student needs. In past years, this course has centred on the History of Islamic Manuscript Painting (1973-74), the History of the Art and Architecture of Muslim India (1974-75), the History of Persian Painting (1975-76), Seven Great Cities in the Muslim World (1976-77).

May be taken more than once, depending on circumstances.

Prerequisite: Background in either art history, geography, sociology, or history.

S. A. Welch. (3-0; 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.

May be taken more than once, depending on circumstances.

Prerequisite: History in Art 360 or 362 or 364 or permission of the Instructor.

(Not offered 1978-79.) (3-0; 3-0)

**\*H A 470. (3) Special Studies in Japanese Painting**

A study of aspects of the history of Japanese painting and calligraphy. Focal points include study of the ways in which continental influences are absorbed and transformed in the development of native traditions, consistent aspects of Japanese aesthetics, the close association of literature and painting, social upheavals and the emergence of new pictorial forms.

Museum trips scheduled.

Not open to students with credit in History in Art 490C.

(3-0; 3-0)

**\*H A 481. (3) History of Architecture in North America**

Study of architectural developments in Canada and U.S.A. from the 17th century to the present, with special emphasis on interiors and furniture, and the expression of distinctively North American cultural attitudes.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**H A 485. (3) Conservation of Antiquities**

Care and maintenance of museum materials and/or historic architecture. Causes of damage and decay; museum environments; handling, storage, and preservation; principles of critical examination and historical evaluation; cleaning and repair. Depending on instructor and areas covered, and with departmental permission, this course may be taken more than once. Usually, but not necessarily, involves field work.

This course is given by Mr. Philip Ward, Chief Conservator, British Columbia Provincial Museum.

(lecture vs. laboratory hours available)

**\*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.

**GRADUATE COURSES****H A 501. (3) Problems in History of Art History**

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.

A. Gowans. (3-0; 3-0)

**H A 503. (3) Special Problems of East-West Relationships**

Parallels and contrasts among the arts of Europe, Islam, India, China, Japan, America, etc. in selected epochs of history.

(Offered Summer Session 1978.) (3-0; 3-0)

**H A 505. (3) Directed Readings**

Studies in history in art through selected readings, supervised by the staff.

**H A 520. (3) Special Studies in Medieval Art History**

Contents of course vary yearly to fit the needs and interests of current students.

May be taken more than once, depending on circumstances.

Prerequisite: History in Art 325 or 420 or equivalent; or permission of the Instructor.

(3-0; 3-0)

**H A 530. (3) Special Studies in Indian Art**

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: History in Art 331 or 430 or equivalent; or permission of the Instructor.

S. Gunasinghe. (3-0; 3-0)

**H A 540. (3) Special Studies in Italian and Northern Renaissance Art and Architecture**

Seminar class with topics in various areas which vary according to students' background, needs and interests.

Prerequisite: History in Art 440 or 441; or permission of Instructor.

(3-0; 3-0)

**H A 550. (3) Special Studies in Islamic Art and Architecture**

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: History in Art 351 or 353 or 450 or equivalent; or permission of the Instructor.

S. A. Welch. (3-0; 3-0)

**H A 560. (3) Special Studies in Modern Art**

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: History in Art 362 or equivalent; or permission of Instructor.

(3-0; 3-0)

**H A 570. (3) Special Studies in Far Eastern Art**

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: History in Art 270 or 370 or 470 or equivalent; or permission of Instructor.

(3-0; 3-0)

**H A 599. (9-15) Thesis**

\*Approved for elective credit in the Faculty of Arts and Science.

## DEPARTMENT OF MUSIC

- Rudolf Komorous, Diploma, State Cons. of Music (*Prague*), Artist's Diploma, Academy of Musical Arts (*Prague*), Professor and Chairman of the Department.
- Franklin E. Churchley, A.R.C.T., L.R.C.T. (*Royal Cons. Mus.*), B.Mus. (*Tor.*), M.A., Ed.D. (*Columbia*), Professor.
- George W. Corwin, B.S. (*Ithaca*), M.A., D.M.A. (*Rochester*), Professor.
- Paul Kling, Artist's Diploma (*Prague State Academy of Music*), Professor and Instrumental Instructor (violin).
- Phillip T. Young, B.A. (*Bowdoin*), Mus.M. (*Yale*), Professor.
- Boyde W. Hood, B.M. (*Eastman*), M.M. (*Ball St.*), Associate Professor and Instrumental Instructor (trumpet).
- Jaroslav Karlovsky, Artist's Diploma (*Cons. of Music, Prague*), Artist's Diploma (*Academy of Music, Prague*), Visiting Associate Professor and Instrumental Instructor (viola) (1977-78).
- Gordana Lazarevich, Artist and Licentiate Dip. (*Tor.*), B.Sc., M.Sc. (*Juilliard*), Ph.D. (*Columbia*), Associate Professor.
- Bernard Turgeon, (*Opera School, Tor. Cons.*), Visiting Associate Professor (voice, opera workshop) (1978-79).
- Martin Bartlett, B.A., B.Mus. (*Brit. Col.*), M.A. (*Mills*), Assistant Professor.
- William H. Benjamin, M.M.A. (*Stanford*), Assistant Professor and Instrumental Instructor (oboe).
- Richard Ely, B.M. (*Montana*), M.M. (*Ill.*), Assistant Professor and Instrumental Instructor (french horn).
- Michael M. Longton, B.M., M.M. (*Brit. Col.*), Assistant Professor.
- Bruce E. More, B.Mus. (*Brit. Col.*), M.Mus., M.M.A., D.M.A. (*Yale*), Assistant Professor.
- Erich P. Schwandt, B.A., M.A., Ph.D. (*Stanford*), Assistant Professor.
- John A. Celona, B.M., M.A. (*San Fran. St.*), Ph.D. (*Calif., San Diego*), Lecturer.
- Richard C. Hereld, B.M. (*Eastman*), M.A. (*Tor.*), Lecturer.
- Lanny Pollet, B.Mus. (*Eastman*), M.Mus. (*U. of Vic.*), Lecturer and Instrumental Instructor (flute).
- Jesse Read, B.Mus. (*Jacksonville*), M.Mus. (*U. of Vic.*), Lecturer, Instrumental Instructor (bassoon), and Director, University Concert Band.
- Ethan P. Sloane, B.Mus. (*New Engl. Cons.*), M.M.A., M.Mus. (*Yale*), Sessional Lecturer and Instrumental Instructor (clarinet) (1977-78).
- Alice Benjamin, B.A. (*Montclair St. Coll.*), M.A. (*Juilliard*), Part-time Sessional Lecturer (1977-78).
- Eugene A. Dowling, N.M. (*Mich. St.*), M.M. (*Northwestern*), Part-time Sessional Lecturer and Instrumental Instructor (tuba) (1977-78).
- Thomas G. Eadie, B.M., M.M. (*Eastman*), Part-time Sessional Lecturer and Instrumental Instructor (trombone) (1977-78).
- J. Scott Eddlemon, B.Mus. (*Juilliard*), Part-time Sessional Lecturer and Instrumental Instructor (percussion) (1977-78).
- Glen Fast, B.Mus. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).
- Lynne Greenwood, B.M., M.M. (*Indiana*), Part-time Sessional Lecturer and Instrumental Instructor (saxophone) (1977-78).
- Linda Houglan-Daniels, B.M., Performer's Certificate (*Eastman*), Part-time Sessional Lecturer and Instrumental Instructor (cello) (1977-78).
- Sandra McCurdy, B.Mus.Ed. (*Indiana*), M.Mus. (*Northwestern*), Part-time Sessional Lecturer (1977-78).
- Edward B. Norman, B.Mus. (*Brit. Col.*), G.R.S.M., A.R.C.M., L.R.A.M., L.T.C.L. (*London*), Part-time Sessional Lecturer and Instrumental Instructor (organ) (1977-78).

## VICTORIA CONSERVATORY OF MUSIC

Students in the Bachelor of Music programme and in the music teaching area in the Bachelor of Education programme receive their solo performance tuition from the faculty of the Department of Music and the Victoria Conservatory of Music. See page 26.

### FACULTY OF THE VICTORIA CONSERVATORY OF MUSIC

- Robin Wood, F.R.A.M., Principal, Victoria Conservatory; piano.
- Winifred Wood, A.M.M. (*Man.*), A.R.C.M., L.R.S.M., A.R.A.M., Vice-Principal, Victoria Conservatory; piano.
- Frances Adaskin, voice.
- Anne Crose, B.Mus. (*U. of Vic.*), M.M. (*S. Calif.*), accompanying.
- Susan DeBurgh, A.R.C.T., L.R.A.M., piano.
- Mary Ducker, G.R.S.M., L.R.A.M., piano.

- Kathryn Ely, B.Ed., B.M. (*Ill.*), harp.
- Donald Haig-Robinson, L.R.A.M., A.R.C.M., piano.
- Sydney Humphreys, L.R.S.M., A.R.A.M., A.R.C.M., F.R.A.M., violin.
- James Hunter, Graduate, Toronto Conservatory, cello.
- Selena James, M.Mus. (*Manhattan*), voice.
- James Kennedy, B.A. (*U. of Vic.*), L.T.C.L., F.T.C.L., recorder.
- Else Menting, Graduate, Amsterdam Conservatory, piano.
- Edward Parker, F.T.C.L., L.R.S.M., A.R.C.T., B.Mus. (*Brit. Col.*), M.M. (*Wash.*), piano.
- Kathleen Solose, B.Mus. (*Juilliard*), piano.
- Elizabeth Taylor, A.R.M.C.M., voice.
- Marjorie Tebo, A.L.C.M., L.R.S.M., piano.
- Catherine Young, B.M., M.M. (*Eastman*), voice.
- Peter Zimmerman, piano.

## GRADUATE PROGRAMMES

For information on studies leading to the M.A. and Ph.D. degrees, see page 161; for graduate courses, see page 144.

## UNDERGRADUATE PROGRAMMES

For students who wish to prepare themselves for careers in music, graduate study, etc., the Department of Music offers majors in Composition and Theory, Music Education, Music History and Literature, Comprehensive (formerly General) Programme, and Performance, leading to the degree of Bachelor of Music.

## ADMISSION REQUIREMENTS

Enrolment in the Bachelor of Music programme 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 Department of Music for acceptance to the programme. An audition on one's major instrument, a music aptitude test, a personal interview (and therefore a campus visit) and two letters of recommendation from adult musicians are required. If distance precludes a visit tentative acceptance may be granted until requirements are satisfied in September. 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.

### 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 music courses that have been completed elsewhere. This credit and departmental admission procedures will determine into which year of studies the student will be accepted. No students are admitted into the final, fourth year.

## PROGRAMME OF COURSES

Beginning in 1977 all music students including those who would formerly have registered in Year 1 of the Bachelor of Education Secondary Music Programme in the Faculty of Education or of Music General Programme in the Department of Music will register in a common first year (Bachelor of Music). Admission to the programme will be recommended by an Admissions Committee. Present criteria of performance and music aptitude mentioned above will be used and in addition, potential for teaching will be considered for some students. During Year 1, students may choose Music Education 101, Introduction to Music Education (1½ units), as an elective. This course which will involve some contact with schools will help faculty and students determine the candidate's suitability for teaching.

Normally students will be admitted officially to the Bachelor of Music in Music Education Programme at the beginning of the second year. Later entry to the programme will be possible with students making up courses not already taken. The degree will be recommended by the Faculty of Fine Arts at the end of the Fourth Year. Students completing this programme will be admitted to the same Professional Year Programme as regular B.Ed. Secondary students with the same priority status.

All B.Mus. students regardless of their choice of Major will take the common first-year programme shown below. However, in this first year a limited number of students may take extra units either in performance (Music 145 instead of 140) or in composition (Music 105) with the permission of the Department. The Department requires minimum keyboard skill which, if not achieved by the end of the first year, may require summer study with a teacher of one's choice and subsequent examination by the Department. If not passed, then Music 336 will be required.

Year 1		
Music 100		3
Music 110		3
Music 140 or 145		2 or 3
Music 180, 181 and/or Music 105 or ME 101		2 or 3
English 115 and 215		3
Non-Music Elective		3
		16 to 18

Students in the Music Education Programme must prepare themselves in a second teaching area and should take a course in this area, or Psychology 100 or equivalent, in Year 1. Before entering the fifth professional year in the Faculty of Education a student must have completed a specified number of units in this other academic discipline. (See the Faculty of Education regulations.)

Towards the end of the first year, each student will be expected to declare his choice of major and will be assigned an advisor with whom he will develop a programme of studies related to his needs and abilities.

Exceptions to the following programme requirements can be made only in special cases and with the written approval of the Departmental chairman.

#### Major in Composition and Theory

Year 2		Year 3		Year 4	
200	3	300	3	400	3
205	3	305	3	405	3
Non-music elective	3	307	2	440	2
240	2	340	2	Music elective	3
350	3	Non-music elective	3	Non-music elective	3
	14		13		14

#### Major in Music History and Literature

*Year 2		*Year 3		*Year 4	
Music History elective	3	Music History elective	3	400	3
200	3	300	3	Music History elective	3
240	2	340	2	499	3
Non-music elective	3	390	3	440	2
Elective	3	Non-music elective	3	Non-music elective	3
	14		14		14

#### Major in Comprehensive Programme

Year 2		Year 3		Year 4	
200	3	300	3	400	3
240	2	340	2	440	2
*Music electives	6	*Music electives	6	*Music elective	3
**Non-music elective	3	**Non-music elective	3	**Non-music elective	3
	14		14	Non-music elective or music elective	3
					14

\*Music electives must include:

- at least 3 units of music history above the 110 level
- either Music 350 or Music 356.

\*\*Non-Music electives will normally include:

- 6 units of language courses, preferably German, Italian, or French
- 3 units of art history, theatre history, or classics
- 3 units of philosophy, mathematics or a science.

#### Major in Performance

Year 2		Year 3		Year 4	
245	6	345	6	400	3
200	3	300	3	445	6
Elective	3	Music History elective	3	447	3
Non-music elective	3	Non-music elective	3	Non-music elective	3
	15		15		15

#### Major in Music Education (Instrumental)

Year 2		Year 3	
Music 200	3	Music 300	3
Music 240	2	Music 340	3
Music 350	3		
One of Music 331, 332, 333, 336	1½	Music 356	3
Music Education 116	1	One of Music 331, 332, 333	1½
Music 280, 281 or Music Education 218	1	Music Education 216	1
Music Education 201	1½	*Music Education 301	1½
Music 320 or other Music History elective	3	Education-D 406	3
		Music 380, 381 or ME 318	1
	16		16

Year 4 (Degree Year)		Year 5** (Diploma Year - in Education)	
Music 400	3	Education-D 337	1½
Music 440	2	Education-B 320	1½
One of Music 331, 332, 333	1½	Education-B 430	1½
Music Education 316	1	Education-A 762	6
Education 398	1½	Education electives	4½
Education-D 303	1½		15
Music Education 401 Elective	1½ 3		
Music 480, 481 or Music Education 418	1 16		

\* Includes school experience (equivalent of Ed. 498).

\*\* Before Year 5, an Introductory Psychology course and Theatre 150 are recommended. A G.P.A. of 3.00 in the upper level music courses and a G.P.A. of 3.00 in the immediately preceding two years (30 units) is required.

#### Major in Music Education (Choral)

Year 2		Year 3	
Music 200	3	Music 300	3
Music 240 (Voice)	2	Music 340	2
Music Education 300	1½	Music Education 319	1
Music Education 201	1½	Music 380, 381 or Music Education 318	1
Music Education 219	1	Music Education 301	1½
Music 280, 281 or ME 218	1	Education-D 406	3
2nd teaching area	3	Music 356	3
Elective	3	(Additional units may be taken in 2nd teaching area)	1-3 15½-17½
	16		

#### Year 4 (Degree Year)

Year 4 (Degree Year)		Year 5 (Diploma Year - in Education)	
Music 400	3	Education-D 337	1½
Music 440	2	Education-B 320	1½
Music Education 419	1	Education-B 430	1½
Music 480, 481 or ME 418	1	Education-A 762	4½
Education 398	1½	Education (2nd teaching area)	3
Education-D 303	1½	Education Elective	3
Non-Music Elective (2nd teaching area)	3		15
Music 320 or Music History Elective	3 16		

#### Major in Music Education (Strings)

Take Major in Performance but must include in first four years:

Music Education 101	1½
Music Education 201	1½
Music Education 301	1½
Music Education 401	1½
Education-D 406	3
Education-D 303	1½
Education 398	1½
	12

Year 5 - same as in Instrumental.

NOTE:

In addition to the courses in the programmes outlined above, each B.Mus. student will be required to enrol in one of the MUS 180-480 series and one of the MUS 181-481 series in each year.

### UNDERGRADUATE COURSES

Unless indicated otherwise, courses begin in September and end in April.

#### LANGUAGE OF MUSIC

##### \*MUS 100. (3) Language of Music: I

A study of the basic materials and organization of music and the development of individual skills, including writing, ear training, sight-reading, and keyboard theory.

Prerequisite: Evidence of music training acceptable to the Department.

J. Celona, L. Pollet, J. Read. (3-2; 3-2)

##### \*MUS 200. (3) Language of Music: II

A study of music from plainsong to the 17th century with emphasis on strict counterpoint. Continued development of ear training, sight singing, and keyboard theory.

Prerequisite: Music 100.

M. Longton, E. Schwandt. (3-1; 3-1)

\*Approved for elective credit in the Faculty of Arts and Science.

**\*MUS 300. (3) Language of Music: III**

A study of the music of the 18th and 19th centuries, emphasizing the writing and analysis of harmony, counterpoint, and form. Continued development of ear training, sight reading, and keyboard theory.

Prerequisite: Music 200 or consent of the Department.

R. Hereld, M. Longton. (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 second year of the Master of Education in Music Education programme but is open to others by permission of the Department. Not available for credit in the B.Mus. programme.

Prerequisite: Permission of the Department.

A working knowledge of traditional harmony is expected.

(Offered in Summer Session only.) (3-0; 3-0)

**\*MUS 400. (3) Language of Music: IV**

Theory, techniques, and practice of twentieth-century music.

Prerequisite: Music 300 or consent of the Department.

J. Celona, M. Longton. (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 twentieth-century compositional techniques. This course is intended for students in the third year of the Master of Education in Music Education programme, but is open to others who satisfy the prerequisite. Not available for credit in the B.Mus. programme.

Prerequisite: Music 303.

(Offered in Summer Session only.) (3-0; 3-0)

**COMPOSITION****MUS 105. (2) Introduction to Composition**

Prerequisite: Permission of Instructor.

J. Celona. (2-0; 2-0)

**MUS 205. (3) Music Composition: I**

Prerequisite: Permission of Instructor.

M. Bartlett. (2-1; 2-1)

**MUS 305. (3) Music Composition: II**

Prerequisite: Music 205.

M. Bartlett. (2-1; 2-1)

**MUS 307. (2) Electronic Music: I**

Introduction to electronic music, including practical work in recording and analog synthesis.

Prerequisite: Music 205 or permission of the Department.

M. Bartlett. (0-2; 0-2)

**MUS 405. (3) Music Composition: III**

Prerequisite: Music 305.

J. Celona, R. Komorous. (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: Music 307 and permission of the Department.

M. Bartlett. (0-3; 0-3)

**MUSIC HISTORY AND LITERATURE****\*MUS 110. (3) Introduction to Music History and Literature**

A survey of music literature in the changing cultural patterns of Western civilization from antiquity to the present day. Intended for students with some elementary knowledge of notation.

R. Hereld. (4-0; 4-0)

**\*MUS 115. (3) The Elements of Music**

A study of the technical, historical, and aesthetic materials necessary to the critical evaluation of music. Primarily intended for the non-musician.

Not open to B.Mus. students.

P. T. Young. (3-0; 3-0)

**MUS 311. (3) Music of the Medieval Period and the Renaissance**

E. Schwandt. (3-0; 3-0)

**\*MUS 312. (3) Music of the Baroque Era**

A study of music from c. 1600- c. 1750.

Prerequisite: Music 110.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**\*MUS 313. (3) Music from c. 1730 to the Late 19th Century**

Prerequisite: Music 110. Not open for credit to those who have taken Music 314.

(Not offered until 1980-81.) (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.

Prerequisite: Music 110 or permission of the Instructor.

M. Bartlett. (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.

Prerequisite: Music 110.

(Not offered 1978-79.) (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.

Prerequisite: Music 110, Music 100 and the permission of the Instructor.

G. Lazarevich. (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.

Prerequisite: Music 110, Music 100 and the permission of the Instructor.

(Not offered 1978-79.) (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.

Prerequisite: Music 110 and 100, or permission of the Instructor.

(Not offered 1978-79; intend to offer 1979-80.) (3-0; 3-0)

**MUS 390. (3) Special Studies**

With the consent of the Department, a student who has demonstrated a capacity for independent work may undertake an individual project.

Prerequisite: Music 110.

Members of the Department. (3-0; 3-0)

**MUS 490. (3) Special Studies**

With the consent of the Department, a student who has demonstrated a capacity for independent work may undertake an individual project.

Prerequisite: Music 110.

Members of the Department. (3-0; 3-0)

**MUS 499 (formerly 426). (3) Seminar in Musicology**

For Music History majors only. Seminar will include the graduating essay.

G. Lazarevich. (3-0; 3-0)

**INSTRUMENTAL AND CHORAL TECHNIQUES****MUS 330. (1½) Strings**

Group instruction in playing all orchestral string instruments.

One term only. To be announced. (2-2)

**MUS 331. (1½) Brasses**

Group instruction in playing all orchestral brass instruments.

R. Ely. September-December only. (2-2)

\*Approved for elective credit in the Faculty of Arts and Science.

- MUS 332. (1½) Woodwinds**  
Group instruction in playing all orchestral woodwind instruments.  
(Not offered 1978-79; intend to offer 1979-80.) (2-2)
- MUS 333. (1½) Percussion**  
Group instruction in playing all orchestral percussion.  
January-April only. (2-2)
- MUS 334. (1½) Voice**  
Group instruction in vocal production.  
(Not offered 1978-79; intend to offer 1979-80.) (2-2)
- MUS 336. (1½) Keyboard**  
Group instruction in piano, harpsichord, and/or organ.  
F. E. Churchley. One term only. To be announced. (2-2)
- MUS 350 (formerly 335). (3) Orchestration**  
Study of instrumentation and orchestration.  
Prerequisite: Music 100.  
P. T. Young. (3-0; 3-0)
- MUS 356. (3) Introduction to Conducting**  
Fundamental conducting techniques as applied to instrumental and vocal music.  
Prerequisite: Permission of Instructor.  
B. E. More. (2-1; 2-1)
- MUS 456. (3) Conducting**  
Prerequisite: Music 356 and the consent of the Instructor.  
G. W. Corwin. (2-1; 2-1)

#### APPLIED MUSIC

Instruction in voice or in an instrument will be provided by the faculty of the Department of Music or by the Victoria Conservatory of Music.

- MUS 140. (2) Individual Tuition**  
Lessons in instrument or voice.  
Prerequisite: Evidence of marked musical ability demonstrated by audition.  
Members of the Department. (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: A.R.C.T. Diploma (Performers') or equivalent.  
For Performance Majors only.  
Members of the Department (1-12-2; 1-12-2)
- MUS 240. (2) Individual Tuition**  
Lessons in instruments or voice.  
Prerequisite: Music 140.  
Members of the Department. (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: Music 145.  
For Performance Majors only.  
Members of the Department. (1-12-2; 1-12-2)
- MUS 340. (2) Individual Tuition**  
Lessons in instruments or voice.  
Prerequisite: Music 240.  
Members of the Department. (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: Music 245.  
For Performance Majors only.  
Members of the Department. (1-12-2; 1-12-2)
- MUS 440. (2) Individual Tuition**  
Lessons in instruments or voice.  
Prerequisite: Music 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.

Members of the Department. (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: Music 345.  
For Performance Majors only.  
Members of the Department. (1-12-2; 1-12-2)
- MUS 447. (3) Graduating Recital**  
Prerequisite: Music 345.  
For Performance Majors only.  
Members of the Department.

#### PERFORMANCE GROUPS

- MUS 180. (1) Ensembles**  
Members of the Department. (0-4; 0-4)
- MUS 181. (1) Chamber Music**  
Members of the Department. (0-3; 0-3)
- MUS 280. (1) Ensembles**  
Members of the Department. (0-4; 0-4)
- MUS 281. (1) Chamber Music**  
Members of the Department. (0-3; 0-3)
- MUS 380. (1) Ensembles**  
Members of the Department. (0-4; 0-4)
- MUS 381. (1) Chamber Music**  
Members of the Department. (0-3; 0-3)
- MUS 480. (1) Ensembles**  
Members of the Department. (0-4; 0-4)
- MUS 481. (1) Chamber Music**  
Members of the Department. (0-3; 0-3)

Music 180-480, Ensembles, include the University Orchestra, University Concert Band, University Chorus, and University Chamber Singers.

Music 181-481, Chamber Music, include the standard chamber groups as well as Collegium Musicum, New Music Ensemble (Sonic Lab), and Accompanying.

Music 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 Department 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**  
January-April only. (3-0)
- MUS 502. (3) Musical Aesthetics and the Theory of Criticism**  
(Not offered 1978-79.) (3-0; 3-0)
- MUS 503. (1½) Introduction to Graduate Study and Music Bibliography**  
All students in Musicology must register for this in their first term of graduate study.  
September-December only. (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)
- MUS 506. (1½) Musical Acoustics**  
(Not offered 1978-79.)

- MUS 507. (3)** Electronic Music (1-0)
- MUS 540. (1)** Individual Tuition  
Lessons in instruments or voice.  
Optional for graduate students in musicology and composition. (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. (3)** Studies in Particular Era of Music History (3-0; 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 majors in final years.
- §**MUS 599. M.A.** Thesis
- §**MUS 699. Ph.D.** Dissertation

\*\*All students in Musicology must register for this each year they are in attendance.

†May be taken more than once, in different fields, at the discretion of the Department.

††Performance majors must register for this in each year of study.

§Credit to be determined.

## DEPARTMENT OF THEATRE

Barbara McIntyre, B.A., M.A. (*Minn.*), Ph.D. (*Pittsburgh*), Professor and Chairman of the Department

Carl R.D. Hare, M.A. (*Alta.*), Dip. R.A.D.A., Professor.

Alan Hughes, B.A., M.A. (*Tor.*), Ph.D. (*Birm.*), Associate Professor.

John F. Krich, A.B. (*Baldwin-Wallace*), M.F.A. (*Yale*), Associate Professor. (On study/leave 1978-79.)

Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (*Pittsburgh*), Associate Professor.

William D. West, Associate Professor.

Linda Hardy, B.A. (*Brock*), M.A. (*Tor.*), Assistant Professor.

Giles W. Hogle, B.A. (*Miami*), M.A., Ph.D. (*Northwestern*), Assistant Professor.

Irene M. Pieper, B.A. (*Calif.*), M.A. (*San Fran. St.*), Assistant Professor.

Karel Loganhume, B.F.A. (*U. of Vic.*), Sessional Lecturer (1977-78).

Anthony H. Bancroft, B.A. (*Brit. Col.*), M.F.A. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).

Murray D. Edwards, B.A. (*Sask.*), M.A., Ph.D. (*Columbia*), Part-time Sessional Lecturer (1977-78).

Joseph A. Euringer, B.A. (*Tor.*), Part-time Sessional Lecturer (1977-78).

Leon M. Pownall, Part-time Sessional Lecturer (1977-78).

Christina Thomas, Part-time Sessional Lecturer (January-March 1978).

N. Bindon Kinghorn, Senior Academic Assistant, and Part-time Sessional Lecturer (1977-78).

Kazimierz Piesowocki, Senior Academic Assistant, and Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMMES

For information on studies leading to the M.A. and M.F.A. degrees, see page 163; for graduate courses, see page 148.

## UNDERGRADUATE PROGRAMMES

The Bachelor of Fine Arts in Theatre is an extensive programme 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 education practice of the theatre arts.

The Department offers several options to the undergraduate student — the general programme, the special programme, and an honours programme in Theatre History. Students who wish to register in the Department of Theatre as theatre majors should seek an interview with the Chairman of the Department before August 15 or during registration week. Students from two year colleges who anticipate transferring to the University of Victoria with the intention of majoring in theatre should consult the Department of Theatre before registering in any theatre courses. Such students should be aware of the special degree requirements in this area and should not normally expect to fulfill those requirements in two years.

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.

Each season, the Theatre Department presents major productions in the Phoenix Theatre as well as various experimental performances in other locations.

## PROGRAMME OF COURSES

### GENERAL PROGRAMME

In the general programme B.F.A. students must complete sixty units of course work of which at least thirty will be in Theatre and no fewer than fifteen outside the Department. In first year each student is required to take Theatre 100, Theatre 105, Theatre 120 and three units of English.

In subsequent years, Theatre 205, Theatre 200, Theatre 300 and Theatre 400 are required for all students. In second year each student will be assigned an advisor who will develop a programme of studies related to his needs and abilities.

### SPECIAL PROGRAMME

A student with special interest in acting, theatre history, design, directing or theatre in education may be permitted to specialize in these areas. Typical outlines in some of these areas follow. (Normally electives will be chosen from courses outside the Department.)

Students may enter the acting specialization at first or second year levels only. Candidates admitted to the University who signify their intent to enter the specialization must audition, normally before the beginning of the academic year. Enrolment is limited to fifteen in the first year and twelve thereafter, and is probationary for two weeks. Further regulations are listed in the Department handbook.

### Acting

†First Year		†Second Year	
Theatre 100	(3)	Theatre 200	(3)
Theatre 105	(3)	Theatre 205	(3)
Theatre 120*	(3)	Theatre 220*	(3)
English	(3)	Theatre 250	(1½)
Elective	(3)	Theatre 260	(1½)
		Theatre 299	(3)

†Audition required. 15

\*Special sections of 120 and 220 are open only to acting specialists.

Third Year		Fourth Year	
Theatre 300	(3)	Theatre 400	(3)
Theatre 313	(1½)	Theatre 314	(1½)
Theatre 320	(3)	Theatre 499	(1½-6)
Theatre 399	(3)	Elective	(3)
Elective	(3)	Courses from the following list:	
Elective	(3)	Theatre 240, 330, 341	
		342, 343, 382	(3-6)

### Directing

First Year		Second Year	
Theatre 100	(3)	Theatre 200	(3)
Theatre 105	(3)	Theatre 205	(3)
Theatre 120	(3)	Theatre 220	(3)
English	(3)	Theatre 240	(3)
Elective	(3)	Elective	(3)

Third Year	
Theatre 300	(3)
Theatre 330	(3)
Theatre 340	(3)
Theatre 341	(3)
Elective	(3)
	<hr/>
	15

**Design**

First Year	
Theatre 100	(3)
Theatre 105	(3)
Theatre 120	(3)
English	(3)
Elective	(3)
	<hr/>
	15

Third Year	
Theatre 300	(3)
Two of:	(6)
Theatre 340	
Theatre 341	
Theatre 342	
Theatre 330	(3)
Elective	(3)
	<hr/>
	15

**Theatre In Education**

First Year	
Theatre 100	(3)
Theatre 105	(3)
Theatre 181	(3)
Theatre 120	(3)
English	(3)
Elective	(3)
	<hr/>
	18

Third Year	
Theatre 300	(3)
Theatre 313	(1½)
Theatre 330	(3)
Theatre 382	(3)
Theatre 399	(3)
Elective	(3)
	<hr/>
	16½

**Theatre History**

First Year	
Theatre 100	(3)
Theatre 105	(3)
Theatre 120	(3)
English	(3)
Elective	(3)
	<hr/>
	15

Third Year	
Theatre 300	(3)
Theatre 313	(1½)
Theatre 371	(3)
Elective	(3)
Elective	(3)
Elective	(1½)
	<hr/>
	15

**HONOURS PROGRAMME IN THEATRE HISTORY****Typical Programme:**

First Year	
Theatre 100	(3)
Theatre 105	(3)
Theatre 120	(3)
English	(3)
Elective	(3)
	<hr/>
	15

Fourth Year	
Theatre 400	(3)
Theatre 430	(3)
Theatre 342	(3)
Elective	(3)
Elective	(3)
	<hr/>
	15

Second Year	
Theatre 200	(3)
Theatre 205	(3)
Theatre 240	(3)
Elective	(3)
Elective	(3)
	<hr/>
	15

Fourth Year	
Theatre 400	(3)
One of:	(3)
Theatre 340	
Theatre 341	
Theatre 342	
Elective	(3)
Elective	(3)
Elective	(3)
	<hr/>
	15

Second Year	
Theatre 200	(3)
Theatre 315	(1½)
Theatre 205	(3)
Theatre 299	(3)
Elective	(3)
Education-B 341	
or approved elective	(3)
	<hr/>
	16½

Fourth Year	
Theatre 400	(3)
Theatre 314	(1½)
Theatre 383	(3)
Theatre 490	(3)
Education-B 344	
or approved elective	(3)
Theatre 414	(3)
	<hr/>
	16½

Second Year	
Theatre 200	(3)
Theatre 205	(3)
Theatre 315	(1½)
Elective	(7½)
	<hr/>
	15

Fourth Year	
Theatre 314	(1½)
Theatre 400	(3)
Theatre 410/411	(3)
Theatre 412/413	(3)
Theatre 414	(3)
Elective	(1½)
	<hr/>
	15

Third Year	
Theatre 300	(3)
Theatre 313	(1½)
Theatre 371	(3)
Theatre 414	(3)
Theatre 410	(1½)
Theatre 390	(3)
	<hr/>
	15

Fourth Year	
Theatre 400	(3)
Theatre 314	(1½)
Theatre 490	(3)
Theatre 411	(1½)
Theatre 412/13	(3)
Elective	(3)
	<hr/>
	15

- Students must apply at the end of their second year to enter into the Honours Programme, which officially begins in their third year.
- The successful third-year candidate will be permitted to enter into the fourth-year programme.
- No candidate for Honours can progress further in the programme 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.
- Each Honours student will be assigned an advisor at the beginning of his third year who will help him determine his specific area of interest; the student will be expected, under the guidance of his advisor, to present papers to a colloquium of Theatre History faculty and other interested faculty and students.
- In his fourth year each Honours student will continue contributing papers to the colloquium and present a final graduating paper, upon which he 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 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) programme.

**COURSES****INTRODUCTORY COURSES****\*THEA 100. (3) The Language of the Theatre**

A practical and theoretical introduction to play analysis, to dramatic criticism, to theatrical form, and to the principles of stage production. Attendance at live performances is required.

C. R. D. Hare. (3-0; 3-0)

**THEA 105. (3) An Introduction to Stagecraft and Technical Practice**

Elementary principles of design and stage management; the techniques of scenery and costume construction.

I. M. Pieper. (1-4; 1-4)

**THEA 150. (1½) Speech Communication**

A practical course designed to develop awareness of oral communication, and to improve technique in organization and presentation. Enrolment is limited to 100 each term with preference given to students registered in the Faculty of Education. The group will be divided into 6 laboratory sections of approximately 15 members. A one-hour lecture meeting will be held on alternate weeks; two-hour laboratory sessions will be held weekly during the term.

September-December. Also January-April.

**THEA 205. (3) An Introduction to Design and the Support Areas of the Theatre**

Elementary principles of sound, front-of-house management, and public relations; basic elements of design in relation to other disciplines of the theatre.

Prerequisite: Theatre 105.

N. B. Kinghorn. (1-4; 1-4)

\*Approved for elective credit in the Faculty of Arts and Science.

## HISTORY OF THEATRE

**\*THEA 200 (formerly 312). (3) Modern World Theatre**

An examination of the theatre from Ibsen to the present.  
H. M. Miller. (3-0; 3-0)

**\*THEA 300 (formerly 310). (3) The History of Theatre to 1642**

An examination of the western theatre in relation to society from its beginnings in primitive ritual to the closure of the English playhouses in 1642. Introduction to research methods in theatre history.  
Prerequisite: Theatre 200. (3-0; 3-0)

**THEA 313. (1½) Period Laboratory for Theatre 300**

An exploration of the performance aspects of the particular period or genre. An elective available only to students taking Theatre 300.  
Prerequisite: Permission of the Instructor.  
Corequisite: Theatre 300.  
A. Hughes. (0-2; 0-2)

**THEA 314. (1½) Period Laboratory for Theatre 400**

An exploration of the performance aspects of the particular period or genre. An elective available only to students taking Theatre 400.  
Prerequisite: Permission of the Instructor.  
Corequisite: Theatre 400.  
A. Hughes. (0-2; 0-2)

**THEA 315. (1½) Period Laboratory for Theatre 200**

An exploration of the performance aspects of the particular period or genre. An elective available only to students taking Theatre 200.  
Prerequisite: Permission of the Instructor.  
Corequisite: Theatre 200. (0-2; 0-2)

**\*THEA 371. (3) A History of Dramatic and Theatrical Criticism**

A detailed examination of major dramatic theories and theatrical criticism from Plato the present day.  
Not open to students with credit in Theatre 270.  
Prerequisite: 3 units of Theatre History or permission of the Instructor.  
H. M. Miller. (3-0; 3-0)

**\*THEA 400 (formerly 311). (3) The History of the Theatre from 1642 to the Rise of Naturalism**

An examination of the late seventeenth-, eighteenth-, and nineteenth-century theatre with particular emphasis on England, France, Italy and Germany.  
Prerequisite: Theatre 300.  
A. Hughes. (3-0; 3-0)

**\*THEA 410. (1½) Seminar in Theatre History: I**

Intensive study of a specific period of 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.)  
Prerequisite: 3 units of Theatre History or permission of the Instructor.  
(Not offered 1978-79; intend to offer 1979-80.) (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.)  
This year: Shakespeare in the theatre. A study of Shakespeare on the stage in three periods with diverse styles, conventions and critical attitudes: Elizabethan/Jacobean, Restoration, Victorian. Texts: Kenneth Muir and S. Schoenbaum, *A New Companion to Shakespeare Studies*; J. L. Styan, *Shakespeare's Stagecraft*; Shakespeare, *Hamlet*, *King Lear*, *Macbeth*, *Richard III*, *The Merchant of Venice*, *The Tempest*; readings in criticism.  
Prerequisite: 3 units of Theatre History or permission of the Instructor.  
A. Hughes. January-April only. (3-0)

**½ Seminar in Theatre History: III**

Intensive study of a specified period or genre. The topics for consideration will change each term. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.)  
Prerequisite: 3 units of Theatre History or permission of the instructor.  
(Not offered 1978-79; intend to offer 1979-80.) (3-0)

**\*THEA 413. (1½) Seminar in Theatre History: IV**

Intensive study of specific period or genre. The topics for consideration will change in each term. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.)  
Prerequisite: 3 units of Theatre History or permission of the Instructor.  
(Not offered 1978-79; intend to offer 1979-80.) (3-0)

**\*THEA 414. (1) A History of Canadian Theatre**

An examination of the Canadian theatre in relation to its society from its native beginnings through to the present day. The French aspects of the course will be studied in translation.  
Prerequisite: 3 units of Theatre History or permission of the Instructor. (3-0; 3-0)

## ACTING

**THEA 120. (3) Acting: I**

First steps in movement, voice, improvisation and scene study. Elementary phonetics.  
L. Hardy, C. D. R. Hare, K. Piesowocki. (0-6; 0-6)

**THEA 220. (3) Acting: II**

Advanced work in acting.  
Prerequisite: Theatre 120 and permission of the Instructor.  
Corequisite: Theatre 250 and 260.

(In 1978-79, open only to students who are enrolled in the acting specialization; open to other students in 1979-80 and alternate years.)  
C. D. R. Hare. (0-6; 0-6)

**THEA 250. (1½) Beginning Speech**

Intensive training of the human voice with emphasis on speech for the stage.  
Prerequisite: Theatre 120 and admission to the second year of the acting specialization.  
Corequisite: Theatre 220.  
L. Hardy. September-December only. (0-7½)

**THEA 260. (1½) Introduction to Stage Movement (formerly Introduction to Dance)**

An introduction to the principles regulating the relationship between the use of the body and acting.  
Prerequisite: Theatre 120 and admission to the second year of the acting specialization.  
Corequisite: Theatre 220.  
K. Piesowocki. (0-8; 0-8)

**THEA 320. (3) Acting: III**

Intensive study in characterization.  
Prerequisite: Theatre 220, 250, 260 and selection.  
January-April only. (0-7½; 0-7½)

## 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.  
Prerequisite: Theatre 120 or 181 and permission of the Instructor.  
G. W. Hoga, H. M. Miller. (1-4; 1-4)

**THEA 430. (3) Directing: II**

Advanced work in stage direction with particular emphasis on special problems of style.  
Prerequisite: Theatre 330 or permission of the Instructor. (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 or working drawings.  
W. D. West. (1-4; 1-4)

\*Approved for elective credit in the Faculty of Arts and Science.

**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.

Prerequisite: Theatre 105 and 240 or permission of the Instructor.  
W. D. West. (2-2; 2-2)

**THEA 341. (3) Costume for the Theatre**

Problems in costume design and construction; history of costume.

Prerequisite: Theatre 105 or permission of the Instructor.  
I. M. Pieper. (2-2; 3-0)

**THEA 342. (3) Lighting for the Theatre**

Lighting design; its theory and practice.

Prerequisite: Theatre 105 or permission of the Instructor.  
G. W. Hogya. (2-2; 202)

**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. Enrolment to be limited.

Prerequisite: 6 units of Theatre and/or permission of the Instructor.  
(1-2; 1-2)

**THEA 441. (1½) Costume Pattern Drafting**

Practical application of various techniques for drafting costume patterns for the theatre; adaptations of historical patterns, development of variations from basic patterns, and draped costumes.

Prerequisite: Theatre 341 or permission of the Instructor.  
I. M. Pieper. (2-1; 2-1)

**CHILDREN'S DRAMA****THEA 181. (3) An Introduction to Theatre-in-Education**

A basic theoretical introduction and practical exploration of the principles and practices of drama with and for children in education and in the community. In relation to these objectives the course will explore the nature of communication, particularly as it relates to the transformation of the life situation in an art form. Examination will be made of non-verbal communication; verbal communication, both oral and written; and dramatic communication: emphasis will be placed on such spontaneous means of communication as improvisation. Studio sessions are required, as well as attendance at lectures, discussions, plays and films.

B. M. McIntyre. (1-4; 1-4)

**THEA 382. (3) Youth Theatre**

A study of the methods and materials for creative drama, improvisation, play interpretation, and reader's theatre, for elementary and secondary school age students in educational and community settings.

B. M. McIntyre. (2-2; 2-2)

**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.

Prerequisite: Theatre 330 and permission of the Instructor.  
(Not offered 1978-79; intend to offer 1979-80.) (1-4; 1-4)

**DIRECTED STUDIES**

NOTE: Directed Studies numbered 390-395 may, with the permission of the Department, be taken for credit more than once.

**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. Open only to second-year students in the B.F.A. programme. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.

(2-2; 2-2)

**\*\*THEA 390. (1½ or 3) Directed Studies in Theatre History**

**\*\*THEA 391. (1½ or 3) Directed Studies in Theatre Aesthetics**

**\*\*THEA 392. (1½ or 3) Directed Studies in Theories of Acting**

**\*\*THEA 393. (1½ or 3) Directed Studies in Theories of Direction**

**\*\*THEA 394. (1½ or 3) Directed Studies in Children's Drama**

\*\*Students in Arts and Science may take for elective credit only one of the five directed studies courses.

Individual, supervised research in children's drama culminating in the production of a specific project either written or practical.

(Not offered 1977-78; intend to offer 1978-79.)

**THEA 395. (1½ or 3) Directed Studies in Design****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. Open only to third-year students in the B.F.A. programme. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.

(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. Open only to fourth year students in the B.F.A. programme. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.

(2-2; 2-2)

**GRADUATE COURSES**

Prerequisite: Departmental evaluation of the student's diagnostic examination and the student's experience.

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.

**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 Contemporary 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 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**

George W. Tiessen, B.F.A. (*Mt. Allison*), M.F.A. (*Cornell*), Assistant Professor (Printmaking and Painting); and Acting Chairman of the Department 1978-79.

Donald Harvey, A.T.D. (*Brighton*), R.C.A., Professor (Drawing and Painting) and Chairman of the Department. (On study leave 1978-79.)

Pat Martin Bates, Dip. (*Académie Royale des Beaux Arts, Antwerp*), R.C.A., Associate Professor (Printmaking).

Roland Brener, Post Dip. A.D. (*St. Martin's School of Art, London*), Associate Professor (Sculpture and Photography).

John P. Dobereiner, Dip. (*V.S.A.*), B.Ed. (*Brit. Col.*), M.F.A. (*Wash.*), Associate Professor (Drawing and Painting).

Mowry Baden, B.A. (*Pomona*), B.A. (*Stanford*), Assistant Professor (Sculpture).

Ruth S. Beer, B.F.A. (*Sir George Williams*), M.V.A. (*Alta.*), Assistant Professor. (Sculpture).

Jean Maddison, Dipl. (*Manchester Polytech., Coventry Coll.*), M.A. (*R.C.A.*), Sessional Lecturer (1977-78).

James Gordaneer, R.C.A., Part-time Sessional Lecturer (1977-78).

Glenn E. Howarth, B.F.A. (*U. of Vic.*), Part-time Sessional Lecturer (1977-78).

Flemming Jorgensen, Part-time Sessional Lecturer (1977-78).

## GRADUATE PROGRAMME

For information on the studies leading to the M.F.A. Degree, see page 164; for graduate courses, see page 150.

## GENERAL INFORMATION

The Department offers two undergraduate programmes leading to the degree of B.F.A. In addition, it makes every effort to serve the needs of students from other departments and other faculties, within the limits of available resources.

The academic emphasis of the Department is on a fine art curriculum, rather than on applied or craft training. The development of visual awareness and the growth of creative skills are seen as the primary goals of the programme. All courses will stress the need for individual initiative and self-discipline.

It is felt that a serious liberal education in the visual arts is an excellent foundation for many careers in art; and the Department will help and advise those students who plan later to enter professional fields.

## 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. *Applicants admissible to the University, will be admissible to the basic first-year course, Art 100 (The Principles of Design), which requires no previous experience in art.*

Students intending to pursue a degree programme in Visual Arts should declare that intention by registering in the Faculty of Fine Arts. Achievement in Art 100 will determine eligibility to continue as a B.F.A. candidate.

Students who have already had considerable experience in art are invited to write to the Department Chairman or request a personal interview in order to seek academic advice. In special cases permission may be granted to include an additional Art course in the first-year programme.

Information about departmental offerings and facilities will always be available to anyone interested.

### 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. As early as possible (normally by June 30) applicants should submit a folio of recent work to be evaluated by a committee of the Department. Folios may contain drawings, prints, paintings, or any flat material. Applicants whose specialty is in a three-dimensional area should submit photographs or slides. Letters of recommendation, evidence of prizes or awards, or other written material should be sent separately by regular mail. Folios should be sent or delivered to:

Chairman,  
Department of Visual Arts,  
Room 198, MacLaurin Building,  
University of Victoria.

DEADLINE June 30, 1978.

If admitted to a B.F.A. programme, applicants will likely receive transfer credit for equivalent studio courses completed elsewhere.

### 3. From other programmes at the University of Victoria

Complete the usual procedures for re-registration, 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 PROGRAMMES

Students who are working towards the B.F.A. degree have the choice of a *major* or a *general* programme. This permits a choice between an intensive commitment to Visual Arts (39 studio units from a degree total of 60); or a combination of Visual Arts and other university offerings (as few as 24 studio units from a degree total of 60). There are identical first-year requirements in both programmes; and the choice between major and general programmes need not be made until the beginning of second or even third year. Entry into the major programme requires the approval of the Department, and involves either the submission of a folio of recent work or a high level of achievement in Art 100. A student who chooses the general programme can, with careful planning, complete the equivalent of an academic major in another department or even in another faculty. There is no folio requirement for the general programme, though the Department reserves the right to limit admission if facilities are crowded.

Both B.F.A. programmes in Visual Arts require academic work outside the Department: students will be encouraged to exploit the full range of resources on the university campus. A liberal education in the visual arts should be a process of intellectual growth and enquiry; creative achievement in the studio, however important, cannot be the sole aim of the programme. The Department will always be pleased to offer advice about courses in other departments that may be particularly relevant to students in Visual Arts.

## MAJOR

Students must complete 39 units of Department offerings, including Art 100; Art 200; any three of Art 210, 220, 230, 240; 12 units to be chosen from courses at the 300 level; and Art 499 (12 units). Of the total of 60 units, at least 18 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art.

Students who have achieved at least a B- in Art 100 and in each of the required Visual Arts courses of the second year, may be admitted into the major programme. Unless special Department permission is given, students must maintain a B+ average in the Visual Arts courses of the third year in order to enter Art 499.

## GENERAL

Students must complete 24 units of Department offerings, including Art 100; Art 200; at least one of Art 210, 220, 230, 240; and 15 units to be chosen from courses at the 300 level. At least 18 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.

1st Year:

Art 100	(3)
History in Art 120	(3) NOTE 1
Art or outside elective	(3) NOTE 2
Outside electives	(6) NOTE 3

2nd Year:

<i>Major</i>		<i>General</i>	
Art 200	(3)	Art 200	(3)
Three of:		One of:	
Art 210		Art 210	
Art 220		Art 220	
Art 230		Art 230	
Art 240	(9)	Art 240	(3)
Outside elective	(3)	Art or outside electives	(6)
		Outside elective	(3)

3rd & 4th

<i>Major</i>		<i>General</i>	
Years: Art 300-341	(12)	Art 300-341	(15)
Art 499	(12)	Art or outside electives	(9)
Outside electives	(6)	Outside electives	(6)

NOTES:

- Students are strongly advised to include History in Art 120 in their first-year programmes. The required 6 units of History in Art may be elected at any time during the four years.
- Permission of the Department may be granted, in exceptional cases, for qualified first-year students to include in their programmes *one* three-unit studio course chosen from Art 210, 220, 230 or 240 to be taken in place of one elective.
- 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).

**COURSES****First Year****\*ART 100. (3) The Principles of Design**

An introduction to visual art through extensive exploration of its elements and concerns. There will be an emphasis on studio experience in two- and three-dimensional areas. This course may be thought of as a foundation upon which all subsequent courses will be built. As far as facilities permit, the course will be open to all students in the University, regardless of background; if enrolment must be limited, priority will be given to students registered in the Faculty of Fine Arts.

(1-4; 1-4)

**Second Year****ART 200. (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.

Prerequisite: Art 100. (0-4; 0-4)

**ART 210. (3) Painting**

A studio introduction to painting and related areas.

Prerequisite: Art 100. (0-3; 0-3)

**ART 220. (3) Sculpture**

A general exploration of three-dimensional form and perception. Attention will be given to some basic techniques including welding, casting, and woodworking. Emphasis of the course is placed on developing and expressing sculptural concepts.

Prerequisite: Art 100. (0-3; 0-3)

**ART 230. (3) Printmaking**

Techniques and history of relief printing: linocut, woodcut and collograph.

Prerequisite: Art 100. (0-3; 0-3)

**ART 240. (3) Photography**

A basic introductory course. The taking, developing, and printing of photographs; darkroom techniques and practices. Enrolment will be limited by facilities available, and priority will be given to Visual Arts students. Students in this course are required to have their own cameras.

Prerequisite: Art 100. (0-3; 0-3)

**Third Year****ART 300. (3) Advanced Drawing**

This course is intended to further increase the individual students' drawing skills. The emphasis will be on the development of a personal statement and the exploration of drawing as an art form in its own right.

Prerequisite: Art 200. (0-4; 0-4)

**ART 311. (3) Painting: I**

(0-3; 0-3)

**ART 312. (3) Painting: II**

(0-3; 0-3)

**ART 313. (3) Painting: III**

Advanced courses in painting (equivalent to the former Art 315 and 316). It is not necessary that these courses be taken in sequence. Concurrent registration in two or more of these courses is permitted.

Prerequisite: Art 210.

**ART 321. (3) Sculpture: I**

(0-3; 0-3)

**ART 322. (3) Sculpture: II**

(0-3; 0-3)

**ART 323. (3) Sculpture: III (not offered 1978-79.)**

(0-3; 0-3)

Advanced courses in sculpture (equivalent to the former Art 375 and 376). It is not necessary that these courses be taken in sequence. Concurrent registration in two or more of these courses is permitted.

Prerequisite: Art 220. (0-3; 0-3)

**ART 331. (3) Printmaking: Screen Printing**

An introduction to screen printing; exploration of all stencil methods, including photo screen, with the aim of producing original prints.

Prerequisite: Art 230. (0-3; 0-3)

**ART 332. (3) Printmaking: Intaglio**

Techniques and history of intaglio printing: etching, engraving, aquatint, etc.

Prerequisite: Art 230. (0-3; 0-3)

**ART 333. (3) Printmaking: Planography**

Techniques and history of lithography, with an emphasis on words with images.

Prerequisite: Art 230. (0-3; 0-3)

**ART 341. (3) Photography**

Students in this course are required to have their own cameras.

Prerequisite: Art 240. (0-3; 0-3)

**ART 390. (3) Directed Studies**

Prerequisite: 6 units of credit in the specialized area of study.

**Fourth Year**

The following courses are for major students only; general students will complete their degree programmes from 300-level courses.

**ART 490. (3) Directed Studies**

Prerequisite: 6 units of credit in the specialized area of study.

**ART 499. (12) Senior Project****GRADUATE COURSES****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. (3) First-year Seminar****ART 581. (3) Second-year Seminar**

The seminar programme is based on weekly meetings of all students at the graduate level. Open discussion, intended to develop ability to articulate, evaluate and criticize, will frequently involve artists and critics visiting the Department. Students will be expected to demonstrate a comprehension and literacy in dealing with the problems of art today.

**ART 599. (6) M.F.A. Thesis**

\*Approved for elective credit in the Faculty of Arts and Science.

# FACULTY OF GRADUATE STUDIES

The Faculty of Graduate Studies of the University of Victoria administers programmes leading to the degree of:

Master of Arts  
Master of Education  
Master of Fine Arts  
Master of Music  
Master of Public Administration  
Master of Science  
Doctor of Philosophy

Degrees may be taken in one Department or Faculty, or in a combination of them.

## EXECUTIVE COMMITTEE:

Members of the Executive Committee of the Faculty of Graduate Studies are:

John M. Dewey, B.Sc., Ph.D., Dean of the Faculty of Graduate Studies, Chairman.

Samuel L. Macey, B.A., Ph.D., Associate Dean of the Faculty of Graduate Studies to June 30, 1978.

### *Representing the Humanities*

David S. Thatcher, B.A., M.A., Ph.D., Department of English. Term expires October 1979.

### *Representing the Sciences*

Alexander McAuley, B.Sc., Ph.D., Department of Chemistry. Term expires October 1978.

### *Representing the Social Sciences*

Malcolm A. Micklewright, B.A., Ph.D., Department of Geography. Term expires June 1978.

### *Representing Education*

Peter O. Evans, B.Ed., M.Ed., Ph.D., Division of Communication and Social Foundations. Term expires October 1979.

### *Representing Fine Arts*

Alan Hughes, B.A., M.A., Ph.D., Department of Theatre. Term expires June 1978.

Latif T. Ghobrial, B.A., M.B.A., Director of Graduate Registration and Records.

## 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 faculty concerned; satisfactory letters of reference; the availability within the department or faculty concerned of a supervisor and of adequate space and facilities. In general, an acceptable academic standing will be a baccalaureate degree 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 faculties may set higher standards.

NOTE 1: Students whose native language is not English will be required to provide evidence that their knowledge of English is sufficient to allow them to proceed with their studies. (See page 11, paragraph (a) under Applicants Whose First Language Is Not English.)

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 here. See page 12 for medical requirements.

### 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 (Exchange 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 faculty concerned, at the appropriate time.

Special Students, as in 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 under b., above, must meet the Qualifications for Admission listed under that heading and have the special permission of the department or faculty 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 faculty to a programme which will normally consist of at least nine units. At the end of that programme, the department or faculty 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 his category.

NOTE 2: A full-time graduate student is one who devotes the greater part of his time to his studies and, thus, should not be gainfully employed for more than 300 hours, September through April. Students who are gainfully employed for a greater number of hours than this must register as part-time students; other students may elect so to register. No part-time graduate student may offer for credit more than six units of course work at the graduate level (courses numbered 500 to 699) in any one winter session; nor may he offer more than nine units of course work or thesis or both for credit in any twelve-month period.

NOTE 3: With the exception of the M.Ed. student who may take up to six units of course work in a Summer Session, no graduate student may take more than three units of course work at the graduate level in any one summer; moreover, he may not take an undergraduate level course in the same summer in which he takes a graduate course.

NOTE 4: No graduate student may offer for credit more than 18 units of work (courses, thesis or dissertation, or both) in any one twelve-month period.

NOTE 5: No graduate student may offer for credit more than six units of work at the undergraduate level in the final 15 units credited to his degree, and these courses shall not be below the 300 level. No Master of Education student may offer for credit more than nine units of work at the undergraduate level in the final 18 units credited to his degree, and these courses shall not be below the 300 level.

NOTE 6: Students in their final year of a Bachelor's degree programme 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 June 1 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 his 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.

#### 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 programmes by registering in person once a year on the annual registration date and paying the necessary fees. (See pages 17-19.)

Students registering for the first time are required to submit a medical history. The necessary form is mailed to each applicant with the Notice of Admission, and it must be completed and mailed to the University Health Service before registration can be completed. A medical examination is not compulsory except for resident students and those 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 Director of the University Health Service, may require a student to take a medical examination at any time during his attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole. 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:

A student who wishes to withdraw from the Faculty of Graduate Studies, either temporarily or permanently, must first request permission from his Supervisor. The student should then apply in writing to the Dean of the Faculty with a supporting memorandum from his Supervisor.

#### Academic Standards:

Students registered in the Faculty of Graduate Studies must maintain a cumulative average of at least "B" (5.00 GPA), computed yearly, on all graded courses taken for credit towards a graduate degree. Individual departments or faculties may set higher standards.

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 faculty concerned.

Students who fail their final oral examination will not be recommended for a degree. Such students have the right to appeal to the Dean of the Faculty, in writing, giving reasons for requesting re-examination. Such an appeal must be made within three months of notification of failure.

#### 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 his 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 Programme Requirements

The minimum requirement for a Master's degree is the equivalent of one full Winter Session of study.

NOTE 1: A full Winter Session of study should be regarded as equivalent to a minimum of 15 units of work.

NOTE 2: A maximum of 18 units of credit for courses, or thesis, or both, may be granted in any twelve-month period during which a student is registered full time at the University of Victoria. A maximum of nine units of credit for course work or thesis, or both, may be granted in any twelve-month period during which a student is not registered full time at the University of Victoria.

NOTE 3: A student with an honours baccalaureate degree may normally be able to obtain a Master's degree with one full Winter Session of study.

##### 4. Research and Course Work

Considerable variation is permitted in the balance between research and course work required for the degree, though most programmes include a thesis based on research.

##### 5. Courses Taken at Other Institutions

On the recommendation of the department or faculty concerned, the Faculty of Graduate Studies may accept for credit in a graduate programme, 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 faculty. The Committee shall recommend to the Faculty of Graduate Studies, a programme of studies; it shall examine the thesis if one is required; it shall conduct a final oral examination of the candidate on his thesis or discipline, or both, the oral being chaired by the Dean or his nominee; it may conduct other examinations; it shall recommend to the Faculty of Graduate Studies that a degree be awarded to a successful candidate.

A final oral examination is required of all students registered for the first time in 1969 and following years. 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.

##### 7. Examiner from Outside the Department or Faculty

The Faculty of Graduate Studies shall appoint an examiner from outside the department or faculty 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 faculty concerned no later than April 2 for graduation at Convocation in the Spring, and August 31 for graduation in the Fall.

#### Special Regulations for the Degree of Doctor of Philosophy:

The doctoral programme 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 (eight-four months) from the date of his first registration in the doctoral programme. A degree will not be awarded in less than two years (twenty-four months) from the time of that registration.

##### 2. Residence Requirements

A student proceeding to the degree of Doctor of Philosophy must spend at least two Winter Sessions at the University of Victoria, except that a student entering the doctoral programme with a Master's degree may have this residence requirement reduced to one Winter Session.

##### 3. Course and Programme 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 programme.

##### 4. Research and Course Work

Considerable variation is permitted in the balance between research and course work required for the degree.

NOTE 1: A full Winter Session of study should be regarded as equivalent to a minimum of 15 units of work.

NOTE 2: A maximum of 18 units of credit for course work or dissertation, or both, may be granted in any twelve-month period during which a student is registered full time at the University of Victoria. A maximum of nine units of credit for course work or dissertation or both, may be granted in any twelve-month period during which a student is not registered full time at the University of Victoria.

##### 5. Courses Taken at Other Institutions

On the recommendation of the department or faculty concerned, the Faculty of Graduate Studies may accept for credit in a graduate programme, 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 programme 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 his major research.

Two members of the Committee shall be chosen by the Faculty of Graduate Studies from outside the department or faculty in which the major research is being carried out. The Committee shall recommend the programme to the Faculty of Graduate Studies.

7. *Language Other Than English*  
Ph.D. programmes may require a reading knowledge of 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 his 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 faculty 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 examinations shall be communicated to all members of faculty at least fourteen days prior to the date of the examinations.
11. *Date of Submission of Dissertation*  
A dissertation must be submitted to the department or faculty concerned no later than March 26 for graduation at Convocation in the Spring, and August 31 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 \$25.00. This fee is to pay for the publication of an abstract in *Dissertation Abstracts*.

### Graduate Studies in Co-operation with Industry and Government

The Faculty of Graduate Studies participates in Co-operative Education at the University of Victoria. M.A., M.Sc., M.F.A. 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 programme of this type 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 programme, 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.

## ANTHROPOLOGY

The Department of Anthropology offers a course of study leading to the degree of Master of Arts. This programme 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 programme.

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. Programme of Studies

CORE COURSES: Normally in the first year of graduate studies a student's programme will include the following core courses:

- ANTHROPOLOGY 500, Seminar in Anthropological Theory, 3 units.
- ANTHROPOLOGY 501, Seminar in Social and Cultural Theory, 1½ units.
- ANTHROPOLOGY 540, Seminar in Archaeology and Culture History, 1½ units.
- ANTHROPOLOGY 550, Seminar in Physical Anthropology, 1½ units.
- ANTHROPOLOGY 560 (Linguistics 560), Linguistic Anthropology, 1½ units.

Core courses contribute 7½ units toward the 15-unit minimum requirement for the Master of Arts degree.

THESIS: All graduate students are required to submit a master's thesis. The thesis, carrying 3 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 programmes from the departmental listings of graduate courses, and may take a maximum of 6 units of upper level undergraduate courses.

### 2. Length of Programme

Most students require two years to complete the master's degree programme, 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 Programme (excluding 499) as outlined in the Calendar. Students without the equivalent of the University of Victoria Honours Programme must take the appropriate undergraduate courses to fulfill the honours requirements before completing their Programme. The programme outlined above indicates the minimal requirements for graduate students; however, it is the responsibility of the student's supervisory committee to tailor the programme to individual needs.

For example, students who intend to enter the programme without an undergraduate major would be advised to spend a first year in upper level undergraduate courses before entering the core programme. 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 316 respectively, to correct these deficiencies.

Prospective students are urged to consult the department for guidance in planning a programme of study and for more specific information about course offerings.

### Faculty and Current Areas of Interest

William H. Alkire, Ph.D. (Illinois)	Ethnology, cultural ecology, Micronesia and Southeast Asia
N. Ross Crumrine, Ph.D. (Arizona)	Structural and symbolic anthropology, mythology and religion, Latin America, Southwestern North America
Leland H. Donald, Ph.D. (Oregon)	Social organization, cultural ecology, statistical methods, sub-Saharan Africa
Orville S. Elliot, Ph.D. (Harvard)	Physical anthropology, primatology, osteology, human genetics; Southeast Asia
Robert B. Lane, Ph.D. (Washington)	Social anthropology, ethnology, social structure, Melanesia and the Pacific, Northwestern North America
Donald H. Mitchell, Ph.D. (Oregon)	Archaeology, cultural ecology, Northwest Coast, North American Indian
Kathleen A. Mooney, Ph.D. (Michigan)	Urban and reserve Indians, linguistics, Northwest Coast, North American Indian
Nicolas Rolland, Ph.D. (Cambridge)	Archaeology, technology, early man, prehistoric economy, method and theory; Europe, Africa.

## BIOCHEMISTRY AND MICROBIOLOGY

The Department of Biochemistry and Microbiology offers courses leading to the degree 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 151-153 are applicable.

1. Examinations, oral or written are mandatory as aids in the planning of individual academic programmes.
2. Applicants should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Graduate 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.

### 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

James T. Buckley, Ph.D. (McGill)	Properties and functions of plasma membranes. Temperature adaptation in Salmonids
William W. Kay, Ph.D. (British Columbia)	Genetic regulation and biochemistry of membrane transport systems in bacteria. Transport of biogenic amines in blood platelets and platelet-collagen interactions
Jack I. Nichols, Ph.D. (Alberta)	The structure and function of cellular ribonucleic acids. Characterization of nuclear ribonucleic-protein complexes
Trevor J. Trust, Ph.D. (Melbourne)	Role of microorganisms in fish health. Environmental sources of pathogens.

## BIOLOGY

The Department of Biology offers programmes 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 Physiology  
Plant and Animal Morphology  
Cellular and Developmental Biology  
Systematic Biology

### Faculty and Areas of Research

F. Thomas Algard, Ph.D. (Stanford)	Developmental Biology: Growth & Differentiation <i>in vitro</i> , Sex Steroid Effects, <i>in vitro</i> .
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
David J. Ballantyne, Ph.D. (Maryland)	Plant Physiology: Mode of Action of Air Pollutants; Phytotoxic
Marcus A. M. Bell, Ph.D. (British Columbia)	Vegetation and Landscape Ecology
Ralph O. Brinkhurst, Ph.D. (London)	Aquatic Invertebrate Ecology and Systematics
Derek V. Ellis, Ph.D. (McGill)	Marine Ecology: Sediment Benthos; Environmental Impact Assessment
W. Gordon Fields, Ph.D. (Stanford)	Natural History of Marine Invertebrates; Cephalopods
Arthur R. Fontaine, D.Phil. (Oxford)	Functional Morphology of Marine Invertebrates: Echinoderms
Patrick T. Gregory, Ph.D. (Manitoba)	Population Ecology of Reptiles and Amphibians
Edwin M. Hagmeier, Ph.D. (British Columbia)	Terrestrial and Freshwater Ecology
John S. Hayward, Ph.D. (British Columbia)	Environmental Physiology: Temperature Adaptation in Homeotherms; Hyperbaric oxygenation

Louis A. Hobson, Ph.D. (Washington)	Biological Oceanography: Phytoplankton Ecology and Physiology
Jack L. Littlepage, Ph.D. (Stanford)	Biological Oceanography: Zooplankton Physiology and Ecology
George O. Mackie, D.Phil. (Oxford)	Behavioural Physiology and Ultrastructure of Marine Invertebrates: Coelenterates.
Brian M. Marcotte, Ph.D. (Dalhousie)	Biological Oceanography: Benthos; Theoretical Ecology
John E. McInerney, Ph.D. (British Columbia)	Behaviour and Physiology of Fishes
John N. Owens, Ph.D. (British Columbia)	Plant Anatomy; Morphogenesis and Reproduction of Conifers
John W. Paden, Ph.D. (Idaho)	Mycology: Ascomycete Morphology and Systematics; Soil Microbiology
Miles Paul, Ph.D. (Stanford)	Developmental Biology; Marine Invertebrate Embryology
Robert G. B. Reid, Ph.D. (Glasgow)	Physiology of Marine Invertebrates
Richard A. Ring, Ph.D. (Glasgow)	Physiology and Ecology of Insects
E. Derek Styles, Ph.D. (Wisconsin)	Plant Genetics: Flavonoid biosynthesis; Paramutation

### Facilities

Facilities available include herbarium, greenhouses, constant environment rooms, equipment for radioisotope analysis, an electron microscope laboratory equipped with scanning and transmission electron microscopes, and a closed-circulation seawater system. Ships are available for oceanographic work, including the University's 54 foot marine science service vessel JOHN STRICKLAND. The campus computing centre has an IBM 370 Model 148, with 2048K storage and standard ancillary equipment. Marine, terrestrial and limnological environments permit field work throughout the year.

### Applications

Initial enquiries regarding graduate studies in Biology should be addressed to the Chairman, Graduate Studies Committee, Department of Biology. Application forms may be obtained from the Secretary of the Faculty of Graduate Studies.

Consideration of an applicant is dependent on a departmental faculty member first agreeing to become his Supervisor. If the applicant is admitted, the Supervisor will recommend a list of individuals to act as Supervisory Committee under his Chairmanship.

Applicants to the Department of Biology should arrange to take the GRE (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 GRE, 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 GRE 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.

## CHEMISTRY

The Department offers programmes of study leading to the degrees of Master of Science and Doctor of Philosophy. Research areas include the following: Organo-metallic chemistry; fluorine chemistry; 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.

Amongst the many modern research instruments available are: high resolution mass spectrometer, x-ray diffractometer, Mössbauer spectrometer, gas chromatographs, ESR and multinuclear Fourier transform NMR facilities, infrared and ultraviolet spectrometers, gas chromatographs,

G.C./M.S., laser interferometers, signal averager, medium and high resolution grating spectrographs, laser Raman spectrometer, PDP11 and IBM 370/148/2048K 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.

Candidates for graduate degrees are required to complete Chemistry 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). They are also required to take Chemistry 509 (Seminar) throughout their period of registration. In addition, candidates for the M.Sc. degree are required to complete at least 9 units of graduate courses in Chemistry. For the Ph.D. degree 15 units of graduate courses in Chemistry are normally required. In both cases substitution of appropriate courses from other departments may be made with the permission of the candidate's supervisory committee.

#### Faculty and Major Fields of Research

Walter J. Balfour, Ph.D. (McMaster)	Electronic spectroscopy.
Graham R. Branton, Ph.D. (Southampton)	Photoelectron spectroscopy and electron impact phenomena.
Gordon W. Bushnell, Ph.D. (West Indies)	Crystallography and structural aspects of inorganic chemistry.
Thomas W. Dingle, Ph.D. (Alberta)	Theoretical chemistry.
Keith R. Dixon, Ph.D. (Strathclyde)	Transition metal and organometallic chemistry.
Alfred Fischer, Ph.D. (New Zealand)	Physical organic chemistry.
Sidney G. Gibbins, Ph.D. (Washington)	Hydrides of silicon, boron and transition metals.
Martin B. Hocking, Ph.D. (Southampton)	Synthetic and physical organic chemistry; pollution control.
Alexander D. Kirk, Ph.D. (Edinburgh)	Photochemistry and luminescence of metal complexes.
Alexander McAuley, Ph.D., D.Sc. (Glasgow)	Inorganic kinetics and mechanisms—solvolysis and redox reactions; Bioinorganic chemistry.
Reginald H. Mitchell, Ph.D. (Cambridge)	Synthesis of novel aromatic hydrocarbons.
Robert N. O'Brien, Ph.D. (Manchester)	Electro and surface chemistry.
Gerald A. Poulton, Ph.D. (Saskatchewan)	Natural products.
Frank P. Robinson, Ph.D. (Alberta)	Organic synthesis; Physical organic chemistry.
Stephen R. Stobart, Ph.D. (Nottingham)	Main groups organometallic chemistry — metal hydrides.
Paul R. West, Ph.D. (McMaster)	Electron spin resonance; Organic free radical reaction mechanisms.

## CLASSICS

The Department of Classics offers a programme of studies leading to the degree of Master of Arts in the areas of:

Greek Literature and  
Latin Literature

A total of at least 15 units of work is required. The Department offers three options: (a) thesis, (b) course work and (c) a combination of thesis and course work. Applicants should seek Departmental approval of their preferred option when they apply for admission. For candidates who choose options (a) or (c), there shall be a final oral examination on the thesis. For those who choose (b), there shall be a final oral examination based on one or more of the graduate courses taken by the candidate. 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

Geoffrey J. D. Archbold, M.A. (Cincinnati)	Roman Imperial History.
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David A. Campbell, M.A.  
(Oxford)

John G. Fitch, Ph.D.  
(Cornell)

Herbert H. Huxley, M.A.  
(Cambridge), F.I.A.L.  
(On study leave,  
July-December 1978).

John P. Oleson, Ph.D.  
(Harvard)

Samuel E. Scully, Ph.D.  
(Toronto)

Gordon S. Shrimpton, Ph.D.  
(Stanford)

Peter L. Smith, Ph.D. (Yale)

Greek Poetry.

Greek Tragedy, especially Sophocles; Roman Tragedy, especially Seneca; Post-Augustan Latin Literature, particularly poetry.

Greek Anthology; Augustan, Post-Augustan and Humanistic Latin Poetry.

Etruscan and Roman Architecture; Ancient Machinery; Nautical Archaeology.

Greek Tragedy, especially Euripides; Greek Moral Thought (down to c.400 B.C.).

Athenian Constitutional History; Aspects of Fifth and Fourth Century B.C.; Greek History; Major Historians of the Fifth and Fourth Centuries B.C.

Roman Comedy; Augustan Latin Poetry.

## ECONOMICS

The Department of Economics offers courses of study leading towards the degree of Master of Arts. The programme is designed for completion in one year. Facilities are available for programmes in International Trade and Economic Development, Regional and Urban Economics and Natural Resources Economics, Economic History, Industrial Organization and Public Policy, and others.

#### Faculty and Major Areas of Research

Kenneth L. Avio, Ph.D. (Purdue)	Money and Banking; Economics of Crime; Price Theory.
Leo I. Bakony, Ph.D. (Washington)	Econometrics; Macroeconomic theory.
Gordon W. Bertram, Ph.D. (California)	Economic history.
Robert V. Cherneff, Ph.D. (Washington)	Macroeconomic theory, Monetary theory, International Trade.
Donald G. Ferguson, Ph.D. (Toronto)	International Trade; Mathematical Economics; Comparative Systems.
J. Colin H. Jones, Ph.D. (Queen's)	Industrial organization; Microeconomic theory.
Leonard Laudadio, Ph.D. (Washington)	Microeconomic theory; Environmental economics; Industrial organization.
Izzud-Din Pal, Ph.D. (McGill)	International trade; Economic development; Microeconomic theory.
Joseph Schaafsma, Ph.D. (Toronto)	Statistics; Public finance.
John A. Schofield, Ph.D. (Simon Fraser)	Regional economics; Benefit/cost theory.
William D. Walsh, Ph.D. (Yale)	Labour economics, Macroeconomic theory.
Gerald R. Walter, Ph.D. (California)	Urban economics, Resources, Economic doctrine.

## EDUCATION

Graduate programmes in the Faculty of Education are under review and there is no guarantee that current programmes will be offered next year. For further information contact the Faculty of Graduate Studies or the Faculty of Education Graduate Advisors.

#### MASTER OF ARTS

The Faculty of Education offers programmes leading to the Master of Arts degree in the following areas:  
Educational Psychology  
Educational Administration  
Curriculum and Instruction  
— Language Arts  
— Mathematics

- Music
- Physical Education
- Science
- Social Studies

In addition to the usual admission requirements of the Faculty of Graduate Studies, applicants should have had at least two years of successful relevant professional experience.

#### MASTER OF EDUCATION

The Faculty also offers programmes leading to the degree of Master of Education in the following areas:

- Educational Administration
- Language Arts
- Mathematics
- Music
- Physical Education
- School Counselling
- Science
- Secondary Reading
- Social Studies

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 nine 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 three 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. programme, 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. programme for conditionally-admitted students will be granted to those who achieved a B average, with no grade less than a B— on the first six units of work in the programme.

#### DOCTOR OF PHILOSOPHY

The Faculty also offers programmes leading to the Ph.D. degree in Educational Psychology.

##### Admission Deadlines

The Faculty of Education will observe the following deadlines for initial applications to all programmes:

February 15:

For applicants seeking Scholarships and Fellowships. (In the event of enrolment limitations, preference will be given to applicants meeting this deadline.)

March 31:

For applicants seeking admission to the following Summer Session.

May 31:

For applicants seeking admission in September of the following Winter Session.

October 15:

For applicants seeking admission in January of the current Winter Session.

#### Faculty and Areas of Research

Robert D. Armstrong, Ed.D. (California)	Language in the elementary school.
J. Douglas Ayers, Ph.D. (Toronto)	Psychometrics; evaluation; cognitive processes.
Robert D. Bell, Ph.D. (Oregon)	Motor learning; instructional methodology.
Alan Bowd, Ph.D. (Calgary)	Cognitive development; cross-cultural psychology.
Ian L. Bradley, Ed.D. (British Columbia)	Aural and visual discrimination in music; Canadian music.
Irvin K. Burbank, Ed.D. (Utah State)	Curriculum development; methodology; mathematics education.
Gerald A. Carr, Ph.D. (Stellenbosch)	Historical and comparative physical education.

Rey A. Carr, Ph.D.  
(California)

Mutual growth learning; psychobody learning; learning rhythms; counselling; school psychology; non-verbal communication.

David J. Chabassol, Ph.D.  
(Alberta)

Adolescence; attitudes, opinions, and problem areas.

Franklin E. Churchley, Ed.D.  
(Columbia)

Music curriculum development, elementary and secondary; early childhood music; piano in music education.

Martin L. Collis, Ph.D.  
(Stanford)

Theory and practice of physical fitness and fitness testing; human response to hypothermia and exercise stress.

William K. Cross, Ed.D.  
(Washington State)

Social studies methodology; teacher education.

Jean D. Dey, Ed.D.  
(California)

Language arts, early childhood education.

David Docherty, Ph.D.  
(Oregon)

Elementary physical education; movement and games; fitness; acquisition of motor skills.

John A. Downing, Ph.D.  
(London)

Psychology of reading; children's language and thought; cross-cultural experiments/comparative education.

John D. Eckerson, Ph.D.  
(Oregon)

Exercise physiology; adapted and/or special physical education.

Peter O. Evans, Ph.D.  
(Alberta)

The nature and development of language abilities; the development of word meaning and reading competence.

Robert H. Fowler, Ph.D.  
(Duke)

Teaching of international relations to secondary students; Twentieth Century European diplomatic history; Programme development in teacher education, 1945-1975.

Cary F. Goulson, Ed.D.  
(Toronto)

Secondary history methodology; history of education.

John F. Hall, Ph.D.  
(Oregon State)

History of science; ecology and outdoor education.

W. John Harker, Ed.D.  
(British Columbia)

Language education; psycholinguistics.

Geoffrey S. Hodder, M.A.  
(University of Victoria)

Art curriculum; aesthetic judgmental process.

Christopher E. Hodgkinson, Ed.D.  
(British Columbia)

Philosophy of administration; values in administrative and organizational theory; value theory; values education; general philosophy.

Edgar B. Horne, Ph.D.  
(Illinois)

Curriculum development and individualized instruction in secondary mathematics.

Bruce L. Howe, Ph.D.  
(Oregon)

Sport psychology; curriculum development; activity for retarded children.

John J. Jackson, Ph.D.  
(Alberta)

Organization/administrative theory and practice in physical education and recreation; psycho-social aspects of physical education, recreation and sport.

Terry D. Johnson, Ed.D.  
(British Columbia)

Children's literature; psycholinguistic approaches to reading instruction.

A. Richard King, Ph.D.  
(Stanford)

Socio-cultural variables in educational processes.

Donald W. Knowles, Ph.D.  
(Alberta)

Developmental psychology (children and adolescents); process variables in counselling; selection of counsellors.

Arthur Kratzmann, Ph.D.  
(Chicago)

The governance of education; early childhood education.

Werner W. Liedtke, Ph.D.  
(Alberta)

Elementary mathematics; early childhood education.

Fred L. Martens, Ph.D.  
(Oregon)

Principles of physical education.

Geoffrey P. Mason, Ph.D. (Washington State)	Measurement and evaluation of student achievement, educational programmes, moral development.	valued at from 3 to 6 units. Students in both programmes must take (normally in December or March) a general examination based on a reading list. Proficiency in reading a language other than English must be demonstrated by means of a written test.
Margie Mayfield, Ph.D. (Minnesota)	Early childhood education and language arts.	The Department offers two programmes, of equal status, leading to the M.A. degree:
John McLeish, Ph.D. (Leeds)	Microtraining (teaching and counselling); student attitudes; small learning groups; history of educational psychology; musical talent.	1. <i>Course work and Thesis</i> . This programme consists of 9-12 units of graduate course work, which must include English 500 and 501 (unless the equivalent of either has been done elsewhere), a thesis of 60-90 typescript pages, and a final oral examination.
Norma I. Mickelson, Ph.D. (Washington)	Reading; language.	2. <i>Course work and Examination without Thesis</i> . This programme consists of 12 units of graduate course work. A final oral examination (3 units) will be based on work submitted in one or more of the seminars chosen.
Richard H. J. Monk, Ph.D. (Washington)	Secondary English composition.	The course of study for each individual M.A. candidate will be determined by the Director of English Graduate Studies in consultation with the student and his supervisory committee. Transfer is possible from one programme to the other, except in cases where a student has been asked to withdraw.
Walter Muir, Ph.D. (Alberta)	Learning; measurement; computer applications.	A departmental guide, <i>A Handbook for Graduate Students</i> , is available on request.
Antoinette A. Oberg, Ph.D. (Alberta)	Curriculum development and evaluation, especially as performed by classroom teachers.	<b>Faculty and Areas of Interest</b>
Lloyd O. Ollila, Ph.D. (Minnesota)	Early learning; developmental and remedial reading.	Lionel Adey, Ph.D. (Leicester)
Arthur V. Olson, Ed.D. (Boston)	Reading.	19th century British literature.
Edward E. Owen, Ph.D. (Edinburgh)	Geography; social studies	Michael R. Best, Ph.D. (Adelaide)
R. Vance Peavy, D.Ed. (Oregon)	Phenomenology; transpersonal psychology; counselling, therapy and the creative arts.	Renaissance drama and Shakespeare; Elizabethan popular culture.
K. George Pedersen, Ph.D. (Chicago)	Educational administration: economics of education; educational finance; educational planning; problem analysis and problem solving.	Thomas R. Cleary, Ph.D. (Princeton)
Kerry C. Quorn, Ph.D. (Washington State)	Elementary language arts programmes; teacher effectiveness.	Restoration and 18th century literature.
Roger A. Ruth, Ph.D. (California, Berkeley)	Children's verbal associations; social class differences in learning.	Charles Doyle, Ph.D. (Auckland)
Marion A. Small, M.Ed. (Western Washington)	Art education; curriculum development; methodology.	Modern poetry and poetics, Modernism.
Hugh Taylor, Ed.D. (Washington State)	Innovations in grading, grade contract, criterion-references grades; affective measurements; personality and sports.	Anthony S. G. Edwards, Ph.D. (London)
Henry G. Timko, Ed.D. (Illinois)	Perceptual skills in beginning reading.	15th and 16th century English literature and bibliography.
Beverly A. Timmons, D.Ed. (Oregon)	Delayed auditory feedback; stuttering; analysis of speech.	Anthony B. England, Ph.D. (Yale)
Ronald E. Tinney, Ph.D. (Minnesota)	Learning disabilities; relationships and communication skills.	Early 18th and early 19th century British literature.
Margaret M. Travis, D.Ed. (Oregon)	Elementary art education.	Melvyn D. Faber, Ph.D. (Calif., Los Angeles)
James H. Vance, Ph.D. (Alberta)	Mathematics education.	Shakespeare; Literature and Psychology.
Margery M. Vaughan, Ed.D. (Georgia)	Musical creativity; music curriculum	Bryan N. S. Gooch, Ph.D. (London)
Larry D. Yore, Ph.D. (Minnesota)	Science education; teacher supervision and evaluation.	17th and 18th century British literature: relationship between poetry and music.
William M. Zuk, Ph.D. (Oregon)	Cross-cultural, early childhood and art education.	Patrick Grant, D. Phil. (Sussex)
		Renaissance literature.
		John G. Hayman, Ph.D. (Northwestern)
		18th and 19th century British literature.
		David L. Jeffrey, Ph.D. (Princeton)
		Chaucer and medieval literature.
		Anthony W. Jenkins, Ph.D. (Calif., Berkeley)
		Late medieval literature.
		Carol V. Johnson, Ph.D. (Bristol)
		Modern American poetry, modern European literature, critical theory.
		Patricia Köster, Ph.D. (London)
		18th century literature.
		Burton O. Kurth, Ph.D. (Calif., Berkeley)
		Renaissance literature and drama.
		Robert G. Lawrence, Ph.D. (Wisconsin)
		Elizabethan and Jacobean drama.
		Roy F. Leslie, Ph.D. (Manchester)
		Old and Middle English literature, history of the English language.
		Samuel L. Macey, Ph.D. (Washington)
		Restoration and 18th century British literature.
		Frederick Mayne, Ph.D. (Witwatersrand)
		Modern drama with comedy and satire.
		Victor A. Neufeldt, Ph.D. (Illinois)
		19th century British literature.
		Colin J. Patridge, Ph.D. (Nottingham)
		19th and 20th century American literature, Commonwealth literature.
		John D. Peter, D. Litt. (S. Africa), D. Litt. (Rhodes)
		Milton, Modern British fiction and poetry.
		Terry G. Sherwood, Ph.D. (Calif., Berkeley)
		Renaissance literature.
		Herbert F. Smith, Ph.D. (Rutgers)
		19th century American literature.
		Nelson C. Smith, Ph.D. (Washington)
		19th century British fiction, American and Canadian literature, the novel.
		Henry E. Summerfield, M. Litt. (Durham)
		18th and 20th century British literature.
		Reginald C. Terry, Ph.D. (London)
		19th century British literature, Modern drama.

## ENGLISH

The Department of English offers the M.A. degree in English, Canadian, American and Commonwealth Literature. All candidates for the degree must meet all the general requirements of the University of Victoria Faculty of Graduate Studies as well as the specific requirements of the Department of English.

Although the Department is authorized to offer the Ph.D., applicants for this degree are not being accepted at the present time.

All applicants must have achieved *at least* a high second class standing (normally a B+ average) in the final two years of their undergraduate work. With a good Honours B.A., or a strong major in English, a full-time student could normally expect to finish the M.A. within one calendar year. A part-time students, or one who is required to make up course work at the undergraduate level, would normally need at least two years for completion of the degree. A total of at least 15 units of credit is required. Half year and full year seminars carry 1½ and 3 units of credit respectively. The thesis is

David S. Thatcher, Ph.D. ( <i>Alberta</i> )	Modern British literature.
Diane Tolomeo, Ph.D. ( <i>Princeton</i> )	Renaissance literature, Anglo-Irish literature.
Bruce E. Wallis, Ph.D. ( <i>Princeton</i> )	18th and 19th century British literature.
Trevor L. Williams, Ph.D. ( <i>Wales</i> )	20th century British literature and political/historical background.

## FRENCH LANGUAGE AND LITERATURE

- I. The Department of French Language and Literature will consider applications for the M.A. Programme in French Studies from the following:
  - (A) Students from Canadian and American universities with B.A. (Honours) or B.A. (Major) in French;
  - (b) Students from British universities with B.A. (Honours) in French, or, in the case of Scottish universities, M.A. (Honours) in French. In both of these cases, first-class or second-class, division I or II, standing will be required.
  - (c) Students with equivalent qualifications.
- II. In order to qualify for the M.A. programme, candidates will be expected to have completed a minimum of eight courses (twenty-four units) at third and fourth-year levels; such a programme to include French 302 and French 402 (sequential courses in stylistics), one course on the history of the French language, and four courses selected from the following areas of literary study: the Medieval period, the Renaissance, the seventeenth, eighteenth, nineteenth, and twentieth centuries.
- III. All candidates will have their previous academic background evaluated by the M.A. Committee. In the light of this evaluation, an appropriate programme will be drawn up for the student in consultation with the graduate advisor. The M.A. Committee of the Department will then assign a supervisory committee to each candidate according to the regulations of the Faculty of Graduate Studies.
- IV. The M.A. shall consist of fifteen units of graduate credit:
  - (a) a thesis of twenty thousand to twenty-five thousand words, worth six units of credit;
  - (b) three full courses, or two full courses plus two half-courses, for nine units of credit.
- V. The thesis topic selected by the candidate must have the approval both of the supervisory committee and the M.A. committee. This regulation also applies to any substantial change from the approved topic which the candidate may find it necessary to make in the course of his research.
- VI. Candidates will be required to possess a reading knowledge of English. In addition, candidates must satisfy the Department that they have a working knowledge of Latin or another approved language.

### Faculty and Areas of Interest

Olivier M. Abrioux, Ph.D. ( <i>Aberdeen</i> )	XVIIth Century French Literature and History of Ideas; XXth Century French Literature to 1950.
Ralph W. Baldner, Ph.D. ( <i>California</i> )	XVIIth Century French Novel; XXth Century French Novel.
Gwladys V. Downes, D.U. ( <i>Paris</i> )	The Theory and Practice of Symbolist Poetry; Contemporary French-Canadian Poetry.
Elaine Limbrick, D. de IIIe cycle (Poitiers)	Montaigne; XVIth Century French Literature and History of Ideas.
Gérald E. Moreau, D.U. ( <i>Poitiers</i> )	French-Canadian Literature; Development of the Novel; XXth Century Poetry and Drama.
Jennifer R. Waelti-Walters, Ph.D. ( <i>London</i> )	Butor; Le Clézio; XXth Century Novel.

## GEOGRAPHY

The Department of Geography offers courses of study and research leading to M.A. and Ph.D. degrees. Individual programmes may be arranged in economic, urban, resources, physical and regional geography with emphasis on Canada, especially Western Canada, and the Pacific Basin.

### Faculty and Research Interests

Michael C. R. Edgell, Ph.D. ( <i>Birmingham</i> )	Physical: Biogeography; Landscape Evaluation; Australia.
Charles N. Forward, Ph.D. ( <i>Clark</i> )	Urban: Port Functions; Urban Historical; Canada.
Harold D. Foster, Ph.D. ( <i>London</i> )	Physical: Applied Geomorphology; Hydrology; Natural Hazards; Renewable Energy.
Charles H. Howatson, M.A. ( <i>British Columbia</i> )	Physical: Geology; Air Photo Interpretation; Western Canada.
David C.-Y. Lai, Ph.D. ( <i>London</i> )	East Asia: Hong Kong Overseas Chinese; China; Industrial; Urban.
Malcolm A. Micklewright, Ph.D. ( <i>Washington</i> )	Economic: Regional Planning and Development.
Peter E. Murphy, Ph.D. ( <i>Ohio State</i> )	Urban: Community Planning; Tourist Management; Quantitative.
Robert E. Pfister, Ph.D. ( <i>Oregon State</i> )	Resources: Recreational; Water Management and Conservation; Environmental Perception.
J. Douglas Porteous, Ph.D. ( <i>Hull</i> )	Urban: Planning; Behavioral; Humanistic; Latin America.
William M. Ross, Ph.D. ( <i>Washington</i> )	Resources: Political; Legal; Coastal Management; Fisheries.
W. R. Derrick Sewell, Ph.D. ( <i>Washington</i> )	Resources: Behavioural; Policy Analysis; Water; Energy.
Stanton E. Tuller, Ph.D. ( <i>Calif., Los Angeles</i> )	Physical: Climatology; Heat Balance; Japan.
Rudolf Wikramatilleke, Ph.D. ( <i>London</i> )	Asia: South and Southeast Asia; Economic and Cultural.
Colin J. B. Wood, Ph.D. ( <i>McMaster</i> )	Resources: Conflict Resolution; Economic; Quantitative.

Admission to the departmental graduate programme 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.

### Programme of Study

Acceptance into the graduate programme requires attendance at formal courses and the presentation and defence of a thesis or dissertation. There is some flexibility in the number of units required to complete a graduate programme. Normally no more than one-third of the course credits required for the M.A. or Ph.D. degree may be undergraduate credits. After consultation with the student at the time of registration, the programme is determined by the student's supervisory committee. Credits 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 programme in three years.

The department participates in the Cooperative Education Programme of the Faculty of Graduate Studies. Under this programme a newly registered student spends the first year of his programme 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 this thesis. The co-op programme is open to both M.A. and Ph.D. candidates and normally extends the length of time required for the degree by one year. While the University will make every effort to place students in suitable research positions, it cannot guarantee that every student can be accommodated.

Enquiries concerning the graduate programme may be addressed to the Graduate Studies Advisor, 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.

## HISTORY

The Department of History offers two programmes leading to the M.A. degree by: (1) thesis option, and (2) non-thesis option. Subject to the admission requirements of the Faculty of Graduate Studies, admission to

either programme 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 programme.

### 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. He 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 750,000 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.

### Non-Thesis Option

A student electing the non-thesis option will select two fields from the following areas: American History, British History, Canadian History, European History, and Asian History. Alternatively, his 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 Advisor, will constitute the student's "field committee" in each of his 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 G.P.A. but who obtain less than "B" standing in History 500 or on the written field exam, may one time only repeat History 500 the following year and rewrite the field exams in the following September.

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 his competence in his 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. Note: students will not be permitted to sit their oral examinations until they have satisfied this language requirement. Language examinations will normally be administered in the months of October, January and March each academic year.

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 within five years of the initial registration.

Although there are no formal residence requirements, residence is recommended.

### Faculty and Major Fields of Interest

Alan F. J. Artibise, Ph.D. ( <i>British Columbia</i> )	Urban History; Western Canada.
Ralph C. Croizier, Ph.D. ( <i>Calif., Berkeley</i> )	Modern China.
Brian W. Dippie, Ph.D. ( <i>Texas</i> )	Intellectual-cultural; Nineteenth Century U.S.
Charlotte S. M. Girard, Ph.D. ( <i>Bryn Maur</i> )	Twentieth Century Diplomacy; Modern France; Canadian Foreign Policy.
James E. Hendrickson, Ph.D. ( <i>Oregon</i> )	British Columbia; American West.
Sydney W. Jackman, Ph.D. ( <i>Harvard</i> )	Nineteenth Century Britain.

T. Jan Kupp, Ph.D. ( <i>Manitoba</i> )	New France.
G. R. Ian MacPherson, Ph.D. ( <i>Western Ontario</i> )	Modern Canada; Agrarian; Co-operative History.
Robert J. McCue, Ph.D. ( <i>Brigham Young</i> )	Sixteenth Century Europe.
Angus G. McLaren, Ph.D. ( <i>Harvard</i> )	Nineteenth Century European Social History.
John Money, Ph.D. ( <i>Cambridge</i> )	Eighteenth Century Britain.
Patricia E. Roy, Ph.D. ( <i>British Columbia</i> )	Modern Canada, British Columbia.
Reginald H. Roy, Ph.D. ( <i>Washington</i> )	Military and Stratategic Studies; Canada.
Donald L. Senese, Ph.D. ( <i>Harvard</i> )	Nineteenth and Twentieth Century Russia.
W. George Shelton, Ph.D. ( <i>Pennsylvania</i> )	Intellectual History.
Phyllis M. Sherrin, Ph.D. ( <i>York</i> )	French Canada.
David A. T. Stafford, Ph.D. ( <i>London</i> )	Twentieth Century Europe.
E. Patricia Tsurumi, Ph.D. ( <i>Harvard</i> )	Modern Japan.
Wesley T. Wooley, Ph.D. ( <i>Chicago</i> )	U.S. Diplomatic and Political History.

## HISTORY IN ART

The Department of History in Art offers a programme leading to the degree of Master of Arts.

The M.A. programme is designed to be completed in two years, although in exceptional circumstances the programme may be of shorter duration. In their first year students are expected to take four courses. History in Art 501, 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 or she must take at least one course in Eastern art (Islamic, Indian, or Far Eastern). Similarly, if a student's primary interest is in Eastern art, at least one course must be in a field of Western art. 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 foreign language, preferably French or German. If the University offers courses in a language indispensable to their M.A. programme, they should be prepared to undertake language training in addition to their normal course work.

### Faculty and Research Interests

Alan Gowans, Ph.D. ( <i>Princeton</i> )	Architectural history; North American art and architecture; popular arts; parallel history.
Siri Gunasinghe, D.U. ( <i>Paris</i> )	Buddhist and Hindu art and architecture of South and Southeast Asia; Indian painting.
Anthony Welch, Ph.D. ( <i>Harvard</i> )	Iranian painting; architecture of Muslim India; Islamic art and architecture.

## LINGUISTICS

The Department of Linguistics offers programmes 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 non-native speakers, languages of the Pacific Rim, and indigenous languages of the Northwest.

### MASTER OF ARTS

The Department offers two programmes, of equal status, leading to the M.A. degree: (1) by course work and thesis, and (2) by course work only. Admission to either programme 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 programme. Ordinarily, a student once accepted into an M.A. programme can expect to take two years to complete it. For either option mentioned, a student will require a total of 30 units of credit. At the discretion of the Department, up to nine 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 503/508 (Syntax), 505/510 (Phonology) and 3 units of Linguistics 581 (Colloquium). 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.

### Thesis Option

This programme involves 15-24 units of course work; thus 6-15 units of credit will be assigned to the thesis. The relative allocation of credit to course work and thesis will depend on candidates' individual qualifications. The Department recognizes that at the end of a student's first year, the number of units allowable for thesis credit may be subject to revision.

### Non-Thesis Option

A student electing the non-thesis option is required to take 30 units of course work, subject to the conditions detailed above. The student will be orally examined at the conclusion of his programme on his knowledge of the theory of Linguistics as it relates to the courses he has taken.

## DOCTOR OF PHILOSOPHY

The Department also offers a programme leading to the Ph.D. degree in Linguistics. The normal expectation is that a student entering the programme has an M.A. degree. All students are admitted on a provisional basis, and their further progress is contingent on their performance in a candidacy exam based on Linguistics 601-603. 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. programme is two years, but in general such a programme will require at least three years. 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.

### Faculty and areas of interest

James Arthurs, Ph.D. ( <i>British Columbia</i> )	Romance Linguistics; Syntax; Stylistics.
Barry F. Carlson, Ph.D. ( <i>Hawaii</i> )	Wakashan, Salishan Languages.
Thomas M. Hess, Ph.D. ( <i>Washington</i> )	Western Canadian Indian Languages; Applied Linguistics; Pacific Northwest Mythology.
Thomas E. Hukari, Ph.D. ( <i>Washington</i> )	Grammatical Theory, Phonology, and Western Canadian Indian Languages.
Joseph F. Kess, Ph.D. ( <i>Hawaii</i> )	Psycholinguistics, Austronesian Languages.
Geoffrey N. O'Grady, Ph.D. ( <i>Indiana</i> )	Phonology; Historical Linguistics; Australian and Athapaskan Languages.
M. Harry Scargill, Ph.D. ( <i>Leeds</i> ) F.R.S.C.	Canadian English Lexicography.
Henry J. Warkentyne, Ph.D. ( <i>London</i> )	Dialectology, Applied Linguistics, Acoustic Phonetics, and Japanese.

## MATHEMATICS

- The Department of Mathematics offers graduate programmes leading to the degrees of Master of Arts and Master of Science in Pure Mathematics, Applied Mathematics, Computing Science, 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 on page 85. A student without this background will be required to make up any deficiency. In so doing, he is expected to obtain a grade of at least a B (5.00) in each such make-up course, and an average of at least B+ (6.00) overall in his make-up courses.
- Each graduate student must, in addition, complete a programme of study consisting of a minimum of fifteen 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.

- Math. 581 Directed Studies. It is possible, under certain circumstances, with the approval of the Graduate Committee, for a student to take directed studies under the supervision of a faculty member.
- A graduate student is governed by the Departmental regulations in force at the time of his 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 Head and then to the Faculty of Graduate Studies a programme of studies. For a thesis candidate the committee shall examine the thesis and conduct a final oral examination of the candidate on his thesis. For a non-thesis candidate the committee shall conduct both written and an oral examination of the candidate on his 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 Head 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 familiarizing himself with other regulations as outlined in the University Calendar and the Calendar of the Faculty of Graduate Studies.

### Faculty and Fields of Research

Ian Barrodale, Ph.D. ( <i>Liverpool</i> )	Numerical Analysis, Operations Research, Computing Science.
Stanley R. Clark, Ph.D. ( <i>Manchester</i> )	Computing Science, Simulation.
Ernest J. Cockayne, Ph.D. ( <i>British Columbia</i> )	Combinatorics.
Roger R. Davidson, Ph.D. ( <i>Florida State</i> )	Statistics.
Bryon L. Ehle, Ph.D. ( <i>Waterloo</i> )	Numerical Analysis, Computing Science.
William R. Gordon, Ph.D. ( <i>Calif., Santa Barbara</i> )	Linear and Multilinear Algebra.
W. Keith Hastings, Ph.D. ( <i>Toronto</i> )	Statistics.
Denton E. Hewgill, Ph.D. ( <i>British Columbia</i> )	Partial Differential Equations.
Lowell A. Hinrichs, Ph.D. ( <i>Oregon</i> )	Geometry, Topology.
Albert Hurd, Ph.D. ( <i>Stanford</i> )	Nonstandard Analysis, Dynamical Systems, Partial Differential Equations.
Stephen A. Jennings, Ph.D. ( <i>Toronto</i> )	Algebra.
Bruce R. Johnson, Ph.D. ( <i>Oregon</i> )	Mathematical Statistics, Probability.
Walter P. Kotorynski, Ph.D. ( <i>Toronto</i> )	Differential Equations.
David J. Leeming, Ph.D. ( <i>Alberta</i> )	Approximation Theory.
Robert A. MacLeod, Ph.D. ( <i>Alberta</i> )	Number Theory.
Charles R. Miers, Ph.D. ( <i>Calif., Los Angeles</i> )	Functional Analysis.
Donald J. Miller, Ph.D. ( <i>McMaster</i> )	Algebra, Graph Theory.
Gary G. Miller, Ph.D. ( <i>Missouri</i> )	Topology.
Charles E. Murley, Ph.D. ( <i>Washington</i> )	Homological Algebra, Abelian Group Theory.
Robert E. Odeh, Ph.D. ( <i>Carnegie Institute of Technology</i> )	Statistics, Computing Science.
D. Dale Olesky, Ph.D. ( <i>Toronto</i> )	Numerical Analysis, Computing Science.
William E. Pfaffenberger, Ph.D. ( <i>Oregon</i> )	Banach Algebras, Operator Theory Harmonic Analysis.
James Riddell, Ph.D. ( <i>Alberta</i> )	Number Theory.
Frank D. K. Roberts, Ph.D. ( <i>Liverpool</i> )	Numerical Analysis, Operations Research, Computing Science.

Earl D. Rogak, Ph.D. (Michigan)	Functional Analysis, Partial Differential Equations, Optimal Control.
Marvin Shinbrot, Ph.D. (Stanford)	Functional Analysis, Differential Equations, Applied Mathematics.
Hari M. Srivastava, Ph.D. (Jodhpur)	Analysis, Applied Mathematics, Mathematical Physics.
Pauline van den Driessche, Ph.D. (Wales)	Applied Mathematics, Differential Equations.

## MUSIC

All Master's programmes in the Department of Music require a minimum attendance of two winter sessions and at least 24 units of course credit.

Apart from the regulations specified by the Faculty of Graduate Studies in the current Calendar, the Department of Music requires of students in musicology the following special qualifications:

### M.A. AND PH.D. IN MUSICOLOGY

#### Admission

An applicant is requested to send, along with official transcripts of previous college study, examples of his or her 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 Department 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 his 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 each year. Full-time M.A. students are required to complete these to the Department's satisfaction by the end of their first year in the programme. Part-time M.A. students will be advised during their first year in the programme when they should expect to complete these examinations.

#### Ph.D. dissertation prospectus

A prospectus will be required for submission to the student's advisory 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 PERFORMANCE

It is preferable for an applicant to visit the department for an interview and audition in his performance medium. When that is impractical, a high quality tape recording must suffice. This should be of 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 and in concerto or solo performances with the University Orchestra.

The candidate's individual programme 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.

### Faculty and Areas of interest

Martin Bartlett, M.A. (Mills)	Director of composition programme, theory.
William H. Benjamin, M.M.A. (Stanford)	Oboe, chamber ensembles.
George W. Corwin, D.M.A. (Rochester)	Director of performance programme, conducting, University chorus, University orchestra.
Richard Ely, M.M. (Illinois)	Horn, chamber ensembles.
Boyde W. Hood, M.M. (Ball State)	Trumpet, brass chamber ensembles.
Paul Kling, Artist's Diploma (Prague State Academy of Music)	Violin, chamber ensembles.
Rudolf Komorous, Artist's Diploma (Prague)	Composition theory.
Gordana Lazarevich, Ph.D. (Columbia)	Director of graduate studies in music, music history, musicology.
Erich Schwandt, Ph.D. (Stanford)	Director of history programme; music history, musicology, collegium musicum.
Phillip T. Young, M.Mus. (Yale)	Musical instrument history, chamber ensembles.

## PHILOSOPHY

The Department of Philosophy offers a programme 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. Programme is restricted to those with an equivalent of First Class Honours standing in the Honours Philosophy Programme at the University of Victoria.

### Faculty

Rodger G. Beehler, Ph.D. (Calgary)	Political Philosophy, Philosophy of Law, 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, Philosophy of History, Moral Psychology, Philosophy and the Environment.
Howard J. N. Horsburgh, B.Litt. (Oxford)	Philosophy of Religion, Ethics.
Eike-Henner W. Kluge, Ph.D. (Michigan)	Medieval Philosophy, Frege & Wittgenstein, Metaphysics, Theory of Perception.
John M. Michelsen, Ph.D. (Washington)	Greek Philosophy, Phenomenology & Existentialism.
Charles G. Morgan, Ph.D. (Johns Hopkins)	Philosophy of Science, Logic.
Kenneth W. Rankin, Ph.D. (Edinburgh)	Action Theory, Philosophy of Mind, Philosophy of Space and Time.

## PHYSICS

The Department of Physics offers programmes of study and research leading to the degrees of M.Sc. and Ph.D. The graduate courses offered are listed on pages 100 and 101.

Close contact is maintained with the Defence Research Establishment Pacific, the Dominion 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 Department also operates the University of Victoria Observatory, whose major equipment includes a 0.5 metre telescope, an iris photometer, a microdensitometer, and a laboratory spectrograph.

### Astronomy and Astrophysics

Observational and theoretical studies which may be carried out in conjunction with the Dominion Astrophysical Observatory at Victoria.

### Geophysics

Geomagnetism and space physics, plasma studies, upper atmosphere physics.

### Nuclear Magnetic Resonance

NMR studies of molecular properties in solids and liquids.

### Nuclear Physics

Nuclear and particle theory, intermediate energy physics with the TRIUMF accelerator.

### Physics of Fluids

Acoustics, gas dynamics and kinetic theory of gases.

### Theoretical Physics

General relativity, nuclear and particle physics.

### Faculty and Major area of Research

Walter M. Barss, Ph.D. (Purdue)	Acoustics
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
John L. Climenhaga, Ph.D. (Michigan)	Astronomy and Astrophysics
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
James P. Elliott, Ph.D. (Stanford)	Gas Dynamics and Kinetic Theory of Gases
Gerhart B. Friedmann, Ph.D. (British Columbia)	Biophysics
F. David A. Hartwick, Ph.D. (Toronto)	Astronomy and Astrophysics
Robert E. Horita, Ph.D. (British Columbia)	Geomagnetism and Space Physics
Donald E. Lobb, Ph.D. (Saskatchewan)	Beam Transport Systems and Magnetic Studies
Grenville R. Mason, Ph.D. (Alberta)	Experimental Nuclear and Particle Physics
R. Michael Pearce, Ph.D. (British Columbia)	Experimental Nuclear and Particle Physics
Howard E. Petch, Ph.D. (British Columbia)	Nuclear Magnetic Resonance in Solids and Liquids
Charles E. Picciotto, Ph.D. (California)	Theoretical Nuclear and Particle Physics.
Lyle P. Robertson, Ph.D. (British Columbia)	Experimental Nuclear and Particle Physics.
Harbhajan S. Sandhu, Ph.D. (British Columbia)	Nuclear Magnetic Resonance in Solids and Liquids
Colin D. Scarfe, Ph.D. (Cambridge)	Astronomy and Astrophysics
Harry M. Sullivan, Ph.D. (Saskatchewan)	Upper Atmosphere Physics
Jeremy B. Tatum, Ph.D. (London)	Astronomy and Astrophysics
Arthur Watton, Ph.D. (McMaster)	Nuclear Magnetic Resonance in Solids and Liquids
John T. Weaver, Ph.D. (Saskatchewan)	Geomagnetism and Space Physics

Chi-Shiang Wu, Ph.D.  
(Western Reserve)

Theoretical Nuclear Physics

## POLITICAL SCIENCE

The Department of Political Science offers courses of study leading to the degree of Master of Arts.

A total of at least 15 units is required as follows:

1. All M.A. candidates are required to complete Poli 505 — Methods of Political Analysis (1½ units). In addition, all candidates except those enrolled in the Legislative Internship Programme are required to complete Poli. 585 — M.A. Seminar (1½ units).
2. Thesis: A 3-unit thesis shall be required of each candidate.
3. Remainder of Programme:
  - (a) Regular M.A. Candidates: will be required to complete 9 additional units of course work. Students may take up to 3 units from undergraduate courses at the 300 or 400 level, and may take up to 3 units from reading courses (590).
  - (b) Legislative Internship: Students who have been accepted as M.A. candidates in this department and who subsequently participate in the Provincial Legislative Internship Programme may obtain 6 of the 15 units required upon completion of a comprehensive Intern Report and examination. Interns are required to complete at least 4½ additional units at the 500 level. No more than 3 of these units may be earned from reading courses numbered at the 590 level.

### Programme Summary

Regular M.A. Option:		Legislative Internship Option:	
Poli. 505	(1½)	Poli. 505	(1½)
Poli. 585	(1½)	Poli. 580 (January-April)	(6)
Poli. 599 Thesis	(3)	Poli. 599 Thesis	(3)
Other courses with maximum of 3 units at 300-400 level, and a maximum of 3 units at 590 level	(9)	Other 500-level course work, with a maximum of 3 units of 590 course work	(4½)
	15 units		15 units

### Faculty and Current Research Interests

Howard L. Biddulph, Ph.D. (Indiana)	Political Opposition and Dissent in Communist Politics, Political Socialization in Communist Politics, Marxist-Leninist Political Thought.
Anthony H. Birch, Ph.D. (London)	British Politics and Government, Nationalism and Nationalist Movements, Political Integration and Disintegration.
Edgar Efrat, Ph.D. (Texas)	Politics of Developing Nations, Sub-Saharan Africa.
Martin B. Levin, Ph.D. (Cornell)	Contemporary Political Thought; Post-Industrial Society; Greek Political Philosophy.
Richard J. Powers, Ph.D. (Claremont)	International Relations, Foreign Policy, International Organizations
Norman J. Ruff, Ph.D. (McGill)	B.C. Politics and Public Administration, Intergovernmental Relations, Canadian Federalism.
Mark H. Sproule-Jones, Ph.D. (Indiana)	Public Choice Theory and Policy Evaluation, Urban and Environmental Policies and Management, Intergovernmental and Interdepartmental Relations.
Neil A. Swainson, Ph.D. (Stanford)	Resource Policy Making; Local, Regional and Metropolitan Government; Public Administration; Government of Canada.
Walter D. Young, Ph.D. (Toronto)	Politics and Communication, Canadian Parties and Political Movements, Political Leadership.

## PSYCHOLOGY

The Department of Psychology offers programmes 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 several areas of experimental psychology, and in Neuropsychology and Social Psychology. The Department also offers ancillary training (but not as a degree) in clinical psychology. The Ph.D. student must specialize in one of the above three

academic areas and consider any clinical experience as additional to his major academic training.

Initial inquiries regarding graduate studies in Psychology may be addressed to the Graduate Advisor, Department of Psychology. Application forms for admission and financial support may be obtained from the Secretary of the Faculty of Graduate Studies.

#### Faculty and Major Area of Research

Loren Acker, Ph.D. (Calif., Los Angeles)	Experimental Child Behaviour Modification: Clinical/Social
Jack K. Adamowicz, Ph.D. (Western Ontario)	Clinical, experimental psychopathology, gerontology.
Alex Bavelas, Ph.D. (M.I.T.)	Cognition and Perception, Organizational Psychology and Communication, Social Psychology of Groups.
Janet Beavin Bavelas, Ph.D. (Stanford)	Social-Personality, Interaction, Cognition.
Pam Duncan, Ph.D. (Wisconsin)	Clinical-Developmental.
Bram Goldwater, Ph.D. (Bowling Green)	Human Psychophysiology, Conditioning.
Gordon Hobson, Ph.D. (Alberta)	Motivation/Alcohol and Personality.
Ronald Hoppe, Ph.D. (Michigan State)	Social Influence, Psycholinguistics.
Richard May, Ph.D. (Claremont)	Learning, Stimulus Preference, Cognitive Development.
G. Alexander Milton, Ph.D. (Stanford)	Childhood Socialization, Social Roles.
Clare K. Porac, Ph.D. (New School for Social Research)	Cognitive processing, visual perception.
Lorne Rosenblood, Ph.D. (Ohio State)	Attitude Theories, Social Affiliation, Research Design.
Frank Spellacy, Ph.D. (University of Victoria)	Neuropsychology, Clinical Psychology.
Otfried Spreen, Ph.D. (Freiburg)	Neuropsychology, Psycholinguistics, Perception.
Charles Tolman, Ph.D. (Washington)	Experimental Psychology, Theory & Methods.
R. L. D. Wright, Ph.D. (Toronto)	Motivation, Conflict and Psychopathology.

## PUBLIC ADMINISTRATION

For the programme leading to the Master of Public Administration degree, refer to page 176.

## SOCIOLOGY

The programme leading to the Master of Arts degree in sociology is designed to maximize options and flexibility for students as well as to reflect the diversity that characterizes the discipline. Courses of study are individually designed to fit student interests and supplement areas of sociology in which they may require additional work.

#### 1. Programme 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 remainder being drawn from departmental listings in the calendar. All students are required to demonstrate competence in sociological theory (Soc. 500), the methodology of sociological research design (Soc. 511) and data analysis, as well as quantitative/statistical techniques (Soc. 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 programmes — both in terms of particular courses and the unit values required. In addition, students may be expected to participate in a Departmental seminar as part of their degree programme.

Other listings are designed to facilitate the range of interests displayed by traditional and contemporary sociological inquiry (Soc. 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 areas of interest declared by the sociology faculty (see below).

#### 2. Length of Programme

Students may ordinarily expect to spend two years completing the Master's degree, although especially qualified students — an Honours degree in sociology with at least a B+ average in Sociology — may require as little as a year.

#### Faculty and Current Areas of Interest

Elaine Cumming, Ph.D. (Radcliffe-Harvard)	Medical sociology; the life cycle.
Robert Hagedorn, Ph.D. (Texas)	Formal organizations; industrial sociology; social psychology.
Alan Hedley, Ph.D. (Oregon)	Sociology of work; formal organizations; methodology.
Daniel J. Koenig, Ph.D. (Illinois)	Political sociology, deviant behaviour, social thought.
Richard Ogmundson, Ph.D. (Michigan)	Stratification; political sociology; collective behaviour.
Nicholas W. Poushinsky, Ph.D. (York)	Statistics; methodology; theory.
T. Rennie Warburton, Ph.D. (London)	Canadian society; religion.
Roy E. L. Watson, Ph.D. (Toronto)	Social welfare institutions; occupations.
Stephen D. Webb, Ph.D. (Tennessee)	Urban; criminology; methodology.
Elena S. H. Yu, Ph.D. (Notre Dame)	Social psychology; sex roles; family.

## THEATRE

#### 1. Programmes in Graduate Studies

The Department offers three programmes in graduate studies:

- M.A. in Theatre History
- M.F.A. in Directing and Production
- M.F.A. in Design and Production

#### 2. Diagnostic Examination

A diagnostic examination will be given in September to all incoming students. All deficiencies must be eliminated by enrolment in the appropriate undergraduate courses or by other assignments suggested by the graduate faculty. These deficiencies will represent additional requirements for the student and must be eliminated before the student can enrol in the graduate-level courses in that area.

#### 3. Participation in Productions

All graduate students will be expected to work in Departmental productions. Areas of activity will be designated 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 his thesis or practicum.

#### 5. Comprehensive Examinations

Comprehensive examinations for the M.A. and M.F.A. students will normally be held in October of each year.

#### 6. M.A. in Theatre History: Requirements

- (a) A knowledge of all design areas at the B.F.A. level. The student's knowledge will be checked in the early stages by the diagnostic examination (see above).
- (b) Theatre History — 9 units.  
At least 6 units must be taken in the Theatre Department at the graduate level.
- (c) Directing — 3 units.
- (d) Theatre 599 M.A. Thesis — 6 units.
  - (i) Written comprehensive examinations must be passed prior to student's registering in Theatre 599.
  - (ii) The M.A. comprehensive examination will emphasize theatre history but will also include the practical areas of the theatre.
  - (iii) The student will submit his thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

NOTE: The M.A. degree will probably require a minimum of two years. The student will normally be required to be in attendance for at least one year.

#### 7. M.F.A. in Directing/Production: Requirements

- (a) A general knowledge of theatre history at the B.F.A. level. The student's knowledge will be checked in the early stages by the diagnostic examination (See 2. Diagnostic Examination, above).

- (b) Competence at the B.F.A. level in all three design areas. (See 2. Diagnostic Examination, above).
- (c) Directing, or Advanced Directing — 3 units.
- (d) One course in Lighting, Costume or Scene Design — 3 units.
- (e) Theatre History — 3 units.
- (f) Theatre 598 M.F.A. Practicum — 6 units.
  - (i) Written comprehensive examinations must be passed prior to the student's registering in Theatre 598.
  - (ii) The M.F.A. comprehensive examination will emphasize the practical areas of the theatre but will include theatre history.
  - (iii) A full-length production will be decided upon in consultation with the student's supervisor and the graduate faculty.
  - (iv) The student will orally defend his practicum as part of the requirements of the Faculty of Graduate Studies.

NOTE: The M.F.A. degree will probably require a minimum of two years. The student will normally be required to be in attendance for at least two years.

#### 8. M.F.A. in Design/Production: Requirements

- (a) A general knowledge of theatre history at the B.F.A. level. The student's knowledge will be checked in the early stages by the diagnostic examination (See 2. Diagnostic Examination, above).
- (b) Competence at the B.F.A. level in directing and in scenery, costume and lighting design. (See 2. Diagnostic Examination, above).
- (c) A good general knowledge of, and interest in, the visual arts, particularly European and North American architecture, painting, sculpture, and minor arts. (See 2. Diagnostic Examination, above).
- (d) Four graduate courses in design for the theatre — 12 units.
- (e) One other graduate course in theatre — 3 units.
- (f) Theatre 598 M.F.A. Practicum — 6 units.
  - (i) Written comprehensive examinations must be passed prior to the student's registering in Theatre 598.
  - (ii) The M.F.A. comprehensive will emphasize the practical areas of the theatre but will include theatre history.
  - (iii) The nature of the practicum will be determined in consultation with the student's supervisor and the graduate faculty.
  - (iv) The student will orally defend his practicum as part of the requirements of the Faculty of Graduate Studies.

NOTE: The M.F.A. degree will probably require a minimum of two years. The student will normally be required to be in attendance for at least two years.

#### Faculty and Current Areas of Interest

Carl Hare, M.A. (Alberta)	Contemporary Theatrical Styles; Canadian Theatre; Children's Theatre; Shakespeare and the Elizabethan Theatre; Acting; Directing
Giles W. Hogya, Ph.D. (Northwestern)	Directing; Lighting Design; Children's Theatre; Creative Dramatics
Alan Hughes, Ph.D. (Birmingham)	Victorian Theatre; Shakespeare in the Theatre; Elizabethan Theatre; Greek Theatre
John Krich, M.F.A. (Yale)	Acting; Directing; Popular Entertainments (Circus, Carnival, Hippodrama, Spectacle); Theatrical Styles and Conventions
Barbara M. McIntyre, Ph.D. (Pittsburgh)	Theatre in Education; Children's Theatre; Child Drama
Harvey M. Miller, Ph.D. (Pittsburgh)	Directing; Acting; Elizabethan Theatre Production; The American Theatre
Irene Pieper, M.A. (San Francisco State)	The History of Costume; Costume Design.
William West	Setting Design, Graphics.

## VISUAL ARTS

The Department of Visual Arts offers a programme 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

students 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.

The programme 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.

Every student is required to produce a written and illustrated thesis (Art 599) showing extensive research into the material and techniques in the chosen area. This study may be of a wide or specialized nature. The thesis is to be undertaken in consultation with the student's supervisor, and its preparation and completion should normally take the minimum of two years' study. At the end of the first year the student is expected to produce a thorough outline of the thesis, showing clearly the specific areas to be studied, and demonstrate extensive preliminary investigation as to its practicality and relevance to further enquiry. Along with the final thesis, normally to be finished by the end of February of the second year, the student is expected to show evidence of competence in some of the techniques explored. This competence may be demonstrated in such ways as experimental tests and results, or the presence of technical knowledge in the major work produced for the final exhibition.

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 will be the major source of evaluation for the student's attainment of the M.F.A. and will be defended orally after all other requirements have been met.

Notwithstanding the art history requirement, a student must complete the following courses:

one two-year sequence: Art 511 and 512, or Art 521 and 522, or Art 531 and 532;

in addition to Art 580, 581, and 599.

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

John P. Dobereiner, M.F.A. (Washington)	Painting and drawing. Two and three dimensional structural reliefs with emphasis on optical phenomena.
Donald Harvey, A.T.D. (Brighton) R.C.A.	Painting, drawing and silkscreen printing. Primarily abstract painting and printmaking with landscape associations.

# FACULTY OF HUMAN AND SOCIAL DEVELOPMENT

John M. Dewey, B.Sc., Ph.D. (London), Acting Dean of the Faculty to June 30, 1978.

The Faculty of Human and Social Development comprises the Schools of Nursing and Social Work, and the Child Care Programme, and offers courses leading to the degree of Bachelor of Arts, in Child Care; Bachelor of Science in Nursing; Bachelor of Social Work.

## Qualifications for Admission

See pages 8-11 inclusive of the Calendar. See additional requirements under each programme.

## General Regulations

Calendar regulations governing registrations, fees, and academic advancement (see pages 11-19) apply to all students registered in the Faculty of Human and Social Development. Special regulations are set out under the appropriate area.

## Regulation Concerning Practicum

Students should give special attention to the Regulation Concerning Practicum (see page 13).

## Academic Advice

Students entering the Faculty for the first time should consult the Director in the appropriate area.

## CHILD CARE PROGRAMME

*Director:* To be appointed.

Roger A. Ruth, B.S., M.S. (Kansas St. Teacher's Coll.), Ph.D. (Calif., Berkeley), Associate Professor, Faculty of Education; Acting Director (1977-78).

Penny A. Parry, B.A. (McMaster), Ph.D. (McGill), Assistant Professor.

Edward A. Dunlop, B.A. (Queen's), M.Ed. (Tor.), Sessional Lecturer (1977-78).

Frances A. S. Ricks, B.A. (Ore.), M.Sc. (Indiana), Ph.D. (York), Part-time Sessional Lecturer (1977-78).

## PROFESSIONAL ADVISORY COMMITTEE

Mr. Vic Belknap, Superintendent of Child Welfare, Ministry of Human Resources.

Mr. T. D. Bingham, Executive Director of Long Range Planning and Social Research, Ministry of Human Resources.

Mr. Ivan Carlson, Assistant Regional Director, Ministry of Human Resources.

Mrs. Joan Costello-Grayson, Chief Child Care Counsellor, The Maples, Burnaby.

Mr. C. J. Curtis, Director, Cedar Lodge Residential Centre (Chariman).

Mrs. Marilyn Dahl, Chairman, Provincial Child Care Licensing Board, Ministry of Health.

Mr. Anthony W. Gascoyne, Director, Alternative Projects, Boys' Club of Greater Victoria.

Mr. J. B. McMahon, Director of Nursing, Glendale Lodge.

Mr. John Noble, Acting Deputy Minister, Ministry of Human Resources.

Dr. John M. Dewey, Dean of Graduate Studies, University of Victoria.

Dr. William H. Gaddes, Professor, Department of Psychology, University of Victoria.

Dr. Barbara McIntyre, Professor, Department of Theatre, University of Victoria.

Dr. Roger A. Ruth, Associate Professor, Faculty of Education, University of Victoria.

Dr. Brian Wharf, Professor and Director, School of Social Work, University of Victoria.

## PROGRAMME

The Child Care Programme offers a programme of study leading to:

— The B.A. with an emphasis in Child Care, which entails an academic programme integrated with a certain amount of practical experience;

— The Diploma in Child Care (described in more detail below), which is given in final recognition of academic achievement and satisfactory performance in the practica.

## BACHELOR OF ARTS WITH AN EMPHASIS IN CHILD CARE

The B.A. with an emphasis in Child Care is a four-year 60-unit programme consisting of an introductory first year, followed by three years in the Programme itself. Students are therefore not formally admitted to the degree programme until they have acquired 15 units of university-level credit.

Within the basic academic requirements of the degree programme, students have considerable freedom in course selection. The practica requirements, which are normally met through volunteer or paid positions (usually in the summer months) in settings throughout the Province, do not carry academic credit towards the degree. The practicum courses (Child Care 210 and 310) do, however, carry academic credit.

## ADMISSION PROCEDURES

Students transferring from other Post-Secondary Institutions must submit an Application for Admission to the University and a Request for Consideration Form to the Director of Admission Services by March 31.

Returning students (both those seeking internal transfer from another faculty and those previously enrolled in the Programme) must submit an Application for Re-Registration to the Records Office by March 31. Those seeking internal transfer must complete the Request for Consideration Form.

Enrolment in the Child Care Programme is limited by the availability of practicum opportunities. Students are selected on the basis of personal suitability as well as academic standing. A minimum G.P.A. of 3.00 (UVic C+) in the immediately preceding year (15 units) is a requirement for admission. Interviews with the Director or his representative will normally be required. Students wishing an interview before March 31 should contact the Director.

Students who register or re-register as students in the Child Care Programme will be expected to have completed a minimum total of three months of approved practica or Child Care 210 before commencing the third year of the Programme, and a minimum total of six months of approved practica or Child Care 310 before commencing the fourth year. The Director reserves the right to refuse students permission to proceed in the Programme if they have not completed appropriate practica.

Prospective students who are not Canadian citizens are cautioned that government hiring policies may present difficulties for them in meeting these practical experience requirements.

## BASIC PROGRAMME

The following academic programme is designed to provide a basic liberal arts education together with specialized practical training. There is considerable flexibility for electives. Students are encouraged to select their electives in consultation with the Programme Director.

### First Year:

One of English 115, 121, 122  
Psychology 100  
and 10½ units of elective courses.

Sociology 100 is strongly recommended as a first year elective course; both because of its general relevance to child care activities and because it must be completed as a prerequisite to other Sociology courses in several areas of Programme specialization.

### Second Year:

Child Care 200, 210, 280  
Psychology 335 or Education-D 305\*; and 6 units  
selected in consultation with the Director.

\*Registration in ED-D 305 requires waiver of its Professional Year prerequisite.

Examples of suitable elective courses are:

Arts and Science	Anthropology 100 or 200 level course Microbiology 101 Biochemistry 201 Biology 150, or any 200 level course English — a 200 level course Linguistics 100, 250 or 370 Mathematics 151 and 102 Philosophy 100 or 269 Psychology 220, 230, 240, 250, or 311 and 312 Sociology 100, 200
Education	Art Education 100 Education-D 200 Music Education — a 100 or 200 level course Physical Education — a 100 or 200 level course
Fine Arts	Music 100 or 200 Theatre 181 or other 100 or 200 level course Visual Arts 100 or 200 level course
Social Work	Social Work 200

**Third and Fourth Years:**

- (1) Child Care 310; Child Care 420 or 460.
- (2) 12 or more units chosen so as to include the courses specified for at least two of the following areas of specialization:
  - (i) Study and treatment of Mentally Handicapped Children.  
Required: Education-D 409C (The Mentally Retarded) 3 units  
Psychology 450 (Mental Deficiency) 3 units
  - (ii) Study and treatment of Emotionally Disturbed Children.  
Required: Education-D 409E (The Emotionally Disturbed) 3 units  
Psychology 430 (Abnormal Psychology) 3 units
  - (iii) Study and treatment of Neurological and Learning Handicaps.  
Required: Education-D 415 (Diagnosis and Remediation of Learning Difficulties) 3 units  
Psychology 415 (Human Neuropsychology) 3 units
  - (iv) Study and treatment of Severely Dysfunctional Children.  
Required: Psychology 415 (Human Neuropsychology) 3 units  
Psychology 430 (Abnormal Psychology) 3 units
  - (v) Care of Children in Cross-Cultural Conflict.  
Required: Anthropology/Sociology 335 (Minority and Ethnic Group Relations) 3 units  
Anthropology 339 (Indians of the Pacific Northwest) 3 units
  - (vi) Family Care.  
Required: Education-D 316/317 (Verbal and Nonverbal Communication) or Education-D 417 (Helping Relationships) or Social Work 301 (Interpersonal Communication) 3 units  
Sociology 305 (Sociology of Families and Households) or Child Care 350 (Law and Social Service) 3 units
  - \*\* (vii) Pre-School Day Care.  
Required: Sociology 304 (Interaction and Socialization) or Sociology 305 (Sociology of Families and Households) 3 units  
Education-B 440 (Early Childhood Education) 1½ units  
Education-B 441 (Research and Programme Development in Pre-School Education) 1½ units
  - (viii) Care of Children and Adolescents in Conflicts with the Law.  
Required: Child Care 350 (Law and Social Service) 3 units  
Sociology 301 (Deviance and Social Control) 3 units
- (3) 15 units (or the balance required to total 30 units) of electives chosen in consultation with the Director.

\*\* In consultation with the Director, the student can include in his programme of electives all courses necessary for licensing as a Pre-School Day Care Supervisor by the Community Care Facilities Licensing Board of the Provincial Government. It should be borne in mind, however, that such licensing is not a primary goal of this area of specialization.

**PROGRAMME DEVELOPMENT COMMITTEES**

Students in the Child Care Programme have made, and are expected to continue to make, through their participation in Programme committees, significant contributions to Programme development and to professional delineation of the role of the Child Care Counsellor. All Programme registrants are urged, wherever possible, to reserve the time allocated to Child Care 280 for committees and other planning purposes.

**PRACTICA**

Practical experience is an essential part of the education of a Child Care Counsellor, and normally involves a period of full-time employment each year of the Programme at one or more of the approved Child Care Centres. A student entering the Programme with previous experience may be given practicum credit for one-third of this time, up to a maximum of 9 months for a fourth year student, 8 months for a third year student, and 7 months for a second year student. While every effort is made to assist students to find positions with child care agencies, students are warned that the final responsibility for securing appointments rests with them.

Students should give special attention to the Regulation Concerning Practicum (see page 13).

**DIPLOMA IN CHILD CARE**

The Diploma in Child Care signifies that the holder not only has completed the academic course requirements for the B.A. with emphasis in

Child Care, but also has accumulated a broad experience in applying this academic study to the specific problems of work in child care agencies. The Diploma is available to the following categories of students:

1. *Students completing the degree of Bachelor of Arts with emphasis in Child Care at the University of Victoria.*
  - (a) Training: The completion of the four-year Bachelor's programme in Child Care and completion of a minimum of 16 months of successful full-time practical experience in at least three agencies approved by the Director as providing a variety of experience related to the student's areas of specialization. The Director will assist students in obtaining these placements but the final responsibility rests with the student.
  - (b) Recommendation: On the student's completion of the above training, the Director and the examining committee of the Professional Advisory Committee will evaluate the student's academic achievement and all reports from agencies where he has interned. When the Director is satisfied that all requirements in Child Care have been met, he will recommend that the Senate grant the "Diploma in Child Care".
2. *Students completing other degrees at the University of Victoria.*
  - (a) Training: The completion of a Bachelor's degree and concurrent or subsequent completion of the 30 units of course work specifically required in the Child Care Degree; field experience as required for enrolment and continuation in the Child Care degree programme; and completion of a minimum of 16 months of successful full-time practical experience in at least three agencies approved by the Director as providing a variety of experience related to the student's areas of specialization.
  - (b) Recommendation: as above.
3. *Students who hold four-year Bachelor's degrees from the University of Victoria or similar institutions.*
  - (a) Experience: A minimum of six months of successful full-time practical experience in agencies approved by the Director is a prerequisite to enrolment in the Diploma programme for students in this category.
  - (b) Training: The completion, or prior completion, of the 30 units of coursework specifically required in the Child Care Degree and completion of 16 months of successful full-time practical experience in at least three agencies approved by the Director as providing a variety of experiences related to the student's area of specialization. Not less than 15 units of University of Victoria courses approved by the Director and not less than 8 months of practical experience must have been completed after enrolment in the Diploma programme.
  - (c) Recommendation: as above.

**COURSES****C C 200. (3) Introduction to Child Care**

This course will offer the student an introduction to theoretical, practical and ethical issues of concern to child care workers: the disparate roles and functions of the child care worker in British Columbia and elsewhere, the way in which the worker can employ a therapeutic relationship in a re-educative approach to promote behavioural change, and the competencies required of child care practitioners in light of changing role definitions. This course is required of all students in the Child Care Programme and may be taken by students in other programmes with permission of the Director.

E. A. Dunlop.

(3-0; 3-0)

**C C 210. (3) Supervised Practicum**

This course serves as a companion course for Child Care 200. Emphasis will be placed on introducing the student to work with children displaying normative patterns of development. Enrolment is restricted to students in the Child Care Programme; students in other departments must secure the permission of the Director.

Pre- or corequisite: Child Care 200.

E. A. Dunlop.

(1-5; 1-5)

**C C 280. (0) Seminar in Child Care**

(1½ fee units)

Seminar involving weekly participation by students, faculty members and outside speakers.

Attendance and participation is required of all students registered in the second year of the Child Care Programme. All students registered in the Programme are encouraged to attend the meetings of this seminar, even though they may not be currently enrolled in it.

(Grading: COM, N or F.)

(1-0; 1-0)

**C C 310. (3) Theoretical and Practical Approaches to Child Care**

This is a supervised practicum course focusing on the student's chosen areas of specialization. Students in the Child Care Programme are strongly

advised to take this course; students in other programmes must secure the permission of the Director.

Prerequisite: Child Care 210. (1-6; 1-6)  
P.A. Parry.

### **C C 350 (formerly 300). (3) Law and Social Services**

The objective is to provide students in Child Care and Social Welfare 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.

J. C. MacPherson (Law) and a member from Social Work. (3-0; 3-0)

### **C C 390. (1½) Directed Studies in Child Care**

Research projects, directed reading, or additional course work in a specified area. All students must receive approval from the Director before registering in this course. Permission will not be granted for more than three units of directed studies courses in this or any other Faculty.

### **C C 420. (1½) Graduation Essay**

Regular class meetings are designed to assist students with the preparation of the graduation essay. Credit may not be received for this course and Child Care 460.

Registration limited to Child Care Programme students in their final year of degree or diploma studies. (0-0-2; 0-0-2)

### **C C 460. (3) Seminar in Child Care**

A study of current theories and practices in Child Care. Topics will include childhood personality development, both normal and pathological, possible therapeutic treatment methods, in-service training, management problems, budgeting, space and long-term planning. A graduation essay will be required. Open to students in their fourth year of the Child Care Programme, and to other students with permission of the Director. (3-0; 3-0)

### **C C 485 (formerly 490). (1½) Special Topics in Child Care**

Students should consult the Director for an outline of the topics to be considered.

September-December only. (3-0)

### **C C 490. (1½) Directed Studies in Child Care.**

Research projects, directed reading, or additional course work in a specified area. All students must receive approval from the Director before registering in this course. Permission will not be granted for more than three units of directed studies courses in this or any other Faculty.

## SCHOOL OF NURSING

Isabel MacRae, B.S., M.A. (*Columbia*), Ph.D. (*New York*), Professor and Director of the School.

Heather F. Clarke, B.N.Sc. (*Queen's*), M.N. (*Wash.*), Assistant Professor.

Kathleen Cyr, B.Sc. (Nursing) (*Seattle*), M.A. (*St. Louis*), Assistant Professor.

W. H. Dyson, B.Sc. (*Moravian*), M.A., Ph.D. (*Kansas*), M.D. (*McMaster*), Part-time Assistant Professor (1977-78).

Kathleen Louise Maxwell, B.Sc. (Nursing) (*Alta.*), M.N. (*Wash.*), Assistant Professor.

K. Ruth Miller, B.S.N. (*Brit. Col.*), M.S.N. (*Yale*), Part-time Assistant Professor (1977-78).

Marilyn F. Jackson, B.N. (*Man.*), M.Ed. (*Tor.*), Sessional Lecturer (1977-78).

Dawn E. McDonald, B.N. (*McGill*), M.Sc.N. (*Western*), Sessional Lecturer.

Margaret D. Bennett, B.Sc.N. (*Brit. Col.*), M.Sc. (*Hawaii*), Part-time Sessional Lecturer (February-March 1978).

Mary L. Richmond, B.N. (*McGill*), M.A. (*Columbia*), Part-time Sessional Lecturer (1977-78).

### COMMUNITY ADVISORY COMMITTEE:

Dr. A. S. Arneil, M.B., Ch.B., D.P.H., Regional Health Officer, Capital Regional District.

Dr. D. Alastair Baird, M.D., Victoria Medical Society.

Mr. P. M. Breel, Senior Director of Hospital Programmes, Ministry of Health.

Miss Lavinia M. Crane, Director of Public Health Nursing, Ministry of Health.

Mr. J. Diemer, Science and Technology Director, Camosun College.

Mr. George Harrison, Administrator, Juan de Fuca Hospital Society.

Miss Elizabeth M. Moore, Director of Nursing, Royal Jubilee Hospital.

Mrs. Joan Smyth, R.N.A.B.C. North Vancouver Island Chapter.

The School of Nursing offers a programme of studies leading to the degree of Bachelor of Science in Nursing (B.S.N.) for nurses currently registered to practise in British Columbia.\* The curriculum is planned to assist the nurse to develop an increased ability to function effectively and interdependently with other professionals in a multidisciplinary health care system. The programme includes academic courses and clinical experience under faculty supervision.

See page 8 for application procedures. Applications are due by March 31.

## ADMISSION REQUIREMENTS

Only nurses currently registered in B.C.\* are admissible to the programme. An average of 500 on the Canadian Nurses' Association Testing Service examination, or its predecessor for initial registration, is expected.

Preference will be given to those who have had previous university experience with courses in social and behavioural sciences. Candidates should realize that they will enter classes with others who have had two years of recent university experience upon which to base current learnings. It is strongly recommended, and may be required, that introductory courses at the first or second year level be taken in Biology, Mathematics, Sociology and Psychology, prior to application to the School of Nursing.

\* Nurses whose application for B.C. registration is in process may also apply.

## PROGRAMME REQUIREMENTS

Students will be required to complete a minimum of 30 units of course work at this University, in approximately two years of full-time study, or not more than six years of part-time study. They will be expected to devote at least one year to full-time study. In addition, to fulfill University requirements for graduation, students must meet the English requirement as set forth on page 12 of the Calendar. With faculty guidance, students will be encouraged to choose appropriate alternatives from among courses offered in the various departments of the University which meet programme requirements.

## PROGRAMME OF STUDIES

All courses taken for credit toward the B.S.N. degree will be at the level of 300 and above.

Nursing 301, 302 and 303 are prerequisites or co-requisites for 400 level nursing courses.

### Year Three:

Nursing 301 - Scientific Method in Nursing	3 units
Nursing 302 - Clinical Studies	3 units
Nursing 303 - Health Science	3 units
** Psychology 335 - Developmental Psychology	3 units
** Sociology 305 - Sociology of Families and Households	3 units

### Year Four:

Nursing 401 - Research in Nursing	1½ units
Nursing 402 - Learning-Teaching Process	1½ units
Nursing 403 - Community Nursing	1½ units
Nursing 404 - Nursing and the Health Care System	1½ units
Nursing 405 - Seminar in Nursing	1½ or 3 units
Nursing 450 - Administration in Health and Social Services	1½ units
Nursing 490 - Directed Study	1½ or 3 units
** Sociology 371 - Statistics and Social Research	1½ units
** Sociology 445 - Sociology of Health and Medicine	1½ units

\*\* Alternative courses to meet these requirements may be chosen in consultation with the Director.

## 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 departmental chairman.

### **NURS 301. (3) Scientific Method in Nursing**

A study of the components of problem solving and review of psychological, sociological and physiological factors considered in application of the scientific method to nursing, (e.g. need hierarchy, role fulfillment, coping behaviours; exploration of the significance of deviation from normal patterns; resources available within the patient and his environment for the improvement of current health status, or for resolution of grief in the event

of chronicity or death for self or significant other). The relationship between theory and students' current or previous clinical experiences will be emphasized. Tests, written care plans and term papers will be the basis for grades.

Corequisite: Nursing 302.

I. MacRae, and others. (3-0; 3-0)

### **NURS 302. (3) Clinical Studies in Nursing**

A practicum during which students apply the scientific method in situations which require extended guidance and/or intervention for the improvement or maintenance of health status. Particular emphasis is given to the conditions of elders; renal dialysis; congenital anomaly, rehabilitation and non-institutionalized chronicity, may also be considered. Grades will be based upon achievement of clinical objectives, and written assignments.

Corequisite: Nursing 301. (1-6; 1-6)

### **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.

Open to students outside the School of Nursing with permission of the Instructor.

Corequisites: Nursing 301 and 302. (3-0; 3-0)

### **NURS 390. (1-3) Directed Studies**

The purpose of this course is to facilitate transfer of students to this School from other institutions.

### **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., Sociology 371, Psychology 300, Mathematics 253, or other approved by course Instructor. September-December. Also January-April. (3-0)

### **NURS 402. (1½) The Teaching-Learning Process in Health Care**

The intent of this course is to enable health professionals to recognize teaching opportunities in various health care environments. Emphasis is upon adaptation of individual and group teaching techniques to such environments and the establishment of criteria for behavioral assessment of teaching effectiveness.

Open to students in Nursing and, with Instructor's permission, to other health professionals.

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

### **NURS 403. (1½) Community Nursing**

This course provides an opportunity to develop understanding of, and skills in, the delivery of health care in the non-hospital setting. Emphasis will be on the nurse's role in such settings, the maintenance of nursing principles in unstructured situations, planning for family health, and selected special-focus programmes.

An integral part of this course is a practicum.

H. F. Clarke, K. Cyr, K. L. Maxwell.

September-December. Also January-April. (3-6)

### **NURS 404. (1½) Nursing and the Health Care Systems**

This seminar course focuses on professional issues in nursing, including the roles of individual nurses and the professional organizations in changing the health care delivery systems and in functioning with those systems.

Pre- or Corequisite: Sociology 445 or an alternate course approved by the Director. January-April. (0-0-3)

### **NURS 405. (1½ or 3) Seminar in Nursing**

An examination of selected topics of importance to Canadian and/or international nursing. Enrolment limited; consent of Instructor required for registration. Not offered every term or every year. Students should consult their academic advisor for an outline of the topics to be considered in any session in which the course is offered.

(Not offered 1978-79; intend to offer 1979-80.) (0-0-3) or (0-0-3; 0-0-3)

### **NURS 450 (Social Work 450). (1½) Administration in Health and Social Services**

The course examine various concepts in 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 to service organizations.)

This course will normally be restricted to students in the fourth year of Social Work or Nursing, and to students with at least fourth year standing in other professional programmes with the permission of the Director of Social Work or Nursing.

September-December. (1-0-2)

### **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 Director. Students must consult with the Director prior to registration.

I. MacRae, and others.

## SCHOOL OF SOCIAL WORK

Brian Wharf, B.A., B.S.W., M.S.W. (*Brit. Col.*), Ph.D. (*Brandeis*), Professor and Director of the School.

Andrew Farquharson, B.A. (*Bishop's*), M.S.W. (*McGill*), M.Ed., Ed.D. (*Tor.*), Associate Professor.

Marilyn J. Callahan, B.A., B.S.W., M.S.W. (*Brit. Col.*), Assistant Professor.

Marjorie D. Martin, B.A., B.S.W., M.S.W. (*Brit. Col.*), Assistant Professor and Co-ordinator of Field Instruction.

Wesley J. Shera, B.A. (*Regina*), M.A. (*Calgary*), Assistant Professor.

Glen M. Farrell, B.S.A. (*Sask.*), M.Sc., Ph.D. (*Wisc.*), Sessional Lecturer (1977-78 and 1978-79).

Jocelyn M. Gifford, B.A. (*McGill*), M.S.W. (*Brit. Col.*), Sessional Lecturer (1977-78).

James C. MacPherson, B.A. (*Acadia*), L.L. B. (*Dalhousie*), L.L.B. (*Cantab.*), Sessional Lecturer (1977-78 and 1978-79).

Robert C. Willihnganz, B.A. (*Calif. St. Coll.*), Ph.D. (*Texas*), Sessional Lecturer (1977-78).

Margot Bonner, B.A. (*U. of Vic.*), M.S.W. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

Glen F. Hamilton, B.A., B.S.W., M.S.W. (*Brit. Col.*), Ph.D. (*Liverpool*), Part-time Sessional Lecturer (1977-78).

June Preston, Soc. Work Dipl., B.A., M.S.W. (*Mt. Royal Coll.*), Part-time Sessional Lecturer (1977-78).

Hanny Turner-Pannekoek, Cert. of Soc. Work (*Sociale Académie*), Part-time Sessional Lecturer (1977-78).

Donna Watt, B.A., B.S.W. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

Walene Whitaker, B.A., M.S.W. (*Brit. Col.*), Part-time Sessional Lecturer (1977-78).

Arthur Abrahamson, B.A. (*Augustana Coll.*), M.A. (*Minn.*), Part-time Consultant (1977-78 and 1978-79).

W. Andrew J. Armitage, B.Sc. (*London*), B.A. (*Cantab.*), B.S.W., M.S.W. (*Brit. Col.*), Part-time Visiting Consultant (1977-78 and 1978-79).

### COMMUNITY ADVISORY COUNCIL

Mr. Dennis Alphonse, Valley Native Friendship Centre, Duncan.

Ms. Denise Bocsik, Representative, B.C. Association of Social Workers.

Mr. Dave Campbell, Probation Officer, Corrections Branch, Ministry of Attorney-General.

Mr. Roger J. A. Cardinal, Representative, Victoria Bar Association.

Mrs. Mavis Dean, Representative, Foster Parents' Association.

Dr. R. J. Flanagan, Representative, B.C. Medical Association.

Mr. Bill Freyer, Representative, Victoria Chamber of Commerce.

Dr. George Hougham, Director, School of Social Work, University of British Columbia.

Ms. Florence Kenyon, Representative, Federated Anti-Poverty Groups of B.C.

Mrs. Peggy Mika, President, Victoria Registered Nurses' Association of B.C.

Mr. Archie Morrison, Retired.

Reverend William Mundy, Representative, Council of Churches.

Mr. Don McComb, Director, Justice Councils of British Columbia.

Ms. Norrie Preston, Representative, Status of Women.

Mr. Ron Rappin, President, Federated Anti-Poverty Group.

Mr. Bernard Robinson, Deputy Commissioner, Corrections Branch, Ministry of Attorney-General.

Mr. George Ruffee, Regional Consultant, Regional Committee for Aid to Handicapped  
 Mr. James Sadler, Retired.  
 Mr. Hugh Saville, Executive Director, Ministry of Human Resources.  
 Ms. Andria Spindel, Executive Director, Social Planning and Review Council of B.C.  
 Ms. Susan Stein, Social Worker, Glengarry Hospital.  
 Ms. Wilna Thomas, Director, Social Service Aide Programme, Camosun College.  
 Mr. David Turner, Regional Program Director, Mental Health Programmes.

## BACHELOR OF SOCIAL WORK

The School of Social Work offers a programme of studies leading to the degree of Bachelor of Social Work (B.S.W.). Admission to this programme requires completion of the first two years (30 units) of an undergraduate programme 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. Candidates for a B.S.W. degree must comply with the Minimum Degree Requirements for a Bachelor's degree outlined on page 16 of the University Calendar.

The objective of the B.S.W. programme is to prepare general practitioners who can respond to troubled individuals and families in a social systems context. This objective calls for a blending of interpersonal and analytic skills and knowledge of individual behaviour and social conditions. The programme seeks to prepare graduates who can function on an inter-disciplinary basis in the non-urban areas of British Columbia.

### Post-Baccalaureate One-Year B.S.W. Programme:

A one-year post-baccalaureate B.S.W. programme has been authorized by the Senate and is planned to commence in 1979. Further information on this programme will be forthcoming by way of a supplement to this Calendar.

## ADMISSION PROCEDURES

Students transferring from other post-secondary institutions must submit an application for admission to the University to the Director of Admission Services by March 31.

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. programme to the Records Office by March 31.

Approximately 30 students will be admitted to the B.S.W. programme in 1978. 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. Students wishing an interview before March 31 should so indicate on the application form.

Applicants are advised that a summer field work placement in a rural area is required for all students. Normally not more than three 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.

## PROGRAMME REQUIREMENTS

### First Year:

The following first year courses are recommended. Students should consult the University Calendar for information regarding prerequisites for senior-level courses.

Anthropology 100  
 Biology 150  
 Economics 100  
 English 115, and 121 or 122  
 Mathematics 130, or 102 and 151  
 Microbiology 101  
 Philosophy 100  
 Political Science 100  
 Psychology 100  
 Sociology 100

### Second Year:

Social Work 200 is required for entry into the B.S.W. programme. Social Work 200 is open to any student who has completed first year satisfactorily but carries credit in the Faculty of Arts and Science only as a free elective (see page 29 of the Calendar: Other Courses outside the Faculty of Arts and Science).

Students meeting all requirements for admission except Social Work 200 can apply for conditional acceptance and enrol in Social Work 200 in Summer Session.

In second year the following courses, or their equivalents, are strongly recommended:

Psychology 220  
 Sociology 200

Other appropriate second year courses are as follows:

Biochemistry 201  
 Child Care 200 (carries credit in the Faculty of Arts and Science only as a free elective).  
 Anthropology 200  
 Economics 200  
 Geography 201, 204 or 205  
 History 242  
 Statistics 253  
 Philosophy 202, 232 or 269  
 Political Science 201, 210, 220, 230, and 250  
 Sociology 209

### Third Year:

In the third year students will take Social Work 301, 302, 303, 350 (unless special permission is received from the Director to omit a course or courses from this group), and 3 units of electives chosen in consultation with the Director; Social Work 304 to be taken in the summer between third and fourth years. Total units, 18 (including 1½ units from either Sociology 341 or Geography 346).

### Fourth Year:

In the fourth year students will take Social Work 401, 402, 450, and 452 (unless special permission is received from the Director to omit a course or courses from this group); and 3 units of electives chosen in consultation with the Director. Total units: 12.

Total units for Third Year and Fourth Year: 30.

Total units for the programme: 60.

## COURSES

Third and fourth-year courses except Social Work 304 and 402 may be taken by students outside the School with the permission of the Director. Social Work 301, 302, 303, 350, 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 200. (3) An Introduction to Social Welfare in Canada

Consideration of current social problems including crime, poverty, health care, aging; an examination of society's response to these problems; the role of social workers in delivering services and in the formulation of social policy.

Students may not receive credit for both Social Work 200 and Social Work 400.

M. J. Callahan, W. J. Shera. (3-0; 3-0)

### SOC W 301. (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.

A. Farquharson. (3-0; 1-3)

### SOC W 302. (1½) The Community in Canada

A review of experiences in the community control of services and of various approaches to community development.

Prerequisites: Sociology 341, or Geography 346.

B. Wharf. 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.

A. Farquharson. (3-0; 3-0)

### SOC W 304. (3) Social Work Field Practice

The third year field placement is planned as a four month summer experience between third and fourth years in which students will be assigned a wide range of responsibilities at the individual, group and community level. Normally, the field work placement will be in a rural location. Relevant conceptual content will be considered in a weekly seminar.

Prerequisites: Social Work 301, 302, 303 and 350.

M. D. Martin.

**SOC W 350 (C C 350) (formerly 300). (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.

(2-0-2; 2-0-2)

**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 Social Work 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 programmes with the permission of the Director of the School of Social Work.

W. J. Shera.

(1-0-2\*; 1-0-2\*)

\*Lectures and tutorials on alternative weeks.

**SOC W 402. (3) Social Work Field Practice**

This course requires students to spend two days per week in a supervised practiced situation in a social service agency. The intent is to deepen and 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 weekly seminar.

Entry into this course will be restricted to fourth year students in the School of Social Work.

Prerequisite: Social Work 304.

M. D. Martin.

**SOC W 450 (Nursing 450). (1½) Administration in Health and Social Services**

The course examines various concepts in organizations 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 to service organizations.

This course will normally be restricted to students in the fourth year of Social Work or Nursing, and to students with at least fourth year standing in other professional programmes with the permission of the Director of Social Work or Nursing.

M. J. Callahan.

September-December. (1-0-2)

**SOC W 452. (3) Selected Topics in Social Work Practice**

This course is intended to review selected issues in social work practice such as interdisciplinary practice, alcohol and drug abuse, and the organization of social and health services, and will be offered in the form of one- or two-day seminars held each month during the academic year. May be taken only once for credit.

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 programmes with the permission of the Director of the School of Social Work.

M. J. Callahan.

**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

F. Murray Fraser, B.A. LL.B. (*Dalhousie*), LL.M. (*London*), of the Bar of Nova Scotia, Professor and Dean of the Faculty.

Ronald I. Cheffins, B.A., LL.B. (*Brit. Col.*), LL.M. (*Yale*), of the Bar of British Columbia, Professor. (On study leave 1978-79.)

Keith B. Jobson, B.A., B.Ed. (*Sask.*), LL.B. (*Dalhousie*), LL.M., J.S.D. (*Columbia*), of the Bar of British Columbia, Professor.

William A. W. Neilson, B.Comm. (*Tor.*), LL.B. (*Brit. Col.*), LL.M. (*Harvard*), of the Bar of Ontario, Professor.

Diana M. Priestly, B.A., LL.B. (*Brit. Col.*), M.L.L. (*Wash.*), Professor and Law Librarian.

Lyman R. Robinson, B.A., LL.B. (*Sask.*), LL.M. (*Harvard*), of the Bars of British Columbia and Ontario, Professor.

Donovan W. M. Waters, B.A., B.C.L., M.A. (*Oxon.*), Ph.D. (*London*), Professor.

Terence J. Wuester, B.A. (*Bethany Nazarene Coll.*), M.A. (*Missouri*), J.D. (*Kansas*), LL.M. (*Yale*), of the Bars of Saskatchewan and Kansas, Professor.

Frank S. Borowicz, B.A. (*Loyola*), LL.B. (*Dalhousie*), LL.M. (*Harvard*), Associate Professor.

Gerard A. Ferguson, B.A. (*St. Patrick's*), LL.B. (*Ottawa*), LL.M. (*New York*), of the Bar of Ontario, Associate Professor.

Neil Gold, B.A. (*York*), LL.B. (*Tor.*), LL.M. (*York*), of the Bars of British Columbia and Ontario, Associate Professor.

Richard M. Brown, LL.B. (*Queen's*), LL.M. (*Harvard*), Assistant Professor.

James E. R. Ellis, LL.B. (*Dalhousie*), LL.M. (*London*), of the Bar of Nova Scotia, Assistant Professor.

James C. MacPherson, B.A. (*Acadia*), LL.B. (*Dalhousie*), LL.B. (*Cantab.*), Assistant Professor.

T. Murray Rankin, B.A. (*Queen's*), LL.B. (*Tor.*), LL.M. (*Harvard*), of the Bar of British Columbia, Assistant Professor.

Mary Anne Waldron, B.A. (*Brandon*), LL.B. (*Man.*), LL.M. (*Brit. Col.*), of the Bar of British Columbia, Assistant Professor.

Douglas R. Campbell, B.A. (*Calgary*), LL.B. (*Alta.*), Part-time Sessional Lecturer (January-June 1978).

The Faculty of Law offers a three-year programme 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 applicants for admission to the Faculty of Law are available from the Dean's office. All applications must be submitted by March 31.

## REQUIREMENTS FOR ADMISSION TO THE FIRST-YEAR PROGRAMME

### Regular Applicants

The Faculty of Law may admit a candidate who:

1. presents proof that he has 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 that he has completed, with standing satisfactory to the Faculty of Law, at least the first three years (forty-five units) of a programme 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 pre-law academic record and Law School Admission Test score.

### Special Applicants

The Faculty of Law may admit a limited number of applicants who have demonstrated by the length and quality of their non-academic experience an

equivalent in substance to formal education. Applicants in this category normally will be restricted to residents of British Columbia, the Yukon and the Northwest Territories.

Special applicants normally will have reached the age of twenty-six on or before September 1 of the year for which they seek admission. Applicants are required to write the Law School Admission Test. Letters of assessment and interviews may also be required.

### Native People

The Faculty of Law is anxious that the number of native Indians and Eskimos among the ranks of the legal profession increase substantially and, accordingly, encourages enquiries and applications from Native People.

However, the Faculty is concerned that candidates not invest a substantial amount of time, money and effort only to find that they were inadequately prepared for the rigours of law school. Hence, the Faculty fully endorses the Programme of Legal Studies for Native People conducted by the Native Law Centre of the University of Saskatchewan. It is highly desirable that those Native candidates whose records are not competitive within the Regular Applicants category enrol in this "head start" programme. Considerable weight is placed upon the evaluation submitted by the director of the programme. Each candidate in this category is required to submit a Law School Admission Test Score.

## GENERAL INFORMATION

### 1. Academic Session

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	
	C+	3	
	C	2	} Pass
	D	1	
Failing Grade	F	0	} Deferred examination granted
Temporary Grade	*DEF	N/A	

\*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 seeking a review of an assigned grade should contact the Dean of the Faculty.

### 4. First Year Programme

All courses in the First Year Programme are compulsory.

### 5. Second and Third Year Programmes

(a) The Faculty of Law may designate courses as compulsory, prerequisite, or recommended courses.

(b) In each of the second and third years of the programme, a student shall enroll in a course programme which has been approved by the Dean or his nominee.

(c) An approved programme 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).

(d) Without the permission of the Dean or his nominee, a 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).

### 6. Standing by Year

Standing in the Programme for the First Year, Second Year or Third Year shall be granted when a student passes all of the courses in his programme for the Year, and EITHER:

(a) obtains a grade of "C+" or better in courses representing at least nine units of courses for the Year, OR

(b) obtains a grade point average of at least 3.0 in the courses for the Year.

### 7. Supplemental Examinations

(a) Where a student does not achieve standing under Regulation 5 above, but attains a grade point average of at least 2.0, the student shall be permitted to write supplemental examinations in not more than two courses representing not more than six units, in order to attain the standing required.

(b) Where a student, enrolled in a clinical programme or other course exclusively for a term (15 weeks), fails to meet the grade requirement of Regulation 5, 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) Supplemental Examinations shall not be written in courses where a student has attained a grade of "C+" or better.

#### 8. Special Examinations

(a) The Faculty may authorize the writing of Special Examinations or the submission of documentation in satisfaction of course requirements to achieve standing under Regulation 5, where a student's ability to write or complete an examination or other academic requirement has been affected by illness or special circumstances.

(b) In considering such cases, the Faculty will require the submission to the Dean of a medical certificate or other documentation.

(c) Students will be advised in writing with respect to procedures to be followed in such cases.

#### 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 Session or intercession 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.

#### 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.

## COURSES

### 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 pre-trial 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: Family Law

The course provides an understanding of the importance of legislation in the legal process. Consideration is given to the ways in which law reform may be achieved. An attempt is made to illustrate the need for and value of interdisciplinary research in certain areas of the law and the potential contribution of other professions in the solution of "legal" problems.

Students should gain an appreciation of how a statute is created, including the basic underlying policy decisions upon which it is based, and the problems faced by the draftsmen in translating general ideas into specific unambiguous language. There is an examination of the rules of interpretation and their use in judicial interpretation of statutes. The course should develop an appreciation for the appropriate use of language in legal work of all types.

From time to time different areas of substantive law will be used to achieve these objectives.

An attempt will be made to provide a perspective of the operation of the law within and upon the family unit. Specific topics will include protection of children, wardship, support obligations, and family property.

Students may be asked to prepare memoranda outlining policy objectives for proposed legislation. In co-operation with the Legislative Council of the Province, students may be required to prepare draft legislation.

Full year course

60 hours

### LAW 106. (2) The Legal Process

The Legal Process seeks a perspective of the processes of decision-making 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 programme.

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.

Students are required to complete a number of written assignments. Research topics are integrated with the areas of substantive law covered in a number of the first-year courses. The use of various research tools, including the computer, is considered. The major objectives of these assignments are to introduce students to source materials commonly used by lawyers, to acquaint students with accepted principles pertaining to proper citation in legal writing, and to develop a degree of proficiency in legal writing and research.

Full year course

60 hours

### LAW 108. (6) The Private Law Process

This course concentrates upon some of the basic rules of processes which regulate the relationships between private citizens. There is an attempt to integrate and interrelate some of the basic concepts normally covered in such courses as Contracts, Property and Torts. The course includes an overview of these areas, emphasizing their similarities rather than their differences, while at the same time students are expected to acquire substantial knowledge in each of these subjects. It presents problems in a form more closely resembling the way they occur in practice and everyday life. An attempt is made to introduce students to basic private law remedies and the use of the judicial process, arbitration and other methods of dispute settlement. With the assistance of audio-visual techniques, students participate in exercises designed to develop the skills of interviewing, counselling and negotiating at an early point in the programme.

This course is primarily concerned with the following subject areas:

#### 1. Contracts

This is a study of the basic principles of the law of contract, the underlying policy considerations, the historical development of such principles and the contemporary phenomena of contracts in society.

Contracts under seal, formation of simple contracts, written contracts and memoranda, rights of third persons, quasi-contract, mistake, interpretation, performance of contracts including conditions, failure of consideration, frustration, present and anticipatory breach, illegality, remedies, and modern statutory developments.

#### 2. Torts

Consideration is given to the manner in which the law distributes losses from injuries to personal, proprietary and economic interests among members of society.

Intentional interference with the person, land and goods, negligence, occupier's liability, strict liability, nuisance, the role of insurance, assessment of damages.

### 3. Property

This is an introduction to the concepts that lawyers use in dealing with competing interests in land, chattels and other forms of wealth. The concept of "property" is examined as are the concepts of "possession" and "ownership" and the consequences following from these concepts.

Personal property: acquisition of title, finder's laws, gifts, bailments, liens, pledges, an introduction to the law of chattel mortgages and conditional sales, problems in the transfer of personal property.

Real property: historical and conceptual analysis of interests in land, concurrent ownership, future interests, the torrens system.

Contracts, Property and Torts are offered as separate elements of The Private Law Process. Students consider concepts common to two or more of the subject areas by reference to materials prepared by the four to six faculty members who are teaching The Private Law Process.

Full year course

200 hours

#### LAW 301. (1½) 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.

(3-0)

#### 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 re-election, particulars, discovery, the indictment, plea bargaining, abuse of process, juries, the trial and appellate processes.

(3-0)

#### LAW 304. (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 programme which will consider criminal procedure, sentencing and corrections, substantive criminal law, trial process and the law of evidence. Through a flexibly-designed programme, students will consider all the major issues confronting the administration of criminal law.

(15-0)

#### LAW 306. (1½) Legal Process: II

It is infrequent indeed that the legal system is discussed as a "system". However, through an assessment of the various major institutions involved in the legal process and the interactions between them, a theory of process may be developed. A system which is coordinated, functioning and made up of a set of interrelated and interacting parts may be described and theorized about. Through this process, a perceptive awareness of what the various institutions are good for may be developed and understood. The role of the private decision and private ordering within the legal system must be underlined and explained.

(3-0)

#### LAW 307. (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.

(4-0)

#### LAW 308. (7½) The Civil Process: An Evolutionary Perspective

The first ten weeks of this course develop first through history and then through modern law the remedies and procedures which have been of time-honoured importance.

The next major step in the programme is a short course in the rules and principles of evidence which will be supplemented during the final three weeks of trial advocacy. This last module will focus directly upon the application of evidence, procedures and remedial law in the context of a full-scale simulation which will immerse students in the civil process from initial interview to appeal.

(15-0)

#### LAW 309. (2) The Law of Evidence: A

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 the objectives of the legal process.

(4-0)

#### LAW 310. (1½) The Law of Evidence: B

This course is designed to familiarize students with some of the basic principles of the law of evidence. The course will explore effects of the rules of evidence on the decision-making process with particular reference to the balancing of interests inherent in the legal process. Specific subject matters will include hearsay, character, opinion, real, documentary, circumstantial and similar fact evidence.

(3-0)

#### 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).

311A (1 unit) Advanced Administrative Law (2-0)

311B (1½ units) Advanced Administrative Law with Clinical Placement (3-0)

#### LAW 312. (1½) Debtor and Creditor Relations

The course will discuss legal aspects of the collection of judgements; use and problems of mechanic's liens; fraudulent transactions, both under provincial and federal law; creditors' arrangements; debtor assistance programmes; and bankruptcy.

(3-0)

#### LAW 313. (1) Legal Accounting

The course will deal with an 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 lawyers' trust accounts.

(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. (2½) Commercial Transactions

This course will encompass a variety of disparate but interacting areas of commercial law, including sale of goods, secured transactions, debtor and creditor relations, banking and bills of exchange and consumer protection. It is envisaged that this course will provide students with a sound background in the commercial law area.

(3-0; 2-0) or (2-0; 3-0) or (5-0)

#### 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 an analysis of 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

(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 anti-combines 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 323. (7½) Family Law Term**

This will be an intensive immersion term during which time students will be engaged in a thorough analysis of the social and legal principles relating to the family. Consideration will be given to an in-depth understanding of the family as a social institution. The course will seek to integrate material otherwise found in the Children and the Law, Conflicts of Laws, and Family Law courses. Family disorders and their consequential legal implications will be viewed from a wide perspective which goes beyond the objective, adversarial role that lawyers often play.

(15-0)

**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 325. (1½) Business Planning**

This course will deal with the financing of business through short and long-term debt, including an examination of debentures and frequently-granted corporate securities such as fixed and floating charges, guarantees, and assignment of accounts. The course will also cover financing a corporation through equity securities, including an examination of kinds of shares, share certificates, share warrants, an introduction to the stock market and publicly-traded securities, and an introduction to the basic structure, theory and principles of the securities regulations.

(3-0)

**LAW 326. (1½) Labour Law**

The Labour Union is no longer simply a response to the crisis of the post-industrialization era. Rather the union is a vital social force of its own with both positive and negative contributions to make in the development of the daily fabric of life. Considerations must therefore be given to questions relating to organization, certification, labour practices, collective bargaining, the role of labour relations in modern society. Specific reference will also be had to the role of the courts and private arbitration in the resolution of issues in labour law.

(3-0)

**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 re-organization, housing and development, elections, and the inter-relationship between federal, provincial and municipal governments.

(2-0)

**LAW 329. (1) Environmental Law**

Environmental Law has a strong interdisciplinary base and neatly interconnects a variety of seemingly disparate areas of law. It effectively builds upon courses in torts, administrative law, property and aspects of land use planning and resource law. The impact of law-making and its policies upon society may be canvassed with the specific reference to the impact of twentieth century development on the condition of life. Specific reference will be had to the role of administrative agencies through coercive and non-coercive techniques, as well as to common law and statutory remedies available through private actions in the judicial process.

(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 332. (1) Natural Resources Law**

This course will be concerned with an examination of the law and public policy with regard to the management of water, forest, fishing, mining and agricultural resources and the mechanisms available for control of resource industries which are vital to the economy.

(2-0)

**LAW 336. (1) Advanced Labour Law**

This course will include industrial relations, the conduct of arbitrations, the development of bargaining and negotiating skills, and the employment relationship of persons outside the organized work force including employment standards, workers' compensation, unemployment insurance, and other regulations bearing upon the job market.

(2-0)

**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 341. (1½) Selected Problems in Sentencing and Corrections**

What is the purpose of criminal law? What do we hope to achieve through its processes? This course will investigate the development of principles respecting sentencing and give consideration to the relevance of psychiatric and medical reports in the ultimate determination. Alternatives to incarceration, such as probation and parole and pre-trial agreements will be considered. In sum, the course seeks to provide students with an understanding of the criminal justice system in action, with specific reference to the post-trial process.

(3-0)

**LAW 345. (2) Taxation**

The course will strive to cover the basic principles of income tax law including such issues as taxable income, residency 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.

(4-0)

**LAW 350. (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 examination

of substantive legal rules, procedural and strategical positions, and introspective critical analysis of the role of the lawyer in the legal process. This requires a carefully supervised programme with manifold opportunities for one-to-one instructor-student supervision and regular group sessions. Programmes envisaged would take place in a community law office, a public interest law office or a general solicitor's practice.

(Grading: COM, N or F.) (15-0)

#### **LAW 351. (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. From an interdisciplinary jurisprudential perspective, 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 advisor.

Through a variety of flexibly designed and closely supervised intensive immersion programmes, students will be involved in observation and participation in the actual operation of government, the preparation and presentation of cases before administrative agencies and the research and preparation of various legal and governmental documents, in an atmosphere designed to foster critical analysis and reflection upon their experience.

(15-0)

#### **LAW 360. (1) 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 focussed upon the legal profession.

(2-0)

#### **LAW 361. (1) Evolution of the Common Law**

Following the Norman Conquest in 1066, there was a social, economic, political and legal revolution which continues to have ramifications for us today. This course will assess the impact of the Conquest on government, development and lawmaking, and will trace the rise of the forms of action at common law, the Court of Chancery and the development of the variety of legal professions which grew in order to deal with the proliferation of complex law which resulted.

(2-0)

#### **LAW 362. (1) The Development of Canadian Legal Institutions**

This course seeks to examine the development of Canadian legal institutions, first against a background of their English ancestry, and then with specific reference to the development of courts and tribunals with tasks specific to the needs of a growing Canada. Reference will be had to the development of administrative tribunals for the regulation of indigenous industry. Through the course, students will gain insights into the unique Canadian development of institutions originally developed in England or in the United States.

(2-0)

#### **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 judgements, 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. (2) 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 laws 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.

(2-0; 2-0)

#### **LAW 399. (1½-4) Supervised Research and Writing**

A student in either second or third year may undertake a substantial research and writing project on Law approved by a member of the Faculty of Law who agrees to supervise the project. With the approval of the Dean or his nominee, the credit for this course may be varied but shall not exceed 2 units per term. This course may be extended over two successive terms, but a student may not enroll in this course in more than two terms.

# SCHOOL OF PUBLIC ADMINISTRATION

A. R. Dobell, B.A., M.A. (*Brit. Col.*), Ph.D. (*M.I.T.*), Professor and Director of the School.

James Cutt, M.A. (*Edin.*), M.A., Ph.D. (*Tor.*), Visiting Professor and Acting Director (1977-78); Professor as of September 1, 1978.

Kathleen A. Archibald, B.A. (*Brit. Col.*), M.S. (*Ill.*), Ph.D. (*Wash., St. Louis*), Associate Professor.

Barry Carin, B.A. (*McGill*), Ph.D. (*Brown*), Visiting Associate Professor (1978-79).

Thomas A. Lambe, B.A.Sc. (*Brit. Col.*), M.S., Ph.D. (*Stanford*), Associate Professor.

J. Barton Cunningham, B.A. (*Brigham Young*), M.P.A., Ph.D. (*S. Calif.*), Assistant Professor.

Richard B. Bird, LL.B. (*Brit. Col.*), Part-time Sessional Lecturer (January-April 1978).

H. Campbell L. MacDonald, B.A.Sc. (*Brit. Col.*), M.B.A. (*W. Ont.*), Part-time Sessional Lecturer (September-December 1977).

Archibald McCaig, Dip.B.Ad. (*W. Ont.*), R.I.A., Part-time Sessional Lecturer (January-April 1978).

Hugh C. Wilkinson, B.Comm. (*Brit. Col.*), M.B.A. (*Wash.*), M.Sc. (*Cranfield*), Part-time Sessional Lecturer (September-December 1977).

Ron M. Burns, B.Comm. (*Brit. Col.*), Director, Executive Development Training Programme.

## MASTER OF PUBLIC ADMINISTRATION PROGRAMME

The School of Public Administration offers a programme of interdisciplinary studies leading to the degree of Master of Public Administration. The course is designed for men and women preparing for administrative or management positions in the public sector, 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 an undergraduate degree from a recognized university, or equivalent qualifications, with an academic standing that is acceptable to the School and the Faculty of Graduate Studies. In general, this would mean a 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, e.g., professional experience, which indicates that the candidate will complete the programme successfully.

Because the M.P.A. programme 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, make-up course work may be required, prior to admission of a student as a candidate for the M.P.A. degree. This would occur where lack of an adequate academic background is judged to be a handicap for the student, particularly in the preparatory courses.

Where some doubt exists as to the quality of an applicant's undergraduate degree, he may be admitted *Conditionally* to the degree programme, and be required to satisfy the School as to his suitability as a full degree candidate, based on the initial course work taken. If this initial course work is completed satisfactorily, it may be used as credit toward the preparatory course component of the degree. Further, such candidates may be required to complete a standardized test of competence for entry to graduate studies, such as the Graduate Record Examination, or the Graduate Management Admissions Test, with a standing acceptable to the School.

Candidates will normally be expected to arrange an interview with the Director and School staff as part of the admission process.

## PROGRAMME OF STUDIES

Each candidate for the degree of Public Administration will design a programme 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. Individual programmes 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) at the graduate level in the University of Victoria.

The programme may be undertaken on a full-time or part-time basis.

The following categories are for candidates admitted directly to the programme. These differ in course content but not in performance requirements.

### The Regular Programme

Each study plan will comprise a minimum of 30 units, consisting of:

- a minimum of 27 units of course work, where the course units taken will include such preparatory courses as are required and a minimum of 15 units of professional, elective courses from inside and outside the School of Public Administration. These professional courses allow the student to pursue, within the framework of his study plan, subjects in his area of interest. Where the student's background is such that he must take more than 12 units of preparatory work, the total number of course units taken will exceed the minimum 27 units. If a student can provide academic or other evidence of proficiency in a preparatory course, a professional elective course may be substituted. All students must take Administration 520 (Policy Analysis), the function of which is to integrate the various preparatory and professional approaches in a series of case studies.
- a Report (3 units) embodying the results of the student's investigation of a specific policy issue or designated management problem.
- an Internship requirement in those cases where the student lacks previous professional experience.

The minimum time in which the regular programme can be completed is two-years of full-time study, or its equivalent part-time.

### The Mid-Career Programme

Each study plan will comprise a minimum of 18 units, consisting of:

- 15 units of professional elective courses, including Administration 520
- a Report (3 units) as in the Regular Programme.

Candidates in this category may be required to undertake, in addition to the basic 18 units in (a) and (b) above, such preparatory courses as are deemed necessary for entry into the professional stream.

The minimum time in which the Mid-Career Programme can be completed is one year of full-time study, or its equivalent part-time.

### The Special Programme

Each study plan will comprise a minimum of 30 units, consisting of:

- a minimum of 27 units of course work, where the course units taken will include a minimum of 15 units of professional, elective courses, including Administration 520, and the set of required preparatory courses completed in an intensive summer session running for not less than 12 weeks prior to entry into the professional courses. The minimum block of intensive preparatory courses so offered would amount to 12 units.
- a Report (3 units) as in the Regular Programme.

The minimum time in which the Special Programme can be completed is one year of full-time study and a prior summer of intensive study, covering 12 units of course work.

### The Report Requirement (ADMN 599):

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 his Supervisory Committee, which shall be composed of two members of the School faculty and one member of the Faculty of Graduate Studies who is not a member of the School. The Supervisory Committee will be expected to review a first draft, and to approve a final version for submission to the Oral Examination Committee which will include at least one professional administrator from outside the University of Victoria in addition to the Supervisory Committee.

### The Internship Requirement:

An internship requirement for candidates without previous professional experience is an important element in the M.P.A. programme. For students in the Regular Programme, this requirement can be served during the summer months between the first and second years, or after the required course work has been completed, or at other times with the consent of the Director of the School. Students in the Special Programme should determine the time of their internship in consultation with members of the faculty. Students are encouraged to find their own placements, but the School will assist in arranging suitable internships.

### 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" (GPA 5.00), computed yearly.

**General Information:**

1. Grading
  - i. Students must maintain an *average* grade of "B" (GPA 5.00) in the course work for the degree as a whole, *and* in each academic year of course work.
  - ii. Grades below "B" *will* count for credit toward the M.P.A. degree, subject to maintenance of the required "B" average. There is, therefore, no formal grade minimum in a particular course, but students who obtain a grade of less than "B—" in a particular course must discuss that grade, and their future study plan, with the Director.
  - iii. Students whose average grade in course work for a particular year falls below "B" must discuss their programme with the Director prior to continuation. (This includes a student who may take only one course in a year and receive a "B—" or lower for it.)
2. Co-operative Education
 

Co-operative Education is an integrated approach to higher education which enables students to obtain relevant work experience while completing an academic programme. Experience in the University of Victoria and in other Canadian universities has demonstrated that Co-operative Education develops graduates who are well-motivated and of a high academic and professional calibre.

Co-operative Education will begin, for full-time students, in the School of Public Administration at the University of Victoria, in the summer of 1978. Students who successfully complete three Work Terms and satisfy the academic requirements of the M.P.A. degree programme offered by the School of Public Administration will receive a notation to this effect on their transcripts at graduation.

**GRADUATE COURSES AND REQUIREMENTS**

The set of graduate courses in the degree is divided into six preparatory courses and a set of professional, elective courses from inside and outside the School of Public Administration. The preparatory courses are seen as providing "core methodology" to students whose background in these areas is insufficient. These areas of methodology, or sets of concepts and approaches, are seen as integral to the requirements of a manager in the public sector. The professional, elective courses pre-suppose adequate breadth and depth in core methodology and allow the student to apply and integrate these various methodological threads in relation to general or specific problem areas facing the public sector manager. Administration 520 is a professional course required for all students which allows students to integrate various aspects of methodology in a set of case studies.

**PREPARATORY COURSES****ADMN 500. (1½) Quantitative Analysis: I**

The applications and limitations of formal numerical analysis in making decisions on problems in the public sector. Topics surveyed include the role of the administrator in choosing a model, supplying inputs and interpreting outputs; elementary statistical decision theory.

September-December.

**ADMN 501. (1½) Quantitative Analysis: II**

A continuation of the topic with particular emphasis on sampling, simulation and applications of elementary optimization theory.

January-April.

**ADMN 502. (1½) Macro-economic Analysis**

Assessment of the economic effects of governmental regulations and policies; macro-economic reasoning as applied to public issues, policies, and programmes; monetary and fiscal policy; "incomes" policy and other contemporary topics.

September-December.

**ADMN 503. (1½) Micro-economic Analysis**

Principles of micro-economics including theories of demand, production and cost, the theory of the firm, the theory of income distribution and welfare economics. Application of micro-economics to selected social issues such as pollution of the environment, education, health and welfare, crime and punishment. An introduction to the principles and applications of cost-benefit analysis.

January-April.

**ADMN 504. (1½) Political Analysis: I**

The course will sensitize the student to the major features of the political process in the modern democratic state, with particular reference to Canada and its provinces. Issues to be examined will be selected from such topics as concepts of power, authority and legitimacy; Canadian and provincial

political cultures; Canadian political nationality and federalism; the structures of executive, legislative and administrative branches of government; the relevance of parties, interest groups, and voting behaviour to the representative process; and the crisis in Canadian federalism.

September-December.

**ADMN 505. (1½) Political Analysis: II**

The course will introduce the student to the basic concerns of political scientists in the study of public sector administration. Questions to be considered will be selected from such topics as the ecology of administration; the significance of leadership and authority; the responsible and representative bureaucracy; developmental administration; and the administrative process in an age of change.

January-April.

**ADMN 506. (1½) Organizational Analysis: I**

Administrative leadership and behaviour: functions of the executive; the nature of authority and leadership; communication; conflict; motivation; decision-making; control.

September-December.

**ADMN 507. (1½) Organizational Analysis: II**

Organizational theory and design: history of organization and management theory; approaches to analysis and design; applications of general systems theory.

January-April.

**ADMN 510. (1½) Canadian Public Law: I**

Students will be introduced to the basic framework of the constitutional and administrative law of Canada. It will examine the role of law in contemporary society, 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 and the impact of a federal system.

September-December.

**ADMN 511. (1½) Canadian Public Law: II**

An examination of the basic principles of administrative law, emphasizing the functioning of administrative tribunals and judicial control of administrative action.

January-April.

**ADMN 512. (1½) Public Sector Accounting and Financial Management: I**

Concepts of cost, income and valuation in public sector accounting. The budget process: line-item budgeting, performance budgeting, programme budgeting, and zero-base budgeting.

September-December.

**ADMN 513. (1½) Public Sector Accounting and Financial Management: II**

Forecasting procedures. Auditing: fiduciary auditing, efficiency auditing, and effectiveness auditing.

January-April.

**PROFESSIONAL, ELECTIVE COURSES****ADMN 520. (formerly 508) (1½) Policy Analysis**

An integrative case-study seminar.

**ADMN 521. (1½) Management of the Public Enterprise**

The process of management and the sequence of events that are integral to that process. In particular, the important function of planning and policy formulation; programme development and service delivery; resource determination, allocation and budgeting; accounting and evaluation.

**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**

Students may be permitted to take Administration 523 more than once for credit, provided the course content is different from that previously taken.

ADMN 523A Public Expenditure in Social Programmes

ADMN 523B Analytical Methods in Public Expenditure

**ADMN 524. (1½) Information Systems: Theory and Practice**

Familiarization with data and information-processing concepts and procedures. The costs and benefits of data collection are considered within the framework of the informational needs of management for functions such as planning, controlling and decision-making.

**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 527. (1½) Decision Analysis**

Presentation of applications of the theory of decision-making under uncertainty within the framework of Bayesian inference and cardinal utility. Applications will include inspection sampling, equipment replacement and project cost estimation.

Prerequisite: Administration 500 or its equivalent.

**ADMN 528. (1½) Production and Operations Management**

The course explores operational methods suitable for scheduling operations in institutional and service oriented settings, and provides experience with the analytical approach to production and operations management, including the design of production systems (process planning, plant location, layout facilities, work measurement); operations, planning and control.

**ADMN 529. (1½ or 3) Organizational Development and Training**

An examination of the contemporary experience in the public sector with organizational development applications in public institutions.

Prerequisite: Administration 506 or its equivalent.

**ADMN 530. (1½) Municipal Administration**

**ADMN 531. (1½) Personnel Management**

Human resource management; recruitment, selection, and training; individual and group motivation and behaviour; manpower utilization, assessment, and compensation systems; cooperation and conflict in labour management relations.

B. Cunningham.

January-April.

**ADMN 532. (1½ or 3) Sociocultural Design**

Public policies and programmes can be viewed as attempts to guide, regulate and change sociocultural processes, that is, as exercises in sociocultural design. This seminar examines the foundations of theories about sociocultural processes and their implications for sociocultural design.

**ADMN 533. (1½) Policy Implementation and Programme Coordination**

This course examines the difficulties encountered in translating policies into action and in achieving the lateral and vertical coordination of government programmes with each other and with related endeavours in the private sector, and explores ways of avoiding or surmounting these difficulties.

**ADMN 534. (1½) Seminar on Energy Issues**

**ADMN 590. (1½-3) Directed Studies**

**ADMN 599. (3) Report Requirement**

# AWARDS AND FINANCIAL AID

## GENERAL REGULATIONS

All enquiries concerning material in this section except University of Victoria graduate fellowships and scholarships should be directed to the Financial Aid Office, University of Victoria. Information regarding University of Victoria Graduate awards may be obtained from the Faculty of Graduate Studies.

All 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, a student must take a full year's programme (this shall be at least fifteen units) which must include the required courses for the year in which the student is registered. Where credit has already been obtained in a required course, however, another may be substituted with the permission of the Dean of the Faculty concerned except that grades of compulsory courses must be included in the required number of units for the year and degree in which the student is registered.

A student who has a failure in one of the required courses for the year will not be eligible for an award based on academic merit. 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 enrol in a full programme.

For general proficiency awards, 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, except that grades of compulsory courses will be included in computing the overall standing.

The University reserves the right to limit the amount of money retained by a student and, if necessary, to reassign awards to other students by reversion. In cases of reassignment by reversion, the names of the original recipients will be included in the published list of awards.

Where applications are necessary, the deadline for submission of application forms is April 30, unless otherwise stated.

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; unsatisfactory conduct, attendance or progress; withdrawal of the award by the donor.

Except where the donor directs otherwise, the proceeds of scholarships and bursaries issued by or through the University will be applied against the total fees for the academic year. If the amount of the award or awards exceeds the unpaid total fees for the academic year, the excess balance will be paid to the student.

If for any reason the original recipient becomes ineligible to hold an award, the funds will be reassigned, by reversion, to other students. In such cases, the published list of award winners will show only the names of the original recipients.

Other awards, such as medals or book prizes, if not presented directly by donors or their agents, will be forwarded to the winners upon receipt.

## 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 bursary is a monetary award based on need and reasonable academic standing.
- (d) A medal is an award based on academic merit or excellence in the area to which the award pertains.
- (e) 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: None of the 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 180.)

- C. Administered by the Association of Universities and Colleges of Canada. (See page 182.)
- D. Administered by other institutions and organizations. (See page 183.)

Section 2: Government of British Columbia Awards. See page 185.

Section 3: University bursaries requiring application. See page 186.

Section 4: Undergraduate awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See page 186.

Section 5: Undergraduate awards for which application must be made to the Senate Committee on Awards. See page 192.

Section 6: Undergraduate awards administered by the University of British Columbia and other institutions and organizations. See page 193.

Section 7: Awards for graduate study. See page 196.

Section 8: Loan funds. See page 198.

## 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.

#### A. ENTRANCE AWARDS ADMINISTERED BY UNIVERSITY OF VICTORIA

Application forms for the following awards may be obtained from the Financial Aid Office, University of Victoria, Victoria, B.C., and must be returned before June 30, unless otherwise indicated. Names of winners will be released early in September.

**PRESIDENT'S ENTRANCE SCHOLARSHIPS** — Five scholarships of \$500 each for British Columbia secondary school graduates who are entering the University of Victoria in September 1978. Awards will be based upon high standing in the 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. If funds permit, additional awards in smaller amounts may be allocated.

**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 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 Union.

**ALDYEN HAMBER I.O.D.E. ENTRANCE SCHOLARSHIP** — Two hundred and fifty dollars (\$250) 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 INSURANCE LTD. 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 No. 61 and the Department 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 of 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.

**\*SARA AND JEAN MACDONALD BURSARY FUND** — Provides annual bursaries 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. At present, the fund provides four bursaries valued at \$300 each.

**PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY** — A bursary of \$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 insurance company. It is open to students entering University from Grade XII. 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.

**THE READ JONES CHRISTOFFERSEN LTD., CONSULTING ENGINEERS' SCHOLARSHIP** — Two hundred dollars (\$200) awarded annually to a student entering the University of Victoria to study pre-engineering. Selection will be made by the Committee on Awards in consultation with the donor.

**THE VANCOUVER ISLAND REAL ESTATE BOARD BURSARY** — A bursary of five hundred dollars (\$500) is provided by the Vancouver Island Real Estate Board to a student holding Canadian citizenship, going directly from Grader XII to the University of Victoria. Candidates must be graduates from senior secondary schools in the Board area which comprises school districts 65, 66, 68, 70, 71, 72, 84 and 85. The winner will be selected by the Senate Committee on Awards on the basis of financial need and recommendations from the school. Candidates are urged to write the Government Scholarship Examinations, but this regulation is not mandatory in order to be considered for the award.

**UNIVERSITY OF VICTORIA ALUMNI AWARD** — The University of Victoria Alumni Association offers annually up to four scholarships of \$500 each made possible through contributions to the Alumni Fund Drive. The scholarships are open to students proceeding from Grade XII to a full course of studies at the University of Victoria leading to a degree in any field. Selection of the successful candidates will be based upon the following criteria, assessed by the Alumni Scholarship Committee:

- high scholastic achievement based on (1) results of the B.C. scholarship examinations conducted in January or June by the Ministry of Education and (2) school grades obtained in final year;
- financial needs;
- demonstrated contribution to school and/or community activities such as sports, fine arts, student government, youth and/or service groups.

Applications for the scholarship must be made to the Financial Aid Office by June 30.

Scholarships will be considered for renewal for a second year only if the candidates complete a full programme of studies as defined by the Senate Committee on Awards, maintain high academic standards and contribute to University life. Application for renewal must be made to the Financial Aid Office by April 30.

Two additional scholarships of \$250 each will be offered to students who carry a minimum of 6 units of credit during the first year at the University provided the candidates meet the scholarship criteria. Greater emphasis will be given to financial need and community contribution by mature student applicants. These scholarships are non-renewable. Applications for the part-time scholarships must be made to the Financial Aid Office by July 31.

**B. ENTRANCE AWARDS, ADMINISTERED BY THE SCHOLARSHIP AND BURSARY COMMITTEE, THE UNIVERSITY OF BRITISH COLUMBIA, 2075 WESTBROOK 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.*

**(1) Entrance Scholarships which must be applied for by July 1 unless otherwise stated.**

**BRITISH COLUMBIA FOREST PRODUCTS LIMITED ENTRANCE SCHOLARSHIPS** — Ten scholarships of \$400 each are offered by British Columbia Forest Products Limited to 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. They are open to students proceeding in the fall from Grade XII to a full course of studies at The University of British Columbia, University of Victoria, or Simon Fraser University. Candidates for these scholarships must be eligible in all respects to compete for Government of B.C. Scholarships and must write the Scholarship Examinations conducted in January or June by the Ministry of Education, B.C. The scholarship will normally be awarded to the ten candidates obtaining highest standing. Those grades obtained in other subjects taken during the year may also be considered. No award will be made, however, to an applicant with an overall average of less than 70%. Applicants for these scholarships must state the necessary details of family service with the Company. Postponement of attendance at The University of British Columbia, Simon Fraser University, or the University of Victoria may be granted to a scholarship winner, but only for certified medical reasons, and then only for a period of a year. Application for postponement must be made to The University of British Columbia at the time the award is made.

**CHEVRON CANADA LIMITED SPECIAL SCHOLARSHIP** — Chevron Canada Limited offers a scholarship worth \$3,000 to children or wards of employees or annuitants, or of deceased employees who died while in the employ of the Company or as annuitants of the Company, and who have or had not less than one year of service with the Company. It will be open in competition to students proceeding in the fall to studies in the first year at Simon Fraser University, The University of British Columbia, the University of Victoria, a regional college in British Columbia or other approved Canadian university of recognized standing, in a full course leading to a degree. Candidates must be eligible in all respects to compete for Government of B.C. Scholarships and must write the Scholarship Examinations for Secondary School Graduates conducted in January or June by the Ministry of Education, Victoria, B.C. The scholarship will normally be awarded to the eligible applicant obtaining highest standing in these examinations, but grades obtained in other subjects taken during the year may also be considered. Should this applicant win another award, however, the scholarship may be given, at the discretion of the Selection Committee, to the eligible candidate with next highest standing. No award will be made to a candidate with an overall average of less than 70%. In case of a tie, the decision will rest with the Selection Committee. The winner of this award will receive \$750 during the first year of attendance at the University, and is eligible for renewals of \$750 a year for three further years. Each renewal is subject to maintenance of standing satisfactory to The University of British Columbia. The student must give essential details of family employment with the Company. *Be careful not to confuse this scholarship with the Chevron Canada Limited Entrance Scholarship.*

**THE FEDERATION OF TELEPHONE WORKERS OF BRITISH COLUMBIA, PLANT DIVISION, SCHOLARSHIP** — The Federation of Telephone Workers of British Columbia, Plant Division, offers two scholarships of \$500 each to sons and daughters of members (with at least twelve months continuous service) or of deceased members (with the same service). They are open in competition to students proceeding in the fall from Grade XII in secondary school to a full programme of studies at The University of British Columbia, Simon Fraser University, the University of Victoria, or any other 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 he or she is registered. Candidates will be considered on the basis either of standing received by recommendation or in the January or June British Columbia Scholarship Examinations. The winners will be selected by The University of British Columbia, in consultation with the Federation, 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 Federation and other pertinent information.

**THE FEDERATION OF TELEPHONE WORKERS OF BRITISH COLUMBIA, TRAFFIC DIVISION, SCHOLARSHIP** — The Federation of Telephone Workers of British Columbia, Traffic Division, offers a scholarship of \$500 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 in secondary school to a full programme of studies at The University of British Columbia, Simon Fraser University, or the University of Victoria. To be eligible for consideration a candidate must have an overall average of at least 70% in the subjects of the grade in which he or she is registered. Candidates will be considered on the basis either of standing received by recommendation or in the January or June British Columbia Scholarship Examinations. The winner will be selected by The University of British Columbia, in consultation with the Federation, 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 Federation and other pertinent 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 be normally awarded to the candidate who obtains the highest standing in Grade XII Government Scholarship Examinations conducted in January or June by the Ministry of Education, Victoria, B.C. and who is proceeding in the fall to a full programme 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 re-award 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 obtain the highest standing in Grade XII Government Scholarship Examinations conducted in January or June by the Ministry of Education, Victoria, B.C., and who are proceeding in the fall to a full programme 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 re-award scholarships if winners receive other scholarships of substantial value.

**THE RETAIL CLERKS UNION, LOCAL 1518, SCHOLARSHIPS** — The Retail Clerks Union, Local 1518, offers three scholarships of \$350 each to students beginning or continuing studies in a full academic programme of studies at The University of British Columbia, University of Victoria, or Simon Fraser University. The awards will normally be made to the applicants with the highest standing in the final examinations. Students entering from Grade XII must write the Scholarship Examinations conducted by the Ministry of Education. 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. Two awards are available for students entering university and one for students continuing their university studies.

**RETAIL, WHOLESALE AND DEPARTMENT STORE 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 XII to any accredited University or College of British Columbia, in a full programme 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 his or her 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 \$500 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 XII 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 qualifying conditions:

1. That the applicant must take two consecutive semesters of work at the regional college.
2. That the applicant must take a full programme 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. That the courses taken must be in a programme 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 XII 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 reserve 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 SCHOLARSHIPS FOR SUN CARRIERS** — The Vancouver Sun offers annually two scholarships of \$500 each to students proceeding in the fall from Grade XII to the first year at Simon Fraser University, The University of British Columbia, or the University of Victoria. To be eligible applicants must have been carriers of the Vancouver Sun for at least two consecutive years. Winners of these scholarships who obtain and maintain first class standing in succeeding years of their undergraduate course or who rank in the top 10% of the Faculty and Year in which they are registered, will be eligible until graduation, up to a maximum of five payments in all, for extra grants of \$500 a year. The winning of this scholarship does not preclude the holder from enjoying the proceeds of other awards which may be offered him. He will not be also permitted, however, to hold The Vancouver Sun Special Scholarship for Carriers.

The scholarships will normally be awarded to the two applicants who rank highest in the Government of B.C. Scholarship Examinations conducted in January or June by the Ministry of Education, B.C., but grades obtained in other subjects taken during the year may also be considered. An applicant must be qualified in all respects to compete for the Government Scholarships, and will only be considered if he obtains an overall average of at least 75% in the Scholarship Examinations. The application must be accompanied by the service certificate of the Vancouver Sun.

**THE VANCOUVER SUN SPECIAL SCHOLARSHIP FOR SUN CARRIERS** — The Vancouver Sun offers annually a scholarship of \$500 to students proceeding in the fall from Grade XII to the first year at The

University of British Columbia, the University of Victoria, or Simon Fraser University, in a full programme leading to a degree in any field. To be eligible an applicant must have been a carrier for the Vancouver Sun for at least two consecutive years, and must write the Scholarship Examinations for Secondary School Graduates, conducted in January or June by the Ministry of Education, B.C. An applicant for this scholarship must be eligible in all respects to compete for Government of B.C. Scholarships. An applicant will be considered only if he obtains an overall average of at least 75% in the Scholarship Examinations. 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 with achievement in one or more areas such as service to the school and community; writing, drama, fine arts; debating and public speaking; sports. A winner who, in successive years of his undergraduate course, obtains and maintains First Class standing (or ranks in the top 10% of the Year and Faculty in which he is registered) will be eligible for renewals of \$500 a year until graduation, not exceeding a total of five payments in all. Candidates will be judged on the basis of their examination grades, their personal letters, and letters of recommendation from their references. The winner of this scholarship, while not also permitted to hold one of the Vancouver Sun Scholarships for Carriers, may accept other awards offered to him. The application must be accompanied by the service certificate of the Vancouver Sun.

**(2) Entrance bursaries which must be applied for by July 1 unless otherwise stated.**

**BRITISH COLUMBIA FOREST PRODUCTS LIMITED BURSARIES** — Bursaries to a total of \$8,000, each with a maximum value of \$300, 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 and whose earnings are limited (see Company brochure for details). They are open to students beginning or continuing studies in the fall in a full undergraduate programme of studies at Simon Fraser University, The University of British Columbia, or University of Victoria. Awards will be made at the discretion of The University of British Columbia to students selected on the basis of their academic standing and need for financial assistance. No award will normally be made, however, to a candidate who obtains an overall average of less than 60% or who is required to write supplementals to obtain clear standing in a full year's work. Winners of the Company's Entrance Scholarships will not be permitted to receive a Company Bursary in the same year. The application must contain the necessary details of family service with the Company.

**THE GRAND LODGE MASONIC BURSARIES** — The Grand Lodge of Antient Free and Accepted Masons of British Columbia annually offers bursaries in the range of \$200 to \$500 each with preference to the sons, daughters, and legal wards of active members of Masonic Lodges in British Columbia or of deceased members who, at the time of death, were active members of these 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 post-secondary level. Selection of winners will be made by The University of British Columbia from applicants with satisfactory academic standing who are beginning or continuing undergraduate studies at any British Columbia University, the B.C. Institute of Technology, or a British Columbia regional college, leading to a degree or certification in any field. First preference will be given to applicants entering the university or college from Grade XII, and then to undergraduates in the second year of studies. 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 also wish to apply for other bursaries should submit a separate application 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 HOSPITAL EMPLOYEES' UNION (PROVINCIAL EXECUTIVE) BURSARIES** — Two bursaries of \$250 each are offered by the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII to a full programme 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 or 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 (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 programme 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 or 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 \$250 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 programme 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, in a full programme leading to a degree in any field. 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** — Two bursaries of \$250 each are offered by the Retail, Wholesale and Department Store Union, Local 580 to active members, or 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 programme leading to a degree in any field. To be eligible for consideration a candidate must have satisfactory standing (normally an overall average of at least 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.

**THE STRY CREDIT UNION BURSARY** — A bursary of \$400 is offered by Stry Credit Union to students who are members of the Stry Credit Union for six months prior to July 1 of the year of application, or who are the sons, daughters, or legal dependents of members of at least one year's standing. It is open in competition to students proceeding from Grade XII to attendance at The University of British Columbia, the University of Victoria, or Simon Fraser University in a full course leading to a degree. The winner will receive \$300 during the first year of studies and, subject to satisfactory standing, \$100 during the second year. The award will be made on the basis of financial need and academic standing. If no suitable candidates apply in any year, the award will not be made in that year, but will accrue for the purpose of making additional awards in a future year, when more than one suitable candidate has applied. The bursary application form must be accompanied by a letter from the General Manager of Stry Credit Union, certifying that the applicant and his or her family meet the membership qualifications.

**THE WAR AMPUTATIONS OF CANADA, VANCOUVER BRANCH, BURSARIES** — Twenty bursaries of \$250 each, provided by the War Amputations Association of Canada, Vancouver Branch, are offered to children of active members of the Branch. These bursaries are available to selected students who are taking a full-time course of study past the Grade XII level at a recognized institution of learning. Applicants must have a clear academic record in a full programme of studies in the year most recently completed. Only three War Amputation Bursaries may be granted to any one student.

**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 with 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 programme 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 in 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.

**THE WOMEN'S AUXILIARY TO THE CANADIAN PARAPLEGIC ASSOCIATION BURSARIES** — Three bursaries of \$300 each are offered by the Women's Auxiliary to the Canadian Paraplegic Association, B.C. Division to paraplegic students or sons and daughters of paraplegics. These bursaries are available to students who are beginning or continuing studies in one of the universities in British Columbia. They will be awarded by the University Awards Committee in consultation with the donors. To be eligible, an applicant must have satisfactory academic standing and need financial assistance.

#### 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:

<i>Name</i>	<i>Value of Scholarship</i>	<i>Number Available</i>
Canadian Ingersoll-Rand	\$1,500	2
Fisher Scientific	1,500	1
Gulf Oil Canada Limited — Scholarships	1,500	15
— Bursaries	500	20
Allied Chemicals Canada Ltd.	1,000	3
Canada Cement Lafarge Ltd.	1,000	6
Canadian International Paper Co.	1,000	7
Canadian Johns-Manville Co., Limited	1,000	3
Cargill Grain	1,000	1
C.E. Canada	1,000	2
Continental Can Company of Canada Limited	1,000	2
Holophane Company Limited	1,000	3
IBM Canada Ltd.	1,000	6
Indusmin Fahramet — University	1,000	3
— College	400	3
Kraftco Undergraduate Scholarship Plan	1,000	3
The Motorola Memorial Scholarship	1,000	1
The Nathan Cummings-Consolidated Foods Scholarship	1,000	1
Nu-West Development Corporation Limited	1,000	2
Teleglobe Canada	1,000	1
Bell Canada Scholarship Plan	750	7
Canadian Reynolds Metals Company Limited	750	6
Consolidated-Bathurst Limited (Dominion Glass)	750	14
Dominion Bridge Company, Limited	750	3
Gulf & Western Industries Inc. Scholarship Programme	750	2
James Richardson Scholarship Plan — Category "A"	750	5
— Category "B"	350	3
Lever Brothers Limited	750	3
Metropolitan Life Merit Scholarships	750	5
Quebec Cartier Mining Company	750	4
State Farm Canadian Centennial Scholarship	750	2
Warner-Lambert Canada Limited	750	5
Weyerhaeuser Canadian Scholarships	750	4
Canadian Pittsburgh Industries Limited	700	2

Celanese Canada Limited Undergraduate Scholarships	700	8
The Continental Corporation Foundation	700	3
Iron Ore Company of Canada	700	2
Amoco Canada Petroleum Canada Ltd.	650	4
CN Centennial Scholarship Plan	600	8
Harry C. Bates Merit Scholarships — First-place	600	
— Second-place	400	
Mobil Oil Scholarship Plan	550	4
Department of Transport	500	10
Gilbey Canada Limited Centennial Scholarship	500	3
Great American Scholarship Programme	500	1
Great Canadian Oil Sands Limited	500	3
Sun Oil Centennial Scholarship Plan	500	4
Texaco Canada Merit Scholarship Programme	Tuition fees	20
Texaco Exploration Merit Scholarship Programme	Tuition fees	5
Consumers Glass Company Limited — University	1,000	
— College	300	
Interprovincial Pipe Line Limited — University	700	
— College	350	

Candidates for the above-named awards should write directly to Mrs. Thérèse Pilon, Awards Officer, National Programmes Division, A.U.C.C., 151 Slater Street, Ottawa, Ontario K1P 5N1.

#### D. 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 application should be sent directly to:

Bobby Bauer Memorial Foundation,  
30 Victoria Street North,  
Kitchener, Ontario.

**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.

**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 non-status 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, c/o The Provincial Museum, Victoria, B.C.

**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 financial assistance to students who are beginning undergraduate studies in a full programme 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 enrolment.

**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 programme has been established by Carling O'Keefe Breweries with the co-operation 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 may be equally divided.

Application forms may be requested at any time. Completed application forms must be *postmarked no later than March 15, 1979*. Awards will be made in time for the commencement of semesters in the fall of 1979.

**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 of 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.

**NANCY GREENE SCHOLARSHIPS** — Twenty scholarships, each for seven hundred fifty dollars (\$750), will be awarded in 1978 to those British Columbia students who apply and who best combine the qualifications set out below. Any student currently registered in a senior secondary school (including independent and private schools) in British Columbia who plans to pursue an educational programme at any designated post-secondary educational institution in the Province of British Columbia is eligible to apply. Applicants must show evidence of good school and community participation and citizenship, leadership and character, scholastic achievement (a minimum average of C+ is mandatory in order for application to be considered) and athletic ability and performance.

Applicants are requested to complete the Nancy Greene Scholarship form and submit it along with a personal letter of application to the Secretary, Nancy Greene Scholarships at the address indicated below. The letter of application must specifically outline scholastic and athletic achievements in grades XI and XII, educational goals, and participation in school and community programmes and affairs, and should be written on 8½ by 11-inch paper. The applicant must request his or her school principal to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships. The principal is requested to attach a statement of grades or marks and a statement certifying athletic and other participation. The applicant must request one other prominent individual in the community to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships.

Applications will be reviewed by a Selection Committee which will include representatives from the British Columbia Amateur Sports Council and the Ministry of Education. Scholarships will be made available to successful applicants after proof that he, or she, has been accepted by the institution concerned and has registered, provided they are not in receipt of a similar or other major award of \$500 or more. All applications and supporting letters should be postmarked not later than June 1, and are to be addressed to the Secretary, Nancy Greene Scholarships, Deputy Provincial Secretary's Office, Parliament Buildings, Victoria, B.C. V8V 1X4.

**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 institution 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 post-secondary 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.

**THE I.W.A. LOCAL 1-80 BURSARY** — The International Woodworkers of America 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 in 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 programme 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.

**MacMILLAN BLOEDEL LIMITED COMMUNITY SCHOLARSHIPS** — Eleven scholarships of \$500 each, ten in British Columbia and one in Saskatchewan, are offered by MacMillan Bloedel Limited. The British Columbia awards are available, one in each of School Districts 65 (Duncan, Cowichan), 68 (Nanaimo), 69 (Qualicum), 48 (Howe Sound), 85 (Vancouver Island North), 50 (Queen Charlotte), and two each in School District 47 (Powell River) and 70 (Alberni), of which one is allocated to Tofino-Ucluelet. The B.C. 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. Further information may be obtained from the Principal of the School.

**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.

**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.

**TRANS MOUNTAIN OIL PIPELINE CO. HIGHER EDUCATION AWARDS** — Up to five Higher Education Awards will be offered annually by the Trans-Mountain Oil Pipe Line 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 examinations 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 programme 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 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 \$50 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 programme 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 first 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.

**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, or 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 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 applications 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 entering from Grade XII or XIII of secondary school (or any other source provided they are qualified for admission). Alberta candidates must write the Provincial examinations and British Columbia 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 programmes, 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 1st onwards and must be completed and returned to Woodward's by July 15th. Applicants must include the official transcript of their Secondary School record. If the transcript is not available by July 15th, it must be forwarded by the student at the earliest possible date after July 15th, directly to the Administrator of Students Awards Office, The University of Alberta, Edmonton, by the Alberta applicants, or to 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

**PROVINCE OF BRITISH COLUMBIA GRANTS** (For eligible undergraduate students) — The Government of the Province of British Columbia annually provides funds to assist students who are residents of this Province to commence or to continue an acceptable full-time programme of post-secondary studies at designated post-secondary educational institutions.

- (a) within the Province of British Columbia;
- (b) in other provinces of Canada when:
  - (i) an acceptable course of professional study in a particular programme is not provided within the Province of British Columbia, or
  - (ii) when admission to an acceptable course of professional study in a British Columbia university is rejected only because registration in that particular Faculty is filled;
- (c) in exceptional circumstances, in other countries when an acceptable course of study in a preferred professional programme is not available at any designated institutions in Canada.

In cases provided for under (b) and (c) above the eligibility of the student and the acceptability of the programme will be decided by the British Columbia Student Aid Committee which may require the applicant to declare that he will return to the Province of British Columbia to practice the profession for which he qualifies.

The Provincial Grant Plan is administered in conjunction with the Canada Student Loans Plan, its purpose being to enable qualified needy students to reduce the amount of indebtedness they must incur to continue their post-secondary education. As the Provincial Grants are free grants of money from public funds students, and the parents of students defined under the Plan as financially dependent, must accept the principle that they are primarily responsible for provision of the funds required for the expenses of post-secondary education. The Provincial Grant Plan and the Canada Student Loans Plan make available means to supplement funds which should normally be available from the student/family resources.

The British Columbia Provincial Grant is available to only those students who are proceeding to a diploma or a first degree at the undergraduate or equivalent level of a post-secondary programme of study. A Provincial Grant will not be granted to students in Post-Graduate Studies, nor to those registered as "qualifying" or "unclassified".

The amount granted to an applicant for assistance depends upon the total amount of his financial need as determined under the Regulations of the Canada Student Loans Plan, and as recommended to the British Columbia Student Aid Committee.

To qualify for a grant (money that does not have to be repaid) a student must:

- (1) comply with the criteria of the Canada Student Loans Plan, as administered by the Provincial Authority of British Columbia;
- (2) submit in accordance with the instructions stated on the form a fully completed: APPLICATION FOR FINANCIAL ASSISTANCE;

- (3) have been resident in this Province for not less than twelve consecutive months prior to the first day of the month in which he commences the programme of study for which he seeks financial assistance. In the case of students qualifying under the provisions of (b) and (c) above, the year of residence within this Province need not be that immediately preceding this academic session, but the proviso exists that the student shall not have established residence of twelve consecutive months (excluding periods of post-secondary study) in another province or country;
- (4) have completed successfully his last previous full-time full course load for an academic year of two terms or two semesters, without a failure in any course requisite for unconditional admission to the next higher academic session. Students allowed to advance while carrying a deficiency of academic credits may not be eligible for assistance under the Provincial Grant Plan until the deficiency is made up.

The Provincial Grants may be granted only to students in full attendance in a full programme of undergraduate or equivalent level of post-secondary studies. These awards are not open to students in graduate studies or registered as "qualifying" or "unclassified" students.

The form of: "APPLICATION FOR FINANCIAL ASSISTANCE" and the accompanying "INFORMATION BROCHURE" are available from the Financial Aid Officer of the designated institution the applicant is (or will be) attending in British Columbia. British Columbia students attending institutions outside this Province should apply directly to: Student Services Branch, Ministry of Education, Parliament Buildings, Victoria, B.C.

**BRITISH COLUMBIA CULTURAL FUND AWARDS** — Students planning to attend other recognized institutions in the cultural field should apply directly to the Scholarship Officer, British Columbia Cultural Fund, Ministry of Recreation and Conservation, Parliament Buildings, Victoria, B.C.

**NANCY GREENE SCHOLARSHIPS** — Twenty scholarships, each for seven hundred fifty dollars (\$750), will be awarded in 1978 to those British Columbia students who apply and who best combine the qualifications set out below. Any student currently registered in a senior secondary school (including independent and private schools) in British Columbia who plans to pursue an educational programme at any designated post-secondary educational institution in the Province of British Columbia is eligible to apply. Applicants must show evidence of good school and community participation and citizenship, leadership and character, scholastic achievement (a minimum average of C+ is mandatory in order for application to be considered) and athletic ability and performance.

Applicants are requested to complete the Nancy Greene Scholarship form and submit it along with a personal letter of application to the Secretary, Nancy Greene Scholarships at the address indicated below. The letter of application must specifically outline scholastic and athletic achievements in grades XI and XII, educational goals, and participation in school and community programmes and affairs, and should be written on 8½ by 11-inch paper. The applicant must request his or her school principal to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships. The principal is requested to attach a statement of grades or marks and a statement certifying athletic and other participation. The applicant must request one other prominent individual in the community to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships.

Applications will be reviewed by a Selection Committee which will include representatives from the British Columbia Amateur Sports Council and the Ministry of Education. Scholarships will be made available to successful applicants after proof that he, or she, has been accepted by the institution concerned and has registered, provided they are not in receipt of a similar or other major award of \$500 or more. All applications and supporting letters should be postmarked not later than June 1, and are to be addressed to the Secretary, Nancy Greene Scholarships, Deputy Provincial Secretary's Office, Parliament Buildings, Victoria, B.C. V8V 1X4.

**PREMIER'S ATHLETIC AWARDS/BRITISH COLUMBIA ATHLETIC AWARDS** (For undergraduate students) — Five Premier's Athletic Awards, each for one thousand dollars (\$1,000) and 25 British Columbia Athletic Awards, each for five hundred dollars (\$500), awarded annually to those British Columbia students who apply and who meet the qualifications set out below.

Applicants must show evidence of athletic ability and performance, leadership and character, and scholastic achievement. Students are eligible to apply for these awards if they are residents of British Columbia and are pursuing an educational programme at any designated post-secondary educational institution in the Province of British Columbia.

Applicants must write a personal letter of application to the Selection Committee, in which they should outline their athletic and scholastic achievements. They must ask the head of the athletic department of the post-secondary education institution and one other prominent sports leader in the community to send a confidential supporting letter direct to the Selection Committee. The athletic director should attach a statement of athletic achievements and other leadership participation.

Applications will be reviewed by a Selection Committee which will include representatives from the British Columbia Amateur Sports Council and the Ministry of Education. Scholarships will be made available to successful applicants after proof that he, or she, has been accepted by the institution concerned and has registered, provided they are not in receipt of a similar or other major award of \$500 or more. All applications and supporting letters should be postmarked not later than June 1, and are to be addressed to the Secretary, Nancy Greene Scholarships, Deputy Provincial Secretary's Office, Parliament Buildings, Victoria, B.C. V8V 1X4.

**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 institution 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 post-secondary 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.

**THE I.W.A. LOCAL 1-80 BURSARY** — The International Woodworkers of America 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 in 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 programme 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.

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**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.

**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.

**TRANS MOUNTAIN OIL PIPELINE CO. HIGHER EDUCATION AWARDS** — Up to five Higher Education Awards will be offered annually by the Trans-Mountain Oil Pipe Line 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 examinations 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 programme 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 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 \$50 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 programme 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 first 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.

**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, or 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 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 applications 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 entering from Grade XII or XIII of secondary school (or any other source provided they are qualified for admission). Alberta candidates must write the Provincial examinations and British Columbia 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 programmes, 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 1st onwards and must be completed and returned to Woodward's by July 15th. Applicants must include the official transcript of their Secondary School record. If the transcript is not available by July 15th, it must be forwarded by the student at the earliest possible date after July 15th, directly to the Administrator of Students Awards Office, The University of Alberta, Edmonton, by the Alberta applicants, or to 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

**PROVINCE OF BRITISH COLUMBIA GRANTS** (For eligible undergraduate students) — The Government of the Province of British Columbia annually provides funds to assist students who are residents of this Province to commence or to continue an acceptable full-time programme of post-secondary studies at designated post-secondary educational institutions.

- (a) within the Province of British Columbia;
- (b) in other provinces of Canada when:
  - (i) an acceptable course of professional study in a particular programme is not provided within the Province of British Columbia, or
  - (ii) when admission to an acceptable course of professional study in a British Columbia university is rejected only because registration in that particular Faculty is filled;
- (c) in exceptional circumstances, in other countries when an acceptable course of study in a preferred professional programme is not available at any designated institutions in Canada.

In cases provided for under (b) and (c) above the eligibility of the student and the acceptability of the programme will be decided by the British Columbia Student Aid Committee which may require the applicant to declare that he will return to the Province of British Columbia to practice the profession for which he qualifies.

The Provincial Grant Plan is administered in conjunction with the Canada Student Loans Plan, its purpose being to enable qualified needy students to reduce the amount of indebtedness they must incur to continue their post-secondary education. As the Provincial Grants are free grants of money from public funds students, and the parents of students defined under the Plan as financially dependent, must accept the principle that they are primarily responsible for provision of the funds required for the expenses of post-secondary education. The Provincial Grant Plan and the Canada Student Loans Plan make available means to supplement funds which should normally be available from the student/family resources.

The British Columbia Provincial Grant is available to only those students who are proceeding to a diploma or a first degree at the undergraduate or equivalent level of a post-secondary programme of study. A Provincial Grant will not be granted to students in Post-Graduate Studies, nor to those registered as "qualifying" or "unclassified".

The amount granted to an applicant for assistance depends upon the total amount of his financial need as determined under the Regulations of the Canada Student Loans Plan, and as recommended to the British Columbia Student Aid Committee.

To qualify for a grant (money that does not have to be repaid) a student must:

- (1) comply with the criteria of the Canada Student Loans Plan, as administered by the Provincial Authority of British Columbia;
- (2) submit in accordance with the instructions stated on the form a fully completed: APPLICATION FOR FINANCIAL ASSISTANCE;

- (3) have been resident in this Province for not less than twelve consecutive months prior to the first day of the month in which he commences the programme of study for which he seeks financial assistance. In the case of students qualifying under the provisions of (b) and (c) above, the year of residence within this Province need not be that immediately preceding this academic session, but the proviso exists that the student shall not have established residence of twelve consecutive months (excluding periods of post-secondary study) in another province or country;
- (4) have completed successfully his last previous full-time full course load for an academic year of two terms or two semesters, without a failure in any course requisite for unconditional admission to the next higher academic session. Students allowed to advance while carrying a deficiency of academic credits may not be eligible for assistance under the Provincial Grant Plan until the deficiency is made up.

The Provincial Grants may be granted only to students in full attendance in a full programme of undergraduate or equivalent level of post-secondary studies. These awards are not open to students in graduate studies or registered as "qualifying" or "unclassified" students.

The form of: "APPLICATION FOR FINANCIAL ASSISTANCE" and the accompanying "INFORMATION BROCHURE" are available from the Financial Aid Officer of the designated institution the applicant is (or will be) attending in British Columbia. British Columbia students attending institutions outside this Province should apply directly to: Student Services Branch, Ministry of Education, Parliament Buildings, Victoria, B.C.

**BRITISH COLUMBIA CULTURAL FUND AWARDS** — Students planning to attend other recognized institutions in the cultural field should apply directly to the Scholarship Officer, British Columbia Cultural Fund, Ministry of Recreation and Conservation, Parliament Buildings, Victoria, B.C.

**NANCY GREENE SCHOLARSHIPS** — Twenty scholarships, each for seven hundred fifty dollars (\$750), will be awarded in 1978 to those British Columbia students who apply and who best combine the qualifications set out below. Any student currently registered in a senior secondary school (including independent and private schools) in British Columbia who plans to pursue an educational programme at any designated post-secondary educational institution in the Province of British Columbia is eligible to apply. Applicants must show evidence of good school and community participation and citizenship, leadership and character, scholastic achievement (a minimum average of C+ is mandatory in order for application to be considered) and athletic ability and performance.

Applicants are requested to complete the Nancy Greene Scholarship form and submit it along with a personal letter of application to the Secretary, Nancy Greene Scholarships at the address indicated below. The letter of application must specifically outline scholastic and athletic achievements in grades XI and XII, educational goals, and participation in school and community programmes and affairs, and should be written on 8½ by 11-inch paper. The applicant must request his or her school principal to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships. The principal is requested to attach a statement of grades or marks and a statement certifying athletic and other participation. The applicant must request one other prominent individual in the community to send a confidential supporting letter direct to the Secretary, Nancy Greene Scholarships.

Applications will be reviewed by a Selection Committee which will include representatives from the British Columbia Amateur Sports Council and the Ministry of Education, Scholarships will be made available to successful applicants after proof that he, or she, has been accepted by the institution concerned and has registered, provided they are not in receipt of a similar or other major award of \$500 or more. All applications and supporting letters should be postmarked not later than June 1, and are to be addressed to the Secretary, Nancy Greene Scholarships, Deputy Provincial Secretary's Office, Parliament Buildings, Victoria, B.C. V8V 1X4.

**PREMIER'S ATHLETIC AWARDS/BRITISH COLUMBIA ATHLETIC AWARDS** (For undergraduate students) — Five Premier's Athletic Awards, each for one thousand dollars (\$1,000) and 25 British Columbia Athletic Awards, each for five hundred dollars (\$500), awarded annually to those British Columbia students who apply and who meet the qualifications set out below.

Applicants must show evidence of athletic ability and performance, leadership and character, and scholastic achievement. Students are eligible to apply for these awards if they are residents of British Columbia and are pursuing an educational programme at any designated post-secondary educational institution in the Province of British Columbia.

Applicants must write a personal letter of application to the Selection Committee, in which they should outline their athletic and scholastic achievements. They must ask the head of the athletic department of the post-secondary education institution and one other prominent sports leader in the community to send a confidential supporting letter direct to the Selection Committee. The athletic director should attach a statement of athletic achievements and other leadership participation.

Applications will be reviewed by a Selection Committee appointed by the British Columbia Physical Fitness and Amateur Sports Fund Committee. The top five applicants selected by the Selection Committee will be awarded the Premier's Athletic Awards of \$1,000 each, and the next 25 applicants selected in order of merit will be awarded the B.C. Athletic Awards of \$500 each. The Athletic Awards will be made available to successful applicants after proof that he or she is attending the institution concerned provided they are not in receipt of a similar or other major award of \$500 or more. All applications should be postmarked *not later* than June 1, and should be addressed to Chairman, British Columbia Physical Fitness and Amateur Sports Fund Committee, Parliament Buildings, Victoria, British Columbia.

**QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIPS** (For graduate students) — Seven thousand dollars (\$7,000) awarded annually to one student commencing in the fall of that year. Normally the scholarship will be awarded in the amount of \$3,500 each year for two successive years of study, but the Committee may, in exceptional circumstances, award the full sum of \$7,000 for one year of study. In exceptional cases in which the scholarship winner finds it necessary to undertake a third year of post-secondary study to complete his/her training, he/she may apply during the second year of such studies for an additional scholarship of \$3,500.

This scholarship was formed to commemorate the visit of Queen Elizabeth II to British Columbia in May 1971 during the Centennial celebrations. The purpose of this scholarship is to enable selected British Columbians, who have graduated from a public university of the Province, to take further studies at approved universities (or equivalent institutions of higher learning) in the United Kingdom. The scholarship is administered through the Office of the Deputy Provincial Secretary by a special committee, headed by the Premier as Honorary Chairman. The special committee consists of representatives of the Provincial Secretary's office, the Ministry of Education, and each of the three public universities of the Province.

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) whose final three years of academic courses leading to his or her first undergraduate degree were all taken in British Columbia;
- (b) whose ordinary private domicile, home, or residence is, in the opinion of the Selection Committee, in British Columbia;
- (c) who is a Canadian citizen; and
- (d) who is not more than 25 years of age in the year in which he or she makes application, although the Selection Committee reserves the right to make exceptions to this rule.

Applicants should be persons of unusual worth and promise. The Selection Committee will make its selection on the basis of academic achievement, demonstrated aptitudes, personal qualities and character, interest and participation in university and community affairs, and proposed programmes of study. All decisions made by the Selection Committee are final.

A successful candidate may not accept other grants or awards unless approved by the Selection Committee. In accepting the award, a candidate assumes the responsibility of following the programme outlined in his or her application. The Selection Committee does not assume any responsibility for the admission or acceptance of a candidate by the institution where he or she proposes to study. If admission is not obtained, the award may be withdrawn. At the conclusion of the period of tenure on the scholarship, the holder is requested to send a brief report on his or her progress to the Selection Committee. The scholarship will be paid in equal amounts at intervals of six months. The first payment will be available prior to commencement of study on the scholarship. All inquiries, applications, and all documents pertaining to this scholarship must be forwarded directly to the Deputy Provincial Secretary, Legislative Buildings, Victoria, British Columbia. Applications for study commencing in the fall must be submitted by March 1. Documents and applications, which cannot be returned, become the property of the Selection Committee.

1. Each applicant must arrange for official transcripts of his or her post-secondary academic record to be forwarded directly to the Deputy Provincial Secretary's Office from the registrars of the institutions concerned.
2. Each applicant must arrange for at least three confidential testimonials to be forwarded from persons who have a good knowledge of the applicant's ability, interests, achievements, character and academic worth.
3. Each applicant must complete the official application form and forward it, along with a letter which includes
  - (a) a brief outline of the applicant's interest and participation in college and community affairs, and his or her special achievements and hobbies;
  - (b) an outline of the programme of studies to be undertaken by the

applicant if awarded the scholarship, including the name of the institution to be attended;

- (c) an outline of the applicant's future plans for a career;
- (d) additional information which the applicant considers to be in the interests of his or her application.

## SECTION 3

### UNIVERSITY BURSARIES REQUIRING APPLICATION

In May 1965, the Board of Governors established a Tuition Assistance Bursary Fund. The Board expressed its concern about the possibility of certain qualified students not being able to attend the University because of serious financial difficulties.

Students who make application for assistance under this Bursary Fund are reminded:

- (a) that the Fund is intended to assist students who are in serious financial difficulty;
- (b) that students who do not come from low-income families, as defined by the B.C. Student Aid Committee, should not normally expect to receive assistance. Where there are special circumstances, appropriate consideration will be given, and each case will be judged on its own merits;
- (c) that applicants may be asked to interview a committee or an officer of the University;
- (d) that, in general, only those students who are registered for a programme of courses which meet the requirements for the B.C. Student Assistance Programme are eligible for assistance, and that the fund is confined to those students who satisfy residence requirements necessary to obtain assistance through the Province of B.C.

Applications will be acceptable only after registration and must be submitted by dates specified on the application form. Application forms are available from the Financial Aid Office.

Completed application forms should be returned to:

Financial Aid Office,  
University of Victoria,  
Victoria, B.C.  
V8W 2Y2

## SECTION 4

### UNDERGRADUATE AWARDS FOR WHICH NO APPLICATION IS NECESSARY

The awards 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 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 enrol in a full programme.

#### 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 the 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 programme), 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 programme. 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.

#### Undergraduate Awards — General

**SUTRO BANCROFT** — A scholarship of three hundred seventy-five dollars (\$375) will be awarded by the Senate Committee on Awards to a deserving and promising student continuing studies at the University of Victoria.

**BETA SIGMA PHI SORORITY CITY COUNCIL BURSARIES** — An award of two hundred dollars (\$200) to be awarded annually to a promising and deserving woman student entering third or fourth year in Arts and Science or Education at the University of Victoria.

**BLANEY'S TRAVEL SERVICE LTD. AWARD** — An annual award of two hundred dollars (\$200) will be provided to a deserving and promising student who is returning to the University of Victoria in the following session. The selection will be made by the Senate Committee on Awards.

\***THE BRITISH COLUMBIA 1958 CENTENNIAL SCHOLARSHIP** — Eight Hundred Dollars (\$800) 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 four hundred dollars (\$400) will be made to a worthy and deserving student. The selection will be made by the Senate Committee on Awards.

**MATTHEW COWAN ANNUAL SCHOLARSHIP** — Two hundred dollars (\$200) awarded annually to a promising student with high academic standing. The winner must continue at the University of Victoria.

**PERCY H. ELLIOTT MEMORIAL SCHOLARSHIP** — One hundred and thirty dollars (\$130) 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** — Seven scholarships of four hundred dollars (\$400) 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 Programmes: 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 programme;
  - Three 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).

**FACULTY WOMEN'S CLUB SCHOLARSHIP** — Three hundred dollars (\$300) to be awarded to a deserving woman student continuing studies either at winter or summer session.

**FRANCIS GOLD WRIST WATCH** — To be presented each year by F.W. Francis, Ltd. to the student obtaining the highest average on the Sessional Examinations, with the provision that no student win it more than once.

\***THE FRANK AND MARGARET GIBBS SCHOLARSHIPS** — Scholarships 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** — Three hundred dollars (\$300) awarded annually to a deserving and promising student in an honours programme 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 ALAN PRATT MEMORIAL SCHOLARSHIP** — One hundred dollars (\$100) awarded annually to a student with broad interests completing second year.

**THE PRESIDENT'S SCHOLARSHIPS** — A number of scholarships up to the value of five hundred dollars (\$500) each will be awarded annually by the Senate Committee on Awards. Awards will be made in Arts, Sciences, Fine Arts, and Education, on the basis of distinction in scholarship. In making the awards, the Committee will take into account any other scholarships candidates have received. Award winners must return to the University of Victoria in the next regular session and must enrol in a full programme in order to retain the award.

**RITHEI CONSOLIDATED LIMITED BURSARY** — One hundred dollars (\$100) to be offered to a promising student registered at the University of Victoria and continuing academic studies.

\***THE EDWARD J. SAVANNAH MEMORIAL SCHOLARSHIP** — Three hundred and fifty dollars (\$350), subscribed by his friends and former students, to be awarded annually to a student proceeding to third year science at the University of Victoria or elsewhere.

\*Administered by the University of Victoria Foundation.

**THE A. W. SHERET SCHOLARSHIP** — One hundred and fifty dollars (\$150) awarded annually to a promising student with high academic standing who is continuing studies at the University of Victoria.

**UNIVERSITY EXTENSION ASSOCIATION OF VICTORIA SCHOLARSHIP** — Two scholarships of one hundred dollars each (\$100) to be awarded to two worthy and promising students who are returning to the University in the following year.

**THE UNIVERSITY OF VICTORIA FACULTY ASSOCIATION SCHOLARSHIPS** — Two scholarships, one of three hundred dollars (\$300), and one of two hundred dollars (\$200) to be awarded annually to further the education of a student of good academic standing.

**UNIVERSITY WOMEN'S CLUB SCHOLARSHIP** — Two hundred dollars (\$200) 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 Executive of the University Women's Club for approval.

**THE VICTORIA COUNCIL, UNITED COMMERCIAL TRAVELLERS OF AMERICA SCHOLARSHIP** — One hundred dollars (\$100) awarded annually to the leading student of the Humanities in the second year. The winner must continue university studies.

\***THE R. T. WALLACE SCHOLARSHIP** — Nine hundred dollars (\$900) awarded annually to a deserving and promising student entering the third or fourth year at the University of Victoria and taking an Honours Programme in the Humanities, Sciences or Social Sciences. If funds permit, additional awards may be allocated.

\***THE WEBER MEMORIAL BURSARY** — One hundred and fifty dollars (\$150) 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.

\***THE WESTAD SCHOLARSHIP** — This scholarship of three hundred and fifty dollars (\$350) is awarded annually for general proficiency to a student entering third or fourth year at the University of Victoria.

**THE WESTON BAKERIES, LIMITED, SCHOLARSHIP** — Two hundred and fifty dollars (\$250) to be awarded annually to a deserving student completing first or second year and continuing University studies.

**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.

### Undergraduate Awards Listed by Course or Area of Study

#### Anthropology

**THE GRANT 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 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** — Seven scholarships of four hundred dollars (\$400) 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 Programmes: 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 programme;
- Three 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 \$30, 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.

\*Administered by the University of Victoria Foundation.

**Biology**

\*THE CHAPMAN MEMORIAL SCHOLARSHIP — A scholarship will be awarded annually, alternating between a student who has completed third year Biology, on the Ecology Programme, and one who has completed third year Geography, on the Resources and Physical Programme. A book on Ecology and Conservation, selected by the appropriate Department will be part of the award. This scholarship is 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 recommendation of the appropriate Department.

THE HOWARD ENGLISH BURSARY — The Victoria Fish & 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.

\*FREEMAN F. KING SCHOLARSHIP — Four hundred and fifty dollars (\$450) awarded to a student entering third or fourth year, preferably the latter, and preparing for a career in natural history, considered in a broad sense. The award is to be based on high academic standing and 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.

\*B. W. PEARSE SCIENCE SCHOLARSHIPS — Four scholarships of two hundred and fifty dollars (\$250) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

THE PROFESSIONAL MEN'S GARDEN CLUB OF VICTORIA SCHOLARSHIP — One hundred and fifty dollars (\$150) 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.

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 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 or fourth year of any undergraduate programme in the field of Natural History or any year of a graduate programme 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.

VICTORIA CENTRAL LIONS CLUB — DR. G. C. CARL AWARD — One hundred and fifty dollars (\$150) awarded annually to the top first year student in the Department of Biology who is continuing similar studies at the University of Victoria.

VICTORIA NATURAL HISTORY SOCIETY SCHOLARSHIP — Two hundred dollars (\$200) awarded to the most deserving student completing first or second year, specializing in Biology, and having a demonstrated interest in natural history.

**Chemistry**

BAPCO PAINT LIMITED SCHOLARSHIP — One hundred (\$100) to be awarded to a student majoring in Chemistry with the highest standing in second year and who continues studying Chemistry in the third year. Should the student receive another major (i.e. over \$500) scholarship, the Bapco scholarship should be awarded to the student with second highest standing subject to the same terms, or the third, etc. Selection will be made by the Committee on Awards in consultation with the Department of Chemistry.

OCEAN CONSTRUCTION SUPPLIES LIMITED, SCHOLARSHIP — One hundred dollars (\$100) awarded annually to the student in first year who obtains the highest standing in Chemistry and who intends to continue studies at the University of Victoria or at any other university.

\*B. W. PEARSE SCIENCE SCHOLARSHIPS — Four scholarships of two hundred and fifty dollars (\$250) awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics, and Physics.

\*THE STEPHEN A. RYCE MEMORIAL SCHOLARSHIP — A scholarship 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. Selection 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**

\*THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Seven scholarships of four hundred dollars (\$400) 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 Programmes: 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 programme;
- Three 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).

GREATER VICTORIA ASSOCIATION FOR THE RETARDED BURSARY — Two hundred and fifty dollars (\$250) awarded annually to a needy student in the third year of the Child Care Programme, specializing in the study and treatment of mentally retarded children. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the Child Care Programme.

**Classics**

CLASSICAL ASSOCIATION OF VANCOUVER ISLAND BOOK PRIZES — One prize (not exceeding \$50) or two 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.

**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 EATON SCHOLARSHIP IN MARKETING — A scholarship of four hundred dollars (\$400), 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 INSTITUTE OF CHARTERED ACCOUNTANTS OF BRITISH COLUMBIA AWARD — \$100 to be awarded to a needy student registered in second year who is proceeding to third year at the University of British Columbia. The student must have maintained a second-class standing in his last year, must have taken the accounting courses offered by the Department of Economics, and must intend to become a Chartered Accountant. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

\*THE GEORGE HAMILTON HARMAN MEMORIAL SCHOLARSHIPS — Two scholarships of two hundred and fifty dollars (\$250) 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.

YORKSHIRE TRUST COMPANY SCHOLARSHIP — One hundred and seventy-five dollars (\$175) awarded annually to the outstanding student in Commerce 151 who plans to continue University studies leading to a B.Comm. degree.

**Education**

\*THE G. CLIFFORD CARL MEMORIAL BURSARY — Three hundred fifty dollars (\$350) awarded to a deserving student entering third, fourth or fifth year 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 — Five hundred and fifty dollars (\$550) 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.

\*Administered by the University of Victoria Foundation.

\*Administered by the University of Victoria Foundation.

**THE COMITAS CLUB SCHOLARSHIP** — One hundred dollars (\$100) to be awarded to a promising and deserving student from first, second or third year in the Faculty of Education who is returning for the following year.

\***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** — Three hundred and fifty dollars (\$350) 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 in 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 dollars (\$100) to be awarded annually to a deserving and promising student in the Faculty of Education.

\***ROBERT BURNS McMICKING CHAPTER I.O.D.E. SCHOLARSHIP** — One hundred dollars (\$100) 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.

**ROSE'S LIMITED JEWELLERS WATCH** — To be awarded annually to the leading student in the Faculty of Education at the University of Victoria.

\***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.

**THE ROSALIND W. YOUNG SCHOLARSHIP** — Two hundred dollars (\$200) to be awarded annually by the University Women's Club of Victoria to the leading woman in first year Education who is continuing University studies.

### English

**THE BEAVER BOOKS SHOP PRIZE** — Donated to the student who stands first in the final examination in both English 121 and 122.

\***THE EDGAR FERRAR CORBET SCHOLARSHIP** — 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 public high school and who will be majoring or honouring in English in the third year.

\***MARTLET CHAPTER I.O.D.E., CUTHBERT HOLMES ENGLISH HONOURS ESSAY SCHOLARSHIP** — A scholarship to the value of one hundred dollars (\$100) 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.

**CHAPTER N, P.E.O. MEMORIAL PRIZE** — One hundred dollars (\$100) awarded annually by Chapter N, P.E.O. Sisterhood, to a woman student in first year for excellence in English.

\***ROYAL INSTITUTION AND FRANK EATON MEMORIAL SCHOLARSHIP** — One hundred dollars (\$100) awarded to the student taking the highest standing in English of the second year.

**THE MADAME SANDERSON MEMORIAL SCHOLARSHIP** — Fifty dollars (\$50) offered annually to a promising student for excellence in English and French to the second year.

### French

**ALLIANCE FRANCAISE SCHOLARSHIPS** — Two scholarships of one hundred dollars (\$100) 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 Majors programme in French.

\***THE ADELINE JULIENNE DELOUVE MEMORIAL SCHOLARSHIPS** — One hundred dollars (\$100) 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 Programmes, up to a total of \$1,800.

**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.

**FRENCH GOVERNMENT MEDAL** — Awarded for excellence in French.

**THE MADAME SANDERSON MEMORIAL SCHOLARSHIP** — Fifty dollars (\$50) offered annually to a promising student for excellence in English and French to 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

\***THE DR. NORMAN BETHUNE MEMORIAL AWARD** — An annual award of seventy-five dollars (\$75) 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 365. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

**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.

### German

**AUSTRIAN GOVERNMENT BOOK PRIZES** — The Austrian Consulate awards book prizes to students in each undergraduate year showing proficiency in German studies.

\***THE J. BEATTIE MacLEAN SCHOLARSHIP** — One hundred and fifty dollars (\$150) 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 Languages and Literature.

**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 ANGELINA NORRIS BURSARY** — Fifty dollars (\$50) awarded annually to a needy and deserving student of modern languages in his first, second or third year who is returning to the University to complete his studies. Preference will be given to a student of German, at the discretion of the Department.

**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 Languages and Literature.

### History

\***THE KATHLEEN AGNEW MEMORIAL SCHOLARSHIPS** — Two awards of two hundred and fifty dollars (\$250) granted for the purpose of stimulating the study of the History of Canada.

**B.C. HISTORICAL ASSOCIATION SCHOLARSHIP** — One hundred dollars (\$100) awarded to the leading undergraduate student in a course on B.C. history.

**CANADIAN DAUGHTERS' LEAGUE, ASSEMBLY No. 5 — GERTRUDE M. RALSTON MEMORIAL BURSARY** — One hundred dollars (\$100) awarded to a deserving student, preferably one in Canadian history.

**CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (Victoria Branch) BOOK PRIZE** — An annual prize of fifty dollars (\$50) 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.

**LEON J. LADNER B.C. HISTORY SCHOLARSHIPS** — Two scholarships, one hundred dollars (\$100) 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 ALLAN AND ELIZABETH McKINNON SCHOLARSHIP** — An annual scholarship of \$350 will be awarded to a senior student of high

\*Administered by the University of Victoria Foundation

\*Administered by the University of Victoria Foundation.

academic standing engaged in a Major or Honours programme 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.

**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** — One hundred dollars (\$100) 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 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, I.O.D.E. SCHOLARSHIP** — One hundred dollars (\$100) awarded to an outstanding student in Canadian History in any year.

### History in Art

**\*MARTLET CHAPTER, I.O.D.E. PRIZE FOR SCHOLARSHIP IN HISTORY IN ART** — An annual award of one hundred and twenty-five dollars (\$125) 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.

### Italian

**THE ITALIAN ASSISTANCE CENTRE BURSARY** — Two hundred and fifty dollars (\$250) to be granted annually to a needy student who has shown good 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.

**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.

### Law

A number of awards may be allocated by the Faculty of Law after registration in September.

**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. Programme. The scholarship was established by the Victoria Law Firm of Crease and Company in honour of D. M. Gordon, Q.C.

**\*MARTLET CHAPTER I.O.D.E. SCHOLARSHIP IN LAW** — An annual scholarship of one hundred twenty-five dollars (\$125) is awarded to the female student with the highest standing in the second year of the LL.B. Programme. The scholarship was established by the Martlet Chapter of the I.O.D.E.

**\*J. LYLE WILSON BOOK PRIZE IN LAW** — An annual award of \$40 is awarded to the Law Student who stands highest in the course in Administrative Law. The award is in 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 will be awarded to a student who has completed, with high academic standing, the first or second year programme 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.

\*Administered by the University of Victoria Foundation.

### Mathematics

**\*B. W. PEARSE SCIENCE SCHOLARSHIPS** — Four scholarships of two hundred and fifty dollars (\$250) 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.

### Music

**\*THE HARRY AND FRANCES MARR ADASKIN SCHOLARSHIP IN MUSIC HISTORY** — An annual award of \$200 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 Department of Music.

**\*THE MURRAY AND FRANCES JAMES ADASKIN SCHOLARSHIP IN VIOLIN OR VIOLA** — An annual award of \$200 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 programme. 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 Department 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 Department of Music.

**DEPARTMENT OF MUSIC FACULTY STRING AWARDS** — Awards made on the recommendation of the Department 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 Department 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 Department Faculty.

**\*THE IDA HALPERN MUSIC SCHOLARSHIP** — An annual award of two hundred dollars (\$200) 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 Department 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 Department of Music.

**\*THE REBECCA AND ESTHER LAZARUS SCHOLARSHIPS IN MUSIC** — Two annual awards each of \$175 made available by Miss Rivkah Isaacs for outstanding performers entering the third or fourth year of the University music programme. One is to be given to a singer in memory of Rebecca Lazarus Isaacs, and the other 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 recommendation of the faculty members of the Department of Music.

**\*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 Department 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.

\*Administered by the University of Victoria Foundation.

**Nursing**

\*THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Seven scholarships of four hundred dollars (\$400) 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 Programmes: 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 programme;
  - Three 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 LILY IRENE HARRIS MEMORIAL BURSARY — An annual bursary will be provided to a needy female student registered in her first year in the School of Nursing. According to the wish of Miss Harris who was a teacher of nursing in China for many years, preference is to be given to a Landed Immigrant from China. If no such student be enrolled, the bursary may be awarded to a student demonstrating genuine need. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

**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 BURSARY — Twenty-five dollars (\$25) 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.

**Physics**

THE BRITISH COLUMBIA TELEPHONE COMPANY SCHOLARSHIP — One hundred dollars (\$100) awarded to a student of first or second year for excellence in Physics. The winner must continue university studies.

THE DON INGHAM MEMORIAL SCHOLARSHIP — This scholarship of two hundred dollars (\$200) is awarded annually by the Victoria Newspaper Guild, Local 223, A.N.G., in memory of Don Ingham, widely-known journalist and amateur astronomer. The scholarship will be awarded to the student in Astronomy 200 who stands first in that course and who is returning to the University of Victoria and planning to take further courses in Astronomy.

\*B. W. PEARSE SCIENCE SCHOLARSHIPS — Four scholarships of two hundred and fifty dollars (\$250) 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 WOODS TRUST SCHOLARSHIPS — Awarded annually to promising students at the University of Victoria who intend to pursue studies as undergraduates at the university or as post-graduate 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 three hundred dollars (\$300) each.

**Political Science**

CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (Victoria Branch) BOOK PRIZE — An annual prize of fifty dollars (\$50) 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 SCHOLARSHIP — Two hundred dollars (\$200) 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.

**Psychology**

ROTARY CLUB OF SAANICH SCHOLARSHIP — Two hundred and fifty dollars (\$250) to be awarded annually to the full-time third year student

\*Administered by the University of Victoria Foundation.

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 programme who has demonstrated outstanding achievement in the study of Psychology.

THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL BURSARY — Twenty-five dollars (\$25) 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.

**Public Administration**

\*THE G. NEIL PERRY AWARD IN PUBLIC ADMINISTRATION — An annual award of fifty dollars (\$50) will be granted to a student whose Administration 599 Report is judged to be best by a faculty committee of the School of Public Administration. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Public Administration.

**Russian**

\*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 and Oriental 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 and Oriental Studies.

**Serbo-Croatian**

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 and Oriental Studies.

**Social Work**

\*THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Seven scholarships of four hundred dollars (\$400) 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 Programmes: 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 programme;
  - Three 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 SARA SPENCER FOUNDATION BURSARIES — Four bursaries, valued at five hundred dollars (\$500) 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.

**Sociology**

THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL BURSARY — Twenty-five dollars (\$25) 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 OPEN DOOR SOCIETY BOOK PRIZE — Awarded annually to the student in the Third or Fourth year of the programme leading to the Bachelor of Arts with Major in Social Welfare who writes the best essay on the subject of placing children of interracial parentage in adoption.

\*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.

**Spanish**

THE SPANISH GOVERNMENT BOOK PRIZE — Awarded to the best student in a senior Spanish course. Selection will be made by the Senate

\*Administered by the University of Victoria Foundation.

Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

### Theatre

\***CRESTVIEW-CHELSEA THEATRE AWARD** — An award of two hundred and fifty dollars (\$250) 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.

\***THE DOROTHY SOMERSET SCHOLARSHIP IN THEATRE** — An annual scholarship of one hundred and seventy-five dollars (\$175), 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.

### Visual Arts

**FINE ARTS BURSARIES** — A variable number of bursaries are available each year to students registered in any year of the Visual Arts programme in the Faculty of Fine Arts on the basis of talent and need. The amount of each bursary is determined by funds available and the number of bursaries awarded. Selection to be made by the Senate Committee on Awards on recommendation of the Department of Visual Arts.

**VICTORIA CENTRAL LIONS CLUB — MILLARD H. MOONEY FINE ARTS BURSARY** — One hundred and fifty dollars (\$150) 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.

## SECTION 5

### UNDERGRADUATE AWARDS FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA

These awards are open only to students who attended 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 Financial Aid Office.

**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 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 ALAN BOAG SCHOLARSHIP** — A scholarship of five hundred dollars (\$500), the gift of the trustees of a fund established by the late Alan Boag, is available for a student who is taking his major work 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.

**B.C. TEACHERS CREDIT UNION BURSARY** — A bursary of \$400, a gift of the B.C. Teachers Credit Union, is offered at the University of Victoria. It will be open to sons and daughters of B.C. Teachers Credit Union members. To be eligible, a candidate must be entering the final year in the Faculty of Education or the one-year post-graduate programme for teacher training. The award will be made on the basis of standing and need.

**CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION, INC. (GREATER VICTORIA BRANCH) BURSARY** — One hundred dollars (\$100) to be awarded annually to a student who has completed first year and is proceeding to either a B.Ed. degree with a Major in P.E. or to a B.P.E. degree. Applicants should further

demonstrate a need for assistance, and show evidence of a particular interest and aptitude in P.E. and general proficiency for academic work. Selection of candidates is to be made by the C.A.H.P.E.R. Awards Committee on the basis of applications submitted to the Committee on Awards of the University before April 30 in each academic year.

**THE CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS** — C.U.P.E. will make available the sum of six hundred dollars (\$600) to provide scholarships for two deserving and promising students at the University of Victoria who are continuing their studies here. The selection will be made on the basis of academic standing. Preference will be given to sons and daughters of members of the C.U.P.E. In each case, the student must make application for these scholarships.

\***LUCY AND MARGARET CORBET SCHOLARSHIP** — Three hundred and seventy-five dollars (\$375) 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.

**IBM CANADA BURSARY PROGRAMME** — IBM Canada Ltd. makes an annual grant of \$1,000 for bursaries to students registered in a full-time course at the University who have satisfactory standing and who demonstrate financial need. These bursaries may be held concurrently with other awards, provided the University is satisfied that a need exists. Apply to the Committee on Awards, University of Victoria.

\***THE DR. DOUGLAS H. TAYLOR LEE MEMORIAL BURSARY** — Three hundred and fifty dollars (\$350) 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 pre-medicine programme.

**PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY** — A bursary of four hundred and fifty dollars (\$450) 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.

**THE HON. AND MRS. G. R. PEARKES PRIZE** — Fifty dollars (\$50) to be awarded annually by the Hon. and Mrs. G. R. Pearkes to the student who has taken Service Training and has highest academic standing among those returning to the University of Victoria.

\***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.

**UNITED NATIONS ASSOCIATION (VICTORIA BRANCH) SCHOLARSHIP** — One hundred dollars (\$100) awarded annually to a student entering third or fourth year with a high academic standing who has actively contributed to the educational work of the United Nations Association. Selection will be made by the Senate Committee on Awards in consultation with the Executive of the United Nations Association (Victoria Branch).

\***THE UNIVERSITY CHALLENGE SCHOLARSHIPS** — One or more scholarships to a total of \$350 to be awarded annually from funds won on the CTV Television Programme "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.

**THE VICTORIA MEDICAL SOCIETY BURSARY** — Five hundred dollars (\$500) 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 pre-medicine programme.

**THE VICTORIA MEDICAL SOCIETY SCHOLARSHIP** — Five hundred dollars (\$500) 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 1979, at the latest. Application forms are available from, and must be returned to, the Financial Aid Office before April 30.

**VICTORIA MUNICIPAL CHAPTER IMPERIAL ORDER OF THE DAUGHTERS OF THE EMPIRE SCHOLARSHIP** — One hundred dollars (\$100) awarded annually to a first year student who is the child of a veteran of World War I or World War II. The recipient of the Scholarship must be recommended for general proficiency and worth by the Faculty, and must continue university work into the second year.

**VICTORIA REAL ESTATE BOARD AWARDS** — Five hundred dollars (\$500) awarded annually as a scholarship, and five hundred dollars awarded annually as a bursary, to students registered at the University of Victoria who are sons or daughters of any Active Member of The Victoria Real Estate Board or any Member of The Victoria Society of Real Estate Salesmen. Selection of the recipient 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.

## SECTION 6

### UNDERGRADUATE AWARDS ADMINISTERED BY THE UNIVERSITY AWARDS COMMITTEE, THE UNIVERSITY OF BRITISH COLUMBIA, 2075 WESTBROOK PLACE, VANCOUVER, B.C. V6T 1W5

Students who submit applications for scholarships or bursaries 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.

**(1) Scholarships which must be applied for by July 1 unless otherwise stated.**

**GRAPHIC ARTS INTERNATIONAL UNION SCHOLARSHIP** — The Graphic Arts International Union Local 210 offers a scholarship in the amount of \$250 to students enrolled in a full academic programme of studies at The University of British Columbia, the University of Victoria or Simon Fraser University at the second year level or higher. The award will normally be made to the applicant with the highest standing as determined by the University Awards Committee, U.B.C. 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 INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION UNDERGRADUATE SCHOLARSHIPS**

— Three scholarships of \$350 each are offered to members, and 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, or Simon Fraser University who will continue in a full programme of studies in the next session in an undergraduate faculty. These scholarships will normally be awarded to the candidates with highest standing as determined by the results of the Final Sessional Examinations conducted in April by the

named universities. Candidates must notify the University Awards Committee by May 1 of their intention of competing. 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 DR. H. B. KING MEMORIAL SCHOLARSHIP IN EDUCATION** — This scholarship of \$300 has been established by the Association of British Columbia School Superintendents as a memorial to Dr. H. B. King, who from 1939 to 1945 was Chief Inspector of Schools for British Columbia. For many years prior to 1939 Dr. King also served the Province of British Columbia with distinction and devotion as a teacher and principal, and as a technical adviser with the Ministry of Education. This scholarship will be awarded to a student who is proceeding to a degree or certificate in the teaching field and is taking a full course in the *second year* at any recognized Faculty of Education in a B.C. university. The award will be made on the basis of academic standing, personal qualities, interest and participation in school and community affairs, aptitude for teaching, and other factors.

**(2) Bursaries which must be applied for by July 1, unless otherwise stated.**

**BRITISH COLUMBIA FOREST PRODUCTS LIMITED BURSARIES** — Bursaries to a total of \$8,000, each with a maximum value of \$300, 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 at least one year and whose earnings are limited (see Company brochure for details). They are open to students beginning or continuing studies in the fall in a full undergraduate programme of studies at The University of British Columbia, the University of Victoria, or Simon Fraser University. Awards will be made at the discretion of The University of British Columbia to students selected on the basis of their academic standing and need for financial assistance. No award will normally be made, however, to a candidate who obtains an overall average of less than 60% or who is required to write supplementals to obtain clear standing in a full year's work. Winners of the Company's Entrance Scholarships will not be permitted to receive a Company Bursary in the same year. The application must contain the necessary details 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 Antient Free and Accepted Masons of British Columbia annually offers bursaries in the range of \$200 to \$500 each with preference to the sons, daughters, and legal wards of active members of Masonic Lodges in British Columbia or of deceased members who, at the time of death, were active members of these 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 post-secondary level. Selection of winners will be made by The University of British Columbia from applicants with satisfactory academic standing who are beginning or continuing undergraduate studies at any British Columbia University, the B.C. Institute of Technology, or a B.C. regional college, leading to a degree or certificate in any field. First preference will be given to applicants entering university or college from Grade XII and then to undergraduates in the second year of studies. 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 also wish to apply for other bursaries should 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 \$250, the gift of the Victoria Home Economics and Dietetic Association, will be awarded annually to a women 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.

### UNDERGRADUATE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

**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.

**BRITISH COLUMBIA ASSOCIATION FOR THE MENTALLY RETARDED BURSARIES** — Bursaries in various amounts are offered by the British Columbia Association for the Mentally Retarded to students in education, medicine, nursing, psychology, and social work in graduate or undergraduate programmes who: (a) are undertaking a full year, part-time of summer school course at a recognized University or College, and (b) intend to pursue studies related to mental retardation. Awards will be made on the basis of combined academic standing and need. Closing dates for submission of application forms are July 15 and December 15. Forms of application may be obtained from: British Columbia Association for the Mentally Retarded, Room 221, 119 West Pender St., Vancouver, B.C. V6B 1S5.

**THE BAY SERVICE AWARD** — A Service Award offered by the Bay (Victoria) is open in competition to students completing Third Years 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, fathers, mothers, sisters, brothers, sons, daughters, grandchildren or step-children 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 CRÉPAULT, Q.C. MEMORIAL SCHOLARSHIP** — In memory of Raymond Crépault, 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 Crépault estate, Radio-mutuel 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 institution.

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 academic background;
2. The candidate's motivation;
3. Recommendations submitted by the candidate's professor, colleagues or employer, 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, Ont. 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.

**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 procedure as for all other I.O.O.F. bursaries, except that family connections with the I.O.O.F. will not be required.

**LEONARD FOUNDATION SCHOLARSHIPS** — This National Foundation awards each year a number of scholarships for which students of the University of Victoria are eligible. Application forms, available from the Financial Aid Office, University of Victoria, should be forwarded to the Honorary Secretary of the Foundation, c/o Canada Permanent Trust Co., 320 Bay Street, Toronto 105, 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.

**THE MARY MARCHI MEMORIAL BURSARY** — This bursary of \$350, a gift of the Kootenay Society for Handicapped Children, will be awarded annually to a deserving undergraduate student, who is presently studying in the field of special education or mental retardation, with the intention of continuing studies in that field. All applications from the University of Victoria will be screened by a special committee at the University of Victoria. The final decision will be made by a special bursary committee appointed by the Kootenay Society for Handicapped Children. Applications should be submitted to the Committee on Awards, Financial Aid Office, University of Victoria by April 30.

**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 to further their education, vocational training, skills and competence 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 meetings will be held at the call of the Chair early in the year and late in the summer.

**THE MERRILL C. ROBINSON BURSARY FUND** — The Merrill C. Robinson Bursary Fund is sponsored by the Canadian National Institute for the Blind to honour the long service to blind people given by the late Merrill C. Robinson, M.B.E., L.L.D. This fund will be administered by a special committee of the CNIB Divisional Board, and will be used to assist blind students attending any university or college within the B.C.-Yukon Division other than The University of British Columbia. Awards will be made only to those who show evidence of ability and promise. Applications are to be directed to the Bursary Committee, Canadian National Institute for the Blind, British Columbia Division, 350 East 36th Avenue, Vancouver, B.C. V5W 1C6, before June 30.

**PREMIER'S ATHLETIC AWARDS/BRITISH COLUMBIA ATHLETIC AWARDS** — Five Premier's Athletic Awards, each for one thousand dollars (\$1,000) and 25 British Columbia Athletic Awards, each for five hundred

dollars (\$500), awarded annually to those British Columbia students who apply and who meet the qualifications set out below.

Applicants must show evidence of athletic ability and performance, leadership and character, and scholastic achievement. Students are eligible to apply for these awards if they are residents of British Columbia and are pursuing an educational programme at any designated post-secondary education institution in the Province of British Columbia.

Applicants must write a personal letter of application to the Selection Committee, in which they should outline their athletic and scholastic achievements. They must ask the head of the athletic department of the post-secondary education institution and one other prominent sports leader in the community to send a confidential supporting letter direct to the Selection Committee. The athletic director should attach a statement of athletic achievement and other leadership participation.

Applications will be received by a Selection Committee appointed by the British Columbia Physical Fitness and Amateur Sports Fund Committee. The top five applicants selected by the Selection Committee will be awarded the Premier's Athletic Awards of \$1,000 each, and the next 25 applicants selected in order of merit will be awarded the B.C. Athletic Awards of \$500 each. The Athletic Awards will be made available to successful applicants after proof that he or she is attending the institution concerned provided they are not in receipt of a similar or other major award of \$500 or more. All applications should be postmarked *not later* than June 1, and should be addressed to Chairman, British Columbia Physical Fitness and Amateur Sports Fund Committee, Parliament Buildings, Victoria, British Columbia.

**THE RHODES SCHOLARSHIPS** — The Rhodes Trustees offer annually for award in the Province of British Columbia one Rhodes Scholarship of the value of approximately \$1,550 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 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 in Canada for at least five years by October 1, 1978. 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 at least 19 but under 25 years of age on October 1, 1979.

A candidate must have completed an undergraduate degree by October 1, 1979.

A candidate may compete in a province in which he is eligible under either (a) or (b) below:

- 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.
- The province in which his university study has taken place, provided that if he is ordinarily 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:

- Literary and scholastic attainments;
- Qualities of truth, courage, devotion to duty, sympathy, kindness, unselfishness, and fellowship;
- Exhibition of moral force of character and of instincts to lead and to take an interest in his fellows;
- 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, 1978, and if elected, to go to Oxford in October 1979. Further information concerning the Scholarship and the opportunities for study at Oxford University may be obtained from Sholto Heberton, 1830-505 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 1980-81 Scholarship must be: unmarried; between the

ages of 18 and 24 inclusive as of July 1, 1980, and have completed two years of undergraduate university-level work but not have attained the bachelor's degree or equivalent at the time that 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 programmes of the Rotary Foundation, a Rotarian, a dependent of a Rotarian, a child, 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 academic credit for courses taken or work completed during the year abroad.

Application 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 15.

**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 in British Columbia and the 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 schools of nursing. Where possible, bursaries will be made available in 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, 1495 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 15th. The application must clearly indicate (a) the applicant's relationship to a member of a 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, to demonstrate which 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 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.

**THE SONS OF NORWAY SCHOLARSHIPS** — Three Scholarships of \$600 each are offered by Sons of Norway Foundation in Canada to students who have shown interest in Norwegian Culture, History or 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. Apply on forms available at the Institution of your choice and give all pertinent information. 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.

**UNIVERSITY WOMEN'S CLUB OF VICTORIA DIAMOND JUBILEE BURSARY** — A bursary of \$100 will be awarded annually by the University Women's Club of Victoria, to a mature woman with a satisfactory academic standing who, without financial aid, would find it difficult to resume her studies. The applicant should be returning to full-time or part-time studies at the University of Victoria. A letter of application, with two references, should

include a brief explanation of how the proposed courses will improve the applicant's qualifications for employment. Applications should be filed during the fall term with the Financial Aid Office, University of Victoria, Victoria, B.C.

**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. Further information may be obtained by enquiring at the Financial Aid Office of the University of Victoria. Inquiries must be made before March 31.

**THE J.M. WARREN SCHOLARSHIP** — The British Columbia Cancer 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. V5Z 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 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 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 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 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 7

### AWARDS FOR GRADUATE STUDY

#### Awards Administered by the University of Victoria

##### UNIVERSITY OF VICTORIA FELLOWSHIPS:

University of Victoria Fellowships of \$5,500 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. This award is made on the basis of \$4,000 September through April. A Summer Supplement of \$1,500 May through August, inclusive, may be awarded upon the recommendation of the Department concerned, for students working full

time on their studies during that period. No duties are attached to these Fellowships and Supplements.

Special Fellowships valued at \$8,000 for twelve months will be awarded to a limited number of exceptional full-time students.

Application should be made at the time of application for admission, in the space provided on the Application Form, which must be received by February 16, in order to be considered. 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, provided that this does not exceed 100 hours, September through April.

#### 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, valued at \$6,500 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. programme only. 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 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 \$6,100 per annum.

#### 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 300 hours, September through April.

**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.

#### 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. Information may also be obtained from the catalogue "Awards For Graduate Study and Research" which can be found in the Reference Division of the Library under REF/LB2339/C3 A35. 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:

#### CANADA COUNCIL GRANTS

##### *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. programme, with first-class standing. Candidate must be nominated by a faculty member of a Canadian university, not later than October 1.

*Value:* \$6,000 plus travel allowance for the award holder only. The Queen's Fellowships also include tuition fees.

Information and nomination forms can be obtained from the Office of the Dean of Graduate Studies.

##### *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

- a. have completed one year of graduate studies beyond the Honours B.A. or its equivalent; and

b. be registered in a programme of studies leading to a doctoral degree.

*Value:* Up to \$6,000 for students in the first two years of a doctoral programme, and up to \$7,000 for students who have completed the first two years of their programme.

Information on the above and other Canada Council awards is available from the Office of the Dean of Graduate Studies, together with some application forms.

**NATION RESEARCH COUNCIL OF CANADA** — Postgraduate awards and a limited number of postdoctorate 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 to men and women on equal terms, on the basis of high scholastic achievement and evidence of skill at research.

#### *Postgraduate Scholarships*

Postgraduate Scholarships are valued at \$6,000 for 12 months, plus a travel grant if required.

Addition information on NRC 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 programmes 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.

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.

**CANADIAN FEDERATION OF UNIVERSITY WOMEN FELLOWSHIPS**

#### *Margaret McWilliams Travelling Fellowship*

One Fellowship awarded annually to a pre-doctoral woman scholar in any field of study.

*Value:* \$5,000. Doctoral programme 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 programme 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 resident holding a degree from a Canadian university.

*Value:* \$3,500.

Further information about these two awards may be obtained from the Canadian Federation of University Women, Suite 209B, 151 Slater Street, Ottawa, Ontario K1P 5H3.

**CENTRAL 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 \$5,100 plus tuition and initial travel expense. In addition, a Fellow may receive an allowance of \$900 for each dependent child. Renewable up to three times.

Application forms are available from the Administrative Officer, Scholarships, Central 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:* \$4,000 per annum, for a period up to three academic years.

Information and application forms are available from the Office of the Dean of Graduate Studies, or Secretary, Committee on Higher Education, 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: Chairman, Fellowships Committee, Canadian Federation of University Women, Suite 209B, 151 Slater Street, Ottawa, Ontario K1P 5H3.

**INTERNATIONAL DEVELOPMENT RESEARCH CENTRE**

#### *Thesis Research Awards - Ph.D. Degree*

The International Development Research Centre offers five awards for research in the field of international development, for tenure in a developing country. Consideration will be given to students in the fields of agriculture, food and nutrition sciences, population and health sciences, information sciences, social sciences and human resources, etc. Applicants must be Canadian citizens.

*Value:* \$6,000 - \$8,500 plus allowance for dependents, travel, research, etc.

Application forms are available from the Office of the Dean of Graduate Studies, and must be submitted by January 31.

#### *For Students from Developing Countries*

Five comparable awards are available for students from developing countries in Canadian universities on a student visa. Tenure will normally be in the student's home country.

Application forms are available from the Office of the Dean of Graduate Studies, and must be submitted by January 31.

**DEPARTMENT OF NATIONAL DEFENCE SCHOLARSHIP** — The Department of National Defence offers several awards for military and strategic studies of interest to Canada which may comprise work in one or more of the following areas: National and International aspects of security, studies of strategic theory, alliances and United Nations, civil-military relations. Candidates must be Canadian citizens with an Honours Bachelor's Degree, or its equivalent.

*Value:* Fellowships - \$10,000. Scholarships - \$6,000.

Application forms are available from the office of the Dean of Graduate Studies and must be submitted by March 1.

**QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIP** — The purpose of this Scholarship is to enable selected British Columbians who have graduated from a public university in B.C. to take further studies at approved universities in the United Kingdom.

*Number and Value:* One Scholarship each year, for a total of \$10,000 (usually divided into two stipends for two successive years).

*Eligibility:* A graduate of the University of Victoria, University of British Columbia or Simon Fraser University;

- whose final 3 years of academic courses leading to his or her first undergraduate degree were all taken in British Columbia;
- 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 enquiries, applications and supporting documents must be forwarded directly to The Deputy Provincial Secretary, Legislative Building, Victoria, B.C., by April 1.

**THE J.H. STEWART REID MEMORIAL FELLOWSHIP** — Open to graduate students in any field at a Canadian University, who are Canadian citizens.

*Value:* \$3,000, renewable *Deadline:* February 1.

Information and forms available from: Awards Officer, Canadian Association of University Teachers, 66 Lisgar Street, Ottawa, Ontario K2P 0C1.

**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	\$6,500 plus tuition fees.
Master's Fellowship	\$6,000 plus tuition fees.
Master's Assistantship	\$4,200 plus tuition fees.

Deadline: January 13.

Information and applications are available from the Office of the Dean of Graduate Studies, or from Transportation Development Agency, 1000 Sherbrooke Street West, P.O. Box 549, Montreal, Quebec H3A 2R3.

## SECTION 8

### LOAN FUNDS

Enquiries relating to the following loans funds, and all applications for loans, should be addressed to the Financial Aid Office, unless the description indicates otherwise.

Applications for Canada Student Loans should be made in advance of the opening of the session. Although loans in limited amounts may also be made during the session, provided funds are available, students should not begin attendance on the assumption that they will be eligible for or receive assistance. In particular, they must meet the requirements specified in the terms of the loan fund involved.

University Loans are not normally made to students until they have registered at the University for a full winter session.

Students are also advised that adult guarantors satisfactory to the Financial Aid Office are required for loans administered by the University.

**B.C. Youth Foundation Loans** — Loans are available to young persons up to 30 years of age. The foundation lends money to pay fees and/or monthly amounts to assist with living expenses. Applicants should contact the Financial Aid Office for further information. Normally, these funds are only available to students who do not qualify for Canada Student Loans.

**B.C. Provincial Financial Awards and Assistance Programme** — The Government of the Province of British Columbia has several programmes of financial assistance for students undertaking studies in designated post-secondary educational institutions for 1978-79. The Ministry of Education will again sponsor a programme providing a combination of funds incorporating the Provincial Grant and the Canada Student Loans Plans. A detailed brochure describing the programme will be available at your institution.

**Canada Student Loans Plan** — This is a plan introduced by the Federal Government to assist students who, without loan assistance, would be unable to pursue full time post-secondary studies at a specified educational institution. The maximum loan for an academic year is \$1,800. Total loans to any student cannot exceed \$9,800. A loan of up to \$900 may be authorized for a single semester which is part of a longer programme of study. Borrowers under the plan are required to repay principal and interest by regular monthly instalments. (This information may be changed after this Calendar has been printed.)

Payments commence six months after the borrower ceases to be a full-time student at a specified educational institution. No payments are made while the borrower is a full-time student nor for six months thereafter. Interest during this period is paid by the Federal Government on behalf of the student.

Need for loan assistance is determined by Provincial Loan Authorities in accordance with administrative criteria established for use throughout Canada. 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 in the Canada Student Loans Plan. Students are expected to save a substantial amount of any income from summer or other employment. Students who apply for loans should consider carefully the repayment obligation being undertaken.

A student in need of a Canada Student Loan must, as a first step, obtain an application form from the institution he or she plans to attend. The application must be completed carefully and accurately by the student, and where applicable, by his parents. Applications require declarations by both the student and his or her parent that all information provided is correct.

When the application is completed it must be submitted to the Financial Awards Office of the British Columbia educational institution to be attended.

**P.E.O. Sisterhood Educational Loan Fund** — Loans are available to women students in any year of a University course, and may be requested at any time. Maximum amount of a loan to any student is \$1,800. Fourth year or graduate students may be granted loans and draw the maximum loan in one year. Undergraduates may apply for and be granted the maximum loan of \$1,800

for two or more years of study but may draw only \$900 of the loan in one academic year. Freshmen must complete one term's work satisfactorily before making application. Loans are made for periods up to five years. A loan may be considered for a summer course. Interest at the rate of 4% is to be paid annually, and the student is expected to begin payment of the principal as soon as she is out of University and employed. Information may be obtained from Mrs. Harold G. Robinson, 860 Richmond Road, Victoria, B.C.

**The University of Victoria Mature Student Fund** — Through the generosity of the Alumni Association, a special fund valued at \$5,000 has been established to help mature students with pressing financial need. Assistance may be provided to students in the form of grants or repayable loans. For further information, contact the Financial Aid Office.

**The University of Victoria Rotating Loan Fund** — The University of Victoria has a small loan fund to assist students requiring financial assistance. This fund is intended to meet emergency situations, and not tuition costs. The loans are interest free and repayable during the summer following the academic year. Adult guarantors are required to co-sign all short-term loans.

Contributions to the University loan fund have been made through the generosity of the following donors:

The Peter Cubis Memorial Fund (Donated by the University of Victoria Alma Mater Society)	\$9,000
The University Challenge Team Loan Fund	3,500
The University of Victoria President's Fund	7,500
The University of Victoria Alumni Association	5,000
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 this fund or by establishing similar funds.

For further information regarding interviews and application forms, please contact the Financial Aid Office.

## SCHOLARSHIPS AND OTHER AWARDS 1976-77

\*Throughout this list, an asterisk indicates that the award or scholarship is administered by the University of Victoria Foundation.

\*The Harry and Frances Marr Adaskin Scholarship in Music History of \$200 each ..... Arne David Sahleen  
Philip James Tillotson

\*The Murray and Frances James Adaskin Scholarship in Viola or Violin of \$200 ..... Stephen Cameron McCormick Calder

\*The Kathleen Agnew Memorial Scholarship of \$250 each ..... Matthew Paul Smith  
Michelle Ruth Wood

Alliance Francaise Scholarship of \$100 each ..... Diana Elizabeth Griffiths  
Erich Gerd Ranft

Austrian Government Book Prizes ..... Ruth Eva Bohl  
Jennifer May Handley  
Susanne Elizabeth Ullrich

Bapco Paint Limited Scholarship of \$100 ..... Elizabeth Helen Rhoades  
The Beaver Books Shop Prize ..... Kathryn Elizabeth McPherrin

\*The Harold Beckwith Memorial Book Prize in Music ..... Donna Marie Nutini

Beta Sigma Phi Sorority City Council Bursaries of \$100 each ..... Christine Maria Helmer  
Constance Lynn Maskery

\*The Dr. Norman Bethune Memorial Award of \$75 ..... David Gregory Heine

The Birks Family Foundation Bursaries ..... To Be Announced  
Blaney's Travel Service Ltd. Award of \$200 ..... Barry Michael Phipps

BMI Canada of \$50 ..... Rodney William Sharman

\*The British Columbia 1958 Centennial Scholarship of \$800 ..... Geoffrey Samuel Chesshire

B.C. Historical Association Book Prize ..... Kathryn Helen Bailey  
Laurie Dale Williamson

- The B.C. Psychological Association  
Gold Medal ..... Shelley Elizabeth Parlow
- The British Columbia Telephone Company  
Scholarship of \$100 ..... John Alan Fawcett
- Bull Trust Fund of \$250 each ..... Karen Marie Black  
David Gavin McKelvey
- Dr. Maxwell A. Cameron Memorial Medals  
and Prizes ..... Dominique Boltres  
Jane Dewhurst
- Canadian Association for Health, Physical Education  
and Recreation, Inc. (Greater Victoria Branch)  
Bursary of \$100 ..... V. Lynne Beecroft
- Canadian Daughters' League, Assembly No. 5 — Gertrude M. Ralston  
Memorial Bursary of \$100 ..... Gerd Ralph Steinke
- Canadian Institute of International Affairs  
(Victoria Branch) Book Prize ..... Thomas Fraser Homer-Dixon
- The Canadian Union of Public Employees Scholarships  
of \$300 each ..... William Frederick Blakeney  
Kevin Roy Faddegon
- Canadian Union of Public Employees Entrance Scholarships  
of \$250 each ..... Deborah Lynn Carlow  
Charles John Gough  
Laura Joan Herbertson  
Susan Jane Storkey  
Kim Andre Wendland
- \*The G. Clifford Carl Memorial Bursary of \$350 ..... No Award
- Classical Association of Vancouver Island  
Book Prizes ..... Michael Joseph Budac  
Timothy Michael J. Hegedus  
Lyle Albert Ramsey
- \*The Clearihue Bursary of \$550 ..... Gwenn Stott
- The Comitias Club Scholarship of \$100 ..... Janice Linda Schulz
- \*Mary Hannah Cooper Scholarship Fund of \$400 ..... Jeffrey Alan Zelt
- \*The Edgar Ferrar Corbet Scholarship of \$250 ..... Nona Lynne Avren
- \*Lucy and Margaret Corbet Scholarship of \$375 ..... Nancy June Kubin
- \*Matthew Cowan Annual Scholarship of \$200 ..... David Martin Pickles
- \*Crestview-Chelsea Theatre Award of \$250 ..... Karen Louise Moore
- \*The Michael Dane Memorial Book Prize in  
Russian ..... Wenceslas Henry J. Stepanek
- \*The Adeline Julienne Deloume Memorial Scholarships  
\$300 ..... Veronica Struman  
\$200 ..... Kimberley Tweed  
Sheila Weaver  
\$150 ..... Alison Margaret Hewitt  
Ada Marion Ulmi  
\$100 ..... John Russell Blackmer  
Diana Elizabeth Griffiths  
Erich Gerd Ranfft  
Linda Kathryn Schofield  
Michelle Ruth Wood  
\$50 ..... Linda Maureen Roggeveen
- The Arthur S. Denny Scholarship of \$100 ..... Maria Theresia Scholz
- \*The Denton Memorial Book Prize ..... David Cecil Parsons
- \*Gwen Downes Memorial Book Prize ..... Brenda Georgina Seehuber
- The Eaton Scholarship in Marketing  
of \$400 ..... Ellen Faye Battle
- Percy H. Elliott Memorial Scholarship of \$130 ..... Dennis Russell Francis
- \*The Harry O. and Etta B. English Memorial Scholarship  
of \$350 ..... Marjorie Anne Clark
- The Howard English Bursary of \$300 ..... Christopher David Shepard
- Faculty of Education Memorial Scholarship  
of \$582 ..... Adrian Brown
- Faculty of Women's Club Scholarship of \$300 ..... Irene Elizabeth Toszczak
- Francis Gold Wrist Watch ..... Derek Dart Ming Chu
- The French Government Book Prizes ..... Audrey Irene Fawcett  
Mirella Gazzoni  
Catherine Alice Weir
- French Government Medal ..... Mirella Gazzoni
- \*The Frank and Margaret Gibbs Scholarships  
of \$150 each ..... Daniel Alfred Adam  
Gary Wayne Billings  
Peter Cellarius  
Sylvia Norma Code  
Robin William Dawes
- Mary Beth Gibson  
Wendy Maureen Graf  
Gordon Hugh Hak  
Cynthia Mary Majocha  
John Brown Murray  
Glen William Scobie  
Linda Joy Walker
- Government of the Federal Republic of Germany  
Book Prizes ..... Dena Lynn Atkinson  
Nancy Elizabeth Barker  
John Russell Blackmer  
Susan Elizabeth Bracht  
Timothy Francis Burns  
Wendy Fischer  
Christina Gruenhagen  
Gordon Hugh Hak  
Christine Maria Helmer  
Charlotte Rose Hynes  
Dacia Irene Moss  
Ilse Anna Maria Mozga  
Peter J.A.M. Poelmans  
Katherine Marie Schwanke  
Irene Elizabeth Toszczak
- The Governor-General's Medal ..... John Edward Bernard
- The Grand Post of the Native Sons of B.C. — Bruce McKelvie  
Scholarship of \$250 ..... Robert Wharton Lawson
- Greater Victoria Association for the Retarded  
Bursary of \$250 ..... Deirdre Elizabeth Holden
- \*The Ida Halpern Music Scholarship of \$200 ..... Karen Eleanor Doyle
- The Harbord Scholarship in Music of \$500 ..... Robert Nelson Sinclair
- Aldyen Hamber, I.O.D.E. Entrance Scholarship  
of \$250 ..... Elizabeth Anne MacPherson
- The Harbord Insurance Ltd. Entrance Scholarship  
of \$500 ..... Janet Ruth Underhill
- \*The George Hamilton Harman Memorial Scholarships  
\$250 ..... George David MacAuley  
Dale Gregory Sketchley
- \*The William A. and Frances E. Harper Scholarship  
of \$100 ..... David Gregory Heine
- The IBM - Canada Bursaries  
of \$100 each ..... Karen Marie Black  
William Frederick Blakeney  
Patrick Brian Costello  
Roderick Edwards  
Terry Susan Genaske  
Karen Louise Guilbault  
Lyn Hendrie  
Alison Sinclair  
Leslie Ann Snow  
Lorraine Bernadette Toleikis
- The Don Ingham Memorial Scholarship of \$200 ..... No Award
- The Institute of Chartered Accountants of British Columbia  
Award of \$100 ..... Keith Alan Watson
- The Italian Assistance Centre Bursary of \$125 each ..... Kathryn Irene Clark  
Ellide Paulina Daminato
- The Government of Italy Book Prizes ..... Nancy Ruth Taylor
- \*The David Kaplan Book Prize in Honours  
Philosophy ..... David Allan Logan
- The Denis King Memorial Scholarship in Music  
of \$300 ..... Anthony Charles Genge
- \*Freeman F. King Scholarship of \$450 ..... Patricia Mae Friesen
- Kiwanis Scholarship of \$400 ..... Dean Frederick Smith
- \*The Hazel T. Knox Memorial Scholarship  
of \$300 each ..... Oliver Thomas Coomes  
Gerald Albert Clive Justice
- Labatt Breweries of British Columbia Limited Entrance  
Scholarship of \$500 ..... Lee-Ellen Benson
- \*Ladner Book Prize for the Study of the History  
of British Columbia ..... Kathryn Helen Bailey
- Leon J. Ladner B.C. History Scholarships  
of \$100 each ..... Margaret Mary Whitehead  
Laurie Dale Williamson
- Lady Laurier Club Scholarship of \$200 ..... Stanley Howard Ashcroft
- \*The Rebecca and Esther Lazarus Scholarships  
in Music of \$175 each ..... Susan Louise Nassachuk  
Linda Rae Gould

\*The Dr. Douglas H. Taylor Lee Memorial Bursary  
of \$350 ..... Kathryn Gail Jones

\*Sara and Jean MacDonald Entrance Bursaries  
of \$300 each ..... Jo-Anne Aura  
Brenda Lee Boyle  
Jacqueline Jacob  
Linda Susan McGee

\*The J. Beattie MacLean Scholarship of \$150 ..... Janice Evelyn Lamont

\*Martlet Chapter, I.O.D.E., Prize for Scholarship  
in History in Art of \$125 ..... Roy Allen Wiebe

\*Martlet Chapter I.O.D.E., Cuthbert Holmes English Honours  
Essay Scholarship of \$100 ..... Michelle Anne Gagnier

\*The Allan and Elizabeth McKinnon Scholarship  
of \$350 ..... Douglas Earle Sanders

\*Robert Burns McMicking Chapter I.O.D.E. Scholarship  
of \$100 ..... Shelly Patricia Petrie

The Angelina Norris Bursary of \$50 ..... Janice Evelyn Lamont

Ocean Construction Supplies Limited, Scholarship  
of \$100 ..... Geoffrey Samuel Chesshire

The Open Door Society Book Prize ..... No Award

The Hon. and Mrs. G.R. Pearkes Prize  
of \$50 ..... Floyd William Low

\*B.W. Pearse Science Scholarships of \$250 each  
Chemistry ..... Arthur Charles Ralfs  
Math ..... Barry Joe  
Biology ..... Marlene Bernice Fuhrmann  
Physics ..... Neil Douglas Shrimpton

The Rosalind Hulet Petch Memorial Prize in Creative Writing  
of \$200 ..... Jill Aleen Rogers

\*The Pett Award in Archeology of \$350 ..... Robert Christopher Morgan

Chapter N, P.E.O. Memorial Prize of \$100 .. Kathryn Elizabeth McPherrin

\*The Alan Pratt Memorial Scholarship  
of \$100 ..... Charlotte Rose Hynes

\*The Oliver Prentice Memorial — Saanich Rotary  
Scholarship of \$300 ..... Michael Anthony Gergel

President's Special Entrance Scholarships  
of \$500 each ..... Jayne Marie Ashcroft  
Henry James Awmack  
Barbara Louise Baerg  
Laurette Marguerite Beaulieu  
Leon Douglas R. Berod  
Kim Rosemary Bolan  
Darren W. Bond  
Susan Kathleen Brandl  
Denise Rolande Browne  
Lorraine Eve Buchal  
Susan Pemela Cobbin  
Richard Darrell Confrey  
Andrew Brent Cooper  
Robert Michael Dufour  
Janice Arlene Dumont  
Ernest Chester Dusdal  
Annabel Jane Eert  
Cora Phem Fowler  
Janice Celia Gottfred  
Bruce Michael Gregg  
Robin Anne Higgins  
Linda Faye Johnson  
Francis Patrick Jones  
Jennifer Ann Jordan  
Norma Eileen Littler  
Catherine Mary MacDonald  
Rachel Jennifer Mackie  
Janice Eileen Mason  
Lisa Patricia Massie  
Lorena M. Mauro  
Trevor James Murray  
Yvonne Vivian Newport  
Carol Maria Nieuwenhuizen  
Frances Ann Noone  
Barry L. Nordin  
Kerstin Margaret Nyberg  
Julie Ovenell  
Cyril Ozeroff  
David Bradley Pettinger  
Yvonne Pink  
James Milston Redekop  
Linda Marilyn Reid  
P. Gwen Richardson

Karen Lee Rix  
Margaret Anna Valeria Ross  
Janice Lynn Runacres  
Gerald Norman Sande  
Anne Patricia Seamark  
Catherine Jane Smith  
Timothy Edward Speakman  
Katalin Szauer  
Leslie Paul Thiele  
Paula Maureen Trask  
Desiree Vanderwel  
Joanne Frances Wong

President's Entrance Scholarship of  
\$500 each ..... Brian Robert Baird  
Donald Chan  
Robert Anthony Charters  
Stanley Edward Dosso  
Doug Munich  
Liane O'Grady

President's Scholarships  
\$400 ..... Norman Jed Schroeder  
Roderick Edwards  
\$300 ..... Dean Frederick Smith  
Wendy Louise Seward  
Irene Elizabeth Tosczak  
Kathryn Patricia Guest  
Beverley Lynn Glover  
\$250 ..... John Alan Fawcett  
George David Macauley  
Lorraine Bernadette Toleikis  
Rodney William Sharman  
Adrian James O'Connor  
Robert Frederick Carlson  
Kevin Douglas McColl  
Duncan William Dow  
\$200 ..... Michael Stuart David Wilkie  
Leslie Jaye Hatch  
Roger Philip Neate  
Deborah Sue Roberts  
Dennis Russell Francis  
Gordon James Cain  
Alison Sinclair  
John Michael Charles Wolff  
Ian Fraser Putnam  
Jean Elizabeth Dew-Jones  
Stephanie Marie Kripps  
Benjamin Check Kwan Chin  
Richard John Fairchild  
Alison Jean MacPhail  
\$150 ..... Barry Joe  
Christopher John H. Donald  
Linda Rae Gould  
Gary Wayne Billings  
Cheryl Reta Mason  
Brian James Cormie  
Janice Linda Schultz  
Karen Louise Guilbault  
Charlotte Rose Hynes  
Constance Lynn Maskery  
Wesley Harvey Laing  
Carol Dawn Elizabeth Hendriks  
Margareta Dijk  
Kim Denise Lane  
Marion Robena Woodson  
Warren George Bell  
Dorothy Anne Underwood  
Sheila Dobie  
Geraldine Joyce Pugh  
David Stewart Fyfe  
Catherine Donna Guidi  
Mela Singh Sangha  
Dawn Ann Pharaoh  
Margaret Jean Oliver  
Darlene Winona Chow  
Cynthia Louise Hopps  
Roxana Maria McKenzie  
Gregory Stephen Welch  
Leila Denise Harris  
Sally Elizabeth Warren  
Gary Frederick Duncan  
Alaura Christine Ross  
Brenda Joan Hoogerdijk  
Peter Jonathan Mousley  
Sandra Louise Russell  
Sheila Marian Reeves

	Yuen Lay Cindy Kwan	Sharyn Anne Sue Yuen
	Patricia Rose Young	Lesley Elizabeth Smith
	Doris Hannelore Ursula Kochanek	Steven James Anderson
	Neal Edward Gripp	Donald Wayne Crowe
\$100 .....	Claude Eli McLean	Severin Joseph Gaudet
	Karen Marie Black	Karyn Lee Bradley
	Rosemary Williams	Patricia Anne Johnson
	David Gavin McKelvey	Peter Jelle Kleyn
	David Martin Pickles	David Lloyd Brooks
	Barry Michael Phipps	Daryl James McLoughlin
	Robin William Dawes	Karen Elizabeth Newell
	Cynthia Mary Majocha	Robin Geoffrey Clewley
	Anne Moya Johnson	Christina Gruenhagen
	Mary Beth Gibson	Richard Douglas Degruchy
	Howard Allan Wightman	Vicki L. Bruce
	John Brown Murray	Steven Lenny Gomolchuk
	Glen William Scobie	Lynda Jane Williams
	Daniel Alfred Adam	Wright Thompson
	Gordon Hugh Hak	Suzanne Marie Pauline Hala
	Patrick Brian Costello	David Alan Mitchell
	Christine Maria Helmer	Deborah Mary Kerr
	Terry Susan Genaske	Linda Patricia Cockroft
	Elaine Margaret Phillips	Susanne Elisabeth Karin Ullrich
	Kathryn Elizabeth McPherrin	Lorna Maureen McRae
	Kim Adair Colbert	\$50 .....
	William James Lee	Harry Sue Wah Joe
	David Peter O'Brien	Ellen Faye Battle
	Geoffrey Edwards	Elizabeth Helen Rhoades
	Andrew David Mardiros	Oliver Thomas Coomes
	Susan Patricia Morrison	Neil Douglas Shrimpton
	Deborah Winifred Gascoyne	Peter Cellarius
	Sharon Diane Styve	Linda Joy Walker
	Robert Gordon Fyles	Wendy Maureen Graf
	Mary Lily Spoke	Sylvia Norma Code
	Katrina Rees Hughes	The Professional Men's Garden Club of Victoria Scholarship
	Douglas Wilton Thompson	of \$150 .....
	Lorna Jane Dosso	Brian James Cormie
	Clayton Royce Campbell	The Read Jones Christoffersen Ltd., Consulting Engineers
	James Louis Tirrul-Jones	Entrance Scholarship of \$200 .....
	Barbara Jane Bell	Robert Edward Bridges
	Ann Buckingham	Rithet Consolidated Limited Bursary of \$100 .....
	Karen Elizabeth Bronson	Elaine Margaret Phillips
	Diane Elsie Gibney	Rose's Limited Jewellers Watch .....
	Rhonda Kim Annett	Imant Karlis Raminsh
	Mary Elizabeth McKinnon	Rotary Club of Saanich Scholarship of \$250 .....
	Michael Joseph Budac	Leslie Jaye Hatch
	Janice Marie Norton	*Royal Institution and Frank Eaton Memorial Scholarship
	William Dillworth Armstrong	of \$100 .....
	Ruth Eva Bohl	Janice Gail Freeman
	Dale Charles Gibbons	Royal United Services Institute of Vancouver Island Book Prizes
	Harold Arthur Rhenisch	in Military History .....
	Carol Elizabeth Denny	Bruce John Harwood
	Shirley Anne Pederson	James Stanley Harold Kempling
	Allan Hillel Krasnick	The Madame Sanderson Memorial Scholarship
	Shelley Elizabeth Easthope	of \$50 .....
	Suzan Heather Nielsen	Alison Margaret Hewitt
	Yvette Therese Liem	*The Edward J. Savannah Memorial Scholarship of \$350
	Karen Jean Stromdahl	John Alan Fawcett
	Catherine Clara Classen	Seaspan International Ltd. Scholarship of \$150 .....
	Lana Berniece Ruddick	Kathryn Patricia Guest
	Marguerite Vanderwel	*The Nora Lugin Shaw Memorial Scholarship
	Rocco Seth Catalano	of \$100 .....
	Cyril Douglas Hume	Marneee Jill Pearce
	Diane Kathleen Sweeney	The Andrew Sheret, Ltd. Scholarship of \$150 .....
	Kenneth Paul Gustafson	Christopher John Donald
	Catherine Doreen Tait	The A.W. Sheret Scholarship of \$150 .....
	Anne Lowe	Anne Moya Johnson
	Janice Lynn Soderman	*The Dorothy Somerset Scholarship in Theatre
	Vivian Carmen Lesnik	of \$175 .....
	Jacqueline Marilyn Martinuk	Gysbertus Timmermans
	David Arthur Bellis	The Spanish Government Book Prize .....
	Nancy Ellen Trope	Ginette Raymonde Griffiths
	Donald Stanley Bamford	*The Robert Lorne Stanfield Book Prizes in
	Pamela Frances Allen	Political Science .....
	Linda Susan Bonner	Patrick David Deakin
	Linda Mae Snider	Thomas Fraser Homer-Dixon
	Ian Robert Morrison	Thomas Henry MacLaughlan
	Susan Alona Vial	Matthew Paul Smith
	David Rodney Lyle	The Prizes of the Ambassador of Switzerland to Canada
	Donald Wayne Matheson	Italian .....
	James Kenneth Luke	Pasquale Patrizio Verdicchio
	Sharon Ann Plater	French .....
	Rosemary Evelyn Vaughan	Catherine Weir
	Susan Mary Ridley	Ursula Renate Bauert
	Lynne Anne Haras	Brian Edward Collins
		*The Taylor Education Bursaries of \$300 each .....
		Peter James Barnacle
		Dawn Marie Chudy
		Karin Ingeborg Scotton
		*The Taylor Scholarship in Music
		\$500 .....
		Nora Victoria Gray
		Claude Eli McLean
		\$400 .....
		Mary Catharine Murray
		United Empire Loyalists Association of Canada (Victoria Branch),
		Book Prize in Canada History .....
		David Edward Lewis
		United Nations Association (Victoria Branch)
		Scholarship of \$100 .....
		No Award

\*The University Challenge Scholarships of \$450 ..... No Award  
 University of Victoria Alumni Award of \$500 each ..... Sharon Dawson  
 Timothy Michael Joseph Hegedus  
 University of Victoria Alumni Entrance Scholarships  
 of \$500 each ..... Terry Gordon Barnett  
 Mark Gerald Crawford  
 Don Dale McKnight  
 University Extension Association of Victoria Scholarship  
 of \$100 each ..... Gordon James Cain  
 Beverley Lynn Glover  
 The University of Victoria Faculty Association Scholarships  
 \$300 ..... Michael Stuart David Wilkie  
 \$200 ..... Deborah Sue Roberts  
 University of Victoria Graduate Awards  
 The R.M. Petrie Memorial Fellowship of \$6,000 .. Peter Charles Dawson  
 The Lewis J. Clarke Memorial Fellowship of \$5,400 ..... Yee-Hing Lai  
 Fellowships - \$3,600 plus \$1,200 each ..... Grace Vera Alexander  
 Frederic Scott Andison  
 Willem Anker  
 Patricia Diane Beatty-Guenter  
 Stuart Aubrey Beaveridge  
 Thomas Cyril Bennett  
 Jeri Kay Bentley  
 Michael James J. Boucher  
 Alexander Gibson Briggs  
 James Frederick P. Bugslag  
 Kevin Floyd Burr  
 Gee Hung Chan  
 Jonathan M. Charteris-Black  
 Jung Helen Chiang  
 Michael J. Coates  
 Molly Elaine Coffey  
 Steven Cotton  
 Leslie Allan Dawn  
 Donald Thomas Eadie  
 Michael John Eccles  
 Dorothy Edgell  
 Virginia Lee Ehrman  
 Daniel John Grant  
 Paul Charles Harley  
 Brian John Harvey  
 Garry John Heard  
 Lalitha Henderson  
 Walter Thomas Hindemit  
 David Wesley Hobill  
 Lokanathan Mahadevan Iyer  
 Sheila Mary Keeble  
 Wen Lai  
 Yee-Hing Lai  
 Margaret Robin Laurence  
 James Eric Low  
 Steven Michael Lucas  
 David Keith MacIntyre  
 Ramanathan Mahadevan  
 Victoria Lynn MacPherson  
 Barbara Marilyn McCall  
 Claudia Eileen Mills  
 Ludwig Mueller  
 Roberta Jane Pazdro  
 Joseph William Percival  
 June Anne Pritchard  
 Paul Francis Rice  
 Irene Elaine Robertson  
 Robert Sinclair Sarracino  
 George A.K. Saunders  
 Miriam Hilary Skelker  
 Lindsay Graham Smith  
 Roberta Cunningham Stevenson  
 David John Tozer  
 Rebecca Arrieta Vermeer  
 Richard Burton Volet  
 John Hugh Ward  
 Margaret Mary Whitehead  
 Roy Allen Wiebe  
 Kathleen Diane Willis  
 Peter John Wilson  
 Patricia Ann Wright  
 Adelle Zannet Hatch  
 Thomas Zannias  
 Fellowships - \$1,800 each ..... Allan James Castledin  
 Gaye Diane Sweet

Leon J. Ladner B.C. History Scholarship for the best M.A. Thesis  
 on the History of B.C. of \$300 each ..... No Award  
 University of Victoria Science Fair  
 Award of \$50 ..... W.N. Caleb Small  
 University Women's Club Scholarship of \$200 ..... Wendy Louise Seward  
 Vancouver Island Real Estate Board Bursary  
 of \$500 ..... Brent Boerlage  
 Victoria Central Lions Club — Dr. G.C. Carl Award  
 of \$150 ..... Cheryl Reta Mason  
 Victoria Central Lions Club — Millard H. Mooney Fine Arts  
 Bursary of \$150 ..... Sydney Elaine Condrashoff  
 The Victoria Centre of the Royal Astronomical  
 Society of Canada Book Prize ..... No Award  
 The Victoria Council United Commercial Travellers of America  
 Scholarship of \$100 ..... Nona Lynne Avren  
 The Victoria Medical Society Bursary of \$500 ..... Nancy Elizabeth Barker  
 The Victoria Medical Society Scholarship of \$500 ..... James Forbes Howie  
 Victoria Municipal Chapter, I.O.D.E. Scholarship of \$100 each  
 Canadian History ..... Gerd R. Steinke  
 General Proficiency ..... Wendy Seward  
 Victoria Natural History Society Scholarship  
 of \$200 ..... Howard Allan Wightman  
 Victoria Real Estate Board Awards  
 Scholarship of \$500 ..... Winona Maureen Hobbs  
 Bursary of \$500 ..... Helen Norma Saunders  
 \*The Victoria Unit of National Council of Jewish Women  
 Book Prize ..... Ronald G. Woitas  
 \*The R.T. Wallace Scholarship of \$900 ..... Derek Dart Ming Chu  
 \*The Weber Memorial Bursary of \$125 ..... Richard Alfred Bradshaw  
 \*The Carl Weisselberger Memorial  
 Book Prize ..... Annemarie Hartmann  
 \*The Westad Scholarship of \$350 ..... Harry Sue Wah Joe  
 The Weston Bakeries, Limited, Scholarship of \$250 ... Roger Philip Neate  
 \*The Christopher E. Wilks Memorial Bursary Fund  
 of \$582 each ..... Jacqueline L. Majors  
 Robert Michael Milloy  
 \*The J.B. Wood Prize in Russian ..... Wenceslas Henry J. Stepanek  
 The Ann Teresa Woods Book Prize  
 in Philosophy ..... Philip J. Burrowes  
 Michael Harold Jones  
 The Woods Trust Scholarships of  
 \$300 each ..... Robert Vick Farley  
 Harry Sue Wah Joe  
 Wendy Louise Rankin  
 Elizabeth Helen Rhoades  
 Sheri Jeannette Robertson  
 Norman Jed Schroeder  
 Rosemary Williams  
 Jeffrey Alan Zelt  
 The Woodward Stores, Limited, Scholarship  
 of \$250 ..... Ralph Dudley Watts  
 The Xi Nu Chapter, Beta Sigma Phi Sorority Annual Bursary  
 of \$50 ..... Jennifer Brown Tedlie  
 Yorkshire Trust Company Scholarship of \$175 ..... Peter Henry Kappel  
 The Rosalind W. Young Scholarship of \$200 ..... Diane Linda Stringer  
 Government of the Socialist Republic of Yugoslavia  
 Book Prize ..... Wright Thompson

# UNIVERSITY OF VICTORIA

## VISITOR

The Honourable Walter Stewart Owen, Q.C., LL.D., Lieutenant-Governor of the Province of British Columbia.

## CHANCELLOR

Robert T. D. Wallace, B.A., M.A., LL.D.

## PRESIDENT AND VICE-CHANCELLOR

Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., F.R.S.C.

## VICE-PRESIDENT

K. George Pedersen, B.A., M.A., Ph.D., F.C.C.T.

## OFFICERS OF CONVOCATION

Robert T. D. Wallace, B.A., M.A., LL.D., Chancellor (Chairman, ex officio).  
Ron J. Ferry, B.A., Registrar (Secretary, ex officio).

## BOARD OF GOVERNORS

### Ex Officio Members:

Robert T. D. Wallace, B.A., M.A., LL.D., Chancellor.  
Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., F.R.S.C., President.

### Members Appointed by the Lieutenant-Governor in Council:

S. Joseph Cunliffe, B.A.Sc., P.Eng. (Chairman). Term expires March 31, 1978.  
William K. Gwyer, B.A.Sc., Civil E. Term expires March 31, 1978.  
Alexander M. Hall, B.S.A., P.Ag. Term expires March 31, 1978.  
Terry Huberts, D.V.M. Term expires March 31, 1978.  
Heather Nicol. Term expires March 31, 1978.  
H. James Portelance, B.A., M.D. Term expires March 31, 1978.  
Hugh R. Stephen. Term expires March 31, 1978.  
Ian H. Stewart, B.A., LL.B. Term expires March 31, 1978.

### Members Elected by the Faculty Members:

Izzud-Din Pal, B.A., M.A., M.Sc., Ph.D. Term expires May 31, 1978.  
Rodney T. K. Symington, B.A., Dip. Ed., Ph.D. Term expires May 31, 1978.

### Members elected by the Student Association:

Mela S. Sangha. Term expires May 31, 1978.  
Clayton Shold. Term expires May 31, 1978.

### Member Elected by Employees:

Alfred R. Lee. Term expires May 31, 1978.

### Secretary:

Ron J. Ferry, B.A.

## SENATE

### Ex Officio Members:

Robert T. D. Wallace, B.A., M.A., LL.D., Chancellor.  
Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., F.R.S.C., President (Chairman).  
K. George Pedersen, B.A., M.A., Ph.D., F.C.C.T., Vice-President.  
Izzud-Din Pal, B.A., M.A., M.Sc., Ph.D., Acting Dean, Faculty of Arts and Science (1977-78).  
Norma I. Mickelson, B.Ed., M.A., Ph.D., Dean, Faculty of Education.  
Peter L. Smith, B.A., M.A., Ph.D., Dean, Faculty of Fine Arts  
John M. Dewey, B.Sc., Ph.D., Dean, Faculty of Graduate Studies.  
John M. Dewey, B.Sc., Ph.D., Acting Dean, Faculty of Human and Social Development (to June 30, 1978).  
F. Murray Fraser, B.A., LL.B., LL.M., Dean, Faculty of Law.  
(Vice-Chairman).

Dean W. Halliwell, M.A., B.L.S., University Librarian.  
Laurence E. Devlin, B.Ed., M.A., Ph.D., Director, Continuing Education.

### Members Elected by the Individual Faculties:

#### Arts and Science:

Richard J. Powers, B.A., M.A., Ph.D. Term expires June 30, 1978.  
Rodney T. K. Symington, B.A., Ph.D. Term expires June 30, 1980.

#### Education:

Bruce L. Howe, B.S., M.S., Ph.D. Term expires June 30, 1978.  
Roger A. Ruth, B.S., M.S., Ph.D. Term expires June 30, 1978.

#### Fine Arts:

Pat Martin Bates, R.C.A. Term expires June 30, 1978.  
Giles W. Hogya, B.A., M.A., Ph.D. Term expires June 30, 1980.

#### Graduate Studies:

Walter M. Barss, B.A., M.A., Ph.D. Term expires June 30, 1978.  
David J. Chabassol, B.A., B.Ed., M.Ed., Ph.D. Term expires June 30, 1980.

#### Human and Social Development:

Isabel MacRae, B.S., M.A., Ph.D. Term expires June 30, 1980.  
Brian Wharf, B.A., B.S.W., M.S.W., Ph.D. Term expires June 30, 1980.

#### Law:

Ronald I. Cheffins, B.A., LL.B., LL.M. Term expires June 30, 1978.  
Lyman R. Robinson, B.A., LL.B., LL.M. Term expires June 30, 1980.

### Members Elected by the Faculty Members:

Alex Bavelas, B.S., M.A., Ph.D. Term expires June 30, 1980.  
Michael R. Best, B.A., Ph.D. Term expires June 30, 1978.  
John L. Climenhaga, B.A., M.A., Ph.D. Term expires June 30, 1980.  
George W. Corwin, B.S., M.A., D.M.A. Term expires June 30, 1979.  
Gerhart B. Friedmann, B.Sc., M.A., Ph.D. Term expires June 30, 1979.  
Sydney W. Jackman, B.S., M.A., A.M., Ph.D. Term expires June 30, 1980.  
Reginald H. Mitchell, B.A., M.A., Ph.D. Term expires June 30, 1978.  
Frank P. Robinson, A.B., Ph.D. Term expires June 30, 1979.  
John A. Schofield, B.A., M.B.A., M.A., Ph.D. Term expires June 30, 1979.  
Neil A. Swainson, B.Ed., B.A., M.A., Ph.D. Term expires June 30, 1978.

### Members Elected by the Student Association:

Saverio Colantonio (replacing Warren B. Miller). Term expires June 30, 1978.  
Philip Dearden, B.A. Term expires June 30, 1978.  
E. Paula DeBeck (replacing Donald E. Schmidt). Term expires June 30, 1978.  
R. C. (Tino) Di Bella, B.A. Term expires June 30, 1978.  
N. Victoria Gray. Term expires June 30, 1978.  
Elizabeth M. Hanan. Term expires June 30, 1978.  
Peter H. Kappel. Term expires June 30, 1978.  
Chris D. Main. Term expires June 30, 1978.  
Mark A. Shaw, B.A. Term expires June 30, 1978.  
Susan M. Soper. Term expires June 30, 1978.  
Robert L. Thompson. Term expires June 30, 1978.

### Member Elected by the Part-time Students:

W. A. (Bert) Hick, B.A. Term expires November 30, 1978.

### Members Elected by the Convocation:

David H. Dunsmuir, B.A., M.A. Term Expires December 31, 1978.  
Jeffrey B. Green, B.A., LL.B. Term expires December 31, 1978.  
June G. Thomson, B.A., M.A., B.L.S. Term expires December 31, 1978.  
Kenneth O. Wright, B.A., M.A., Ph.D. D.Sc. (hon.). Term expires December 31, 1978.

### Members Appointed by the Lieutenant-Governor in Council:

Barbara G. Corry, R.T., B.Sc., M.Sc. Term expires April 30, 1978.  
Winnifred B. Life. Term expires April 30, 1978.  
Dorothy Livingston, B.Sc., B.S.W. Term expires April 30, 1978.  
Faith E. Lort, B.A., B.L.S. Term expires April 30, 1978.

### Secretary of Senate (ex officio):

Ron J. Ferry, B.A., Registrar.

## EMERITI AND HONORARY DEGREE RECIPIENTS

### PROFESSORS EMERITI

Roger J. Bishop, B.A., B.L.S., M.A., Professor Emeritus of English.  
 George A. Brand, B.A., M.Ed., Professor Emeritus of Education.  
 C. Vyner Brooke, B.A., A.M., Ph.D., Professor Emeritus of Spanish.  
 Kathleen M. Christie, B.A., M.A., Professor Emerita of Education.  
 Hugh E. Farquhar, M.A., Ph.D., Professor Emeritus of Education.  
 W. Gordon Fields, B.A., A.M., Ph.D., Professor Emeritus of Biology.  
 W. Harry Hickman, B.A., M.A., Docteur de l'Université de Paris, Professor Emeritus of French.  
 Albion Wilfrid Johns, B.A., Professor Emeritus of Education.  
 Frederick Kriegel, 2nd State Cert., Vienna, Professor Emeritus of German.  
 Donald J. MacLaurin, B.A.Sc., M.S., Ph.D., Professor Emeritus of Chemistry.  
 J. Beattie MacLean, B.A., M.A., Ph.D., Professor Emeritus of German.  
 Sydney G. Pettit, M.A., Professor Emeritus of History.  
 Bérange B. Steel, L. ès L., Professor Emerita of French.  
 Jean-Paul Vinay, L.ès L., M.A. Agrégé de l'Université de France, Officier d'Académie, D.Litt., F.R.S.C., Professor Emeritus of Linguistics.  
 Robert T. D. Wallace, M.A., LL.D., Professor Emeritus of Mathematics.

### HONORARY DEGREE RECIPIENTS

\*Charles Johnstone Armstrong, May 1961.  
 \*Rosalind W. Young, May 1961.  
 Jeffrey Aikin Cunningham, May 1964.  
 Walter Charles Koerner, November 1964.  
 W. Kaye Lamb, November 1964.  
 H. Rocke Robertson, November 1964.  
 Louis-Albert Vachon, November 1964.  
 Bristow Guy Ballard, May 1965.  
 Thomas Rice Henn, May 1965.  
 Robert Wellington Mayhew, May 1965.  
 George Randolph Pearkes, May 1965.  
 Joseph Badenock Clearihue, May 1966.

Leon Johnson Ladner, May 1966.  
 Phyllis Gregory Ross, May 1966.  
 William Andrew Cecil Bennett, May 1966.  
 Donald Grant Creighton, May 1967.  
 Norman Alexander Robertson, May 1967.  
 Joseph Roberts Smallwood, May 1967.  
 Cyril J. Berkeley, May 1968.  
 George Forrester Davidson, May 1968.  
 William Bruce Hutchison, May 1968.  
 Constance Blytha Pearkes, May 1968.  
 George Woodcock, May 1968.  
 C. Northrop Frye, May 1969.  
 Sir Edmund Hillary, May 1969.  
 His Royal Highness The Prince Philip, Duke of Edinburgh, November 1969.  
 Christopher Tunnard, May 1970.  
 George Charles Clutesi, May 1971.  
 Richard Biggerstaff Wilson, May 1971.  
 Jean Sutherland Boggs, May 1972.  
 Sir Hugh Springer, May 1972.  
 Robert Thomas Duff Wallace, May 1972.  
 Margaret Jean Clay, May 1973.  
 George Max Antony Grube, May 1973.  
 Jack Leonard Shadbolt, May 1973.  
 Walter Henry Gage, May 1974.  
 Sir Charles Wright, May 1974.  
 Wilfrid Bennett Lewis, May 1975.  
 Edmund Herman Lohbrunner, May 1975.  
 Daniel Marshall Gordon, April 1976.  
 Bora Laskin, April 1976.  
 William Ralph Lederman, April 1976.  
 Nathan Theodore Nemetz, April 1976.  
 Donald Olding Hebb, May 1976.  
 Margaret Anchoretta Ormsby, May 1976.  
 Eugène Vinaver, May 1976.  
 Harry Emmet Gunning, May 1977.  
 William Arthur Irwin, May 1977.

# STATISTICS

## ENROLMENT 1977-78 AS OF DECEMBER 1, 1977

(Figures for 1976-77 are in brackets)

### Faculty of Arts and Sciences — Full Time\*

First Year .....	1195(1016)
Second Year .....	789 (848)
Third Year .....	648 (661)
Fourth Year .....	489 (492)
Unclassified as to year .....	56 (72)
Total in Faculty .....	3177(3089)

### Faculty of Education — Full Time\*

#### Elementary:

First Year .....	17 (160)
Second Year .....	170 (201)
Third Year .....	231 (251)
Fourth Year .....	78 (81)
Fifth Year .....	33 (28)
Diploma Programme .....	45 (50)
Post B.Ed. Degree (Elem.) 5th Year Programme .....	0 (0)
Unclassified as to year .....	1 (0)

#### Secondary:

First Year .....	52 (132)
Second Year .....	101 (110)
Third Year .....	88 (105)
Fourth Year .....	78 (50)
Fifth Year .....	45 (51)
Diploma Programme .....	66 (96)
Unclassified as to year .....	0 (1)
Special Students .....	21 (27)
Total in Faculty .....	1026(1343)

### Faculty of Fine Arts — Full Time\*

First Year .....	106 (108)
Second Year .....	110 (119)
Third Year .....	87 (102)
Fourth Year .....	89 (74)
Unclassified as to year .....	4 (6)
Total in Faculty .....	396 (409)

### Faculty of Human and Social Development — Full Time\*

First Year .....	0 (0)
Second Year .....	18 (26)
Third Year .....	88 (84)
Fourth Year .....	58 (24)
Unclassified as to year .....	2 (3)
Total in Faculty .....	166 (137)

### Faculty of Law:

First Year .....	67 (44)
Second Year .....	41 (69)
Third Year .....	67 (0)
Total in Faculty .....	175 (113)

Total full-time undergraduates*	4940(5091)
Total part-time undergraduates .....	1954(1784)
Total Undergraduates .....	6894(6875)

\*Undergraduates registered in 12 units or more.

### Faculty of Graduate Studies:

Full-time .....	223 (255)
Part-time .....	192 (240)
Total in Faculty .....	415 (495)

### School of Public Administration:

Full-time .....	39 (24)
Part-time .....	60 (66)
Total in School .....	99 (90)
Total Graduates .....	514 (585)
Grand Total .....	7408(7460)

### FULL-TIME STUDENTS OF NON-B.C. ORIGIN 1977-78

Determined by location of previous educational institution attended.  
(Figures for 1976-77 are in brackets.)

Alberta .....	216 (234)
Saskatchewan .....	56 (50)
Manitoba .....	41 (19)
Ontario .....	220 (212)
Quebec .....	48 (48)
New Brunswick .....	2 (5)
Nova Scotia .....	19 (14)
Prince Edward Island .....	4 (3)
Newfoundland .....	4 (3)
Yukon .....	17 (14)
Northwest Territories .....	1 (0)
Other countries .....	206 (259)
	834 (870)

### DEGREES CONFERRED MAY 1977

B.A. — 395; B.Ed. — 243; B.F.A. — 44; B.Mus. — 22; B.Sc. — 190; M.A. — 50; M.Ed. — 48; M.Mus. — 1; M.P.A. — 8; M.Sc. — 13; Ph.D. — 5. TOTAL — 1019.

### BUILDINGS ON THE UNIVERSITY CAMPUS

Student Union Building (1962) addition (1976)	Cornett Building (1966)
Clearihue Building (1962)	Sir Arthur Currie Hall (1967)
Classroom-Office Extension (1971)	David Thompson Hall (1967)
Third Wing (1976)	Sedgewick Building (1968) additions (1969, 1970)
Elliott Building (1963)	Lansdowne Residence Buildings (1969)
Lecture Wing (1964)	Cunningham Building (1971)
Emily Carr Hall (1964)	Saunders Building (1974)
Margaret Newton Hall (1964)	McKinnon Building (1975)
McPherson Library (1964) addition (1973)	University Centre (1978)
Campus Services Building (1965)	Residences - addition (1978)
MacLaurin Building (1966)	

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# To All and Singular

to whom these Presents shall come the Honourable Sir George Rothe Pellett Knight Commander of the Royal Victorian Order, Garter Principal King of Arms, Sir John Lubbock Baronet, Knight, Member of the Royal Victorian Order, Clarenceux King of Arms and Sir Henry John Teppin Esquire, Member of the Royal Victorian Order, Norroy and Ulster King of Arms, Lord Greeting.

**Whereas**

Joseph Badenoch Clearihue Esquire, upon whom have been conferred the Decoration of the Military Cross and the Canadian Efficiency Decoration, Doctor of Laws, Master of Arts and Bachelor of Civil Law of the University of McGill and Master of Arts of the University of Oxford, a Judge of the County Court of Victoria in the Province of British Columbia, Canada, Chairman of the Board of Governors of Victoria College in the said Province, hath represented unto the Most Noble Bernard Marmaduke Duke of Norfolk, Knight of the Most Noble Order of the Garter, Knight Grand Cross of the Royal Victorian Order, Earl, Marshal and Hereditary Marshal of England and One of Her Majesty's Most Honourable Privy Council that Victoria College was founded on the twenty fourth day of July 1902 and was created a second institution of higher learning in that Province affiliated with the University of British Columbia by the Victoria College Act of the British Columbia Legislature dated the fifteenth day of March 1905. And that the Board of Governors of the said College is desirous of having Armorial Ensigns duly assigned for Victoria College with lawful authority, and he therefore as Chairman and on behalf of the said Board of Governors, hath requested the favour of His Grace's Warrant for Our granting and assigning such Armorial Bearings as may be proper to be borne and used for Victoria College on Seals or otherwise according to the Laws of Arms And whereas the said Earl, Marshal did by Warrant under his hand and seal bearing date the fifteenth day of February instant authorize and direct Us to grant and assign such Armorial Bearings accordingly. Know ye therefore that We the said Garter, Clarenceux and Norroy and Ulster in pursuance of His Grace's Warrant and by virtue of the Letters Patent of Our several Officers to each of Us respectively granted do by these Presents grant and assign the Arms following for Victoria College that is to say



a Torch erect Or enflamed also proper irradiated Gold and ensigned with a Scroll Argent thereon the Hebrew characters **אור** (Let there be light) Azure as the same are in the margin hereof more plainly depicted to be borne and used for ever hereafter for Victoria College on Seals or otherwise according to the Laws of Arms. In witness whereof We the said Garter, Clarenceux and Norroy and Ulster Kings of Arms have to these Presents subscribed Our names and affixed the Seals of Our several Officers this twentieth day of February in the tenth year of the Reign of Our Sovereign Lady Elizabeth the Second by the Grace of God of the United Kingdom of Great Britain and Northern Ireland and of Her other Realms and Territories, Queen, Head of the Commonwealth, Defender of the Faith and in the year of Our Lord One thousand nine hundred and sixty-one.

G. R. Pellett, Garter. J. A. Lubbock, Clarenceux. Henry J. Teppin, Norroy and Ulster

