

UNIVERSITY OF VICTORIA

Calendar

1972-73

DIRECTORY OF CORRESPONDENCE

Letters of inquiry concerning the University in general should be addressed to the Registrar, University of Victoria, Box 1700, Victoria, British Columbia.

Letters of inquiry in regard to the following specific matters should be addressed to the officer shown.

ADMISSIONS

Undergraduate:

New Admissions — Director of Admissions

Re-admissions — Registrar

Graduate:

Dean, Faculty of Graduate Studies

ADVISING

Arts and Science: Director of Academic Advising, Faculty of Arts and Science

Education: Director, Advising Centre, Faculty of Education

AWARDS and FINANCIAL AID

Financial Aid Officer

BOOKSTORE

The Manager, Bookstore

COLLEGES (Membership)

Master of Lansdowne College

Master of Craigdarroch College

CONTINUING EDUCATION

Director, Division of Continuing Education

COUNSELLING

Director, Counselling Centre

HEALTH SERVICES

Director, Student Health Services

HOUSING SERVICES

Manager, Housing Services

STUDENT UNION BUILDING

Manager, Student Union Building

SUMMER SESSION

Director, Summer Session

TRAFFIC and SECURITY

Supervisor of Traffic and Security

UNIVERSITY TRANSCRIPTS

Registrar

OFFICE HOURS

The offices of the University are open throughout the Winter Session from 8:30 a.m. to 4:45 p.m., Monday to Friday, except on statutory and University holidays. From April 1 to September 1 the offices close at 4:30 p.m.

ERRATUM

Page 64, paragraph 1, lines 16 and 17 should read: No registration will be valid unless all required procedures have been completed and fees have been paid in accordance with the regulations given on page 76.

DIRECTORY OF CORRESPONDENCE

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UNIVERSITY OF VICTORIA

VICTORIA, BRITISH COLUMBIA, CANADA

Calendar *1972-73*

The **University of Victoria** is constituted under the terms of the Universities Act (Bill number 63, 1963). This Act provides for the establishment of Convocation, the Board of Governors, the Senate, the Faculty Council, and the Faculties. It 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.

1972

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
30	31				1			1	2	3	4	5				1	2	3	4		30					1	
2	3	4	5	6	7	8	6	7	8	9	10	11	12	5	6	7	8	9	10	11	2	3	4	5	6	7	8
9	10	11	12	13	14	15	13	14	15	16	17	18	19	12	13	14	15	16	17	18	9	10	11	12	13	14	15
16	17	18	19	20	21	22	20	21	22	23	24	25	26	19	20	21	22	23	24	25	16	17	18	19	20	21	22
23	24	25	26	27	28	29	27	28	29					26	27	28	29	30	31	23	24	25	26	27	28	29	
MAY							JUNE							JULY							AUGUST						
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21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30	31		
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
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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3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		24	25	26	27	28	29	30	

1973

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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14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31	29	30					
MAY							JUNE							JULY							AUGUST						
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
	1	2	3	4	5				1	2			1	2	3	4	5	6	7			1	2	3	4		
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				26	27	28	29	30	31		
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
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
30					1		1	2	3	4	5	6			1	2	3		30	31					1		
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	23	24	25	26	27	28	29	

ACADEMIC YEAR 1972-73

<i>Day</i>	<i>Date</i>	<i>Item</i>	<i>1972</i>
Friday	30 June	Last day for submission of applications for re-registration in September 1972 in undergraduate Faculties by returning students.	
Friday	30 June	Last day for submission of applications for admission by students transferring from B.C. colleges.	
Saturday	1 July	Academic Year 1972-73 begins.	
Saturday	1 July	Dominion Day.	
Monday	3 July	Fee for late submission of applications for students mentioned in June 30 entry becomes effective at 12:00 noon.	
Monday	3 July	Summer Session 1972.	
Friday	18 Aug.		
Tuesday	1 Aug.	Supplemental examinations for Winter Session 1971-72.	
Friday	4 Aug.		
Tuesday	1 Aug.	Last day for submission of applications by all students not mentioned above under June 30 entry who are seeking admission to undergraduate Faculties in September 1972.	
Wednesday	2 Aug.	Fee for late submission of applications for admission for students mentioned in August 1 entry becomes effective at 12:00 noon.	
Monday	4 Sept.	Labour Day.	
Tuesday	5 Sept.	Registration in person in all Faculties. Details of place and time are mailed to all students receiving notice of admission or authorization to re-register in September 1972.	
Saturday	9 Sept.		
Monday	11 Sept.	First term classes begin. Fee for late registration becomes effective.	
Monday	11 Sept.	First day of two-week period for changing courses which begin in the first term.	
Wednesday	13 Sept.	Senate meets.	
Friday	15 Sept.	Last day of 5-day period for late registration.	
Monday	18 Sept.	Board of Governors meets.	
Friday	22 Sept.	Last day of period for changing courses which begin in the first term. All changes must be reported to the Registrar's Office by 4:00 p.m. on this date.	
Monday	9 Oct.	Thanksgiving Day.	
Wednesday	11 Oct.	Senate meets.	
Monday	16 Oct.	Board of Governors meets.	
Friday	27 Oct.	Academic Assembly.	
Tuesday	31 Oct.	Last day for dropping first term courses without penalty of failure.	
Wednesday	8 Nov.	Senate meets.	
Thursday	9 Nov.	Reading Break. Classes cancelled. University open.	
Friday	10 Nov.		
Saturday	11 Nov.	Remembrance Day.	
Wednesday	15 Nov.	Last day for submission of applications from third and fourth year students seeking to register in second term courses.	

<i>Day</i>	<i>Date</i>	<i>Item</i>
Monday	20 Nov.	Board of Governors meets.
Thursday	7 Dec.	Last day of classes in the first term.
Monday	11 Dec.	First term examinations begin.
Wednesday	13 Dec.	Senate meets.
Monday	18 Dec.	Board of Governors meets.
Tuesday	19 Dec.	First term examinations end.
Monday	25 Dec.	Christmas Day.
Tuesday	26 Dec.	Boxing Day.

1973

Monday	1 Jan.	New Year's Day.
Monday	8 Jan.	Second Term classes begin.
Monday	8 Jan.	Registration in person in all Faculties for third and fourth year students receiving authorization to register or re-register in courses beginning in the second term.
Friday	12 Jan.	Last day for changing courses which begin in the second term. All changes must be reported to the Registrar's Office by 4:00 p.m. on this date.
Monday	15 Jan.	Board of Governors meets.
Wednesday	17 Jan.	Senate meets.
Wednesday	14 Feb.	Senate meets.
Monday	19 Feb.	Board of Governors meets.
Thursday	22 Feb. through	Reading Break. Classes cancelled. University open.
Friday	23 Feb.	
Wednesday	28 Feb.	Last day for dropping full year and second term courses without penalty of failure.
Wednesday	14 Mar.	Senate meets.
Monday	19 Mar.	Board of Governors meets.
Wednesday	4 Apr.	Last day of classes in the second term.
Monday	9 Apr.	Examinations begin.
Wednesday	11 Apr.	Senate meets.
Monday	16 Apr.	Board of Governors meets.
Friday	20 Apr.	Good Friday.
Monday	23 Apr.	Easter Monday.
Saturday	28 Apr.	Examinations end.
Thursday	17 May	Senate meets (tentative).
Monday	21 May	Victoria Day.
Tuesday	22 May	Board of Governors meets.
Saturday	26 May	Convocation.
Monday	18 June	Board of Governors meets.
Saturday	30 June	Academic Year 1972-73 ends.

UNIVERSITY OF VICTORIA

BOARD OF GOVERNORS

Ex Officio:

The Chancellor.
The President.

Appointed by the Lieutenant-Governor in Council:

Lloyd G. McKenzie, Q.C., B.A., LL.B. (Chairman). Term expires October 31, 1972.
Gilbert F. Auchinleck, B.A.Sc. Term expires June 30, 1974.
S. J. Cunliffe. Term expires November 18, 1974.
David Angus. Term expires October 30, 1973.
Justin V. Harbord. Term expires October 31, 1972.
Hershell A. Smith. Term expires October 31, 1972.

Elected by the Senate:

C. Hilary Butler, B.A., M.A. Term expires December 31, 1972.
Charles Gregory, M.B., Ch.B., Cert. in Psych. R.C.P.S. Term expires December 31, 1972.
Alexander M. Hall, B.S.A., P.Ag. Term expires December 31, 1972.

Secretary:

J. Trevor Matthews, B.A., M.B.A.

SENATE

Ex Officio:

The Chancellor.
The President (Chairman).
The Deans of the Faculties.
The University Librarian.

Appointed by the Senate:

Dean of Administration.
Dean of College and Student Affairs.

Elected by the Faculties:

Olivier M. Abrioux, L. ès L., D.E.S., Ph.D. (Arts and Science). Term expires June 30, 1975.
Robert D. Armstrong, B.Ed., B.A., M.Ed., Ed.D. (Education). Term expires June 30, 1975.
Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (Fine Arts). Term expires June 30, 1975.
Jean-Paul Vinay, L. ès L., D.E.S., M.A., Agrégé de l'Université de France, officier d'Académie, F.R.S.C. (Graduate Studies). Term expires June 30, 1973.

Elected by the Joint Faculties:

Sydney W. Jackman, B.S., M.A., A.M., Ph.D. Term expires June 30, 1974.
J. Beattie MacLean, B.A., M.A., Ph.D. Term expires June 30, 1974.
Richard J. Powers, M.A., Ph.D. Term expires June 30, 1974.
Kenneth W. Rankin, M.A., Ph.D. Term expires June 30, 1974.
Reginald H. Roy, B.A., M.A., Ph.D. Term expires June 30, 1974.
Leo I. Bakony, B.A., Ph.D. Term expires June 30, 1973.
David J. Chabassol, B.A., B.Ed., M.Ed., Ph.D. Term expires June 30, 1973.
Burton O. Kurth, B.A., Ph.D. Term expires June 30, 1973.
Kenneth C. Moss, B.Sc., A.R.C.S., D.I.C., Ph.D. Term expires June 30, 1973.
Alexander D. Kirk, B.Sc., Ph.D. Term expires June 30, 1973.
Gordon C. Hobson, B.A., M.A., Ph.D. Term expires June 30, 1972.

William R. Gordon, M.A., Ph.D. Term expires June 30, 1972.
T. Rennie Warburton, B.A., Ph.D. Term expires June 30, 1972.

Elected by the Alma Mater Society:

Robert A. Higinbotham. Term expires September 30, 1972.
Derry A. McDonell. Term expires September 30, 1972.

Elected by the Graduate Students' Society:

David H. Dunsmuir, B.A. Term expires September 30, 1972.

Elected by the Convocation:

C. Hilary Butler, B.A., M.A. Term expires December 31, 1972.
J. David N. Edgar, B.Com., LL.B. Term expires December 31, 1972.
Charles Gregory, M.B., Ch.B., Cert. in Psych. R.C.P.S. Term expires December 31, 1972.
Alexander M. Hall, B.S.A., P.Ag. Term expires December 31, 1972.
Eugene M. Johnson, B.A., LL.B. Term expires December 31, 1972.
J. David T. Price, B.Ed., M.Ed. Term expires December 31, 1972.

Appointed by the Lieutenant-Governor in Council:

N. D. Cameron, B.A. Term expires August 31, 1972.
G. F. Homer, M.D., F.R.C.S. (Eng.). Term expires August 31, 1972.
F. A. Hamdi, M.D., Ph.D. Term expires October 30, 1973.
Mrs. G. H. Wheaton. Term expires October 30, 1973.

Secretary of Senate:

The Registrar (*ex officio*).

VISITOR

The Honourable John Robert Nicholson, P.C., O.B.E., LL.D., LL.B., Lieutenant-Governor of the Province of British Columbia.

CHANCELLOR

Roderick L. Haig-Brown, LL.D.

PRESIDENT

Hugh E. Farquhar, M.A., Ph.D., President (pro tem.).

OFFICERS OF CONVOCATION

The Chancellor (Chairman).

The Registrar (Secretary).

VICE-PRESIDENTS

D. J. MacLaurin, B.A.Sc., M.S., Ph.D., P.Eng., Vice-President (Academic) (pro tem.).

Vice-President (Admin.) and Dean of Administration, appointment pending.

DEANS AND OTHER SENIOR ADMINISTRATIVE OFFICERS

Dean, Faculty of Fine Arts, appointment pending.

Dean, Faculty of Graduate Studies, appointment pending.

James E. Currie, B.Com., M.B.A., Executive Assistant to the President.

Ron J. P. Ferry, B.A., Registrar.

William R. Gordon, B.A., M.A., Ph.D., Assistant Dean of the Faculty of Arts and Science.

Dean W. Halliwell, M.A., B.L.S., University Librarian.

Ronald R. Jeffels, C.D., B.A., B.Ed., M.A., Director of Admissions.

J. Trevor Matthews, B.A., M.B.A., Secretary, Board of Governors, Director of Institutional Research.

Robert W. McQueen, B.Com., C.A., Bursar.

K. George Pedersen, B.A., M.A., Ph.D., Dean of the Faculty of Education.

Jean-Paul Vinay, L. ès L., D.E.S., M.A., Agrégé de l'Université de France, Officier d'Académie, F.R.S.C., Dean of the Faculty of Arts and Science.

ACADEMIC HEADS AND CHAIRMEN

Olivier M. Abrioux, L. ès L., D.E.S., Ph.D., Head, Department of French Language and Literature.

Leo I. Bakony, B.A., Ph.D., Chairman, Department of Economics.

Pablo Cabañas, Licenciado, Doctor en Filosofía y Letras, Head, Department of Hispanic and Italian Studies.

David A. Campbell, M.A., Chairman, Department of Classics.

Margaret E. Cumming, B.A., M.A., Ph.D., Chairman, Department of Anthropology and Sociology.

Harry W. Dosso, B.A., M.Sc., Ph.D., Head, Department of Physics.

Alfred Fischer, B.Sc., M.Sc., Ph.D., Acting Head, Department of Chemistry.

Esme N. Foord, B.A., M.A., Ed.D., Director of Academic Advising, Faculty of Arts and Science.

Charles N. Forward, B.A., M.A., Ph.D., Head, Department of Geography.

Alan Gowans, M.A., Ph.D., Chairman, Department of History in Art.

James E. Hendrickson, B.A., B.Ed., M.A., Ph.D., Head, Department of History.

Roy F. Leslie, B.A., M.A., Ph.D., Head, Department of English.

George O. Mackie, B.A., M.A., D.Phil., Chairman, Department of Biology.

J. Beattie MacLean, B.A., M.A., Ph.D., Head, Department of Germanic Languages and Literature.
R. Anne McLaughlin, Director, Advising Centre, Faculty of Education.
O. Phoebe Noble, B.A., Acting Head, Department of Mathematics.
Kenneth W. Rankin, M.A., Ph.D., Head, Department of Philosophy.
Terence M. Rickwood, B.A., Ph.D., Head, Department of Slavonic and Oriental Studies.
Stephen A. Ryce, B.A., Ph.D., Head, Department of Chemistry. (Leave of absence 1972-73.)
Otfried Spreen, Ph.D., Chairman, Department of Psychology.
Neil A. Swainson, B.A., B.Ed., M.A., Chairman, Department of Political Science.
Norman Toynton, Chairman, Department of Visual Arts.
Trevor J. Trust, B.S., M.S., Ph.D., Acting Head, Department of Bacteriology and Biochemistry.
Alex. J. Wood, B.S.A., M.S.A., Ph.D., Head, Department of Bacteriology and Biochemistry. (Leave of absence 1972-73.)
Phillip T. Young, B.A., Mus.M., Chairman, Department of Music.

FACULTY COUNCIL

Ex Officio:

The President (Chairman).
The Deans.
The University Librarian.
The Registrar (Secretary).

Elected by the Joint Faculties:

Arts

John Money, B.A., M.A., Ph.D. Term expires November 1973.
Rodney T. K. Symington. Term expires November 1972.

Science

H. Edward Tryk, B.A., M.A., Ph.D. Term expires November 1973.
Keith R. Dixon. Term expires November 1972.

Education

Henry G. Timko, B.S., M.A., Ed.D. Term expires November 1973.
R. Vance Peavy. Term expires November 1972.

Fine Arts

Robert C. Field, B.A., M.A. Term expires November 1973.

UNIVERSITY OF VICTORIA FOUNDATION

Justin V. Harbord (Chairman).
William H. Armstrong.
Roland O. Bull.
S. J. Cunliffe, B.Sc., P.Eng.
Thomas G. Denny.
Hugh E. Farquhar, M.A., Ph.D.
James R. Genge, M.A.
R. L. Haig-Brown, LL.D.
C. B. Jameson, B.Sc., D.M.D.
J. C. Scott-Harston, Q.C., B.A., M.A.
Richard B. Wilson, B.Com., LL.D.

Honorary Members:

Joseph B. Clearihue, M.C., E.D., Q.C., B.A., B.C.L., LL.D.
Robert W. Phipps.
Robert W. McQueen, B.Com., C.A. (Treasurer).

Hon. Mr. Justice Robert A. Wootton.
Floyd A. Fairclough (Secretary).

CHANCELLOR EMERITUS

Joseph B. Clearihue, M.C., E.D., Q.C., B.A., M.A., B.C.L., LL.D.

DEAN EMERITUS

Henry C. Gilliland, M.A., Dean Emeritus of Education.

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.

Jeffrey A. Cunningham, B.A., LL.D., Professor Emeritus of Zoology.

G. Reid Elliott, B.A., Ph.D., Professor Emeritus of Economics.

Sydney G. Pettit, M.A., Professor Emeritus of History.

Robert T. D. Wallace, M.A., 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.

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.

SENATE REPRESENTATIVES TO THE PROVINCIAL ACADEMIC BOARD

Edgar B. Horne, B.A.Sc., B.A., M.A., Ph.D. Term expires June 30, 1974.

Roy E. L. Watson, M.A., Ph.D. Term expires November 30, 1972.

*Under the former affiliation with the University of British Columbia.

UNIVERSITY REPRESENTATIVES TO THE JOINT BOARD OF TEACHER EDUCATION

The President, or his nominee.

Nominee, Dr. Richard H. J. Monk.

The Dean of the Faculty of Education, or his nominee.

Representative of the Senate: Fred L. Martens, B.A., B.Ed., M.S. in P.E., Ph.D. Term expires October 31, 1974.

FACULTY AND ADMINISTRATIVE PROFESSIONAL STAFF

NOTE: The University Calendar goes to press in March. In consequence, this list may be subject to some modification when the academic session begins.

- Abrioux, Olivier M., L.ès L., D.E.S. (*Paris*), Ph.D. (*Aberdeen*), Professor and Head of the Department of French Language and Literature.
- Acker, Loren, A. A., B.A., Ph.D. (*Calif., Los Angeles*), Assistant Professor, Psychology.
- Adam, Jeanne E., L. ès L. (*Toulouse*), Assistant Professor, French Lanugage and Literature.
- Adey, Lionel, B.A., M.A. (*Birmingham*), Ph.D. (*Leicester*), Assistant Professor, English.
- Alexander, Douglas A., B.Sc. (*U. of Vic.*), M.Sc. (*North Carolina*), Senior Programmer Analyst.
- Alford, Norman W., B.A. (*London*), Ph.D. (*Texas*), Assistant Professor, English. (Leave of absence 1972-73.)
- Algard, Franklin T., A.B. (*San Jose St.*), Ph.D. (*Stanford*), Associate Professor, Biology.
- Alkire, William H., B.A. (*Wash.*), M.A. (*Hawaii*), Ph.D. (*Ill.*), Associate Professor, Anthropology and Sociology.
- Allen, Robert C., B.Sc. (*U. of Vic.*), Superintendent of Systems Development, Computing Services.
- Apps, George E., B.A.Sc. (*Briti. Col.*), P. Eng., Director of Buildings and Grounds.
- Archbold, Geoffrey J. D., B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Associate Professor, Classics.
- Armstrong, Robert D., B.Ed., B.A., M.Ed. (*Alta.*), Ed.D. (*Calif.*), Associate Professor, Education.
- Ashwood-Smith, Michael J., B.Sc., M.Sc. (*Durham*), Ph.D. (*London*), Associate Professor, Biology.
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- Tweedale, Alan, B.Sc. (*Manchester*), D.Phil. (*Sussex*), Senior Programmer Analyst, Computing Services.
- Tyler, Fred T., B.Sc., M.A., M.Ed. (*Alta.*), Ph.D. (*Calif.*), Professor, Education.
- Underhill, J. Gerald G., C.D., B.Com. (*Brit. Col.*), C.A. Accountant.
- Vance, James H., B.Sc. (*Alta.*), M.A. (*Wash.*), Ph.D. (*Alta.*), Assistant Professor, Education.
- van den Driessche, Pauline, B.Sc., M.Sc. (*Imp. Coll.*), D.I.C., Ph.D. (*Wales*), Assistant Professor, Mathematics.
- Van der Voort, S. Ann, B.A. (*Queen's*), A.R.C.T. (*Tor.*), L.R.S.M. (*London*), B.L.S. (*Tor.*), Head, Acquisitions Division, Library.
- Vaughan, Margery M., L.R.S.M. (*Royal School of Mus.*), Mus.G. (*West. Ont.*), Mus. Bac. (*Tor.*), M.Litt. (*Durham*), Ph.D. (*U. of Georgia*), Assistant Professor, Education.
- Viesti, Jr., Carl R., B.A. (*Catholic U. of America*), M.S. (*Bridgeport*), Ph.D. (*Ore.*), Assistant Professor, Education.
- Vinay, Jean-Paul, L. ès L., D.E.S. (*Paris*), M.A. (*London*), Agrégé de l'Université de France, Officier d'Académie, F.R.S.C., Professor, Linguistics and Dean of the Faculty of Arts and Science.
- Wainman-Wood, E. Patricia, B.A. (*Queen's*), Lecturer, Theatre.
- Walker, David R. T., B.A. (*U. of Vic.*), M.A. (*Iowa*), Lecturer, Psychology.
- Wallach, Bret, A.B., M.A., Ph.D. (*Calif.*), Assistant Professor, Geography.
- Wallis, Bruce E., B.A. (*Rutgers*), M.A. (*Harvard*), Ph.D. (*Princeton*), Assistant Professor, English.
- Walsh, William D., B.Com. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Assistant Professor, Economics.
- Walter, Gerald R., B.A., M.A., Ph.D. (*Calif.*), Assistant Professor, Economics.
- Walters, Jennifer R., B.A. (*London*), L. ès L. (*Lille*), Ph.D. (*London*), Assistant Professor, French Language and Literature.
- Warburton, T. Rennie, B.A. (*Leeds*), Ph.D. (*London*), Associate Professor, Anthropology and Sociology.
- Ward, James, B.A. (*Sheffield*), Ph.D. (*Manchester*), Associate Professor, Education.
- Warkentyne, Henry J., B.A. (*West. Ont.*), M.A., Ph.D. (*London*), Assistant Professor, Linguistics.
- Warkentyne, Michiko, B.A. (*Tokyo*), B.A. (*West. Ont.*), Part-time Lecturer, Slavonic and Oriental Studies.
- Watson, Roy E. L., M.A., Ph.D. (*Tor.*), Associate Professor, Anthropology and Sociology.
- Watt, Gordon A. J., M.A. (*Aberdeen*), Lecturer, English.
- Weaver, John T., B.Sc. (*Bristol*), M.Sc., Ph.D. (*Sask.*), Associate Professor, Physics.
- Welch, S. Anthony, B.A. (*Swarthmore*), M.A. (*Harvard*), Visiting Lecturer, History in Art.
- West, Paul R., B.Sc., Ph.D. (*McMaster*), Assistant Professor, Chemistry.
- Whiffin, Jean I., B.A., B.L.S. (*Tor.*), Head, Serials Division, Library.
- Whitfield, Albert J., Administrative Assistant, Building and Grounds.
- Widdifield, Herbert R., B.A. (*R.M.C.*), Manager, Systems Services.
- Widdowson, Thomas B., B.A., M.A., Ph.D. (*Brit. Col.*), Visiting Associate Professor, Biology.

- Wikkramatileke, Rudolph, B.A. (*Ceylon*), M.A. (*Clark*), Ph.D. (*London*), Professor, Geography.
- Williams, Richard L., B.S. (*St. Cloud St. Coll.*), M.S. (*Cornell*), Assistant Professor, Education.
- Williams, Trevor L., B.A., M.A. (*Manchester*), Ph.D. (*Wales*), Assistant Professor, English.
- Wong, Samuel K. P., B.Sc. (*Hong Kong*), M.Sc., Ph.D. (*Brit. Col.*), Senior Programmer Analyst, Computing Services.
- Wood, Alex. J., B.S.A., M.S.A. (*Brit. Col.*), Ph.D. (*Cornell*), Professor and Head of the Department of Bacteriology and Biochemistry. (Sabbatical leave 1972-73.)
- Wood, Colin J. B., B.A. (*Wales*), M.A., Ph.D. (*McMaster*), Assistant Professor, Geography.
- Woods, John H., B.A., M.A. (*Tor.*), Ph.D. (*Michigan*), Associate Professor, Philosophy.
- Wooley, Wesley T., A.B. (*Ill.*), A.M. (*Chicago*), Assistant Professor, History.
- Wootton, Carol, B.A. (*U. of Vic.*), M.A. (*Brit. Col.*), A.R.C.T. (*Tor.*), L.R.S.M. (*London*), Lecturer, English.
- Wright, R. Leslie D., B.A., M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Associate Professor, Psychology.
- Wu, Chi-Shiang, B.S. (*Nat. Taiwan U.*), M.S., Ph.D. (*Western Res. U.*), Assistant Professor, Physics.
- Wynand, Derk, B.A., M.A. (*Brit. Col.*), Lecturer, English.
- Young, Phillip T., B.A. (*Bowdoin*), Mus.M. (*Yale*), Associate Professor and Chairman of the Department of Music.
- Yore, Larry D., B.S., M.A. (*Minn.*), Lecturer, Education.
- Yoxall, Clive, Superintendent of Housekeeping, Building and Grounds.
- Zietlow, Edward R., B.A. (*Dakota Wesleyan*), M.A. (*Boston*), Ph.D. (*Wash.*), Assistant Professor, English.

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 the 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 degree.

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 is representative both of the Faculties and of the Convocation. Dr. 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. Dr. Malcolm Gordon Taylor was appointed first President of the University in July 1964 and served until June 30, 1968. Professor Robert T. Wallace was appointed Acting President for one year. On July 1, 1969, Dr. Bruce J. Partridge became President, serving until January 31, 1972, when Dr. Hugh E. Farquhar was appointed President (*pro tem.*). 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 for a term beginning January 1, 1970.

The historical traditions of the University are reflected in its academic regalia. The B.A. hood is of solid red, a colour that recalls the early affiliation with McGill. The B.Sc. hood, of gold, and the B.Ed. hood, of blue, show the colours of the University of British Columbia. Blue and gold have been retained as the official colours of the University of Victoria.

The Arms of the University

Extracts from the official description authorized by the College of Heralds, London: "Azure an open Book proper edged, bound and clasped Or; on a Chief Argent three Martlets Gules; And for the Crest on a Wreath of the Colours: dexter Cubit Arm proper in the hand a Torch erect Or enflamed also proper irradiated Gold and ensigned with a Scroll Argent thereon in Hebrew characters 'Let there be Light' Azure."

Buildings on the Gordon Head Campus

Student Union Building (1962)	Cornett Building (1966)
Clearihue Building (1962)	Sir Arthur Currie Hall (1967)
Elliott Building (1963)	David Thompson Hall (1967)
Elliott Building: Lecture Wing (1964)	Sedgewick Building (1968)
Emily Carr Hall (1964)	additions (1969, 1970)
Margaret Newton Hall (1964)	Lansdowne College Buildings (1969)
McPherson Library (1964)	Cunningham Building (1971)
Campus Services Building (1965)	Clearihue Classroom-Office Extension
MacLaurin Building (1966)	(1971)

ACADEMIC REGALIA

Chancellor

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

President

Gown royal blue corded 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. and B.Mus. with mitred neck-piece), 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

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, 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.

GENERAL INFORMATION

The academic year begins on the first of July and ends on the last day of June. The Winter Session is divided into two terms — the first, September to December; the second, January to April. The Summer Session consists of seven weeks' instruction in July and August. 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.

For the academic year 1972-73 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: Bachelor of Arts, Bachelor of Science, Bachelor of Education (a five-year degree preparing teachers for the Elementary and Secondary schools of the Province); Bachelor of Fine Arts, Bachelor of Music, Master of Arts, Master of Fine Arts, Master of Music, Master of Science, Doctor of Philosophy. Also offered are Diploma Programmes in Education for graduates seeking teacher certification.

In choosing undergraduate degree programmes, students are strongly urged to consult the Calendar prescriptions for the degree programme desired. In particular, students choosing the Bachelor of Science degree should normally have taken mathematics and science courses in senior secondary school.

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.

By proper selection of First Year courses in Arts and Science, students may equip themselves to enter the first year of Engineering, Forestry, Nursing, and the second year of Agriculture, Physical Education, Pharmacy, at certain other universities. Courses preparatory to Medicine, Dentistry, Law, Architecture, etc., may be taken at the University. See page 359. **Pre-Professional Education.**

GENERAL REGULATIONS

1. Students who are accepted by transfer from other institutions must complete all further courses at the University of Victoria.
2. The University will normally not grant a degree for residence of less than two regular winter sessions or the equivalent.
3. No student may take more than 18 units and, without special permission of the Dean or the Registrar, fewer than 15 units, in each winter session. Students are reminded that to qualify for nearly all scholarships, bursaries, prizes and loans a student is required by the terms of the award to undertake a minimum of 15 units of course work in each year.
4. A student who in a winter session takes more than the minimum units required for any one year can have these extra units credited toward his degree.
5. Students may not continue with work in a higher year, unless they take concurrently all courses required to clear conditions or deficiencies in the lower years. The total of all work taken may not exceed 18 units. They may continue only in subjects for which they have successfully completed prerequisites.
6. Courses for which credit has not been obtained must be repeated, or permissible substitutes taken in the next winter session attended. Except in the case of English 110 and in the case of a course which is a required course but which is outside the student's main area(s) of study, no course may be repeated more than once.
7. Normally, all students must complete the final year at the University of Victoria. Under certain circumstances, however, credit may be granted to a student taking his fourth year of study at another institution subject to:
 - (a) the approval of the Dean of the Faculty concerned;
 - (b) the courses taken at another institution being acceptable substitutes for fourth year University of Victoria courses;
 - (c) the courses meeting the requirements for the degree sought.

8. Fourth-year undergraduates, with high standing in an Honours Programme, are eligible to apply for admission to graduate-level courses, subject to the approval of the Department or Faculty concerned and subject to clearance with the Faculty of Graduate Studies.

9. A student with standing defective in respect of more than 3 units, although he will not be permitted to register in a higher year, may be allowed to continue by registering in the lower year and by taking courses in accordance with the regulations under **Satisfactory Standing and Credit**.

10. Normally, a student may not be registered in two different institutions in the same year. Prior permission to be so registered must be obtained from the Dean of the Faculty concerned or the Registrar.

11. Students in attendance at the University may not register concurrently for extramural or correspondence work to be taken for credit at the university level.

LIMITATION OF ENROLMENT

1. 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.
2. 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.

LIMITS ON ENROLMENT FOR THE SESSION 1972-73

In 1969, the University instituted a priority system for the admission and re-registration of students in the First and Second Years. Although the University anticipates that it will not be necessary to invoke the priority system for the 1972-73 Winter Session, the University will continue to assign a priority to each applicant, as appropriate, for purposes of classification only. The priority system, if and when it is invoked, overrides all other statements in the Calendar that deal with the admission and re-registration of students.

The priority system is shown below.

1. Priority System for First Year

Priority 1:

Applicants resident in British Columbia, who have graduated on the Academic-Technical Programme, Grade XII (B.C.), and who have obtained an average of 3.00 (C+) on the six core subjects (excluding P.H.E. and Guidance 11) and the three best subjects of one of the Specialties. Where an applicant qualifies in more than one Specialty, his best achievement will be taken.

The weighted equivalents are as follows:

A	(86 - 100%)	= 5
B	(73 - 85%)	= 4
C+	(67 - 72%)	= 3
C	(60 - 66%)	= 2
P	(50 - 59%)	= 1

Priority 2:

Mature applicants (age 24 or over in 1972), resident in B.C.

Priority 3:

Applicants resident in British Columbia who do not qualify under the above categories, but who demonstrate promise or potential for success at university. Applicants falling in this category will be deemed to have demonstrated such promise if they have obtained an average of at least 2.0 (C) as calculated in 1 above, or have satisfied criteria of the Faculty of Fine Arts by submission of appropriate evidence.

Priority 4:

- a) Applicants who, in a previous session at the University of Victoria, have obtained satisfactory standing with fewer than 12 units of credit;

- b) Applicants from Grade XIII (B.C.) who have passed three full Grade XIII courses (equivalent of 9 units of credit);
- c) Transfer students from colleges who have obtained satisfactory standing with fewer than 12 units of credit.

Priority 5:

Applicants resident in British Columbia whose average as calculated in 1 above is less than 2.0 (C).

Priority 6:

Applicants whose standing was unsatisfactory in the last session attended at University of Victoria. Each such applicant must submit an appeal to the Senate Committee on Admission and Re-registration on a special form, supplied by the Registrar's Office, in order to determine his eligibility for re-registration. Each applicant in this category who was not in attendance during the previous winter session must submit letters of reference from employers in support of his appeal. In certain cases, an applicant may be required to attend a personal interview with a designated officer of the University. Where exceptional circumstances warrant it, applicants in this category may be placed in a higher priority upon the judgment of the Registrar and/or the Senate Committee on Admission and Re-registration.

*Priority 7:**

Applicants who hold Canadian citizenship but who are not residents of British Columbia.

*Priority 8:**

Landed immigrants who have lived in the Province of British Columbia for at least one year prior to the beginning of the session 1972-73.

*Priority 9:**

Other landed immigrants.

*Priority 10:**

Applicants in Canada on student visas.

* Distinguished applicants in these priorities may be placed in a higher priority upon the judgment of the Director of Admissions and/or the Senate Committee on Admission and Re-registration.

II. Priority System for Second Year

Priority 1:

- a) University of Victoria students and qualified transfer students from other B.C. universities and colleges who have obtained 15 to 18 units of credit in the last session attended.
- b) Qualified applicants from Grade XIII (B.C.) who have passed 5 full courses (equivalent of 15 units of credit) in the last school year attended.
- c) Applicants from the institutions mentioned in a) who have the same qualifications obtained on the basis of part-time studies.
- d) Applicants from Grade XIII (B.C.) who have the same qualifications as in b) obtained on the basis of part-time studies.

Priority 2:

- a) University of Victoria students and qualified transfer students from other B.C. universities and colleges who have obtained 12 units of credit in the last session attended.
- b) Applicants from Grade XIII (B.C.) who have passed 4 full courses (equivalent of 12 units of credit) in the last school year attended.
- c) Applicants from the institutions mentioned in a) who have the same qualifications obtained on the basis of part-time studies.
- d) Applicants from Grade XIII (B.C.) who have the same qualifications as in b) obtained on the basis of part-time studies.

Priority 3:

University of Victoria students and qualified transfer students from other B.C. universities and colleges who have accumulated at least 12 and fewer than 27 units of acceptable transfer credit, with satisfactory standing in the last session attended.

Priority 4:

Applicants whose standing was unsatisfactory in the last session attended at University of Victoria. Each such applicant must submit an appeal to the Senate Committee on Admission and Re-Registration on a special form, supplied by the Registrar's Office, in order to determine his eligibility for re-registration. Each applicant in this category who was not in attendance during the previous winter session must submit letters of reference from employers in support of his appeal. In certain cases, an applicant may be required to attend a personal interview with a designated officer of the University. Where exceptional circumstances warrant it, applicants in this category may be placed in a higher priority upon the judgment of the Registrar and/or the Senate Committee on Admission and Re-registration.

Priority 5:

Out-of-Province applicants with the equivalent of 15 units or more of acceptable transfer credit. Distinguished applicants in this category may be placed in a higher priority upon the judgment of the Director of Admissions and/or the Senate Committee on Admission and Re-registration.

III. Priority System for Third Year.

Should the need arise to limit enrolment in the Third Year, admission or re-registration of applicants who seek entry to that year will be judged in keeping with the policies mentioned above for Second Year with the appropriate changes in unit count.

General Notes on the Priority System

1. The University reserves the right to refuse admission or enrolment to applicants whose over-all academic records are considered to be weak, even though such applicants may meet the technical requirements for admission or re-registration.
2. In certain programmes of study, facilities cannot be provided to accommodate all those seeking entry. In consequence, even though an applicant may be admissible to the University, it may not be possible to allow him entry to the programme of his first choice.

RE-REGISTRATION

All inquiries relating to re-registration in undergraduate Faculties should be addressed to the Registrar.

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 Registrar by the following dates:

Summer Session 1972:

May 1: for all students.

Winter Session 1972-73:

June 30: for all students seeking to register in both terms of the Winter Session.

November 15: for all Third and Fourth Year students seeking to register in the Second Term in the Winter Session (not applicable to First and Second Year applicants. See *Registration*, paragraph 8, page 64).

2. Late applications must be accompanied by a letter of explanation. If enrolment priorities permit the acceptance of late applications, these will be subject to a late fee. See page 75.
3. Applicants desiring to undertake studies on a part-time basis (i.e. fewer than nine units of credit), in the evening in particular, may apply as late as September 1 without incurring the late application fee. However, applicants for part-time studies are urged to apply by the earlier due date, mentioned above, in order to avoid disappointment due to limitations on enrolment.
4. Students who have been required to withdraw from the University in the past because of unsatisfactory performance and who wish to be considered for re-registration must include a letter of appeal addressed to the Senate Committee on Admission and Re-registration, c/o the Registrar, when making application for re-registration.
5. 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 date mentioned above.

ADMISSION

All inquiries relating to undergraduate admission to the University should be addressed to the Director of Admissions.

APPLICATION FOR ADMISSION

1. Persons seeking admission for the first time must obtain an Application for Admission form from the Director of Admissions. This form will be available after March 1 for Summer Session and after May 1 for Winter Session, and must be returned, fully completed and accompanied by all official transcripts of academic records, to the Director of Admissions by the following dates:

Summer Session 1972:

May 1: for all applicants.

Winter Session 1972-73:

- a) *June 30:* for all applicants seeking transfer from colleges in British Columbia in order to undertake courses in both terms of the Winter Session.
- b) *August 1:* for all other applicants seeking admission in order to undertake courses in both terms of the Winter Session.
- c) *November 15:* for all applicants for Third and Fourth Years seeking to transfer from other post-secondary institutions in order to undertake half-year courses beginning in the Second Term of the Winter Session. (Not applicable to applicants for First and Second Years — see paragraph 8 under *Registration*, page 64).

A student who experiences difficulty in obtaining official transcripts or other documents should still submit his application by the due dates mentioned. This will indicate to the Admissions Office that the student is seeking a place and would like one retained for him.

2. Late applications must be accompanied by a letter of explanation. If enrolment priorities permit acceptance of late applications, these will be subject to a late application fee. See page 75.
3. Applicants desiring to undertake studies on a part-time basis (i.e. fewer than 9 units of credit), in the evening in particular, may apply as late as September 1 without incurring the late application fee. However, applicants for part-time studies are urged to apply by the appropriate due date mentioned above, in order to avoid disappointment owing to limitations on enrolment.
4. 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 numbers. 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*.
5. Persons applying for admission to the 1972 Summer Session who plan to attend the Winter Session 1972-73 must also submit an Application for Re-registration to the Registrar on or before June 30. See page 36.
6. Persons seeking admission to the Faculty of Graduate Studies should consult page 325.
7. Each applicant applying for the first time must submit two copies of official transcripts of secondary school records and of any higher studies taken. These statements must accompany the Application for Admission form. 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 B.C. 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 applications recent reports on their teaching effectiveness from Principals and/or Superintendents. Applicants who have been registered in Grade XIII (B.C.) but who did not undertake the examinations offered by the Department of Education must supply a letter from their school stating the reasons why the examinations were not undertaken. Applications not fully supported by all relevant documents by the dates stipulated above will be subject to a late fee. See page 75.

8. Each applicant whose academic records, in whole or in part, originate outside the Province of British Columbia must pay an Evaluation Fee of \$10. 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.
9. 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.
10. Transcripts in languages other than English or French must be submitted together with official, notarized translations into English or French.
11. 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.
12. Applicants should consult the admission requirements for each Faculty since, in certain cases, the applicant must demonstrate special aptitudes beyond the normal academic requirements, e.g. in Music, Visual Arts, Physical Education, etc.
13. All applicants will be informed in writing of their acceptance or rejection as soon as their applications can be processed by the Admissions Office. In certain areas, however, candidates may have to wait for at least one week after the closure date for the receipt of applications before they can expect to receive a notice granting them a place. This delay may be consequent upon the competition for places in divisions of the University where there are restricted resources. To ensure equity for all those applying, applications may be held in the Admissions Office until shortly after the closure date and the selection of the successful candidates made at that time. Applicants should not anticipate acceptance 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.
14. Applicants who do not meet the requirements for admission to the University have the right to appeal their cases to the Senate Committee on Admission and Re-registration. This procedure is carried out by submitting the appeal in writing through the Director of Admissions. In making appeal, a candidate should state specifically why he believes University regulations should be waived in his case.
15. The University of Victoria does not require applicants to undertake the aptitude and achievement tests administered by the Service for Admission to College and University (SACU) or 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.

EARLY APPLICATION FOR ADMISSION

Applicants who are permanent residents of British Columbia, who will graduate on the Academic-Technical Programme, Grade XII (B.C.), in June 1972, and who expect to receive an average of at least C+ in certain specified courses in Grades XI and XII (see below under Admission Requirements) may apply for early admission. This manner of application is totally voluntary on the part of the student and the school concerned.

To make such application, one should carry out the following steps:

1. Obtain an Application for Admission form and instructions from the principal of the senior secondary school attended.
2. Return the form to the principal for processing and request that he submit the processed form to the Director of Admissions by *May 31, 1972*.
3. As soon as official transcripts are received in July from the Department of Education confirming that the applicant has graduated, the applicant mails *two copies* of the transcript to the Director of Admissions at the University.

About June 15, the Director of Admissions will mail a notice to each applicant indicating whether or not he is admissible. He will also send the applicant information

about the date when he must register in person at the University, about counselling services and course selection, as well as any other information required.

Until the applicant submits his official transcripts showing graduation from Grade XII, his admission is *provisional only*.

ADMISSION REQUIREMENTS

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

1. **Graduates of British Columbia Secondary Schools:** The qualifications for admission to the University are as follows:

(a) **Admission from Grade XII (up to and including September 1973):**

Applicants must have fulfilled the requirements for graduation from senior secondary school in the Academic-Technical programme prescribed by the Department of Education for the Province of British Columbia. Normally, an applicant must have fulfilled these requirements **by the June** of the year in which he is seeking admission. Normally, no applicant with a deficiency in his academic qualifications will be admitted.

Distinguished students who, while regularly enrolled in a full programme of Grade XII studies, undertook Grade XIII courses and wrote and passed the examinations set by the Department of Education may be given credit for courses passed. An evaluation will be carried out by the Director of Admissions.

Students may not receive university credit for senior secondary courses passed for graduation on the Academic-Technical Programme, whether taken among the required courses or as extra subjects.

(b) **Admission from Grade XII (after September 1973):**

At the time this Calendar went to press, the University was studying the entrance requirements for students who apply from Secondary School after September 1973. These requirements will appear in a special supplement to this Calendar.

The previous regulations notwithstanding, any applicant has the right to appeal his case to the Senate Committee on Admission and Re-Registration. The applicant is invited to do so by formal letter submitted to the Director of Admissions. In addition, such an applicant is encouraged to seek a personal interview with that officer.

(c) **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 on the Academic-Technical programme. The student should normally be taking such number of 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 Admissions by

a. August 1 for the Winter Session 1972-73.

- b. November 15 for First Year courses given in the second term of the Winter Session.
- c. May 1 for Summer Session 1972.
- (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.

(d) **Admission from Grade XIII (B.C.):**

- (i) Applicants who have graduated on the Academic-Technical Programme and who have satisfactory standing in Grade XIII courses will be admissible to the University. "Satisfactory standing" is here to be defined as it is for students in attendance at the University of Victoria. See page 71. **Satisfactory Standing.**
- (ii) The University will grant credit for courses passed in the Grade XIII examinations on the same basis as for students at the University. See page 71. **Credit.**
- (iii) An applicant who cannot qualify for admission under (i) above may appeal in writing through the Admissions Office to the Senate Committee on Admission and Re-registration when making application for admission. Each such case will be judged separately by that committee.
- (iv) Adult applicants will be considered on an individual basis.

The above qualifications are approved by the Senate of the University. Inquiries relating to Secondary School Graduation or to the Grade XII and XIII examinations should be addressed to the Department of Education, Victoria, B.C.

2. Graduates of Secondary Schools outside British Columbia: The following specific admission requirements apply, provided that applicants' academic records meet in subject matter and standing both the requirements for admission to this University and the requirements for admission to a recognized university in their own province or country.

An applicant who has completed his secondary education outside the Province and whose family is permanently domiciled in British Columbia will be considered for admission on the same basis as graduates of British Columbia Secondary Schools. For this purpose, Grade XII in any other Canadian province is equated with Grade XII (B.C.)

If applicants are granted admission, they will normally be placed in the First Year but may be granted advanced placement or standing in certain subjects on assessment of their records by the Director of Admissions.

(a) **Applicants from other Canadian provinces:**

Alberta, Saskatchewan, Manitoba, Nova Scotia, Newfoundland — Grade XII.
 Ontario — Grade XII on the five-year Arts and Science Programme with an average of at least 70%, or full Grade XIII.

New Brunswick — Grade XIII.

Quebec — two years at a C.E.G.E.P. (academic programme).

Prince Edward Island — completion of first year at the University of Prince Edward Island or the equivalent.

(b) **Applicants from other countries:**

(i) **General Certificate of Education (G.C.E.)**

— standing in five subjects including English, a second language, mathematics, a laboratory science, and one academic elective, of which at least three must be at the Advanced (A) Level. At both Ordinary and Advanced Level an average grade of "3" with no subject below "4."

- (ii) School Certificate — as for the G.C.E. (i) above, with three passes at the Principal Level on the Higher School Certificate.
- (iii) University of Hong Kong Matriculation Certificate — standing equivalent to (i) above.
- (iv) Certificate of Matriculation of recognized universities.
- (v) High School Graduation and completion of at least one full year of study at an accredited college or university in the United States of America. Grade average of B or better. High School studies to include at least: 7 semesters of English, 6 semesters in a language other than English, 4 semesters laboratory science, 6 semesters mathematics. However, distinguished applicants who have completed high school graduation only may be admitted to the University. Such applicants must stand in the first 10% of the graduating class in their school.
- (vi) Applicants from India must, as a minimum requirement, possess a bachelor's degree, division I.

3. Admission from other Universities and Colleges:

(a) Admission from colleges in British Columbia:

- (i) Applicants who have graduated on the Academic-Technical Programme prescribed by the Department of Education will be admissible to the University from colleges in British Columbia provided that their standing is satisfactory at the college attended. "Satisfactory standing" is here to be defined as it is for students in attendance at the University. see page 71. **Satisfactory Standing.**
- (ii) Credit for courses passed at colleges will be granted on the same basis as for students attending the University. See page 71. **Credit.**
- (iii) Applicants from colleges who have not achieved "satisfactory standing" are required to continue at the college in order to raise their standing to a satisfactory level.
- (iv) Transfer credit, as far as course content is concerned, will be granted provided that courses completed are equivalent to courses offered in the University curriculum (or if not offered are recognized as reaching University standards) and are appropriate to the degree programme elected by the applicant. See approved list of transfer courses by college, pp. 43 to 63.
- (v) Mature applicants who lack secondary school graduation but possess good college records will be considered on an individual basis. In any case, applicants who cannot qualify for admission under (i) above, may appeal in writing through the Director of Admissions to the Senate Committee on Admission and Re-registration. The letter of appeal must accompany the application form and should state briefly the applicant's special circumstances.

(b) Admission from other colleges and universities:

- (i) Applicants who meet the admission requirements under Section 1 or 2 above, and who have successfully completed studies at another university or at a college not included in 3(a) above, may be granted admission with transfer credit. Courses completed must be equivalent courses offered in the University curriculum (or, if not offered, recognized as reaching University standards), must be appropriate to the degree programme elected, and normally constitute the equivalent of a full year of study when considered individually or in combination. Transfer credit will be tentative only and is subject to review after the students have completed one or more sessions at the University.
- (ii) A student who has failed his last year or has an overall weak record at another institution will not normally be permitted to transfer to the University of Victoria, even though he may possess the admission requirements for secondary school graduates.

Applicants planning to complete preliminary studies at another institution should verify that their proposed studies are fully acceptable to permit transfer to the University of Victoria.

Transfer credit granted in a degree programme is limited and may not normally be applied to the final two years of the programme. An applicant may not normally receive credit for subjects taken at a college after he has been granted 30 units of course credit either as transfer credit or through a combination of transfer and University credit.

College students on student visas who apply to transfer to the University of Victoria will be subject to academic screening on the same basis as students seeking admission directly from their home countries.

Except where specifically stated otherwise in the regulations of a particular Faculty, a student may not normally receive a degree unless he completes the equivalent of two full winter sessions in attendance at the University, one of which must be the final year.

4. Admission of Mature Applicants:

The University of Victoria is anxious to assist persons domiciled in British Columbia who are at least 24 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 Office of the Director of Admissions;
- (b) return the form, together with:
an official transcript of all academic work undertaken to date; a letter written by the applicant outlining his personal background and work experience; two letters of reference from employers or from persons who know the candidate well.

If possible, candidates should arrange an interview with the Director of Admissions who will be pleased to give whatever advice and assistance he can.

Applicants from Other Countries

An applicant from a country where English is not the common language must satisfy the Director of Admissions that his knowledge of English is adequate to permit the successful pursuit of his studies. In particular, candidates seeking admission to the Faculty of Education are reminded that full and fluent command of the English language, both written and oral, is a prerequisite.

The University suggests that such applicants undertake the Test of English as a Foreign Language (TOEFL). Information concerning this test, 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.

An applicant coming directly from another country must give satisfactory evidence of his ability to meet the costs of tuition, board and room, books, and incidentals.

COURSE EQUIVALENCIES FOR TRANSFER CREDIT

The following list shows the courses given at the colleges in British Columbia which are accepted for transfer credit by the University. The number in brackets after a course shows the credit value upon transfer: nomenclature for University of Victoria courses is in terms of numbers listed in the 1971-72 Calendar. This list was correct as of January 1972. Since the colleges are still adding to their offerings, the list will change during any academic year.

Camosun College (Victoria)

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Anthropology & Sociology	Anth 100 & 102	Anth 100 (3)	
	Soc 100 & 101	Soc (unassigned) (3)	1st yr.
	Soc 200 & 202	Soc (unassigned) (3)	2nd yr.
Biology	Biol 110 & 111 <i>or</i>		
	Biol 150 & 151	Biol 150 (3)	
	Biol 153	no equivalency	no credit
Chemistry	Chem 110 & 111	Chem 120 & 111 (4)	
	Chem 120 & 121	Chem 124 & 121 (4)	
	Chem 150	Chem (unassigned) (1½)	
	Chem 151	Chem (unassigned) (1½)	
	Chem 153	Chem (unassigned) (1½)	
	Chem 160	Chem (unassigned) (1½)	
Classics	Class 100	Class (unassigned) (1½)	half of 100
Economics	Bus 150	no equivalent	no credit
	Bus 151	Comm 151 (1½)	
	Bus 160 & 161	Econ 100 (3)	
	Bus 165	no equivalent	no credit
	Bus 170	Comm (unassigned) (1½)	
	Bus 176	no equivalent	no credit
	Bus 211 & 213 <i>or</i> 260 & 261	Econ 200 (3) <i>or</i> (unassigned, 1½ each)	
English	Engl 100 & 102	Engl 120 (3)	
	Engl 110	Engl (unassigned) (1½)	1st yr.
	Engl 112	Engl (unassigned) (1½)	1st yr.
	Engl 201 & 203	Engl 200 (3)	
	Comm 150 & 151	Engl 110 (3)	
French	Fren 100 & 101	Fren 160 (3)	
	Fren 120 & 121	Fren 180 (3)	
	Fren 150 & 151	no equivalent	pre-requisite for 160
Geography	Geog 100 & 101	Geog 101 (3)	
	Geog 110	Geog (unassigned) (1½)	1st yr.
	Geog 120	Geog (unassigned) (1½)	1st yr.
	Geog 200 & 201	Geog 203 (3)	
German	Germ 100 & 101	Germ 100 <i>or</i> 140 (3)	with a grade of C or better
Hispanic & Italian Studies	Span 100 & 101	Span 100 (3)	1st or 2nd class mark required for entry to Sp 260 & 290
History	Hist 100 & 102	Hist 242 (3)	
	Hist 110 & 112	Hist 230 (3)	
	Hist 200	Hist (unassigned) (1½)	2nd yr.
	Hist 202	Hist (unassigned) (1½)	2nd yr.
Linguistics	Ling 100 & 102	Ling (unassigned) (3)	1st yr.
Mathematics	Math 100	Math 100 (1½)	
	Math 110	Math 110 (1½)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 112	Math (unassigned) (1½)	1st yr.
	Math 113	Math 151 (1½)	
	Math 150	no equivalent	no credit
	Math 164	no equivalent	no credit
	Math 170	no equivalent	no credit
Philosophy	Phil 100	Phil (unassigned) (1½)	no credit towards degree in Phil
	Phil 102	Phil (unassigned) (1½)	no credit towards degree in Phil
Physics	Phys 100 & 101	Phys 103 (3)	
	Phys 102 & 103	Phys 101 (3)	
	Phys 150	no equivalent	no credit
	Phys 151	no equivalent	no credit
	Phys 152	no equivalent	no credit
	Phys 154	no equivalent	no credit
	Phys 155	no equivalent	no credit
Political Science	Poli 100	Poli (unassigned) (1½)	1st yr.
	Poli 102	Poli (unassigned) (1½)	1st yr.
Psychology	Psyc 100 & 101	Psyc 100 (3)	
	Psyc 200 & 203	Psyc 220 (3)	

Capilano College (West Vancouver)

Anthropology	Anth 120 & 121	Anth 100 (3)	
	Anth 200	Anth (unassigned) (1½)	
	Anth 201	Anth 240 (1½)	
& Sociology	Soc 100	Soc (unassigned) (1½)	
	Soc 100 & 101 <i>or</i>		
	Soc 101 & 122	Soc 100 (3)	
	Soc 122	Soc (unassigned) (1½)	
	Soc 200 & 201	Soc 200 (3)	
Biology	Biol 100 & 101 (old)	Biol 150 (3)	
	Biol 104 & 105	Biol (unassigned) (3)	placement exam if going on in Biol
	Biol 200	Biol 300 (1½)	
	Biol 204	Biol 306 (1½)	
	Biol 205	Biol (unassigned) (1½)	2nd yr.
	Biol 210	Biol (unassigned) (1½)	2nd yr.; Bot.
Chemistry	Chem 100 & 101 (old) <i>or</i>		
	Chem 104 & 105	Chem 120 & 111 (4)	if student obtains at least B
	Chem 110 & 111	Chem 124 & 121 (4)	
	Chem 200 & 201	Chem 233 & 231 (3)	
	Chem 204	Chem (unassigned) (1½)	
	Chem 205	Chem (unassigned) (1½)	
Economics	Two of: Econ 100, 120, 121 <i>or</i> Econ 100 & 101	Econ 100 (3)	
	Econ 101	Econ (unassigned) (1½)	
	Econ 200 & 201	Econ 200 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
English	Engl 100 & one of: 104, 105, 106, 108 <i>or</i>		
	Engl 102 & one of: 104, 105, 106, 108	Engl 120 (3)	
	Engl 200 & 201	Engl 200 (3)	
	Engl 202 & 203	Engl (unassigned) (1½ each)	2nd yr.
	Engl 204 & 205 Engl. 212 & 213	Engl 203 (3) Engl (unassigned) (3)	
French	Fren 100 & 101 <i>or</i>		
	Fren 102 & 103	Fren 160 (3)	
	Fren 110 & 111	Fren 180 (3)	
	Fren 202 & 203	Fren 240 <i>or</i> 260 (3)	
	Fren 210 & 211	Fren 280 (3)	
Geography	Geog 100 & 101 <i>or</i>		
	Geog 110 & 111	Geog 101 (3)	
	Geog 106	Geog (unassigned) (1½)	
	Geog 200 & 201	Geog 201 (3)	
	Geol 110 & 111	Geol 200 (3)	
German	Germ 100 & 101	Germ 100 (3)	student must complete a general survey of German grammar grade of C+ or better required
	Germ 200 & 201	Germ 240 <i>or</i> 260 (3)	
Hispanic & Italian Studies	Span 100 & 101	Span 100 (3)	
	Span 200 & 201	Span 260 (3)	grade of C+ req'd; oral test if going on in Span.
History	Hist 100 & 101	Hist (unassigned) (3)	
	Hist 200 & 201	Hist (unassigned) (3)	
	Hist 202	Hist (unassigned) (1½)	
History in Art	F.A. 100 & 101	H.A. 100 (3)	
	F.A. 200 & 201	H.A. (unassigned) (3)	
Mathematics	Math 030	Math 012 (0)	
	Math 100 & 101	Math (unassigned) (3)	
	Math 120	Math 170 (1½)	
	Math 121	Math 271 (1½)	student should do 170 & 171 concurrently with 272
	Math 130, 131 & 132	Math 130 (3)	
	Math 140	Math 110 (1½)	
	Math 200 & 201	Math 232 <i>or</i> 110 & 210 (3)	
	Math 220	Math 170 (1)	
	Math 221	Math 272 (1)	consult Dept.
	Math 230 & 231	Math 230 (3)	
Music	Music 100 & 101	Music 100 (3)	
	Music 110 & 111	Music 110 (3)	no credit towards B.Mus.
	Music 120 & 121	Music 110 (3)	for B.Mus. candidates

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Philosophy	Phil 100 & 101 (old) <i>or</i>		
	Phil 101 & 102	Phil 100 (3)	
	Phil 200	Phil 232 (1½)	
	Phil 201	Phil 326 (1½)	
Physics	Phys 100 & 101 <i>or</i>		100 & 101 not advised for students going on in sciences
	Phys 104 & 105 <i>or</i>		
	Phys 110 & 111	Phys 101 (3)	
	Phys 200 & 201	Phys (unassigned) (3)	
Political Science	Poli 100 & 101	Poli 200 (3)	students must take our 200 if going on in Poli. conditional: consult Dept.
	Poli 200	Poli (unassigned) (1½)	
	Poli 201	Poli (unassigned) (1½)	
Psychology	Psyc 100 & one of: 101, 200, 204	Psyc 100 (3) <i>or</i> (unassigned, 1½ each)	
	Psyc 201	Psyc (unassigned) (1½)	2nd yr.
	Psyc 205	Psyc (unassigned) (1½)	2nd yr.
	Psyc 210 & 211	Psyc 200 (3)	
	Slavonic & Oriental Studies	Jap 100 & 101	Jap 100 (3)
Arts & Science	Environment & Life Style General Studies 100	Humanities (unassigned) (3) under consideration	

Cariboo College (Kamloops)

Anthropology & Sociology	Anth 111 & 121	Anth 100 (3)	
	Anth 112	Anth (unassigned) (1½)	
	Anth 122	Anth (unassigned) (1½)	half of 339
	Anth 211 & 221	Anth 200 (3)	
	Anth 212 & 222	Anth (unassigned) (3)	not acceptable towards major
	Soc 111 & 121	Soc 100 (3)	
Soc 211 & 221	Soc 200 (3)		
Biology	Biol 110 & 120 <i>or</i> 111 & 121	Biol 150 (3)	
	Biol 211	Biol 203 (1½)	
	Biol 212	Biol 306 (1½)	
	Biol 221	Biol 204 (1½)	
	Biol 222	Biol (unassigned) (1½)	
	Biol 213 & 223	Biol 200 (3) <i>or</i> (unassigned, 1½ each)	
	Biol 224	Biol (unassigned) (1½)	sufficient for Honours
Chemistry	Chem 110 & 120	Chem 120 & 111 (4) <i>or</i> 124 & 121 (4)	with grade of B— or better
	Chem 111 & 121	Chem 124 & 121 (4)	with grade of B— or better
	Chem 113 & 123	Chem 120 & 111 (4)	
	Chem 211 & 221	Chem (unassigned) (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Chem 222 & 212	Chem (unassigned) (3)	upon interview may be equated with 230 & 231
Economics	Econ 111 & 121	Econ (unassigned) (3)	
	Econ 211 & 221	Econ 200 (3)	
	Econ 211 alone	Econ (unassigned) (1½)	
	Comm 112	Comm 190 (1½)	
	Comm 121	Comm 151 (1½)	
English	Engl 111 & 121	Engl 120 (3)	
	Engl 114	Engl (unassigned) (1½)	1st yr.
	Engl 203	Engl (unassigned) (1½)	half of 202
	Engl 207	Engl (unassigned) (1½)	
	Engl 209	Engl (unassigned) (1½)	
	Engl 210	Engl (unassigned) (1½)	
	Engl 211 & 221	Engl 200 (3)	
French	Fren 110 & 120	Fren 160 (3)	
	Fren 111 & 121	Fren 180 <i>or</i> 260 (3)	
	Fren 211 & 221	Fren 290 (3)	
	Fren 212 & 222	Fren 285 (3)	
Geography	Geog 111 & 121	Geog 101 (3)	
	Geog 112 & 122	Geog 203 (3)	
	Geog 211 & 221	Geog 201 (3)	
	Geol 111 & 121	Geol 200 (3)	
	Geol 212	Geol (unassigned) (1½)	2nd yr.
	Geol 221	Geol (unassigned) (1½)	2nd yr.
	Geol 222	Geol (unassigned) (1½)	2nd yr.
	Geol 223	Geol (unassigned) (1½)	2nd yr.
German	Germ 111 & 121	Germ 100 (3)	
History	Hist 111 & 121	Hist 242 (3)	
	Hist 112 & 122	Hist 230 (3)	
	Hist 211	Hist (unassigned) (1½)	
	Hist 212 & 222	Hist 210 (3) <i>or</i> (unassigned) (1½ each)	
	Hist 221	Hist (unassigned) (1½)	half of 350
History in Art	Fine Arts 111 & 121	H.A. 100 (3)	
Linguistics	Engl 212	under consideration	
	Engl 222		
Mathematics	Math 110	Math (unassigned) (1½)	
	Math 120	Math (unassigned) (1½)	
	Math 110 & 120	Math 160 (3)	Fac. of Ed.
	Math 111	Math 100 (1½)	
	Math 121	Math 101 (1½)	
	Math 122	Math (unassigned) (1)*	accepted for entry when Math 110 is pre-requisite
	Math 123	Math (unassigned) (1½)	
	Math 211	Math 200 (1½)	
	Math 212	Math (unassigned) (1)*	
	Math 215	Math (unassigned) (1½)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 221	Math 201 (1½)	
	Math 222	Math (unassigned) (1)*	
	*Math 122, 212 & 222	Math 110 & 210 (3) or 232 (3)	
	Math 225	Math (unassigned) (1½)	
	Comm 114	Math 151 (1½)	
	Comm 124	Math 102 (1½)	
Physics	Phys 110 & 120	Phys 101 (3)	
	Phys 111 & 121	Phys 121 (3)	
	Phys 123 & 110 or 113	Phys 103 (3)	
	Phys 210 & 220 & 229	Phys (unassigned) (3)	first half of 212 & second half of 213
	Phys 211 & 221 & 219	Phys 211 (3)	
	Astr 110 & 120	Astr 120 (3)	
Psychology	Psyc 111 & 121	Psyc 100 (3)	
	Psyc 211 & 221	Psyc 200 (3) or (unassigned) (1½ each)	
	Psyc 212 & 222	Psyc 240 (3)	
Visual Arts	Fine Arts 112 & 122	no equivalent	no credit
Columbia Junior College (Vancouver)			
Anthropology & Sociology	Anth 210 & 220 Soc 210 & 220	Anth 100 (3) Soc 100 (3)	
Biology	Biol 110 & 120 Zool 110 & 120	Biol 150 (3) Zool 202 (3)	1970-71 course
Chemistry	Chem 103 & 104 Chem 110 & 120 Chem 210 & 220	Chem 120 & 111 (4) Chem 124 & 121 (4) Chem 230 & 231 (3)	
Economics	Econ 110 & 120 Econ 210 & 220	Econ 100 (3) Econ (unassigned) (3)	
English	Engl 110 & 120 Engl 210 & 220	Engl 120 (3) Engl 200 (3)	
Fine Arts	Fine Arts 110 & 120	Fine Arts (unassigned) (3)	elective only not accepted on BFA without Dept. approval
French	Fren 110 & 120 Fren 210 & 220	Fren 160 (3) (formerly 140) Fren 260 (3) (formerly 240)	if Fr. 11 or 91 already taken
Geography	Geog 110 & 120 Geog 210 & 220	Geog 101 (3) Geog 203 (3)	students wishing major or honours in Geog must consult Dept.
German	Germ 101 & 102 Germ 110 & 120 Germ 201 & 202	Germ 100 (3) Germ 240 (3) Germ (unassigned) (3)	student must complete gen. survey of Germ grammar placement according to grade, ability

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Hispanic & Italian Studies	Span 101 & 102	Span 100 (3)	
	Span 210 & 220	Span 240 (3)	
History	Hist 110 & 120	Hist 230 (3)	
	Hist 210 & 220	Hist (unassigned) (3)	
	Hist 223 & 224	Hist 210 (3)	
Mathematics	Math 110 & 125	Math 130 (3)	
	Math 120	Math 110 (1½)	
	Math 210	Math 200 (1½)	
	Math 220	Math 210 (1½)	
Philosophy	Phil 110 & 120	Phil 100 (3)	
Physics	Phys 110 & 120	Phys 101 (3)	
	Phys 210 & 220	Phys (unassigned) (3)	
Psychology	Psyc 110 & 120	Psyc 100 (3)	
	Psyc 210 & 220	Psyc 200 (3)	
Slavonic & Oriental Studies	Russ 101 & 102	Russ 100 (3)	

Douglas College (New Westminster)

Anthropology & Sociology	Anth 24-201 & 110	Anth 100 (3)	
	Soc 23-181 & 182	Soc 100 (3)	
	Soc 23-183	Soc (unassigned) (1½) 1st yr.	
	Soc 23-140	Soc (unassigned) (1½) 1st yr.	
Biology	Biol 41-111	Biol (unassigned) (1½) 1st yr.	
	Biol 41-421	Biol (unassigned) (1½)	
	Biol 41-432	Biol 300 (1½)	
	Biol 41-433	Biol (unassigned) (1½)	non-science majors
	Biol 41-435	Biol (unassigned) (1½)	may be considered as pre-requisite in lieu of Biol 200: consult Dept.
Chemistry	Chem 42-200	Chem (unassigned) (1½)	
	Chem 42-210	Chem (unassigned) (1½)	
Economics	Econ 83-060 & 061	Econ 100 (3) <i>or</i> (unassigned, 1½ each)	
	Econ 83-062 & 063	Econ 200 (3) <i>or</i> (unassigned, 1½ each)	
	Acct 81-050	no equivalent	no credit
	Acct 81-210	Comm 151 (1½)	
Education	Educ 66-210	no equivalent	no credit
	Ph. Ed. 64-113	Ph.Ed. 100 (0)	swimming
	Ph. Ed. 64-115	no equivalent	no credit
	Ph. Ed. 64-200	no equivalent	no credit
English	Lit 91-114	Engl (unassigned) (1½) 1st yr.	
	Two of: Lit 91-701, 702, 703, 704, 705, 706, 707, 709	Engl 120 (3)	
	Lit 91-708	Engl (unassigned) (1½) 1st yr.	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Lit 91-720	Humanities (unassigned)	(1½)
	Lit 91-721	Humanities (unassigned)	(1½)
	Lit 91-731 & 732 (312/313)	Engl 245 (3) <i>or</i> (unassigned, 1½ each)	
	Lit 91-733 (314)	Engl (unassigned)	(1½) 2nd yr.
	Lit 91-734	Engl (unassigned)	(1½) 2nd yr.
	Lit 91-735 & 736 (316/317)	Engl 200 (3) <i>or</i> (unassigned, 1½ each)	
	Lit-91-737	Engl (unassigned)	(1½) 2nd yr.
	Lit 91-738	Engl (unassigned)	(1½) half of 424
	Comm 92-752	no equivalent	no credit
	Comm 92-750 & 751	Engl 110 (3) <i>or</i> (unassigned, 1½ each)	
	Comm 92-757	no equivalent	no credit
	Cr. Wr. 96-752 & 753	no equivalent	no credit
	Cr. Wr. 96-754 (200)	Engl (unassigned)	(1½) half of 202
French	Mod. Lang 26-221 & 222 (240)	no equivalent	no credit
	Mod Lang 26-223 & 224 (241)	Fren 180 (3)	
Geography	Geog 25-301 <i>or</i> 306 <i>plus</i> 302 <i>or</i> 303	Geog 101 (3)	
	Geog 25-301 & 302 & 303 & 306	Geog 101 (3) & 203 (3) <i>or</i> (unassigned, 1½ each)	
	Geog 25-303 <i>plus</i> Geol 43-560 <i>or</i> 561 Geol 43-560 <i>or</i> 561 <i>or</i> 562	Geol 200 (3)	
		no equivalent alone	no credit
German	Mod. Lang 26-231 & 232 (220)	Germ 100 <i>or</i> 140 (3)	with grade C or better
	Mod. Lang 26-233 & 234	Germ 240 (3) <i>or</i> Germ 260 (3)	with grade C or better with grade B or better
	Mod. Lang 26-235 & 236 (421)	Germ (unassigned) (3)	with grade C or better
History	Hist 21-210 (110)	Hist (unassigned)	(1½) local
	Hist 21-401	Hist (unassigned)	(1½) introductory
	Hist 21-402	Hist (unassigned)	(1½) medieval
	Hist 21-404 (111)	Hist (unassigned)	(1½) Can. west
	Hist 21-406	Hist (unassigned)	(1½) 20th cent. U.S.
	Hist 21-409	Hist 376 (1½)	
	Hist 21-415	Hist (unassigned)	(1½) Fr. Can.
	Hist 21-417	Hist (unassigned)	(1½) Germany
	Hist 21-419 (120)	Hist (unassigned)	(1½) 20th cent.
	Hum 34-120	Hist (unassigned)	(1½) 1st yr.
History in Art	Art 11-107	H.A. (unassigned)	(1½) 1st yr.
	Art 11-121	H.A. (unassigned)	(1½) 1st yr.
Linguistics	Mod. Lang 26-269 (180)	no equivalent	no credit
Mathematics	Math 44-131	Math (unassigned)	(1) 1st yr.
	Math 44-132	Math 210 (1½)	
	Math 44-210	no equivalent	no credit

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 44-220	Math 101 (1½)	
	Math 44-440	Math (unassigned) (1½)	
	Math 44-442	= Ma 12	no credit
	Math 44-448	Math (unassigned) (1½)	
	Math 44-450	Math 100 (1½)	
Music	Music 12-101	under consideration	
	Music 12-150	under consideration	
	Music 12-151	under consideration	
	Music 12-152	under consideration	
	Music 12-153	under consideration	
	Music 12-154	under consideration	
	Music 12-156	under consideration	
	Music 12-159	under consideration	
	Music 12-162	under consideration	
	Music 12-164	under consideration	
	Music 12-165	under consideration	
	Music 12-166 (101)	under consideration	
	Music 12-170	under consideration	
	Music 12-210	under consideration	
	Music 12-220	under consideration	
	Music 12-240	under consideration	
	Music 12-351	under consideration	
Philosophy	Phil 27-331 & 333 (200) <i>or</i> Phil 27-332 & 334 (210)	Phil 100 (3)	
Physical Education	P.E. 64-540	P.E. 100 (0)	badminton
	P.E. 64-541	P.E. 100 (0)	track & field
	P.E. 64-542	P.E. 100 (0)	volleyball
Physics	Phys 45-425 & 426 (210)	Phys 101 (3)	
	Phys 45-480 & 487 (200)	Phys 103 (3)	
	Phys 45-486	Phys (unassigned) (1½)	
Political Science	Poli 22-271	Poli (unassigned) (1½)	
	Poli 22-272	Poli (unassigned) (1½)	student would not have to take Poli 200
	Poli 22-273	Poli (unassigned) (1½)	
	Int. Rel. 32-442	Poli (unassigned) (1½)	
Psychology	Psyc 28-191 & 192 (200)	Psyc 100 (3)	
	Hum. Dev. 33-100	Psyc (unassigned) (1½)	1st yr.
Slavonic & Oriental Studies	Mod. Lang 26-161 & 162 (100 & 200)	Russ 100 (3)	
Theatre	Thea 95-140	Thea 105 (3)	
	Thea 95-182	Thea 260 (1½)	upon exam by Dept.
	Thea 95-801	Thea (unassigned) (1½)	half of 100
	Thea 95-802	Thea (unassigned) (1½)	
	Thea 95-803	no equivalent	no credit
	Thea 95-806	Thea (unassigned) (1½)	
Visual Arts	Art 11-101 & 103 & 108 & 109 & 110	Art 100 (3)	
	Art 11-140	no equivalency	no credit

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Art 11-200, & 210	Art 109 (3)	
	Art 11-230	no equivalency	no credit
	Art 11-250	no equivalency	no credit
	Art 11-260	no equivalency	no credit

Arts & Science	B.C.St. 31-210, 211 or 212	Soc.Sci. (unassigned, 1½ each)	
	Hum 34-520	Lib.Arts (unassigned) (1½)	
	Hum 34-100	Humanities (unassigned) (1½)	

Malaspina College (Nanaimo)

Anthropology & Sociology	Anth 111 & 112	Anth 100 (3)	
	Anth 121 & 122 <i>or</i> 211 & 212	Anth 200 (3)	
	Anth 221	Anth (unassigned) (1½)	
	Soe 111 & 112	Soc 100 (3)	
	Soc 220	Soe (unassigned) (1½) 2nd yr.	
	Soc 230	Soc (unassigned) (1½) 2nd yr.	
	Soc 240	Soe (unassigned) (1½) 2nd yr.	
	Soc 250	Soe (unassigned) (1½) 2nd yr.	
	Soc 251	Soe (unassigned) (1½) 2nd yr.	
	Soc 260	no equivalent	no credit

Biology	Biol 111 & 112	Biol 150 (3)	
	Biol 200 & 201	Biol 200 (3) <i>or</i> (unassigned, 1½ each)	
	Bot 221	Biol 203 (1½)	
	Bot 222	Biol 204 (1½)	
	Zool 203	Biol 207 (1½)	
	Zool 205	Biol 206 (1½)	
	Zool 221 & 222	Zool 202 (3)	1970-71 course

Chemistry	Chem 121 & 122	Chem 124 & 121 (4)	
	Chem 201 & 202	Chem 221 (1)	
	Chem 211 & 212	Chem 224 (2)	
	Chem 221 & 222	Chem 224 & 221 (3)	
	Chem 231 & 232	Chem 233 & 231 (3) <i>or</i> 230 & 231 (3)	

Economics	Econ 100 & 101	Econ 100 (3)	
	Econ 111 & 112 <i>or</i> 211 & 212 <i>or</i> 221 & 222	Econ 200 (3)	
	Econ 231 & 232	no equivalent	no credit

English	Engl 100 & 101	Engl 110 (3)	
	Engl 111 & 112	Engl 120 (3)	
	Engl 200 & 201	Engl 200 (3)	
	Engl 211 & 212 (new)	Engl 203 (3)	
	Engl 222 & 223	Engl 202 (3)	to enter senior writing courses student must consult Dept.

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Engl 241	Engl (unassigned) (1½)	2nd yr.
	Engl 242	Engl (unassigned) (1½)	2nd yr.
French	Fren 111 & 112	Fren 160 (3)	
	Fren 121 & 122	Fren 180 (3)	
	Fren 221 & 222	Fren 290 (3)	
Geography	Geog 111 & 112	Geog 101 (3)	
	Geog 210 & 220	Geog 203 (3)	
	Geog 230 & 231	Geog 205 (3)	
	Geog 231 & 232	Geog 204 (3)	
	Geog 232 & 233	Geog 201 (3)	
	Geog 241 <i>or</i> 242 <i>or</i> 251 <i>or</i> 252	Geog (unassigned) (1½ each)	2nd yr.
	Geol 111 & 112	Geol 200 (3)	
German	Germ 111 & 112	Germ 100 (3)	grade of C+ or better req'd.
	Germ 211 & 212	Germ 240 (3) <i>or</i> Germ 260 (3)	with grade of C+ with grade of B or better
Hispanic & Italian Studies	Span 111 & 112	Span 100 (3)	
	Span 121 & 122 <i>or</i> 211 & 212	Span 240 (3)	
History	Hist 111 & 112	Hist 242 (3)	
	Hist 211 & 212	Hist 230 (3)	
	Hist 221 & 222	Hist 240 (3)	
History in Art	Art 111 & 112	H.A. 100 (3)	credit in Fac. of Ed.
		H.A. (unassigned) (3)	credit in Fac. of A. & S. or F.A.
Linguistics	Ling 111 & 112	Ling 100 (3) <i>or</i> 360 (3)	
Mathematics	Math 111 & 112 (revised 1970-71)	Math 180 (3)	if Ma 11 or 91 already taken
		<i>or</i> Math 151 (1½) <i>and</i> Math (unassigned) (1½)	if Ma 12 already taken
	Math 111 & 121	Math 151 & 102 (3) <i>or</i> 151 & 100 (3)	if Ma 12 already taken
		Math 130 (3)	
	Math 121 & 122	Math 160 (3)	
	Math 131 & 132	Math (unassigned) (1)	Dept. may allow entry to 210
	Math 140	Math 170 (1½)	
	Math 161	Math 171 (1½)	
	Math 170	Math (unassigned) (1)	
	Math 211	Math 151 (1½)	
	Math 212	Math (unassigned) (1½)	
	Math 221	Math 200 (1½)	
	Math 222	Math 201 (1½)	
	Math 241	Math 110 (1½)	
	Math 242	Math 210 (1½)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Music	Music 111 & 112	Music 110 (3)	subject to audition for B.Mus. programme
	Music 121 & 122	Music 100 (3)	
	Music 171-2G	no equivalent	no credit
	Music 113 & 114	under consideration	
	Music 141 & 142	under consideration	
	Music 143 & 144	under consideration	
	Music 151 & 152	under consideration	
	Music 153 & 154	under consideration	
	Music 161 & 162	under consideration	
	Music 211 & 212	under consideration	
	Music 221 & 222	under consideration	
Philosophy	Phil 111 & 112	Phil 100 (3)	
	Phil 121 & 122	Phil (unassigned) (3)	
Physical Education	PE 103	no equivalent	no credit
	PE 107	PE 100 (0)	(badminton)
	PE 120	PE 100 (0)	(volleyball)
	PE 122 <i>or</i> 124	PE 100 (0)	(gymnastics)
	PE 126	PE 100 (0)	(basketball)
Physics	Phys 111 & 112	Phys 103 (3)	
	Phys 121 & 122	Phys 101 (3)	
	Phys 221 & 222	Phys 211 (3)	
	Phys 231 & 232	Phys 212 (3)	
Political Science	Poli 111 & 112 <i>or</i> 211 & 212	Poli 200 (3)	
Psychology	Psyc 111 & 112	Psyc 100 (3)	
	Psyc 203	Psyc (unassigned) (1½)	2nd yr.
	Psyc 203 & 204	Psyc 200 (3)	
	Psyc 213	Psyc (unassigned) (1½)	2nd yr.
	Psyc 214	Psyc (unassigned) (1½)	2nd yr.
	Psyc 223	Psyc (unassigned) (1½)	2nd yr.
	Psyc 223 & 213 <i>or</i> 224	Psyc 220 (3)	
Theatre	Thea 111 & 112	Thea 100 (3)	
	Thea 201 & 202	Thea 120 (3)	
Visual Arts	Art 101 & 102	Art 109 (3)	
	Art 105 & 106 & 152 & 181 & 182	Art 105 (6)	
	Art 191 & 192	no equivalency	no credit
Arts & Science	Phys.Sci. 131 & 132	Science (non-lab) (unassigned) (3)	

College of New Caledonia (Prince George)

Anthropology & Sociology	Anth 101 & 102	Anth 100 (3)	
	Anth 201 & 202	Anth 200 (3)	
	Soc 101 & 102	Soc 100 (3)	
	Soc 201 & 202	Soc (unassigned) (3)	2nd yr.

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Biology	Biol 101 & 102	Biol 150 (3)	if grade of B or better attained
	Biol 103 & 104	Biol 150 (3)	
	Biol 201 & 202	Biol 200 (3)	
	Zool 201 & 202	Biol 207 (1½)	
Chemistry	Chem 101 & 102 <i>or</i> 103 & 104	Chem 120 & 111 (4)	
	Chem 201 & 202	Chem (unassigned) (3)	
	Chem 203 & 204	Chem 230 & 231 (3)	
Classics	Clas 101 & 102	Clas 100 (3)	
Economics	Econ 101 & 102	Econ 100 (3)	
	Econ 101	Econ (unassigned) (1½)	
	Econ 201 & 202	Econ 200 (3)	
	Bus 101	Comm 151 (1½)	
	Bus 103	Comm 190 (1½)	
English	Engl 101 & 102	Engl 120 (3)	
	Engl 103	Engl (unassigned) (1½) half of 110	
	Engl 201 & 202	Engl 200 (3) <i>or</i> (unassigned, 1½ each)	
	Engl 203 & 204	Engl (unassigned) (1½ each)	
	Engl 205 & 206	Engl 202 (3) <i>or</i> (unassigned, 1½ each)	
French	Fren 101 & 102	Fren 180 (3)	
	Fren 103 & 104	Fren 160 (3)	
	Fren 201 & 202	Fren 285 (3)	
Geography	Geog 101 & 201 <i>or</i> 203 <i>or</i> 205	Geog 101 (3)	
	Geog 103 & 203	Geog 204 (3)	
	Geog 105 & 205	Geog 205 (3)	
	Geog 201 & 202	Geog 203 (3)	
	Geol 101 & 102	Geol 200 (3)	
	Geol 201	Geol (unassigned) (1½)	
	German	Germ 101 & 102	Germ 100 <i>or</i> 140 (3)
Germ 201 & 202		Germ 240 <i>or</i> 260 (3)	if grade of C or better obtained
Hispanic & Oriental Studies	Span 101 & 102	Span 100 (3)	
History	Hist 101 & 102	Hist 242 (3)	
	Hist 103 & 104	Hist 230 (3)	
	Hist 201 & 202	Hist (unassigned) (3)	Hist 368
	Hist 203 & 204	Hist 210 (3)	
Mathematics	Math 101 & 102	Math 100 & 101 (3)	
	Math 103	Math 102 (1½)	
	Math 104	Math (unassigned) (1½)	
	Math 201 & 202	Math 200 & 201 (3)	
	Math 203	Math (unassigned) (1½)	
	Math 204	Math 110 (1½)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 205 & 206 Math 207 & 208	Math 170 & 171 (3) Math (unassigned) (1½ each)	consult Dept. for placement
Music	Music 101 & 102 Music 103 & 104 Music 201 & 202	Music 100 (3) Music 110 (3) Music 200 (3)	subject to interview & exam
Philosophy	Phil 101 & 102 Phil 201 & 202 Phil 203 Phil 204 Phil 205	Phil 100 (3) Phil 300 (3) Phil 326 (1½) under consideration under consideration	
Physics	Phys 101 & 102 <i>or</i> 103 & 104 Phys 105 & 106 Phys 201 & 202 Phys 203 & 204	Phys 101 (3) Phys 103 (3) Phys (unassigned) (3) Phys (unassigned) (3)	
Political Science	Poli 101 & 102	Poli (unassigned) (1½ each)	
Psychology	Psyc 101 & 102 Psyc 201 & 202 Psyc 203 & 204 Psyc 205 & 206	Psyc 100 (3) Psyc 200 (3) Psyc 220 (3) Psyc (unassigned) (1½ each)	2nd yr.
Theatre	Thea 101 & 102 Thea 121 & 122 Thea 201 & 202 Thea 203 & 204 Thea 231 & 232 Thea 241	Thea 100 (3) Thea 120 (3) Thea 312 (3) Thea 310 (3) no equivalent Thea 105 (3)	subject to audition no credit by permission of instructor
Visual Arts	Art 101 & 102	Art 109 (3)	

Okanagan College (Kelowna, Salmon Arm, Vernon)

Anthropology & Sociology	Soc 111 & 121	Soc 100 (3)	
Biology	Biol 111 & either 121 or 122 Biol 211 & 221 Biol 212 Biol 222	Biol 150 (3) Biol (unassigned) (3) Biol 300 (1½) Biol 306 (1½)	
Chemistry	Chem 111 & 121 Chem 112 & 122 Chem 116 Chem 116 & 126 Chem 211 & 221 Chem 212, 222 & 226	Chem 124 (3) Chem 120 (3) Chem 111 (1) Chem 121 (1) Chem (unassigned) (3) Chem 230 & 231 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Economics	Bus 111 & 121 Econ 111 & 121 Econ 211 & 221	Comm 151 & 190 (3) Econ 100 (3) Econ 200 (3)	
English	Engl 111 & 121 <i>or</i> 112 & 122 Engl 211 & 221	Engl 120 (3) Engl 200 (3)	
French	Fren 111 & 121 Fren 112 & 122 Fren 211 & 221	Fren 160 (3) Fren 180 (3) Fren 280 (3)	
Geography	Geog 111 & 121 Geog 211 & 221 Geol 111 & 121	Geog 101 (3) Geog 205 (3) Geol 200 (3)	
German	Germ 111 & 121 Germ 211 & 221	Germ 100 (3) Germ 240 (3)	
History	Hist 111 & 121 Hist 112 & 122 Hist 211 & 221	Hist 242 (3) Hist 230 (3) Hist 210 (3)	
History in Art	H.A. 111 & 121	H.A. 100 (3)	
Mathematics	Math 110 & 120 Math 111 & 121 Math 112 & 122 Math 211 & 221 Math 212 & 222	= Ma 12 Math (unassigned, 1½ each) Math 100 & 101 (1½ each) <i>or</i> 130 (3) Math 110 & 210 (3) Math 230 (3)	no credit acceptable substitute for Math 160
Physics	Phys 111, 116, 121 & 126 Phys 211, 216, 221 & 226	Phys 101 (3) Phys (unassigned) (3)	
Psychology	Psyc 111 & 121 Psyc 211 & 221	Psyc 100 (3) Psyc (unassigned) (3)	
Selkirk College (Castlegar)			
Anthropology & Sociology	Anth 100 & 101 Soc 110 <i>or</i> 120 & 121 Soc 111 Soc 211 Soc 220 (old) Soc 220 (new) Soc 221 (old) Soc 221 (new)	Anth 100 (3) Soc 100 (3) Soc (unassigned) (3) Soc (unassigned) (3) Soc (unassigned) (3) Soc (unassigned) (1½) Soc (unassigned) (3) Soc (unassigned) (1½)	
Biology	Biol 102 & 103 <i>or</i> Biol 104 <i>or</i> 110 <i>or</i> 111 Biol 200 <i>or</i> 213 Biol 204 <i>or</i> 230 Biol 206 <i>or</i> 240	Biol 150 (3) Biol 306 (1½) Biol (unassigned) (1½) Biol (unassigned) (1½)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Biol 208 & 210 <i>or</i> 231 & 241	Bot 205 (3)	1970-71 course
	Biol 214 & 216 <i>or</i> 232 & 242	Zool 202 (3)	1970-71 course
	Biol 218	Biol 312 (1½)	
Chemistry	Chem 104 <i>or</i> 110 <i>or</i> 112	Chem 120 & 111 (4)	
	Chem 111 <i>or</i> 122	Chem 124 & 121 (4)	
	Chem 211 & 240	Chem 224 & 221 (3)	
	Chem 212	Chem 230 & 231 (3)	
Economics	Comm 230 & 240	Comm 190 & 151 (1½ each)	
	Econ 110 <i>or</i> 111	Econ (unassigned) (3)	
	Econ 210 <i>or</i> 211	Econ 200 (3)	
English	Engl 110 <i>or</i> 111 <i>or</i> 112 & 113	Engl 120 (3)	
	Engl 200 <i>or</i> 211	Engl 200 (3)	
	Engl 210 <i>or</i> 212	Engl (unassigned) (3)	
	Engl 230 & 240 <i>or</i> 231	Engl (unassigned) (3) 2nd yr. (accepted by Fac. of Ed. in lieu of Ling 100)	
French	Fren 110 <i>or</i> 111	Fren 160 (3)	
	Fren 112 <i>or</i> 120	Fren 180 (3)	
	Fren 114	Fren (unassigned) (3)	not part of Major or Hon.
	Fren 210 <i>or</i> 212 <i>or</i> 220	Fren 280(3)	
	Fren 214	Fren (unassigned) (3)	not part of Major or Hon.
Geography	Geog 130 & 131 <i>or</i> 134 <i>or</i> 140	Geog 101 (3)	
	Geog 140 & 144 (141)	Geog 205 (3)	
	Geog 230 & 144 (141)	Geog 201 (3)	
	Geog 230 & 240	Geog (unassigned) (3)	
	Geol 132 & 142	Geol 200 (3)	
German	Germ 100	Germ 100 <i>or</i> 140	grade of C or better req'd to enter 2nd yr. courses
History	Hist 100 & 101	Hist 240 (3) <i>or</i> (unassigned, 1½ each)	
	Hist 111	Hist 240 (3)	
	Hist 112	Hist 242 (3)	
	Hist 200	Hist (unassigned) (1½)	Colonial
	Hist 201	Hist (unassigned) (1½)	American
	Hist 203	Hist (unassigned) (1½)	Canadian
	Hist 211	Hist 230 (3)	
	Hist 212	Hist 210 (3)	
	Hist 216	Hist (unassigned) (1½)	
	Hist 217	Hist (unassigned) (1½)	
History in Art	F.A. 111	H.A. (unassigned) (3)	
Hispanic & Italian Studies	Ital 100	Ital 100 (3)	grade of C+ or better (or oral test) req'd to enter higher courses
	Ital 200	Ital 200 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>	
Mathematics	Math 103	Math (unassigned) (1)		
	Math 100 & 101 <i>or</i> Math 111	Math 130 <i>or</i> 100 & 101 (3)		
	Math 130 & 131 <i>or</i> Math 110	Math (unassigned) (3)	if Ma 12 not already taken	
	Math 200 & 201 <i>or</i> Math 211	Math 230 <i>or</i> 200 & 201 (3)		
	Math 220 & 221 <i>or</i> Math 212	Math 232 <i>or</i> 110 & 210 (3)		
	Math 230 <i>or</i> 213	Math (unassigned) (2)	with 110 (or 130/131) plus 100 at UVic = credit for Math 140	
	Comp Sc 130 <i>or</i> 200	Math 170 (1½)		
	Comp Sc 201	Math 271 (1½)		
	Comp Sc 211 (old)	Math 170 & 171 (3)		
Philosophy	Phil 100 & 101	Phil 100 (3)		
Physical Education	P.E. 201 <i>or</i> 202 <i>or</i> 200 P.E. 218	Gymnastic activities P.E. 100 (0)	no credit volleyball	
	Physics	Phys 100 <i>or</i> 102 <i>or</i> 110 Phys 104 <i>or</i> 111 & 112 Phys 200 Phys 202 & 203 <i>or</i> 231 & 241 Phys 204 Phys 206 <i>or</i> 240 Phys 208 Phys 210	Phys 103 (3) Phys 101 (3) lab for Phys 211 no separate credit Phys 211 (3) Phys (unassigned) (1½) Phys (unassigned) (1½) Phys (unassigned) (1½) Phys (unassigned) (1½)	
Psychology	Psyc 100 & 101 <i>or</i> Psyc 111	Psyc 100 (3)		
	Psyc 200 & 201 <i>or</i> Psyc 211	Psyc 200 (3)		
	Psyc 206 & 207 <i>or</i> Psyc 212	Psyc 220 (3)		
	Psyc 216 & 217	Psyc (unassigned) (3)		
	Psyc 220 & 221	Psyc (unassigned) (3)		
	Slavonic & Oriental Studies	Russ 100 <i>or</i> 111 Russ 120 (new) <i>or</i> 112 Russ 120 (old) Russ 200 <i>or</i> 211 Russ 220 (new) <i>or</i> 212 Russ 220 (old)	Russ 100 (3) no equivalent Russ 200 (3) Russ 200 (3) Russ (unassigned) (3) Russ 201 (3)	no credit
	Arts & Science	Arts I)))	Humanities (unassigned) (9) Lab Science (3) Language (3)	

Trinity Western College (Langley)

Anthropology & Sociology	Anth 101 & Soc 201 Soc 212	A/S 100 (3) Soc (unassigned) (1½)	69-70 course
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<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Soc 221	Soc (unassigned) (1½)	
Biology	Biol 105 & 106	Biol 150 (3)	
	Zool 205	Biol 207 (1½)	
	Zool 206	Biol (unassigned) (1½)	
Chemistry	Chem 101 & 102	Chem 111 & 120 (4)	
	Chem 111 & 112	Chem 121 & 124 (4)	
	Chem 205 & 206	Chem (unassigned) (3)	may be 224 & 221 upon interview
	Chem 211 & 212	Chem (unassigned) (3)	may be 230 & 231 upon interview
Economics	Econ 201 & 202	Econ 200 (3)	
English	Engl 101 & 102	Engl 120 (3)	
	Engl 205 & 206	Engl 200 (3)	
	Engl 260, 261 & 262	Engl 201 (3)	
	Engl 260 or 261 or 262	Engl (unassigned) (1½ each)	2nd yr.
French	Fren 101 & 102	no equivalent	no credit
	Fren 111 & 112	Fren 160 (3)	no credit if Fr 12 already taken
	Fren 121 & 122	Fren 180 (3)	
	Fren 211 & 212	Fren 260 (3)	
	Fren 221 & 222	Fren 280 (3)	
Geography	Geog 101 & 102	Geog 101 (3)	
	Geol 201 & 202	Geol 200 (3)	
	Field Surv. 252	Geog (unassigned) (1½)	
German	Germ 101 & 102	Germ 100 or 140 (3)	with grade of C or better
	Germ 211 & 212	Germ 240 or 260 (3)	with grade of C or better
Hispanic & Italian Studies	Span 101 & 102	Span 100 (3)	grade of C+ required in all cases
	Span 121 & 122	Span 240 (3)	
	Span 211 & 212	Span 260 (3)	
History	Hist 105 & 106	Hist 240 (3)	
	Hist 111 & 112	Hist (unassigned) (3)	
	Hist 201 & 202	Hist 230 (3)	
	Hist 205 & 206	Hist 210 (3)	
	Hist 231 & 232	Hist 242 (3)	
History in Art	Art 125 & 126	H.A. 100 (3)	
Mathematics	Math 101 & 102	Math (unassigned) (3)	if not taken to complete high school
	Math 105 & 106	Math 100 & 101 (3)	
	Math 121	Math 110 (1½)	
	Math 205 & 206	Math 200 & 201 (3) or 230 (3)	
	Math 221	Math 210 (1½)	
Music	Music 105 & 106	Music 115 (2)	Fac. of Ed. only
	Music 121 & 122	Music 100 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Music 135 & 136 <i>or</i> 235 & 236	Music 110 (3)	
Philosophy	Phil 205 & 206	Phil 100 (3)	
Physical Education	P.E. 161	P.E. 143 (1½)	
	P.E. 180	P.E. 100 (0)	badminton
	P.E. 182	P.E. 100 (0)	track & field
	P.E. 183	P.E. 100 (0)	volleyball
	P.E. 184	no equivalent	
	P.E. 185	P.E. 100 (0)	soccer
	P.E. 187	no equivalent	
	P.E. 190	P.E. 100 (0)	basketball
Physics	Phys 121 & 122	Phys 101 (3)	
	Phys 201 & 202	Phys (unassigned) (3)	
Political Science	Poli 201 & 202	no equivalent	no credit
Psychology	Psyc 105 & 106	Psyc 100 (3) <i>or</i> (unassigned, 1½ each)	
	Psyc 205 & 206	Psyc 220 (3)	
	Psyc 211 & 212	Psyc (unassigned) (3)	2nd yr.
	Psyc 294	Psyc (unassigned) (1½)	2nd yr.
Visual Arts	Art 227 & 228	no equivalent	no credit
Arts & Science	Hum 121 & 122	Hum (unassigned) (3)	
Vancouver City College (Vancouver)			
Anthropology & Sociology	Anth 120 & 130	Anth 100 (3)	
	Anth 121	no equivalent	no credit
	Anth 195	no equivalent	no credit
	Soc 120 & 121	Soc 100 (3)	
	Soc 195	no equivalent	no credit
	Soc 222	Soc (unassigned) (1½)	
	Soc 223	Soc (unassigned) (1½)	
	Soc 315	no equivalent	no credit
Biology	Biol 115 & 117 & 215 <i>or</i>	Biol 150 (3)	
	Biol 116		
	Biol 130	Biol (unassigned) (1½)	
	Biol 140	Biol (unassigned) (1½)	no credit toward Biology Major
	Biol 150	Biol (unassigned) (1½)	
	Biol 160	no equivalent	no credit
	Biol 330	Biol 300 (1½)	
	Biol 350 & 360	Zool 202 (3)	70-71 course
	Biol 370	Biol (unassigned) (3) <i>or</i> Bact 200 (3)	no credit toward Biology Major
	Biol 380	Biol 306 (1½)	
	Biol 460	Biol (unassigned) (1½)	
Chemistry	Chem 115 & 215	Chem (unassigned) (3)	C+ or better required to enter 230

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Chem 115H & 215H	Chem (unassigned) (3)	C+ or better required to enter 224 and/or 233
	Chem 116 & 216	Chem 111 & 120 (4)	
	Chem 315 & 415	Chem (unassigned) (3)	terminal course
	Chem 316	Chem (unassigned) (1½)	
	Chem 416	Chem (unassigned) (1½)	
Economics	Econ 117 & 118	Econ (unassigned) (3)	no credit if continuing in Econ.
	Econ 155 & 165 or 115 & 116	Econ 100 (3)	
	Econ 321 & 421	Econ 200 (3)	
	Acct 115 & 215	Comm 151 & 190 (3)	
English	Engl 117 & 217	Engl 120 (3)	
	Engl 181 & 281	Engl (unassigned) (3)	
	Engl 323 & 424	Engl 200 (3)	
	Engl 325 & 327	Engl (unassigned) (3)	
French	Fren 115 & 215	no equivalent	no credit
	Fren 117 & 217	Fren 160 (3)	
	Fren 119 & 219	Fren 180 (3)	
	Fren 327 & 427	Fren 260 (3)	
	Fren 329 & 429	Fren 280 (3)	
Geography	Geog 150 & 350	Geog 201 (3)	
	Geog 160	Geog (unassigned) (1½)	
	Geog 170 & 270 or 180 or 190	Geog 101 (3)	
	Geog 180 & 190	Geog 203 (3)	cannot substitute for Geog 101 in Fac of Ed
German	Germ 117 & 217	Germ 100 or 140 (3)	with grade of C or better
	Germ 119 & 219	Germ 240 (3)	with grade of C or better
	Germ 329 & 429	Germ (unassigned) (3)	
History	Hist 113 & 213	Hist 238 (3)	
	Hist 120 & 230	Hist 240 (3)	
	Hist 140 & 240	Hist 242 (3)	
	Hist 150 & 260	Hist 230 (3)	
	Hist 161 & 349	Hist (unassigned) (3)	
	Hist 170 & 280	Hist 210 (3)	
	Hist 330	Hist (unassigned) (1½)	
	Hist 333	Hist (unassigned) (1½)	half of 374
	Hist 339	Hist (unassigned) (1½)	half of 325
	Hist 369	Hist (unassigned) (1½)	
	Hist 400/71 (195)	Hist (unassigned) (1½)	
	B.C.St. 220	Hist (unassigned) (1½)	
History in Art	Art Hist 114 & 214	H.A. 100 (3)	
Hispanic & Italian Studies	Span 117 & 217	Span 100 (3)	
Mathematics	Math 131 & 231	Math 170 & 171 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 151 & 251	Math (unassigned) (3)	if Ma 11 or 91 already taken
	Math 161 & 261	Math 160 (3)	
	Math 171 & 271	Math 130 <i>or</i> 100 & 101 (3)	
	Math 172	Math (unassigned) (1)	
	Math 272	Math (unassigned) (1)	
	Math 273	Math (unassigned) (1)	
	Math 327 & 427	Math 230 (3)	
	Math 329 & 429	Math 232 <i>or</i> 110 & 210 (3)	
	Math 473	Math (unassigned) (1)	required for Math Honours
Philosophy	Phil 120 & 122	Phil 100 (3)	
	Phil 223	Phil (unassigned) (1½)	
	Phil 224	Phil 223 (1½)	
	Rel.St. 120 & 220	Phil (unassigned) (3)	
Physical Education	P.Ed. 133	P.E. 100 (0)	golf
	P.Ed. 134	P.E. 100 (0)	tennis
	P.Ed. 136	to be determined individually	
	P.Ed. 140	P.E. 100 (0)	track & field
	P.Ed. 143	P.E. 100 (0)	rugby
	P.Ed. 144	P.E. 100 (0)	badminton
	P.Ed. 145	P.E. 100 (0)	basketball
	P.Ed. 147	P.E. 100 (0)	volleyball
	P.Ed. 150	P.E. 100 (0)	gymnastics
	P.Ed. 156	P.E. 100 (0)	swimming
	P.Ed. 160	P.E. 143 (1½)	
	Recr 160	P.E. 343 (1½)	
	Recr 171	P.E. 344 (1½)	
	Recr 461	P.E. 142 (1½)	
Physics	Phys 115 & 215	Phys 101 (3)	
	Phys 325 & 425	Phys 121 <i>or</i> 211 (3)	
Political Science	Poli 117 & 119	Poli 200 (3)	
	Poli 219	Poli (unassigned) (1)	half of 350
	Poli 220	Poli (unassigned) (1)	2nd yr.
	Poli 250	no equivalent	no credit
	Poli 260	Poli (unassigned) (1)	2nd yr.
Psychology	Psyc 115 & 215	Psyc 100 (3)	
	Psyc 320	Psyc (unassigned) (1)	2nd yr.
	Psyc 322 & 323	Psyc 220 (3)	
	Psyc 324 & 424	Psyc 335 (3)	

REGISTRATION

1. **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 Registrar's Office. Each student, by his Notice of Admission or 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 Notices of Admission and Authorizations to Re-register that are not exercised in the session to which they apply are automatically cancelled.

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.

No registration fee will be valid unless all required procedures have been completed and fees have been paid in accordance with the regulations given on page 76.

2. **English Requirement:** All students enrolling in First Year are required to write a qualifying examination to test their proficiency in expressing themselves in the English language. Students who fail the qualifying examination are required to complete English 110. Details of the time and place of the examination will accompany the registration materials sent to each student.

3. **Late Registration:** The period for late registration in September is the first five days of classes.

4. **Unsatisfactory Standing:** No student with unsatisfactory standing will be permitted to register without the permission of the Faculty concerned.

5. **Registration in fewer than 9 units of credit courses:** Employed persons or others unable to undertake full-time studies who wish to register as part-time students, i.e., students taking fewer than 9 units of course work, and who have applied by the due date for re-registration (June 30) or new admission (August 1) may elect to register by mail but must do so no later than September 1. Otherwise, registration must take place in person on a day appointed by the Registrar. Students who register after the appointed day will be subject to late registration fees. See page 75.

6. **Deferred Examinations:** If the results of deferred examinations affect the standing of a student, his Authorization to Re-register will not be issued until examination results are available.

7. **Registration for Both Terms in Winter Session:** Students planning to undertake studies in both terms of the Winter Session must register for all courses they intend to take, including half-year courses beginning in January.

8. **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:

- (a) Register during the regular September registration period for a programme of half-year courses to be taken in the First Term only (applications due by June 30 or August 1 (see pages 36 and 37)).
- (b) Register on the first day of classes in January for a programme of half-courses to be taken in the Second Term only (applications due by November 15).

9. **Course and Programme Changes:**

- (a) Students may add and drop courses during the first ten days of classes in the First Term and during the first five days in the Second Term upon submission of the appropriate change form to the Registrar's Office. (See para. 3, page 32.)
- (b) 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 appropriate withdrawal forms to the Registrar's Office. (See para. 3, page 32.) Failure to notify the Registrar by the specified date will result in the student receiving an F for the course.

(c) 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.

10. **Auditing a Course:** A student may be admitted to a certain course as an auditor upon the payment of fees as specified on page 75. Auditors may participate in the course if they wish but will not receive credit for any work undertaken.

11. **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 Registrar's Office and that all changes, including those in address and telephone number, are reported promptly to the Registrar's 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 forms. Such registration, however, will be counted in determining the student's eligibility for a supplemental examination or scholarship standing and will be used when calculating standing and grade point average.

Also, a student who registers in a course which carries no credit in his degree programme or Faculty must indicate this by entering FNC (For No Credit) on his registration forms. Such registration will not be counted in computing a student's grade point average or standing, or in determining eligibility for scholarships or a supplemental examination.

12. **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.

13. **Credit by Special Evaluation:** In exceptional instances, the experience of a student may have prepared him to obtain credit by special evaluation for a given course, subject to the following conditions:

- (a) Credit by special evaluation is open only to undergraduate students who are formally registered at the University or who have been formally admitted to the University.
- (b) Credit by special evaluation is limited to 15 units of credit counted towards a degree.
- (c) Credit by special evaluation is available only in undergraduate courses in those departments whose policies permit special evaluations in those courses.
- (d) Credit by special evaluation will be granted only if the course concerned is applicable to the degree programme selected by the student.
- (e) Special evaluations shall be undertaken at the time or times specified by the department concerned.
- (f) A student may not apply for a special evaluation in any of the following circumstances:
 - i. the course is the equivalent of one in which he has registered previously at the secondary school, college or university level;
 - ii. the course is more elementary than courses for which he has already received credit;
 - iii. the course is at the 100 or 200 level in his native language (other than English).
- (g) When making application for a special evaluation, the student must first consult the department offering the course.
- (h) If the department permits the special evaluation, the student's application will be signed by the department head or chairman indicating this and the student will be informed of the time that the special evaluation will take place.

- (i) The student shall then submit the application to the Registrar together with the required fee, as provided for in the schedule of fees shown on page 79.
- (j) On payment of the fee, the Registrar's Office will authorize the special evaluation by means of a notation on the application form and will forward a copy of the form to the department so that the department may proceed with the evaluation.
- (k) On completion of the special evaluation, the department shall inform the student in writing of the grade received and shall also notify the Registrar's Office in writing.
- (l) The results of a special evaluation will be entered in the academic record of the student in the session in which he is registered. If the evaluation is completed before registration, the results will not be entered in the student's record until he is registered and in attendance. In any case, the grade received will be reflected in the student's sessional grade point average.

14. **Credit for Courses Passed in a Year Failed prior to 1969-70:**

- (a) A student who intends to register in the final year of a degree programme may apply for credit in those courses which were passed within a failed year at the University of Victoria and for which no credit was granted, provided that the courses are applicable to the degree programme selected by the student. Application should be made to the Registrar when making application to register in the final year or when making application for graduation.
- (b) A student who intends to register in the final year of a degree programme may apply for credit in those courses which were passed within a failed year at another university or at a college and for which no credit was granted on admission, provided that the courses are applicable to the degree programme selected by the student. Appeals should be made in writing at the same time that application is made for registration in the final year of a degree programme, and should be addressed to the Senate Committee on Admission and Re-registration, c/o Registrar's Office. The Committee will judge each case separately and on its own merits. In particular, it will consider the student's total record of achievement at the University of Victoria.

15. **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 Notice of Admission, 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 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.

CATEGORIES OF STUDENTS

Each student who has been authorized to register in an undergraduate Faculty is designated as one of the following:

- 1. Regular student { Candidate for a degree
Candidate for a diploma in Education
(Elementary or Secondary)
- 2. Special student

Regular and special students registered in fewer than 9 units of credit courses in the Winter Session are recorded as part-time students; those registered in 9 units or more are recorded as full-time students. (See para. 3, page 32.)

Students registered in the Faculty of Graduate Studies should refer to categories of students given on page 326.

PROBATION

A student may, because of a marginal record upon admission, or a poor record during previous attendance, be placed on probation either until Christmas or for the full academic year.

GRADUATION

Convocation takes place in 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. Graduands who have received permission to complete a course or courses elsewhere must apply for graduation not later than December 1. Special forms for this purpose are available from the Registrar's office. See regulation regarding Graduating Class Fee, page 75, para. 3.

GRADUATION REQUIREMENTS FOR BACHELOR'S DEGREES

1. At least 60 units of university level courses are required.
2. At least 21 units must be in courses numbered 300 or higher.
3. A passing grade in either the qualifying examination in English or English 110 is required.

ATTENDANCE

1. **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 6 under *Evaluation of Student Achievement*, page 68.)
2. **Absence Consequent on Illness:** Students who are absent because of illness or disability should report to their instructors on return to classes.

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, laboratory or practical sessions and tutorials in a course are indicated in the following examples:

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

January-April only.

EVALUATION OF STUDENT ACHIEVEMENT

Undergraduate Facilities

1. Depending on the nature of the subject matter and the wishes of a given Department or Faculty, a variety of examination techniques may be used.
2. At the end of each session, students are awarded a letter grade in each course indicating their level of achievement. The method of determining this letter grade shall be chosen by the instructor from amongst alternative techniques agreed upon by the department and approved by the Senate. At the beginning of the session the instructor will discuss with students and advise the department of the methods to be used for carrying out evaluation: term and final examinations, papers, reports, essays and other assignments.
3. Examinations in the winter session are held in December and April.
4. Applications for special consideration because of illness or domestic affliction must be submitted in writing to the Registrar not later than two days after the close of the examination period. In all such cases a medical certificate or other substantiating document must be presented to the Registrar's Office.
5. 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 examination, and students who have not obtained a grade of at least D will neither be permitted to write the examination nor to receive any credit for the course. If 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.
6. 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.
7. 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.

Senate Regulations for 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 examinations. Invigilators should send unusual cases to the Registrar 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 Registrar. If he has other reason for complaint, he should communicate with the Registrar 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 domestic affliction before an examination should report the circumstances immediately to the Registrar.
14. In case 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 Timetables

Timetables are posted on official University bulletin boards approximately two weeks before the dates announced for the beginning of Christmas and final examinations.

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 Registrar, 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 Registrar's 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.

Review of an Assigned Grade

Students may not have access to final examination papers without the permission of the Department or Faculty concerned and the Registrar.

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 (for which a request for a review will not be granted) must reach the Registrar within two weeks after the announcement of final grades and must be accompanied by a fee of \$7.50 for each course concerned, which will be refunded only if the grade is raised.

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 Department Head or 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, self-evaluation or class participation.

GRADING SYSTEM

The following letter grades are used in evaluating student achievement:

Letter Grade	Grade Point Value	*Class
A+ A, A-	9, 8, 7	First Class
B+, B, B-	6, 5, 4	Second Class
C+, C, D	3, 2, 1	Pass
E	0	Failure (conditional supplemental)
F	0	Failure (no supplemental)
N	0	Failure (did not write final examination or otherwise complete course requirements by the end of the term/session. No supplemental.)

*Does not apply to the Faculty of Graduate Studies.

If a student falls ill during an examination or misses an examination because of illness or domestic affliction, this must be brought to the attention of the Registrar. A physician's certificate or other substantiating document must be submitted to the Registrar within two days of the close of the examinations. The Registrar will communicate with the Instructor in regard to his assessment of the student's performance.

Please note: deferred examinations are granted only where final examinations are involved. Deferred examinations are normally held in August. If a deferred examination is not taken, the grade becomes N. The grade E is not granted to Summer Session and part-time students, who are not entitled to write supplementals.

The table below is provided for the convenience of students who began their work under the former marking system, the University having adopted the above grading system effective September 1965.

OLD Mark/150	NEW Letter Grade	Grade Point Value
less than 60	F	0
60 - 74	E	0
75 - 81	D	1
82 - 89	C	2
90 - 96	C+	3
97 - 104	B-	4
105 - 111	B	5
112 - 119	B+	6
120 - 126	A-	7
127 - 134	A	8
135 - 150	A+	9

STANDING

Undergraduates taking at least 15 units of work, and obtaining a grade of at least D in each subject, will be placed in one of the following categories on the basis of general average:

First Class, a grade point average of 6.5 or higher;

Second Class, a grade point average between 3.5 and 6.49;

Pass, a grade point average between 1.0 and 3.49.

CREDIT

A student is entitled to receive credit for any course in which he attains a final grade of D or higher, provided that he has not previously received credit for the same course or its equivalent.

SATISFACTORY STANDING — UNDERGRADUATE STUDENTS

Winter Session

1. A student taking more than 9 units in the winter session will achieve satisfactory standing only if, as a result of his final grades, at the end of the session, he passes in courses totalling at least 9 units in value.
2. A student taking 9 units or fewer in the winter session will achieve satisfactory standing only if, as a result of his final grades at the end of the session, he passes in all his courses.

Summer Session

1. A student taking more than 3 units in summer session will achieve satisfactory standing only if, as a result of his final grades at the end of the session, he passes in courses totalling at least 3 units in value.
2. A student taking 3 units or fewer in summer session will achieve satisfactory standing only if, as a result of his final grades at the end of the session, he passes in all his courses.

WITHDRAWAL

The Board of Governors and the Senate may require a student to withdraw from the University at any time for unsatisfactory conduct, for failure to abide by regulations, or for unsatisfactory progress in his programme of studies or training.

Any student who after registration decides to withdraw from the University must first report to the Director of the Counselling Centre, or the Director of the Advising Centre (Education students), and then to the Registrar. He will be required to obtain clearance from the University, to the satisfaction of the Registrar, before being granted **Honourable Dismissal** or recommended, where applicable, for refund of fees. See page 64, para. 9(b).

Withdrawal for Unsatisfactory Standing

1. An undergraduate student who, in the course of his academic career, fails to achieve satisfactory standing in any one session, will, if priorities subsequently established permit, be authorized to re-register at the University and will be placed on probation.

2. An undergraduate student who, in the course of his academic career, fails to achieve satisfactory standing in any two academic sessions, whether they be consecutive or not, will normally be required to withdraw for a period of not less than one year. A student who has been required to withdraw must apply in writing through the Registrar to the Senate Committee on Admission and Re-registration for authorization to re-register at the University in a future session.

3. If a student re-registers under 2, he must achieve satisfactory standing in all subsequent sessions, otherwise he will be required to withdraw permanently.

4. Any undergraduate student whose academic record, as determined by the grades assigned in the first term, is unsatisfactory, may, upon the decision of the Faculty and on notification by the Registrar, be required to discontinue attendance 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.

UNDERGRADUATE SUPPLEMENTAL EXAMINATIONS

1. (a) In the winter session no candidate will be granted supplementals in more than 3 units. A candidate will be granted a supplemental in a subject which he has taken during the session provided (i) he has written the final examination and has obtained a final grade of E, and (ii) he has obtained (as a result of the final examinations) at least 12 units of credit in that session. A grade of E confers only conditional supplemental standing and is not a guarantee of supplemental eligibility. Students in the Faculty of Education taking a *required* 18 unit year may write up to 6 units of supplementals. A student who obtains a grade of F in a given subject may not write a supplemental examination in that subject.

(b) **No supplementals will be granted to Summer Session and part-time students.**

2. If a grade of E is obtained in a December final, the student has the option of repeating the first term course in the second term if it is offered, or, if eligible, writing a supplemental examination in August if he wishes a credit for the course.

3. A student in the final year of a degree programme taking only 12 units of course work will be granted supplemental privileges in 3 units, at the discretion of the Dean concerned and the Registrar, provided the student has written the final examination and obtained a grade of not less than E in the course for which supplemental privileges are granted.

4. If a supplemental granted in a course is passed with a grade of at least D, credit will be given for the course. In the computation of the overall average in the work of a session or for a degree, the grade in a supplemental, if passed, will be considered as D.

5. Similarly, the overall average will not be changed if a subject already passed is written for higher standing.

6. In all but the Final Year a candidate who has been granted a supplemental may write it only once. If he fails, he must repeat the course or take a permissible substitute. In the Final Year he may write it twice.

7. Supplemental examinations, covering the work of both the first and second terms, will be held in August.

8. Applications for supplemental examinations, accompanied by the necessary fees, must be in the hands of the Registrar by July 1.

9. If a student, because of exceptional circumstances, is permitted to postpone a supplemental beyond the first regular supplemental examination period, he will be responsible for the content of the course as currently offered. If the course is not offered or has been discontinued, the supplemental privilege may be cancelled. Attention is also drawn to the section under *Satisfactory Standing*.

Supplemental examinations may be written at the following B.C. 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 \$10.00; at a regular outside centre, 15.00. In the event that a candidate does not appear for an examination, the refund will be \$5.00 only. Conditions governing refunds appear on page 79 under *Other Fees and Charges*.

TRANSCRIPT OF ACADEMIC RECORD

On request of the student, a transcript of a student's academic record will be mailed 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 first term grades.

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

No transcript will be issued to or for a student who has not made arrangements satisfactory to the Accounting Office to meet any outstanding indebtedness.

Granted Honourable Dismissal indicates that the student is in no disciplinary difficulty at the time the transcript is issued; the term has no reference to academic status.

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

Fees for transcripts of academic record: one copy free of charge at the completion of each year; three copies free of charge following graduation; additional copies supplied at the rate of 2 copies for \$1.00. Free copies may not be accumulated.

FEES

General

1. The University reserves the right to change fees without notice.
2. Fees are not transferable from one session to another.
3. While the University may issue fee bills from time to time, it is the responsibility of the student to calculate his fees in accordance with the following regulations and to ensure payment by the prescribed dates.
4. Students registering in the Summer Session should consult the Calendar Supplement for Summer Session which is published separately.

Tuition Fees

1. Undergraduate Programmes:

Winter Session:	\$30.00 per unit (see 3. below), with a maximum total fee of \$428.00 for the session
Summer Session and Intersessional Studies:	\$100.00 per 3 unit course (see 3. below)
La Maison Française:	\$160.00
Internship programme:	\$428.00
Diploma Programme in Education Administration:	\$496.00
Industrial Education Programme:	Students who are taking courses at the Division of Industrial Education at Burnaby will be assessed fees in accordance with the schedule published by The University of British Columbia (\$100.00 per 3 unit course).

2. Graduate Programmes:

	<i>Master's degree</i>	<i>Doctor's degree</i>
Total tuition fee:	\$600.00	\$900.00
Full-time students:		
First year	\$450.00	\$450.00
Second year	\$150.00	\$450.00

Master's candidates completing the degree requirements in the first half of the second year will be exempt one-half of the second year's tuition fees. Full-time students who change to part-time status in their second year will normally be assessed at \$30.00 per unit, but must understand that the full fee of \$600.00 for the Master's programme or \$900.00 for the Doctoral programme must be paid before graduation.

Part-time students: \$30.00 per unit (see 3. below)

Special and qualifying students: \$30.00 per unit (see 3. below). Fees paid in these categories are not applicable toward a subsequent degree programme.

Part-time, special and qualifying students who register for Summer Session and Intersessional courses will be assessed tuition fees at the rate of \$100.00 per 3 unit course.

In the case of students taking a Doctor's degree after a Master's degree, both degrees taken at the University of Victoria, the total tuition fee for both degrees shall not exceed \$900.00.

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.

3. Courses which have a "0" unit value are assessed a fee unit value for the purpose of assessing fees. This value is shown in the course description.
4. Auditors are required to pay full tuition fees.

Student Organizations — Fees Authorized by the Board of Governors

1. The Alma Mater Society fee of \$32.00 is required at the time of registration from all students registered in an undergraduate Faculty for 7 or more units in the Winter Session. Except where courses are taken off campus, students registered for more than 3 units and less than 7 units are required to pay a fee of \$12.00. Inquiries with respect to this fee should be directed to the Alma Mater Society.
2. The Student Union fee of \$2.00 is required at the time of registration from all undergraduate students registered in the Summer Session. Students registered in the Internship programme and in the Diploma Programme in Education Administration are required to pay this fee in respect of both summer periods covered by their term of registration. Inquiries with respect to this fee should be directed to the Alma Mater Society.
3. The Graduating Class fee of \$10.00 is required at the time of registration from all undergraduate students registered in the Winter Session who expect to complete their degree requirements and graduate in this academic year (see *Graduation*, page 67). This fee is for the support of Graduating Class activities. Applications for partial refund of this fee by students who are not eligible to graduate at the end of the session, and any other inquiries with respect to this fee, should be addressed to the Graduating Class President, care of the Alma Mater Society.
4. The Graduate Students' Society fee of \$15.00 is required once each year at the time of registration from all students registered in the Faculty of Graduate Studies. Students who continue in master's and doctoral programmes beyond the second year will be assessed the Graduate Students' Society fee yearly until they cease to be registered students in the Faculty. Inquiries with respect to the fee should be directed to the Graduate Students' Society.

Other Sessional Fees — Undergraduate Faculties

1. An evaluation fee of \$10.00 is required from applicants 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. The fee is not refundable and is not applicable to tuition fees.
2. A late application fee of \$15.00 will be required of all students who fail to submit their applications for admission or re-registration together with all supporting documents at the time required. (See pages 35 and 36).
3. A late registration fee of \$25.00 will be charged to any student who registers after the appointed day. When late registration is permitted in the first term of the Winter Session the late fee will be the basic \$25.00, plus \$5.00 per day after the first day of lectures.
4. A reinstatement fee of \$25.00, additional to all other fees, must be paid by any student who wishes reinstatement in the same session after allowing his registration to lapse. Reinstatement will be contingent upon the permission of the student's Dean and the Registrar.
5. A registration fee of \$10.00 in each session is required from students registered in the Faculty of Education Industrial Education Major programme and whose tuition fees are paid by the Department of Education.

Other Sessional Fees — Faculty of Graduate Studies

1. An application fee of \$5.00 is to be paid at the time of application for admission.
2. A registration fee of \$5.00 is to be paid annually while a student is registered in the Faculty of Graduate Studies.
3. A reinstatement fee of \$100.00 must be paid by any student who wishes reinstatement after allowing his registration in the Faculty of Graduate Studies to lapse without permission.

Payment of Fees

1. Registration is complete only when enrolment procedures are completed in keeping with regulations on page 64 and total sessional fees have been paid. Although certain *tuition* fees may be paid in instalments (see 2. and 3. below), all fees are payable at the time of registration.
2. A minimum payment of \$50.00 or, where applicable, one-half of sessional tuition fees, whichever is the lesser, is required from all undergraduate students at the time of registration. This payment is part of the first fee instalment (see 3. below) and is applied to tuition fees. Students who provide documentary evidence that their full first fee instalment will be paid directly to the University by a government department or other organization will be granted exemption from this prepayment requirement.
3. The schedule of minimum payments required from undergraduate students registering in the first term of the Winter Session is as follows:

At or prior to registration	\$50.00 (see 2. above).
On or before October 13, 1972	\$30.00 per unit for courses which finish in the first term, plus \$15.00 per unit for courses taken in both terms, less the prepayment above. All applicable student organization fees. All late application and late registration fees assessed.
On or before January 19, 1973	\$30.00 per unit for courses taken in the second term only, plus \$15.00 per unit for courses taken in both terms, subject to the maximum total tuition fee of \$428.00 for the session.
4. The schedule of payments required from undergraduate students registering in the second term of the Winter Session is as follows:

At or prior to registration	\$50.00 (see 2. above).
On or before January 19, 1973	\$30.00 per unit, less the prepayment above. All applicable student organization fees. All late application and late registration fees assessed.

Illustration of fee payments required for an undergraduate programme:

<i>Course programme</i>	<i>First Term</i>	<i>Total Sessional Fees</i>	
		<i>Second Term</i>	
Courses which finish in the first term	4½ units	\$135.00	\$135.00
Courses taken in both terms	9 units	\$135.00	\$270.00
Courses taken in the second term only	3 units	\$ 90.00	\$ 90.00
Total	<u>16½ units</u>	<u>\$270.00</u>	<u>\$495.00</u>
Reduction in second term to adjust total sessional fees to maximum of \$428.00		<u>\$ 67.00</u>	<u>\$ 67.00</u>
Total tuition fees		<u>\$270.00</u>	<u>\$428.00</u>
A.M.S. fee		\$ 32.00	\$ 32.00
Fee payments required		<u>\$302.00</u>	<u>\$460.00</u>

This example is for illustrative purposes only. The fee payments required from individual students may differ, and will depend upon their particular course programmes.

5. The schedule of payments required from students registered in the Internship Programme and the Diploma Programme in Education Administration will be issued at the time of registration. All other fee regulations apply to these programmes.
6. The schedule of payments required from students registering in the Faculty of Graduate Studies will be issued at the time of registration. All other fee regulations apply to these programmes.
7. A late payment fee, additional to all other fees, will be charged when fees are not received in the Accounting Office on the due dates specified in the schedules above (October 13, 1972, and January 19, 1973). This fee is 10% of the unpaid balance; minimum \$5.00, maximum \$20.00. Students who wish to appeal against this fee must do so in writing to the Late Payment Fee Appeals Committee and such appeals must be received within fourteen days from the imposition of the fee. Appeals will not be considered unless the student's current fee instalment, including late payment fee, has been paid in full.
8. Fees should be paid, in person or by mail, to the Accounting Office.
9. Students are advised to pay fees by certified cheque payable to "University of Victoria". Those students who do not pay by certified cheque, and whose cheques are returned by their banks, will be subject to the late payment fee if their cheques are not redeemed by the prescribed payment dates.
10. Registration must be validated by payment of fee instalments as they become due. If a student fails to validate his registration by October 27, 1972, and February 2, 1973 (by payment in full of first and second fee instalments respectively), he will not be entitled to attend classes or undertake examinations and must apply for reinstatement. Reinstatement in the same session will be contingent upon the permission of the student's Dean and the Registrar, and upon payment of a reinstatement fee in addition to all other fees.
11. Students who claim that their fees will be paid directly to the University by scholarship award, government department or other outside agency, must produce documentary evidence at the Accounting Office. When this is not done by the prescribed payment dates, late payment fees are applicable.

Refund of Fees

1. Students who withdraw from a course should notify the Registrar immediately in writing. Otherwise, full fees will be assessed and applications for re-registration may not be accepted until accounts are settled in full.
2. No refund of fees will be made to graduate students except in cases of withdrawal due to extenuating circumstances such as illness or domestic affliction. If refunds are allowed they will be made in accordance with the schedules in 3. or 4. below, as applicable.
3. Undergraduate students who register in the first term and who withdraw from courses or from the University will normally be charged tuition fees in accordance with the following schedule. Tuition fees paid in excess of these amounts will be refunded. No refunds of tuition fees will be made to students who withdraw after October 13, 1972, in the first term and after February 9, 1973, in the second term.

Tuition fees charged in event of withdrawal on or before:

September 22, 1972	— \$10.00 per course (maximum \$50.00)
September 29, 1972	— 40% of first term fees
October 6, 1972	— 60% " " " "
October 13, 1972	— 80% " " " "
January 12, 1973	— 100% " " " "
January 19, 1973	— 100% of first term fees, plus \$10.00 per course (maximum \$50.00)
January 26, 1973	— 100% of first term fees, plus 40% of second term fees.
February 2, 1973	— 100% of first term fees, plus 60% of second term fees

- February 9, 1973 — 100% of first term fees, plus 80% of second term fees
 after February 9, 1973 — 100% of sessional fees.
4. Undergraduate students who register in the second term and who withdraw from courses or from the University will normally be charged tuition fees in accordance with the following schedule. No refunds will be made to students who withdraw after February 9, 1973.
- Tuition fees charged in event of withdrawal on or before:
- January 19, 1973 — \$10.00 per course (maximum \$50.00)
 January 26, 1973 — 40% of second term fees
 February 2, 1973 — 60% „ „ „ „
 February 9, 1973 — 80% „ „ „ „
 after February 9, 1973 — 100% „ „ „ „
5. Undergraduate students registered in the first term for more than 3 units who withdraw from the University or reduce their programme to 3 units will receive a refund from the University of the Alma Mater Society fees paid less the charges shown in the following schedule. No refunds will be made by the University to students who withdraw after October 13, 1972. Amounts charged in event of withdrawal on or before:
- September 29, 1972 — \$3.00
 October 6, 1972 — 4.00
 October 13, 1972 — 5.00

Scholarships, Fellowships, Bursaries and Loans

1. Except where the donor directs otherwise, the proceeds of scholarships, fellowships and bursaries issued by or through the University will be applied against the total sessional fees. If the amount of the award or awards exceeds the unpaid total sessional fees, the excess balance will be paid to the student.
2. Students who require financial assistance (including that granted under the Canada Student Loan Plan) in order to pay sessional fees should apply to the appropriate agency in sufficient time to receive such assistance by the prescribed payment dates. Late payment fee regulations are applicable where this has not been done.
3. Certain scholarships and bursaries are paid by cheque drawn in favour of the student. If these cheques are not endorsed and applied against fees by the prescribed payment dates, the regulations covering late payment will apply.
4. Students seeking advice about scholarships, fellowships, prizes, bursaries and loans should direct their inquiries to the Financial Aid Officer.

Other Fees and Charges

1. Students registered in Chemistry courses are required to purchase a laboratory ticket for \$6.00. These tickets should be purchased at the Accounting Office before the commencement of classes.
 2. A fine of \$2.00 will be imposed for infraction of University parking and traffic regulations. Fines paid prior to 4:00 p.m. of the second working day following the issue of the Traffic Violation ticket will be reduced in the amount of \$1.00. Fines will be imposed for infraction of Library regulations in amounts determined by the University Librarian.
- Fines imposed prior to November 1 which, together with any previously assessed penalties, remain unpaid at November 30, will be increased by \$1.00.
- Fines imposed prior to January 1 which, together with any previously assessed penalties, remain unpaid at January 31, will be increased by \$1.00.
- Fines imposed prior to March 1 which, together with any previously assessed penalties, remain unpaid at March 31, will be increased by \$1.00.

Fines imposed prior to May 1 which, together with any previously assessed penalties, remain unpaid at May 31, will be increased by \$1.00.

These increases will be accumulated so long as a fine remains unpaid; however, no fines shall be increased by more than \$4.00. Transcripts will not be issued, and re-admission to University may be denied to those who have not paid outstanding fines and penalties.

3. Rates for board and lodging in the University residences are listed on page 72.
4. Regular supplemental examination, per paper \$10.00
 Supplemental examination at regular centres, per paper 15.00
 Supplemental examination at centres outside of British Columbia 15.00
 Supplemental examination fees must be paid when application for examination is made and not later than July 1. In the event that a candidate does not appear for an examination, a refund will be authorized only if, within 10 days after the scheduled examination, the candidate submits to the Registrar an adequate explanation for failure to write the examination. If the refund is made, it will be \$5.00.

Full refunds will be granted only to those students who cancel their application by July 15.

Review, per course, payable with application\$ 7.50

Fee for credit by special evaluation (course challenge fee) payable at the time of application \$15.00 per unit

Fee for transcripts of academic record: one copy free of charge at the completion of each year; three copies free of charge following graduation; additional copies supplied at the rate of 2 copies for \$1.00. Free copies may not be accumulated.

5. All motor vehicles, driven or parked on campus between 7:00 a.m. and 6:00 p.m. Monday through Friday and between 7:00 a.m. and 12:00 noon Saturday, by members of Faculty or Staff, Students, and by persons whose normal place of employment is on campus, must be registered with the University.

Parking permits and regulations are obtainable at the Traffic and Security Office.

The following parking fees become effective September 1, 1972.

	<i>Reserved</i>	<i>General</i>
Permits issued prior to December 31	\$15.00	\$5.00
Permits issued between December 31 and April 30	9.00	3.00
Permits issued after April 30	2.00	2.00
Extra permits for additional cars or replacements	1.00	1.00

Parking fees shall cover the period from the date of issue to the following August 31, except for the following special permits:

Conference (7 days or less)	\$1.00
Conference (more than 7 days)	2.00

ACADEMIC SERVICES

LIBRARY

The Library of the University of Victoria has a collection of over 500,000 volumes, in addition to microform holdings of well over 600,000 items, subscriptions to over 5,000 periodicals, and a collection of nearly 10,000 records and tapes.

With the exception of its Special Collections of rare books and manuscript materials, all books in the McPherson Library are in open stacks, to which all students have access. Well-trained staff are available to help the student make the fullest use of the Library's resources and to give individual or group instruction in the use of a research library. Regulations regarding loan policies and hours of service are displayed prominently in the Library and are published in the faculty and student editions of the *Guide to the McPherson Library*. Copies of these publications, which contain a variety of other useful information, are distributed at registration time.

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.

COUNSELLING CENTRE

Counselling Services

The objective of the Counselling Centre is to help each student to obtain the maximum benefit from his University experience. Toward this end, a comprehensive range of counselling services is available throughout the year from a fully qualified staff of professional counsellors.

Educational-Vocational Counselling

The Counselling Centre assists University students and potential University students to consider both educational and vocational goals as a preliminary step toward choosing the university faculty and programme which will be of greatest interest and value. Vocational tests and other assessment devices are available to further a student's understanding of himself. The Counselling Centre also helps students who are encountering difficulty with academic work through its Reading and Study Skills Courses. The Counselling Centre maintains a complete library of vocational information and an extensive collection of calendars from Canadian and American universities, colleges and professional schools.

Personal Counselling

In addition, the Counselling Centre provides an opportunity for a student to explore with a counsellor any topic or situation which is causing concern. Some of the personal problems which might be resolved through counselling are general dissatisfaction, inability to make a decision, problems in relating to fellow students, or anxiety. Group counselling services are available, and some students find it helpful to meet together under the sponsorship of a counsellor. Students decide whether they prefer individual appointments or group counselling.

Additional Services

Counsellors meet either individually or in groups with Grade XII senior secondary school students to provide information about University life, courses or career possibilities. The Counselling Centre is authorized to administer the *Scholastic Ability Test* and the *Achievement Test* of the *College Entrance Examination Board*, the *Test of English as a Foreign Language*, the *Graduate Record Examination*, the *Miller Analogies Test*,

the *Law School Admission Test*, the *Dental College Admission Test*, and the *Medical College Admission Test*. The Counselling Centre, which is located in the Clearihue Building, may be consulted for additional information.

Reading and Study Skills Courses

In order to make the most of his academic potential, a student must know and apply to his work, various techniques of reading, listening, organizing material, studying and writing essays and examinations. During each term, the Reading and Study Skills Centre offers an eight-week non-credit course, whose aim is to assist students to develop or improve their skill in using these techniques. Provision is made for those students who so require to work on vocabulary improvement under supervision subsequent to taking the Reading and Study Skills Course.

A thirty-hour "Transition Course" is provided just prior to registration for students who are entering University for the first time. The aim is to develop reading and study skills, and to learn how to use the library effectively before the pressure of classes begins.

Students who have problems connected with organization, study, or writing examinations are encouraged to discuss them with the staff of the Reading and Study Skills Centre.

SPECIAL COURSE IN ENGLISH

The Department of Linguistics offers a non-credit course in English for those students whose native language is not English and who are in need of additional practice in oral and written composition. Inquiries concerning the nature and content of this course should be directed to the Department of Linguistics at the time of registration. Enrolment in the course is voluntary and is not reflected in a student's academic record.

PLACEMENT OFFICE

Canada Manpower Centre:

The Student Placement Office, operated by the Canada Manpower Division, Department of Manpower and Immigration, is located on the campus. It is operated on a full-time basis, open Monday through Friday.

Graduates, graduands and undergraduates seeking permanent employment are urged to register before the end of October with the placement office. Early registration is recommended because many employers complete their recruiting visits in early November.

Students seeking part-time work during the academic year or temporary work during Christmas holidays are requested to register early with the placement office. Those students seeking temporary summer work only, need not register until January.

Notice regarding employment opportunities of all kinds will be posted conspicuously in campus buildings. These notices will include information on Federal and Provincial Government vacancies, as well as those in industrial and other private organizations.

Students who wish to arrange for an interview with a Student Placement Counsellor or an employer's representative are invited to make an appointment.

UNIVERSITY BOOKSTORE

The Bookstore, located in the Campus Services Building, is owned by the University and, in keeping with University policy, operates on a break-even basis. Savings are passed on to students in the form of textbook discounts.

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

In addition, the general booksection contains over 6000 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. School supplies, stationery, lab coats, records, poster, gym strip, crested ware and art supplies are offered in the Supplies Section.

Returns are accepted only with a receipt and within 10 days of purchase. At the beginning of the first term the return deadline for textbooks is extended to a maximum of 6 weeks, until October 15.

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.

COMPUTING FACILITIES AT THE UNIVERSITY OF VICTORIA

The University provides a broad array of computing services supported by experienced staff members and an IBM System/360 Model 50 computer.

The central computing facility:

Main storage — 512K bytes

4 tape drives transferring data at 60,000 characters/second

5 disk drives transferring data at 312,000 characters/second

printer — 1100 lines per minute

card reader — 1000 cards/minute

card punch — 300 cards/minute

Student Terminal Facility:

card reader — 500 cards/minute

printer — 600 lines/minute

Special service and facilities:

Plotting services are provided with a Calcomp 563 off-line system.

Any commercial paper tape can be converted to magnetic tape for computer processing.

Optical Mark Scoring services (for multiple choice examinations) are available locally.

Computing services are used extensively on campus to support academic research, teaching and administration. Research users include faculty members in Anthropology and Sociology, Biology, Chemistry, Classics, Economics, Education, English, Geography, Linguistics, Mathematics, Physics, Political Science and Psychology.

Undergraduate and graduate students use the computer to complete assignments in Computing Science, Economics, Linguistics and other courses. The high speed terminal provides rapid turnaround and plans are underway to double the speeds of card reader and printer at the terminal in the near future.

The Library, Accounting Office and the Registrar's Office make regular use of computing services for routine needs including book circulation controls, payroll, budgets, accounts payable, student records, etc.

The Computing Centre also provides services to the Dominion Astrophysical Observatory, Forest Research Laboratory, Fisheries Research Board, Canadian Hydrographic Surveys, Frozen Sea Research Group, Pacific Oceanographic Group, City of Victoria — Traffic Engineering, in addition to several Senior Secondary Schools in Victoria and other locations on Vancouver Island where students are undertaking introductory courses in computing.

Students in all disciplines are encouraged to learn to use the computing system before their third year of studies. Credit courses and non-credit courses are available for students and expert help is available from the staff of professional programmers in the Computing Services Department.

Those who are planning a career in computing may be eligible for further training by summer employment or by part-time employment in the Operations area during the winter session, or possibly by employment as student assistants to faculty members.

MEDICAL, HOUSING AND FOOD SERVICES

UNIVERSITY ACCOMMODATION

1. The University provides accommodation for 326 students in Craigdarroch College and 287 students in Lansdowne College.
2. Application forms for residence accommodation can be obtained from Housing Services. Students, both graduate and undergraduate, are requested to submit residence applications as early as possible.
3. Assignment of rooms will be completed July 31 for students who have returned their completed application forms together with an application deposit of \$25.00 which will be credited against second term residence fees. All assignments are conditional upon the admission of the student to the University.
4. Students who have been assigned residence accommodation may occupy their rooms from the afternoon of the day before their registration. Meal passes become effective for dinner on the day before the first day of lectures. During registration week meals may be obtained on campus at current rates.
5. Students who will not arrive to occupy assigned accommodation by the first day of lectures must notify the Housing Services in writing before that date. Assignments may be cancelled where this is not done. Fees will be assessed from the beginning of the term.
6. Fourteen days' notice is required for withdrawal from residence accommodation.
7. Current rates for the Winter Session are as follows.
Double room: First term \$383.00; Second term \$412.00; Total \$795.00
Single room: First term \$416.00; Second term \$449.00; Total \$865.00
8. Payments for first and second term are due at the Housing Services not later than August 31, 1972 and December 15, 1972, respectively. Assignments are subject to cancellation where fees are not paid by the due dates. Room keys will be issued only if first term fees have been paid.
9. The application deposit of \$25.00 is forfeited if the student leaves during or at the end of the first term, or if second term residence fees are not paid by the first day of lectures of the second term.

The deposit will be refunded if:

- (a) no accommodation is available;
- (b) the student is not admitted to the University;
- (c) the student cancels his/her assignment within the time stipulated on the room assignment.

OFF-CAMPUS ACCOMMODATION

A file of private homes where students may obtain full board and room, or light housekeeping accommodation, is maintained by Housing Services. While Housing Services makes every effort to maintain an up-to-date file on available homes, there is no guarantee that suitable accommodation will be found by the University for every student who applies. The cost of full board and room varies from about \$85 to \$100 a month. Students should ascertain whether they are being offered two or three meals a day at the price quoted. For winter accommodation listed with the University, two weeks' notice is the accepted term of notice prior to October 31. After this date a full month's notice is required in order to leave private accommodation, otherwise students can expect to forfeit a month's rent.

Food Services

The University operates a comprehensive food service facility in the Commons Building. Two 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.

In addition, there are two coffee shops on the campus managed by the CNIB. These are located in the services building and in Building "L".

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 HEALTH SERVICE

The Health Service is not a teaching department, being maintained solely for the benefit of students who may require medical care and advice, especially those whose homes are not in Victoria or vicinity, or who have no regular family doctor.

A nurse is in attendance from 8:30 to 5:00 p.m. Monday to Friday. A doctor is in attendance for consultation 10:00 a.m. to 1:30 p.m., and 3:00 p.m. to 5:00 p.m., Monday to Friday. It should be noted that all consultations are held to be entirely confidential. Records are not available to any other person, and information contained in them will be released only at the request of the student.

Students are urged to bring any problems of University life to the Health Service before such problems have developed to a serious stage. Psychiatric counselling, consultation and treatment is available to assist students with emotional problems.

All students are advised to have medical insurance. Those students who are not covered by their parents' plan are advised to enrol in the B.C. Medical Plan. If ineligible for the B.C. Medical Plan, students should consult the Health Service regarding the University Health and Accident Plan.

STUDENT AFFAIRS

The officer responsible for Student Affairs (appointment pending) 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 students of the University of Victoria. It is the recognized means of communication between students and the faculty, the administration, and the outside community. It has traditions going back almost to the founding of Victoria College, and contacts with almost every phase of education in the province both within and outside the University's perimeters. The governing body of the Alma Mater Society is the Representative Assembly, which consists of 46 members elected half in February and half in October of each year. Members of the Assembly proper are elected by year.

The Executive Council is composed of 18 members. This group directs the day-to-day activities of the Society and has 10 administrative officers directly elected by the student body and 8 non-administrative members elected from and by the Representative Assembly. The President presides at all meetings, has the final say on all policy decisions, acts as chief spokesman of the Society, and also serves as ombudsman for the students both individual and corporate of the University. The Vice President, who has no assigned duties, handles many functions, including relations with other student groups and the day care centre. The Treasurer is responsible for all the business matters of the Society, and the Communications Director for minutes, elections, and constitutional changes. The Academic Affairs Chairman is responsible for the constant evaluation of the teaching methods, course content, examination procedures, and all other academic matters within the University, while the Activities Co-ordinator is responsible for the production of all non-athletic recreations offered by the Society, which include dances, rock festivals, kite festivals, and the pubs and cabarets. The Publications Director is responsible for the Martlet, the literary magazine, the handbook, the telephone directory, and all other AMS publications. The two Athletics representatives, extramural and intramural, who also sit on the Athletics Directorate, are the students' voice in the University Athletics programme. Finally, the Student Campus Development Co-ordinator is the representative of the Society in the University's decisions concerning buildings, grounds, student housing, and the Student Union Building itself.

All of these officers are willing to help any student with a problem he may have, and all may be contacted at the Student Union Building.

The A.M.S. levies the \$26 activities fee collected by the University for the Society. Of this amount, \$10 goes directly into the Student Union Building Expansion Fund (or Dr. Ewing Memorial Fund), and the remaining \$16 goes towards the maintenance of the programmes of the Society and the Student Union Building. A further \$6 is collected at registration which goes to the Athletics Directorate to support the athletic programmes on campus.

The programmes of the Society can generally be divided into four areas of concern — administrative, academic, service, and community. Under "administration" is placed the day-to-day operation of the Society, the operation of the SUB with its various facilities, the placing of Society representatives on committees both within the University and in the outside world, and the plans for expanded Student Union facilities. Those members of the Assembly concerned with Academics actively investigate such matters as course and professor evaluation, examination procedures, tenure and promotion, university government, student awareness of the many facets of campus life, and co-ordination of both the bookstore and the library. In the services area the Society acts to provide the student with many activities and facilities designed to increase and enhance his overall education, including clubs, publications, activities, athletics, charter travel, nursing and day care facilities, student housing, traffic and parking facilities, etc. Finally, those University students interested in the problems in the community in which they live, can through the Alma Mater Society organize groups concerned about environmental development and pollution, native peoples, poverty and unemployment, accessibility to education, and liaison with other students' groups, with secondary schools, and with various government agencies.

Any student at the University of Victoria registered in more than three units of courses on campus is eligible both to vote and to hold office in the Representative Assembly. Many more people, however, are needed for the work of the Society than those elected, and most of the activities are carried out on a volunteer basis. If you have a problem of your own, if you have a problem of concern, if you have an idea, if you have a project — here is the place to come.

The doors are always open.

President 1972-73: Mr. Russell W. R. Freethy
1971-72: Mr. Ian J. McKinnon
1970-71: Mr. Robert McDougall
1969-70: Mr. Norman Wright
1968-69: Mr. Frank Frketich
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

DAY CARE CENTRE

The Alma Mater Society operates a co-operative day care centre for UVic students with pre-school age children. Located in a spacious, fully-equipped house on the border of the campus, the centre is licensed to take children between the ages of two and four. Provincial government subsidies pay all or part of the fees (\$70/month, full time) of this non-profit centre which is staffed by trained personnel. Registration is limited. Application should be made at the centre at 2246 McCoy Road. (477-8646)

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. Its purpose is to encourage graduate student participation in the intellectual, cultural and social affairs of the University.

The Executive Council of the Society, comprising eight members, is elected by the members of the Society. These eight council members are:

The President is the official representative of the Society to the University and community; he chairs all meetings of the Society; he is an ex-officio member of all committees within the Society.

The Vice-President assists the President in the execution of his duties; he is the official spokesman of the Society in the absence of the President; he is often appointed by the President to chair committees within the Society; he arranges the time and place of all meetings of the Society.

The Secretary takes minutes of all executive and general meetings of the Society; he is responsible for all correspondence of the Society.

The Treasurer is responsible for the funds of the Society; he keeps an accurate record of the funds received and disbursed by the Society; he prepares the budget of the Society, subject to approval by the Executive Council.

The Liaison Officer acts as a liaison between the Executive Council of the Society and the Alma Mater Society, he is often appointed by the President to sit on University committees.

The Special Relations Officer is a representative of the Society at meetings of the British Columbia Graduate Student Society, and co-ordinates the activities of members serving on University Committees.

The Publicity Officer is responsible for all newsletters publicizing the activities of the Society and assists the electoral officer during elections.

The Social Director is responsible for organizing all social functions of the Society and the correspondence pertaining to these functions.

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

President 1972-73 — Mrs. Elizabeth Bristowe
1971-72 — Mr. John N. Dorner
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. Padraig Coughlan

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.

AVENUES OF REDRESS

In cases where students have problems involving individual faculty members and wish to seek redress, they may do so, without fear of consequence, through the officer responsible for Student Affairs (appointment pending), the Counselling Centre, Department Heads or Chairmen, A.M.S. representatives, other individual faculty members, the Student Faculty Liaison Committee of the Faculty of Education, Deans, the President and Senate.

HAZING

The Board of Governors prohibits hazing.

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

The Students' 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 Students' Council.

UNAUTHORIZED STUDENT ACTIVITIES

The Board of Governors prohibits any act by a student attending the University, or by anyone, which might cause injury to any person or damage to University property.

Any violation of the British Columbia liquor regulations within the precincts of the University is considered to be a serious offence and any such violation may be reported to the Faculty Council for disciplinary action. Any events organized on the campus at which liquor will be served must receive prior approval from the President's Office.

The Board of Governors considers unlawful entry of buildings on campus a very serious offence, and any such occurrence will be reported to and dealt with by the Board of Governors.

Any student violating the above regulations is liable to expulsion.

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 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 is paid \$200.00 for the first three years and \$215.00 after three years of paid service under the plan. Free medical and dental care is provided. Annual leave (30 days plus travelling time) with full pay and allowances may be granted each year, usually after the summer training period. On graduation the Officer Cadet is promoted to the commissioned rank of 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 \$400.00 in academic years and \$690.00 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 \$200.00 in 1st year, \$400.00 in 2nd, 3rd and 4th year. Five 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:

- a. be a Canadian citizen;
- b. be single and remain so until commissioned (ROTP only); MOTP, DOTP and ROUTP applicants may be married;
- c. 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
1002 Wharf Street
Victoria, B.C.

or University Liaison Officer
Canadian Forces Base Esquimalt
FMO, Victoria, B.C.

for ROUTP

Commanding Officer
Canadian Militia District Headquarters
Bay St. Armouries
715 Bay Street
Victoria, B.C.

COLLEGE AFFAIRS

THE COLLEGE SYSTEM

Craigdarroch and Lansdowne Colleges, the first two Colleges of the University's College system, came into operation in 1968 and 1969. They represent an attempt on the part of the University to deal with problems that frequently arise through rapid growth and expansion. The College system is intended to give the students a greater sense of identity through close association with a fairly small group of students and professors, and through this association, derive maximum benefit from their studies.

Membership in the Colleges is free and open to students from the various years and disciplines within the University. In general, each College will consist of approximately 1,000 students, with 300 residents and 700 non-residents. Both resident and non-resident student members have the opportunity of continuing their education outside formal classroom through the informal exchange of ideas with professors and other students.

The Colleges are not separate teaching institutions; all teaching is carried on through the Departments and Faculties. However, it is in the area of general culture and social affairs that the Colleges can make their most significant contribution by sponsoring films, seminars, informal discussions with professors, sports events, social activities and special lectures.

Each of the Colleges possesses study-office areas, with some library and classroom facilities, and residences. The Colleges share the facilities of the Commons Block, with its dining room, seminar lounges, games rooms, and cafeterias. Both resident and non-resident members of the Colleges have full access to these facilities, and they are encouraged to use them.

The internal affairs of each College are managed and directed by a College Council consisting of the Master, the Fellows, and student representatives elected from and by the members of the College.

CRAIGDARROCH COLLEGE COUNCIL

The composition of the Craigdarroch College Council for 1971-72 was as follows:

- Fellows* Dr. L. Adey (Department of English)
Mrs. S. Baker (Housing)
Dr. D. C. Y. Lai (Department of Geography)
Dr. Elaine Limbrick (Department of French)
Mr. M. S. Power (Department of Political Science)
- Students* Rick Paterson (elected from non-residents)
Ross Ruddick (elected from non-residents)
Chris Considine (elected from non-residents)
Brian Neal (elected from non-residents)
Jim Horne (elected from non-residents)
Wayne Keil (elected from non-residents)
Geoff Stubbs (elected from Men's Residence)
Dave Storey (elected from Men's Residence)
Gregg Watt (elected from Men's Residence)
Linda Scott (elected from Women's Residence)
Kathy Francis (elected from Women's Residence)
Chris McKenzie (elected from Women's Residence)
- Master* Prof. G. Grant McOrmond (Department of English)

LANSDOWNE COLLEGE COUNCIL

The composition of the Lansdowne College Council for 1971-72 was as follows:

- Fellows* Dr. B. F. Beardsmore (Department of French)
Mr. C. W. Cowan (Department of History)
Dr. C. D. Doyle (Department of English)
Dr. R. V. Peavy (Faculty of Education)
Dr. N. C. Smith (Department of English)
- Students* Miss Karen Holman, (elected from Women's Residence)
Mr. K. Fraser (elected from Men's Residence)
Mr. A. Hood (elected from non-residents)
Mr. P. Mazzocchi (elected from non-residents)
Mr. J. Ramsay (elected from entire membership)
Mr. J. Seto (elected from non-residents)
- Master* Dr. Bryan N. S. Gooch (Department of English)

MEMBERSHIP IN CRAIGDARROCH AND LANSDOWNE COLLEGES

1. Resident Students

All resident students automatically become members of a College. Students wishing accommodation in residence should request application forms from the Housing Office. The number of places available is limited. For that reason, students are advised to apply early. Assignment of rooms will be completed by July 31 for those students who can be accommodated. Assignment of rooms is conditional upon the student being granted academic admission to the University.

For information concerning rates for residence accommodation, please see page 83.

2. Non-Resident Students

Students wishing to become members of either Craigdarroch or Lansdowne College should apply to the Master, Craigdarroch College or the Master, Lansdowne College, for application forms.

Completed application forms should be returned by September 27, 1972. Those who have been accepted for membership may pick up their membership cards at the College offices. In selecting students for membership in a College, an attempt will be made to provide for a cross-section of the student body by Faculty and year.

Membership in a College is conditional upon the student being academically admissible to the University. Students returning to the University of Victoria who are members of a College should renew their membership by notifying the College Office of their return.

ALUMNI ASSOCIATION

All graduates of the University of Victoria and Convocation members are automatically members of the Alumni Association.

Students who attended Victoria College, Victoria Normal School, and members of the community who have shown an interest in higher education are associate members.

It is hoped that students will take an active interest in alumni affairs. Further information regarding the activities of the local branch may be obtained from the Secretary, Building "J", University of Victoria. Telephone 477-6911, Local 588.

FACULTY OF ARTS AND SCIENCE

The degrees offered in this Faculty are Bachelor of Arts (B.A.) and Bachelor of Science (B.Sc.). Most departments offer programmes leading to an Honours degree.

Academic Advice

The Academic Advising Centre for the Faculty of Arts and Science is located in the MacLaurin Building in Room 323. Students may obtain information or advice on any programme or courses offered by this Faculty by visiting or writing to the Director of Academic Advising.

Students who are entering the University for the first time are required to complete a Course Planning Form. Students may return these forms in person or by mail and will receive a copy for their personal files after checking by the Advising Centre. Students entering First Year are referred to a list of courses open to First Year students given on page 97.

Students in the Faculty of Arts and Science are welcome to discuss proposed degree programmes at any time. They will be required to complete a Record of Degree Programme before the end of the first term of their Third Year. This form will be checked to ensure that proposed courses will fulfill the requirements for the degree desired. It will be used by the Registrar's Office as a record for graduating purposes and must be kept up-to-date by the student.

Summer Session and Other Credit

1. Although the degrees in this Faculty are normally granted on completion of the required units in the winter session, credit obtained in summer session may be combined with that obtained in winter session to complete the required number of units.

2. The maximum credit for summer session work in any one calendar year is 6 units.

3. Students who plan to undertake work at other universities must receive prior approval from the Dean or the Registrar if they wish such courses to be credited towards a degree at the University of Victoria. 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 Registrar of the University of Victoria. Extramural work done at other universities prior to registration at the University of Victoria may be accepted, if approved by the Faculty, but may not exceed 3 units in respect of any one academic year, or normally, a maximum of 15 units subsequent to Grade 13.

4. Students in attendance at the University may not register concurrently for extramural or correspondence work for credit at the university level.

5. Although candidates may complete degree requirements by registration in Summer Session and Evening courses, all candidates are urged to register as full-time students for at least one Winter Session, preferably that of the Final Year.

6. 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 programme provided that the courses he takes at the medical 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 B.A. or B.Sc. 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 Registrar for assessment by the department or departments concerned.

If a student contemplates transferring to a medical 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 Registrar his intention to transfer to a medical school and seek credit for work taken there 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 67 for regulations concerning graduation.

A departmental recommendation for such a Bachelor's degree will be made through the Faculty to the Senate.

Graduation Standing

The graduating average of a student graduating from the Faculty of Arts and Science shall be determined as the weighted average of all 300 and 400 level courses taken for credit in the Faculty except where credit has been obtained for more than 30 units of such courses, in which case the 30 units yielding the highest weighted average will be selected (including, where necessary, the appropriate fraction of a course).

The above does not apply to students who are granted permission to undertake their Fourth Year at another university (see para. 7, page 32 and para. 6, page 93). The classes of degrees to be awarded to such students shall be determined by the Dean of the Faculty in consultation with appropriate departments.

DEGREE PROGRAMMES

A student may proceed to the B.A. degree in one of three programmes: Honours, Major, and General. 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. The Major programme requires a degree of 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. The General programme may also lead to professional careers or graduate studies, depending upon the level of competence demonstrated therein; its distinctive characteristic, however, is the breadth of the education for which it provides. In most cases, by choosing courses carefully, students may postpone until the end of the Second Year the decision as to which programme to undertake. Students must consult departmental requirements and prerequisites. It is recommended that students discuss proposed programmes with the Director of Academic Advising for the Faculty of Arts and Science well in advance of Registration.

Students who may wish to take a professional year in the Faculty of Education after obtaining the B.A. or B.Sc. degree are advised to consult the Advising Centre of the Faculty of Education before they embark on studies in Third Year.

Students who may wish to transfer to another university to undertake further study, are advised to select either an introductory course in English or courses in another language to the 200 level or both amongst their electives.

Degree Requirements Common to the B.A. and B.Sc. Programmes

Each of the Honours, Major and General programmes requires the completion of a minimum of 60 units of course work, including at least 21 units of courses numbered 300 or higher.

Effective September 1, 1970, each undergraduate student seeking to qualify for a degree in the Faculty of Arts and Science is required: (a) either to pass a qualifying examination in the use of English, or to complete satisfactorily a prescribed course in First Year English; and (b) 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; and (c) 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 another department.

Honours Programme

The number of units required for an Honours programme varies between 60 and 69 depending upon the requirements of the department concerned. Departmental

requirements are set out on pages 99-255 and must be satisfied along with general University regulations on pages 32-33, 64-67 and the general requirements for completion of the first 30 units as specified above.

Unless special permission is given by the Dean to the contrary, a student must complete the requirements for an Honours programme in four academic years. With the joint approval of the departments concerned, a student may be permitted to fulfill requirements for an Honours programme in two fields; however, such a programme may require an extra year of study.

A student planning to proceed in an Honours programme must consult the Chairman or Head 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. This consent will normally be given only if (a) the Department offers an Honours programme; (b) the student has fulfilled the requirements of the first two years, and has at least Second Class standing (a G.P.A. of 3.50) in the work of the Second Year and in the field of specialization; and (c) the student has completed all prerequisite courses. He may not continue in an Honours programme after the Third Year without the consent of the Department concerned. 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 the Major or General programme.

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.

Honours are of two classes: First and Second. A student who passes all his courses but fails to obtain a Second Class standing (a G.P.A. of 3.50) in the work of his Third and Fourth Years may, upon recommendation of the Department, be granted appropriate standing in the Major or General programme.

Major Programme

The Major programme requires the completion of the first 30 units in conformity with the regulations on page 94 and the remaining units in conformity with general University regulations on pages 32-33, 64-67 and as follows: courses selected to include the major, consisting of 15 units of courses numbered 300 and above, as specified by the department; and at least 15 units of electives which may, when desirable, include not more than 9 units prescribed by the department as corequisites.

General Programme

The General programme requires completion of the first and second years in conformity with the regulations on page 94 and in conformity with general University regulations given on pages 32-33, 64-67 and as follows: 9 units taken in courses numbered 300 and above, as may be specified by the department in each of two fields; and 12 units of electives which may, when desirable, include not more than 6 units prescribed by the department as corequisites.

PROGRAMMES LEADING TO THE DEGREE OF BACHELOR OF ARTS*

In order to qualify for a B.A. degree a student must present at least 33 units (of the minimum 60 units required for a degree) of courses from the following departments while meeting the general requirements specified on page 94 and for the degree programme selected: Anthropology and Sociology, Classics, Economics, English, French Language and Literature, Geography, Germanic Languages and Literature, Hispanic and Italian Studies, History, Linguistics, Mathematics, Philosophy, Political Science, Psychology, Slavonic and Oriental Studies.

* Bachelor of Arts programmes in History in Art and in History in the Arts are offered in the Faculty of Fine Arts.

Students may proceed to a B.A. degree in an Honours or a Major programme in the following fields:

Anthropology	Linguistics
Classics	Mathematics
Economics	Philosophy
English	Political Science
French	Psychology
Geography	Russian
German	Social Welfare (Major only — see below)
Greek (Honours only)	Sociology
History	Spanish
Latin (Honours only)	

A student may proceed to a B.A. degree in a General programme in any two of the above fields, or in one of the above and one of the following: Biology, Chemistry, Physics.

PROGRAMMES LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

In order to qualify for a B.Sc. degree, a student must present at least 33 units (of the minimum 60 units required for a degree) of courses from the following departments while meeting the general requirements specified on page and for the degree programme selected: Bacteriology and Biochemistry, Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

A student may proceed to a B.Sc. degree in the Honours programme in one of the following fields: Astronomy, Bacteriology, Biochemistry, Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

A student may proceed to a B.Sc. degree with a major in one of the following fields: Astronomy, Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

A student may proceed to a B.Sc. in a General programme in any two of the following fields: Biology, Chemistry, Geography, Mathematics, Physics, Psychology.

INTERDISCIPLINARY PROGRAMMES

Bachelor of Arts with a Major in Social Welfare:

The Bachelor of Arts with a Major in Social Welfare requires, in the Third and Fourth Years, a minimum of 33 units. Of these 33 units, 9 must be taken in courses numbered 300 or higher as may be specified by the Department in each of two of the following fields: Anthropology, Economics, Political Science, Psychology, Sociology. Either as part of these two areas of concentration or in addition to them, the student must complete Psychology 335 and Sociology 350. In addition, the Major requires Social Work 400, an Introduction to Social Work.

Interdepartmental Offerings:

Senior courses in the humanities and sciences, given on an interdepartmental basis, are available as free electives (see p. 199 for Liberal Arts 305; p. 250 for Science 300).

Pacific Studies Programme:

In February 1969, the Senate approved the introduction of a Pacific Studies programme. Details of the programme are given on pages 218 to 219.

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
Astronomy 120	Japanese 100
Biology 150	Latin 100, 140, 240
Chemistry 120, 124, 224, 233	Linguistics 100
Chinese 100	Mathematics 100, 101, 102, 110, 130, 151, 170, 171, 180
Classical Studies 100	Philosophy 100, 202, 211, 212, 221, 223, 232, 233, 242, 245
Economics 100	Physics 101, 103, 121
English 110, 120	Political Science 200
French 160, 180	Portuguese 100
Geography 101	Psychology 100
German 100, 140, 200, 201, 202, 295	Russian 100
Greek 100	Sociology 100
History 205, 210, 220, 230, 238, 240, 242, 250, 252	Spanish 100, 240

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:

History in Art 120
Music 100, 110
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 490
History in Art 230, 315, 325, 340, 360, 380, 390, 430, 441, 481, 490
Music 200, 300, 311, 312, 313, 314, 315, 316, 400
Theatre 310, 311, 312, 390-394 (one only)

Courses not Recognized in the Faculty of Arts and Science

Students in Third and Fourth Year are permitted to take for credit a total of 3 units of free electives chosen without restriction from any undergraduate courses offered in this University, provided prerequisites are met and where the regulations of the Department offering the courses permit. In exceptional cases, a student may receive additional units of Arts and Science credit for undergraduate courses not recognized for credit in the Faculty of Arts and Science, provided that prior written permission of the Department in which the student wishes to undertake a Major or Honours programme has been obtained. 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.

COURSES IN ARTS AND SCIENCE

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History in Art (see Faculty of Fine Arts)	
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Physics	227
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DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY

- Elaine Cumming, B.A., M.A. (*Sask.*), Ph.D. (*Radcliffe*), Professor and Chairman of the Department.
- William H. Alkire, B.A. (*Wash.*), M.A. (*Hawaii*), Ph.D. (*Ill.*), Associate Professor.
- Donald W. Ball, B.A. (*Calif., Santa Barbara*), M.S. (*Ore.*), M.A., Ph.D. (*Calif., Los Angeles*), Associate Professor.
- N. Ross Crumrine, B.A. (*Northwestern*), M.A., Ph.D. (*Arizona*), Associate Professor.
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GENERAL, MAJOR AND HONOURS PROGRAMMES

ANTHROPOLOGY

NOTE: 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; 350; three units from 320, 322, 323, 324, 325, 326, 328, 329, 334, 339, chosen to include two ethnographic areas; three units from 400, 401, 416, 418, 441; and three units from 305, 306, 310, 335, 345, 346, 405, 406, 407, 414, 419, 449.

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 34 units of which 22 must be in Anthropology and include 300, 350, 399, and 499; three units chosen from 400 and 416; three units from 320, 322, 323, 324, 325, 326, 328, 329, 334, 339, chosen to include two ethnographic areas; six units chosen to include at least one course from each of the following groups: 305, 306, 310, 335, 401, 405, 406, 407, 414, 418, 419; and 345, 346, 441, 449. 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.

SOCIOLOGY

NOTE: Three undergraduate programmes are offered in Sociology. The General programme is designed to produce flexibility, at the same time providing a general background for students entering related fields. The Major programme requires students to specialize in their last two years, initiating them into the theories and methods of the discipline. The Honours programme is recommended for students planning graduate work in Sociology. Students taking a Majors, or Honours programme are urged to consult the Department early in their academic careers.

Sociology 100 is a prerequisite for the General, Major or Honours programmes. First Year students who plan to undertake any of these programmes are therefore required to enrol in the introductory course. This requirement may be satisfied by course challenge or by permission of the Department. In addition, Sociology 209 is strongly recommended for all students contemplating advanced work in Sociology.

General — *First Year*: Sociology 100 as above; *Second Year*: Sociology 209 and/or 200; *Third and Fourth Years*: nine additional units of Sociology chosen from courses numbered 300 and above.

Major — *First Year*: Sociology 100 as above; *Second Year*: Sociology 209 and/or 200; *Third and Fourth Years*: a total of 15 units consisting of 371, 400, 430 and seven and a half additional units from courses numbered 300 and above.

Honours — *First Year*: Sociology 100 as above; *Second Year*: Sociology 209 and/or 200. Students who have achieved at least high Second Class standing in Sociology 200 and Sociology 209 (if both have been taken) or in either of these if only one has been taken, may be admitted to the Third Year in the Honours Programme with the permission of the Department; *Third and Fourth Years*: Students will take at least 34 units of which 22 above 300 level must be in Sociology and include Sociology 371, 372, 399, 400, 430 and 499. Students may be permitted to take some 300 level courses in their second year.

COURSES

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

ANTHROPOLOGY

Prerequisite for Third and Fourth Year Courses:

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

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

NOTE 1: Students qualifying under (b) taking 200 as *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) **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.

Prerequisite: At least Second Year standing or completion of Anth. 100. (3-0; 3-0)

ANTH 240. (1 ½) **Archaeology**

An introduction to archaeological research and problems of interpretation; survey and examination of our current understanding of prehistoric cultural development in the world's major regions.

Prerequisite: At least Second Year standing or completion of Anth. 100.

September-December only. (3-0; 0-0)

ANTH 250. (1 ½) **Physical Anthropology**

An introduction to the investigation of biological characteristics of human populations; evolution of human populations.

Prerequisite: At least Second Year standing or completion of Anth 100.

January-April only. (0-0; 3-0)

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. (1 ½) **Primitive Arts and Crafts**

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

September-December only. (3-0; 0-0)

ANTH 306. (1 ½) **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.

(Not offered 1972-73.)

September-December only. (3-0; 0-0)

ANTH 310 (Sociology 310). (3) **Religion**

The analysis of religion as a social institution. Topics studied include: problems of definition and methodological approaches; theories about the origin and evolution of religion; anthropological field studies of religion; the validity and ramifications of Weber's thesis on Protestantism and modern Western civilization, including his studies on the world religions; types of religious organization, e.g. sects, churches and denominations; messianic and nativistic movements; religion in contemporary Western societies.

There will be a final examination but grades for the course are awarded primarily on the basis of three term papers for which students are required to do considerable reading. Students are also expected to lead class discussions. (3-0; 3-0)

ANTH 320. (1-3) **Ethnology of a Selected Area**

Students should consult the Department.

(3-0; 3-0)

ANTH 322. (1 ½) **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.

January-April only. (0-0; 3-0)

ANTH 323 (formerly 422). (1 ½) **Ethnology of the Circum-Polar Region**

The cultures of Arctic and Sub-Arctic Eurasia and North America.

January-April only. (0-0; 3-0)

ANTH 324. (1 ½) **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 trend in cultural development.

(Not offered 1972-73.)

September-December only. (3-0; 0-0)

ANTH 325. (1 ½) **Ethnology of South America**

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

September-December only. (3-0; 0-0)

ANTH 326. (1 ½) **Ethnology of Oceania**

Peoples and cultures of the Pacific Islands. Their origins and development.

January-April only. (0-0; 3-0)

ANTH 328. (1 ½) **Ethnology of Northeast Asia**

An integrated description and analysis of the peoples and cultures of Japan, China, and other areas of Northeast Asia.

January-April only. (0-0; 3-0)

ANTH 329 (formerly 328). (1 ½) **Ethnology of Southeast Asia**

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

September-December only. (3-0; 0-0)

ANTH 334. (1 ½) **Ethnology of Sub-Saharan Africa**

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

September-December only. (3-0; 0-0)

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

Minority and ethnic groups within complex societies with special reference to Canada.

(Not offered 1972-73.)

(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 345. (1 ½) **Prehistory of South and East Asia**

A survey of the prehistorical development and cultural origins of China, Japan, Mainland and Island Southeast Asia and India.

Text: Various journal articles. There is no general text.

September-December only. (3-0; 0-0)

ANTH 346. (1 ½) **Prehistory of Oceania**

A survey of the prehistorical development and cultural origins of Australia and the Pacific Islands.

Text: Various journal articles. There is no general text.

January-April only. (0-0; 3-0)

ANTH 350 (formerly 340). (3) **Evolution and Adaptation 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 human populations.

(3-0; 3-0)

ANTH 399. (1) **Honours Seminar**

For students in the Third Year of the Honours programme.

(1-0; 1-0)

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. (1 ½) **Cultural Ecology**

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

January-April only. (0-0; 3-0)

ANTH 405 (formerly 404, 405). (1 ½) **Economic Anthropology**

A comparative analysis of the social context of production, distribution and exchange systems.

(Not offered 1972-73; intend to offer 1973-74.) January-April only. (0-0; 3-0)

ANTH 406. (1 ½) **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.

The format combines lectures in theoretical issues and approaches with seminar discussions. Class members prepare reports on case studies for group discussion. In addition, a research paper to be read and discussed in class is required of each student. Course grade is based on this paper and class participation.

January-April only. (0-0; 3-0)

ANTH 407. (1 ½) **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 symboling 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.

(Not offered 1972-73.) January-April only. (0-0; 3-0)

ANTH 414. (1 ½) **Culture and Personality**

An examination of the types and range of relationships between culturally patterned behaviour and personal character. Consideration of national character, modal personality, the socialization process, and idiosyncratic behaviour.

January-April only. (0-0; 3-0)

ANTH 416. (3) **Introduction to Anthropological Research**

Designed to give students competence in research methods suitable for anthropological problems. Emphasis is placed on research design, problems of validation, the nature of explanations, the formal methods of analysis, especially statistics. Course work includes solution of problems in laboratory sessions, examinations, and completion of a research project. (2-2; 2-2)

ANTH 418 (Sociology 418). (1 ½) **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 only. (3-0; 0-0)

ANTH 419 (Sociology 419) (1 ½) **Modernization and Development**

Process of modernization. Industrialization and urbanization in the contemporary world. January-April only. (0-0; 3-0)

ANTH 441. (1 ½) Archaeological Method and Theory

Techniques of excavation, description and analysis of archeological materials, research design and preparation of reports; the historical and anthropological contexts of archaeological research. Prerequisite: Anthropology 240.

September-December only. (2-2; 0-0)

ANTH 449. (1 ½) Archaeology of the Pacific Northwest

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

January-April only. (0-0; 2-2)

ANTH 451. (1 ½) 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 only. (2-2; 0-0)

ANTH 460. (1 ½) Museology

A survey of the historical development of museums, the educational and social importance of museums, and the main aspects of modern museum operations. Open only to students taking Anthropology as an area of concentration, major or honours, or by permission of the Department.

NOTE: Anthropology 460 is an elective and may not be included among the courses completed to satisfy the anthropology requirements for honours, majors or general programme.

One term only, to be announced.

(3-0)

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

SOCIOLOGY

Prerequisite for Third and Fourth Year courses: Courses numbered 300 and above may be chosen as electives if one of the following conditions is satisfied:

(a) Completion of Sociology 100

(b) The student has at least Third Year standing and the permission of the course Instructor.

NOTE: Satisfaction of the Sociology 100 requirement is necessary for the students in the General programme as well as for those intending to Major and Honour in Sociology. Sociology 209 is strongly recommended for all students contemplating advanced study in Sociology.

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

An examination of Canadian Society and its changing structure through the use of basic concepts, principles and methods of Sociology. Prerequisite: At least Second Year standing or completion of Sociology 100.

(3-0; 3-0)

SOCI 209. (3) The Development of Modern Sociology

A comparative survey of basic concepts and theories in Sociology in the late nineteenth and early twentieth centuries and their social origins. The development of these ideas in Sociological theory. Prerequisite: Sociology 100. (3-0; 3-0)

SOCI 301. (3) Deviance and Social Control

Theories of deviant conduct; the social roles of deviants; the relationship between deviance and social control; agencies and mechanisms of control. (3-0; 3-0)

**SOCI 304 (formerly 305). (3) Interaction and Socialization
(formerly Socialization and Interaction)**

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) Family and Social Development (formerly Sociology of The Family)

The family as structure and process; family functions in social order; continuity and change in family and other social institutions. Sociological perspectives on child development; the role of family in the life-cycle of members. (3-0; 3-0)

SOCI 310 (Anthropology 310). (3) Sociology of Religion

The analysis of religion as a social institution. Topics studied include: problems of definition and methodological approaches; theories about the origin and evolution of religion; anthropological field studies of religion; the validity and ramification of Weber's thesis on Protestantism and modern Western civilization, including his studies on the world religions; types of religious organization, e.g. sects, churches and denominations; messianic and nativistic movements; religion in contemporary Western societies. (3-0; 3-0)

SOCI 315. (3) Social Stratification

Differentiation in macro and micro systems; the dimensions of class, status, and power. (3-0; 3-0)

SOCI 319 (formerly one half of Sociology 320). (1½) Industrial Sociology

Man-work linkages; labour force trends; organizational, technological, and work group determinants of industrial behaviour.

Credit cannot be obtained for Soci 319 (1½ units) and Soci 320 (3 units).

September-December only. (3-0; 0-0)

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 Soci 320 (3 units) and Soci 321 (1½ units).

January-April only. (0-0; 3-0)

SOCI 325. (3) Small Groups

Analysis and discussion of laboratory experiments on small groups; the contribution of this research to the development of theory and methods. (2-2; 2-2)

SOCI 330. (3) Political Sociology

The application of sociological concepts, theory, and methods to the study of political theory and political behaviour including the relationships between political and other social institutions. Prerequisite may be waived in exceptional cases.

(3-0; 3-0)

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. (1 ½) Demography

Study of the growth, distribution, and movement of human populations with special emphasis on the social causes and consequences.

September-December only. (3-0; 0-0)

SOCI 341. (1 ½) Human Ecology

Study of the form and development of human communities as adaptations to continuously changing conditions of life.

January-April only. (0-0; 3-0)

SOCI 345. (1 ½ formerly 3 units) Sociology of Health and Medicine

Social definitions of illness and health response to illness, the health professions, systems of health care with an emphasis on cross-national comparisons, patient careers.

Credit cannot be obtained for Soci 345 (3 units) and Soci 345 (1½ units).

September-December only. (3-0; 0-0)

SOCI 350. (3) Social Welfare as a Social Institution

The historical developments of social welfare as a social institution; the organization of welfare services and the functions they perform in modern society; the relation of social welfare to other institutions.

(3-0; 3-0)

SOCI 355. (1 ½ formerly 3 units) Sociology of Communication

The structure and function of communication in society, the process of interpersonal and mass communication, opinion formation and change, development of communication systems, impact of mass media on society.

Credit cannot be obtained for Soci 355 (3 units) and Soci 355 (1½ units).

January-April only. (0-0; 3-0)

SOCI 360. (1 ½) The Sociology of Sport

Sport and society; sport as a social activity. Conceptual and empirical analyses of the social nature of sport, games, and play. The relation of these phenomena to the sociocultural environment; and their utility as models of social process and structure.

September-December only. (3-0; 0-0)

SOCI 371 (formerly 370). (1 ½) Statistics and Social Research I

The logic and interpretation of statistical concepts and methods in the Social Sciences; measures of central tendency, variability and relationship; techniques of social measurement and data collection. This course assumes no mathematical knowledge beyond elementary algebra and is intended to familiarize students with basic research and statistical techniques.

Credit cannot be obtained for Soci 370 (3 units) and Soci 371 (1½ units).

Prerequisite: Sociology 100.

September-December only. (3-0; 0-0)

SOCI 372 (formerly 370). (1 ½) Statistics and Social Research II

Sampling and tests of hypotheses; correlation and regression.

Credit cannot be obtained for Soci 370 (3 units) and Soci 372 (1½ units).

Prerequisite: Sociology 100, 371.

January-April only. (0-0; 3-0)

SOCI 380. (1 ½) Sociology of the Life Cycle

A general survey of the role structure and the institutional connections typical of each phase of the life cycle. Emphasis will be placed on age grading and inter-generational differences with some cross-national comparisons. An introduction to the social roles of childhood, adolescence, adulthood and old age will be given and the division of labour between the sexes and the age categories discussed. Special emphasis will be placed upon those aspects of the social context of the life cycle that are not already dealt with in other courses, namely, the sociology of education and the last part of the life cycle.

January-April only. (0-0; 3-0)

SOCI 390. (1 ½) Selected Problems in Sociology

Presentation of current research 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; 3-0)

SOCI 399. (1) Honours Seminar

For students in the Third Year of the Honours Programme. (1-0; 1-0)

SOCI 400. (3) Sociological Theory

A consideration of major sociological theories and theorists, the relation of earlier sociological thought to contemporary theory with special emphasis on recurrent problems and basic concepts. Open only to students registered in the Fourth Year.

(3-0; 3-0)

SOCI 418 (Anthropology 418). (1 ½) 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 only. (3-0; 0-0)

SOCI 419 (Anthropology 419). (1 ½) Modernization and Development

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

January-April only. (0-0; 3-0)

SOCI 420. (3) Formal Organizations

A presentation of the major theoretical and research developments in the study of organizations. The course will revolve around five main topics: organizational objectives, technology and organizational structure, social relations in organizations, inter-organizational relationships, and comparative organization research.

Prerequisites: Fourth year standing or permission of the Instructor. (3-0; 3-0)

SOCI 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 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

GRADUATE COURSES

ANTH 500. (3) Seminar in Anthropological Theory

ANTH 501. (3) Seminar in Social and Cultural Anthropology

***ANTH 510. (1 ½) 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:)

510 (A) Social Organization

510 (B) Economic Anthropology

510 (C) Political Anthropology

* Students must consult the department before enrolling in starred courses.

- 510 (D) Anthropology of Religion
- 510 (E) Symbolic Anthropology
- 510 (F) Cultural Ecology
- 510 (G) Culture Change

***ANTH 530. (1 ½) 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:)

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

ANTH 540. (1 ½) Seminar in Archaeology and Culture History

***ANTH 542. (1 ½) Archaeology of a Selected Area**

ANTH 550. (1 ½) Seminar in Physical Anthropology

***ANTH 552. (1 ½) Selected Topics in Physical Anthropology**

***ANTH 590. (1 ½ -3) Directed Studies**

ANTH 599. (3) Thesis

SOCI 500. (1 ½ or 3) Problems in Sociological Theory

SOCI 510. (1 ½ or 3) Quantitative Methods

SOCI 511. (1 ½ or 3) Research Design

SOCI 530. (1 ½ or 3) Studies in Social Structure

SOCI 535. (1 ½ or 3) Studies in Social Processes

SOCI 590. (1 ½ or 3 or 6) Directed Studies

SOCI 599. (3 or 6) Thesis

* Students must consult the department before enrolling in these courses.

DEPARTMENT OF BACTERIOLOGY AND BIOCHEMISTRY

Alex J. Wood, B.S.A., M.S.A. (*Brit. Col.*), Ph.D. (*Cornell*), Professor and Head of the Department. (Sabbatical leave 1972-73.)

Trevor J. Trust, B.Sc., M.Sc., Ph.D. (*Melbourne*), Assistant Professor and Acting Head of the Department.

Sheila A. Berry, B.S., M.Sc., Ph.D. (*Alberta*), Assistant Professor.

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

This department offers honours programmes in bacteriology and biochemistry. The outlines of the two programmes and the prerequisites and corequisites for the department offerings are for the guidance of honours candidates only. *Students from other departments intending to take courses in bacteriology and biochemistry are urged to consult the department at the time of registration.*

HONOURS PROGRAMME — BACTERIOLOGY

		First Year	Second Year	Third Year	Fourth Year
Humanities	English	120	—	—	—
	Language 1	—	100	200	—
	Language 2	—	—	—	100
	Mathematics	130	110	343	—
	Mathematics	—	200	—	—
Physical Sciences	Chemistry	—	—	344	—
	Chemistry	124	224	—	—
	Chemistry	—	233	—	—
	Physics	101	—	—	—
	Biology	150	200	303	302
	Biology	—	—	—	300
	Biology	—	—	—	417
Bacteriology and Biochemistry	Bacteriology	—	200	300	400
	Bacteriology	480	480	480	480
	Bacteriology	—	—	—	499
	Biochemistry	—	—	300	400
	Biochemistry	—	—	—	405
Total Units		15	18	18	18

COURSES

BACT 200. (3) **Introductory Bacteriology**

The introductory principles and the language of bacteriology. Techniques for the isolation and cultivation of the bacteria. The relation of bacteria to agriculture, public health and sanitation, fermentation industries and veterinary science. Corequisites: Chemistry 124 (3 units).

Texts: Frobisher, *Fundamentals of Microbiology*.

A. J. Wood, T. J. Trust. (2-2; 2-2)

BACT 300. (3) **General Bacteriology**

The principles and practices of bacteriology. The basic concepts of immunology, serology, physiology, nutrition, genetics and cytology.

Text: Burrows, *Textbook of Microbiology*. 19 Ed.

T. J. Trust, A. J. Wood. (2-2; 2-2)

BACT 400. (3) Advanced Bacteriology

An in-depth study of bacteriology. Specific concepts in the principal areas.

Text: B. D. Davis et al, *Microbiology*.

T. J. Trust.

(2-2; 2-2)

BACT 470. (1-3) Directed Studies in Bacteriology

T. J. Trust, A. J. Wood.

BACT 480. (0) Seminar

Attendance and participation is required for all students in all years of the Bacteriology Honours programme.

Members of the Department.

(2-0; 2-0)

BACT 499. (2) Undergraduate Thesis

Research under the direction of a staff member.

Open to Bacteriology Honours only.

HONOURS PROGRAMME — BIOCHEMISTRY

		First Year	Second Year	Third Year	Fourth Year
Humanities	English	120	—	—	—
	Language 1	—	100	200	—
	Language 2	—	—	—	100
	Mathematics	130	110	343	201
	Mathematics	—	200	—	—
Physical Sciences	Chemistry	—	—	—	333
	Chemistry	124	224	344	326
	Chemistry	—	233	—	—
	Physics	101	—	212	—
	Biology	150	200	303	—
Bacteriology and Biochemistry	Bacteriology	—	200	—	300
	Biochemistry	—	—	300	400
	Biochemistry	—	—	—	405
	Biochemistry	—	—	—	499
	Biochemistry	480	480	480	480
Total Units		15	18	18	18

COURSES

BIOC 300. (3) General Biochemistry

The metabolism of the major nutritional entities: carbohydrates, fats, proteins, vitamins and the macro and micro mineral elements will be considered.

Text: Mallette et al, *Introductory Biochemistry*.

A. J. Wood, J. T. Buckley and S. A. Berry.

(3-0; 3-0)

BIOC 400. (3) Biochemistry

A comprehensive study of the chemistry of biological systems. Topics will include the chemistry of constituents of living organisms and of the anabolic and catabolic pathways of metabolism.

Text: A. L. Lehninger, *Biochemistry*; I. H. Segel, *Biochemical Calculations*.

J. T. Buckley and S. A. Berry.

(3-0; 3-0)

- BIOC 405. (1) **Laboratory Methods in Biochemistry**
Corequisite: Chemistry 344.
Text: G. Rendina, *Experimental Method in Modern Biochemistry*.
J. T. Buckley. (0-2; 0-2)
- BIOC 470. (1-3) **Directed Studies in Biochemistry**
A. J. Wood, T. J. Trust, J. T. Buckley and S. A. Berry.
- BIOC 480. (0) **Seminar**
Attendance and participation is required for all students in all years of the Biochemistry Honours programme.
Members of the Department. (2-0; 2-0)
- BIOC 499. (2) **Undergraduate Thesis**
Research under the direction of a staff member. Open to Biochemistry Honours students only.

GRADUATE COURSES

- BIOC 500. (3) **Advanced Biochemistry**
- BIOC 510. (3) **Advanced Nutritional Biochemistry**
- BIOC 570. (3) **Directed Studies**
- BIOC 580. (0) **Seminar**
- BIOC 599. (3-6) **M.Sc. Thesis**
- BIOC 600. (3) **Topics in Biochemistry**
- BIOC 699. (3-9) **Ph.D. Dissertation**

DEPARTMENT OF BIOLOGY

- George O. Mackie, B.A., M.A., D.Phil. (*Oxon.*), Professor and Chairman of the Department.
- Jeffrey A. Cunningham, B.A. (*Queen's*), LL.D. (*U. of Vic.*), Professor Emeritus of Zoology.
- W. Gordon Fields, B.A. (*Brit. Col.*), A.M., Ph.D. (*Stanford*), Professor.
- Arthur R. Fontaine, B.Sc. (*McGill*), D.Phil. (*Oxon.*), Professor.
- Franklin T. Algard, A.B. (*San Jose St.*), Ph.D. (*Stanford*), Associate Professor.
- Michael J. Ashwood-Smith, B.Sc., M.Sc. (*Durham*), Ph.D. (*London*), Associate Professor.
- Alan P. Austin, B.Sc., Ph.D. (*Wales*), Associate Professor.
- David J. Ballantyne, B.Com. (*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.
- 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.
- Jack L. Littlepage, B.A. (*San Diego*), Ph.D. (*Stanford*), Associate Professor.
- John E. McInerney, B.Sc., (*Ottawa*), M.Sc., Ph.D. (*Brit. Col.*), Associate Professor.
- John N. Owens, B.S. (*Portland St.*), M.S., Ph.D. (*Ore.*), Associate Professor.
- Robert G. B. Reid, B.Sc., Ph.D. (*Glasgow*), Associate Professor.
- E. Derek Styles, B.S.A. (*Brit. Col.*), Ph.D. (*Wis.*), Associate Professor.
- Thomas B. Widdowson, B.A., M.A., Ph.D. (*Brit. Col.*), Visiting Associate Professor.
- Louis A. Hobson, B.S. (*Humboldt St. Coll.*), M.S., Ph.D. (*Wash.*), Assistant Professor.
- John W. Paden, B.S. (*Calif.*), M.S., Ph.D. (*Idaho*), Assistant Professor.
- Richard A. Ring, B.Sc., Ph.D. (*Glasgow*), Assistant Professor
- Hamish D. W. Bridgman, B.Sc. (*U. of Vic.*), B.A. (*Cambridge*), Administrative Assistant.
- Hans (Jack) F. Dietrich, Senior Scientific Assistant.
- Thorston W. Henrich, M.A. (*South Dakota*), Senior Laboratory Instructor.

Honorary Research Associates

- Kenneth Radway Allen, B.A., M.A. (*Cambridge*), Honorary Research Associate, Director, Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C.
- Donald F. Alderdice, B.A., M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Honorary Research Associate, Senior Scientist, Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C.
- Raymond J. Ghelardi, B.A. (*Stanford*), M.S., Ph.D. (*Calif.*), Honorary Research Associate, Senior Scientist, Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C.
- Robert S. Parker, B.S. (*Wash.*), M.A., Ph.D. (*Brit. Col.*), Honorary Research Associate, Senior Scientist, Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C.

GRADUATE PROGRAMMES

For information on programmes leading to the M.Sc. and Ph.D. degrees, see the section of this Calendar dealing with the Faculty of Graduate Studies.

UNDERGRADUATE PROGRAMMES

In all cases, students planning a programme in Biology should consult with the Departmental 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 programme in one of the following *Options*:

Botany
Ecology
Functional Biology
Marine Biology
Zoology

The core and science co-requisites for Honours and Major Programmes are outlined on page 114. Recommended programmes for the options may be found on page 115.

B.Sc. General and *B.A. General* programmes should be chosen to meet the requirements as set out in the Programme outline on page 114.

NOTES: (These refer to the chart on page 114).

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 103. However, honours and major students are advised to take Physics 101 which is prerequisite to more advanced Physics offerings that are important to certain areas in Biology. Physics 101 requires Mathematics 130 as co-requisite.

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 should be taken if Physics 101 is to be taken (see note 2 above) or if a student's second area of concentration is to be in Mathematics, Chemistry, or Physics; otherwise Mathematics 102 and 151 are advised.

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 departmental recommendation.

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 71 under "Summer Session and Other Credit: 6.") for students who have taken their first three years at the University of Victoria to be granted a B.A. or a 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 that the necessary provisions outlined on page 71 can be met.

BIOLOGY PROGRAMMES

HONOURS	MAJORS		B.Sc. GENERAL		B.A. GENERAL	
Core	Core					
Biol. 150 (1)	Biol. 150 (1)	3	Biol. 150 (1)	3	Biol. 150 (1)	3
Biol. 200	Biol. 200	3	Minimum of 6 units of 200 level Biology courses	3	Minimum of 6 units of 200 level Biology courses	3
Biol. 203/204	Biol. 203/204	3	Minimum of 9 units of acceptable Bio- logy courses num- bered 300 and above	6	Minimum of 9 units of acceptable Bio- logy courses num- bered 300 and above	6
Biol. 206/207	Biol. 206/207	3				
Biol. 300/306	Biol. 300/306	3				
One of Biol. 303, 305 or 331	One of Biol. 303, 305, or 331	3				
Biol. 304	Minimum of 9 Biology units chosen to com- plete option	3	Minimum No. of Biol. units	18	Minimum No. of Biol. units	18
Biol. 460		1				
Biol. 499		3	Co-requisites		Co-requisites	
Minimum of 12 Bio- logy units chosen to complete option	Minimum No. of Bio- logy units	12	Phys. 101 or 103 (2) Chem. 120 or 124 (3) Math. 102/151 or 130 or equivalent (4)	3	Chem. 120 or 124 (3)	3
Minimum No. of Bio- logy Units	Co-requisites					
	Phys. 101 or 103 (2) Chem. 120 or 124 (3) Math. 102/151 or 130 or equivalent (4)	37				
Co-requisites						
Phys. 101 or 103 (2)		3				
Chem. 120 or 124 (3)		3				
Math. 102/151 or 130 or equivalent (4)		3				
Chem. 230 or 233		3				
Electives		12				
TOTAL UNITS	TOTAL UNITS	61				

¹ See note 1) page 113

² See note 2) page 113

³ See note 3) page 113

⁴ See note 4) page 113

RECOMMENDED PROGRAMMES FOR MAJORS AND HONOURS

Modification in these programmes may be made with the approval of the Department. Programmes for special interests may be designed in consultation with departmental advisors.

MAJORS

Botany Option

First Year	3	Second Year	3	Third Year	3	Fourth Year	3
Biol. 150 ¹	3	Biol. 200	3	Biol. 300/306	3	Biol. 318/418	3
Chem. 120 or 124	3	Biol. 203/204	3	Biol. 331	3	Biology Group I Electives	3
Phys. 101 or 103	3	Biol. 206/207	3	Biol. 343 and 344	3		
Math. 102/151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives ²	3	Electives ²	3	Electives ³	6	Electives ³	9
	15		15		15		15

Biology Group I Electives

Biol. 411 (3), 415 (3), 421 (1½), 422 (1½), 423 (1½), 452 (1½).

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

Ecology Option

First Year	3	Second Year	3	Third Year	3	Fourth Year	3
Biol. 150 ¹	3	Biol. 200	3	Biol. 300/306	3	Biol. 427	1½
Chem. 120 or 124	3	Biol. 203/204	3	Biol. 303 or 305 or 331	3	Biol. 440	1½
Phys. 101 or 103	3	Biol. 206/207	3	Biol. 318/418	3	Biology Group II Electives	3
Math. 102/151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives ²	3	Electives ²	3	Electives ³	6	Electives ³	9
	15		15		15		15

Biology Group II Electives

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

* with Departmental permission.

Departmental Advisors in Ecology: Drs. Austin (Marine and Freshwater Plant), Bell (Terrestrial Plant), Ellis (Marine), Hagmeier (Terrestrial and Freshwater).

¹ See Note 1, page 117.

² See Note 2, page 117.

³ See Note 3, page 117.

Functional Biology Option

First Year	3	Second Year	3	Third Year	3	Fourth Year	6
Biol. 150 ¹		Biol. 200		Biol. 300/306		Biology Group III Electives	
Chem. 120 or 124	3	Biol. 203/204	3	Biol. 303* or 305 or 331	3		
Phys. 101 or 103	3	Biol. 206/207	3	Biol. 309 or 343	1½	Biology Group III Electives	1½
Math. 102/151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives ²	3	Electives ²	3	Electives ³	6	Electives ³	9
	15		15		15		15

Biology Group III Electives:

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

* advised for students considering going on to professional schools, e.g. Medicine, Dentistry, etc.

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

Morine Biology Option

First Year	3	Second Year	3	Third Year	3	Fourth Year	3
Biol. 150 ¹		Biol. 200		Biol. 300/306		Biol. 301 or 311	
Chem. 120 or 124	3	Biol. 203/204	3	Biol. 303 or 305 or 331	3	Biology Group IV Electives	3
Phys. 101 or 103	3	Biol. 206/207	3	Biol. 301 or 311	3		
Math. 102/151 or 130 or equivalent	3	Chem. 230 or 233	3				
Electives ²	3	Electives ²	3	Electives ³	6	Electives ³	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).

¹ See Note 1, page 117.

² See Note 2, page 117.

³ See Note 3, page 117.

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), McInerney (Fish: Physiology and Behaviour), Reid (Marine Invertebrates: Physiology).

Zoology Option

First Year	Second Year	Third Year	Fourth Year
Biol. 150 ¹ 3	Biol. 200 3	Biol. 300/306 3	Biology Group V B Electives 6
Chem. 120 or 124 3	Biol. 203/204 3	Biol. 303* or 305 3	
Phys. 101 or 103 3	Biol. 206/207 3	Biol. 309 Biology Group V Electives 1½	1½
Math. 102/151 or 130 or equivalent 3	Chem. 230 or 233 3		
Electives ² 3	Electives ² 3	Electives ³ 6	Electives 9
15	15	15	15

¹ See Note 1, below.

² See Note 2, below.

³ See Note 3, below.

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).

* advised for students considering going on to professional schools, e.g. Medicine, Dentistry, etc.

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

NOTES: (These refer to Option charts on pages 115-116.)

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 Option 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.

HONOURS:

Honours students should complete the programme of required courses and Biology electives for the appropriate OPTION as described for the Major, and in addition should take Biol. 304 (3) in their third year, Biol 460 (1) and 499 (3) in their fourth year, and a minimum of 3 additional units of Biology courses chosen in consultation with the Department to a total of not less than 37 units of Biology. Written application for entry into Honours should be made to the Department not later than

March 1 of the Third Year. The applicant should have and should maintain a B+ average in all departmental courses.

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.

COURSES

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 113.

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. The course is designed for those with little biological background and those wishing to consolidate their understanding of basic biological science (see Note 1, page 113).

Text: Keeton, *Biological Science*.

Dr. Hayward and Members of the Department. (3-3; 3-3)

BIOL 200 (formerly 402). (3) **Cell Biology**

Molecular, biophysical and structural aspects of microbial, plant and animal cells. The life histories of cells, including aspects of cell division and embryogenesis. Cellular control and defence mechanisms. Pre- or co-requisites: Chemistry 230 or 233.

Texts: Jenson and Park, *Cell Ultrastructure*; Loewy and Siekevitz, *Cell Structure and Function*.

Dr. Ashwood-Smith and Members of the Department. (3-2; 3-2)

BIOL 203. (1 1/2) **Algae and Fungi**

Survey of the algae, fungi, and related procaryotes, and concepts of their development, phylogeny and identification. Ecological and economical importance of the marine and freshwater algae. Morphology and physiology of the fungi, and their use in food and industrial processes. Laboratories will include first-hand experience of the algae from local lakes and sea shores, and isolation, pure culture and identification of fungi. Not open to students with credit for Botany 205.

Text: To be announced.

Drs. Austin and Paden. September-December only. (3-3; 0-0)

BIOL 204. (1 1/2) **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.

Dr. Owens. January-April only. (0-0; 3-3)

BIOL 206. (1 1/2) **Invertebrate Zoology**

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

Texts: To be announced.

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

BIOL 207. (1 1/2) **Chordate Zoology**

A maximum credit of 1 1/2 units can be obtained in this course.

Section 40. In this section the patterns of chordate evolution from the point of view of organism-environment interactions will be emphasized. Changes in the struc-

ture and organization of vertebrate systems will be studied in relation to the succession of environments exploited by the chordates. This section is recommended for majors and non-majors except as follows:

Section 65. 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 Zool. 202.

Text: To be announced.

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

BIOL 300. (1 1/2) 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 eucaryotis and procaryotis; classical concept of the gene; genetic control of biochemical reactions; growth and differentiation; genetics variation in individuals and in populations; genetics and evolution; genetics and man. Demonstration sessions will be arranged. Biology Honours and Majors should take this course in conjunction with Biology 306. Pre- or co-requisite: Biology 200 (Cell Biology).

Texts: Scientific American Reprints; Crow, *Genetics Notes*.

Dr. Styles. January-April only. (0-0; 3-2)

BIOL 301 (formerly ZOOL 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. Co-requisite: Biology 303 or 305 (Zoology 303 or 305).

Texts: To be announced.

Dr. Fontaine. (2-3; 2-3)

BIOL 302 (formerly ZOOL 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, majors, and pre-professional students or permission of the instructor. Pre- or co-requisites: Zoology 202 or Biology 207. Biology 303 (Zoology 303) is desirable.

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

Dr. Algard. (2-3; 2-3)

BIOL 303 (formerly ZOOL 303). (3) Vertebrate Physiology

Functional processes of whole vertebrate organisms and their major organ systems. Laboratory work concentrates on familiarization with methodology in physiology including instrumental and surgical techniques. Prerequisites: Biology 200; Biology 207 or Zoology 202; Physics 101 or 103. Chemistry 124 is recommended.

Texts: To be announced.

Dr. Hayward. (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: To be announced. (2-3; 2-3)

BIOL 305 (formerly ZOO 305). (3) Comparative Physiology

A survey of the functioning and evolution of physiological systems in the animal kingdom. Special attention is given to marine invertebrate physiology. Prerequisite: Biology 200 or equivalent.

Texts: Hoar, *General and Comparative Physiology*.

Dr. Reid.

(2-3; 2-3)

BIOL 306. (1 1/2) Ecology

A survey of populations, communities and ecosystems. Biology Honour and Major students should take this course in conjunction with Biology 300.

Texts: To be announced.

September-December only. (3-0; 0-0)

BIOL 309. (1 1/2) Developmental Zoology

Animal development and the mechanisms that control it; introductory embryology of vertebrates and some invertebrates. Prerequisites: Biology 206 and 207.

Texts: To be announced.

September-December only. (2-3; 0-0)

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: To be announced.

Drs. Littlepage and Hobson.

(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: To be announced.

Dr. Littlepage.

(2-3; 2-3)

BIOL 312 (formerly ZOO 312). (1 1/2) 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 co-requisites: Biology 206 or Zoology 301.

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

Dr. Ring.

September-December only. (2-3; 0-0)

BIOL 313. (1 1/2) Economic Entomology

A study of man's greatest competitors for food and resources. Insects and arachnids of medical, household, stored products, 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.

Dr. Ring.

January-April only. (0-0; 2-3)

BIOL 314. (3) Natural History of Marine Invertebrates

General problems in 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 individual projects will be reported in seminars. Prerequisite: Biology 206 or equivalent. Not open to students with credit in Biology 311 and Biology 406.

Text: Ricketts & Calvin, *Between Pacific Tides*, Revised by Hedgpeth.

Dr. Fields.

(2-3; 2-3)

BIOL 316. (1 1/2) Environmental Issues

Participatory instruction on the interaction between human population, natural resources, and environment. Emphasis will be on problem-defining through a combination of lectures, guest speakers, seminars, debate, panel and small group discussions. The interpretation of facts is emphasized from a variety of viewpoints. Use of modern communications techniques such as film, video and audiotape and various art forms is encouraged for individual presentations. Field trips.

Requirements: Active participation in discussion, one seminar or equivalent presentation or project, and one term essay. Biology 150 is not required. 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 2 years University or comparable experience.

Text: Ehrlich & Ehrlich, *Population, Resources, Environment*, and assigned readings.

Dr. Bell. (evenings).

January-April only. (0-0; 3-0)

BIOL 318 (formerly BOTA 31B). (1 1/2) Vascular Plant Taxonomy

An introduction to plant systematics; principles of classification, identification, nomenclature; modern approaches, e.g., genecology, chemotaxonomy, taximetrics; familiarization with selected vascular plant families of British Columbia; techniques of collection and preservation. Weekend field trips. One seminar per student. Active participation in discussion is expected. A well-prepared collection of 25 properly annotated and identified plants must be submitted before completion of the course. Obtain instructions before the summer preceding the course. Prerequisite: Botany 205 or Biology 204 or written permission of the instructor.

NOTE: A 3 or 4 day field trip to alpine country may be held during registration week to collect plants for later study, and to learn some field techniques. Contact the instructor for details.

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

Dr. Bell.

September-December only. (2-3; 0-0)

BIOL 320. (1 1/2) 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 majors 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.

Text: Lerner, *Heredity, Evolution, and Society*.

Dr. Styles.

September-December only. (3-0; 0-0)

BIOL 329 (formerly ZOO 416). (1 1/2) Biology of the Vertebrates

A course dealing with the vertebrates, with emphasis on the birds and mammals of British Columbia. Lectures will stress the characteristic features and natural history

of each class. The laboratory will include classification and identification of the common vertebrates. Field trips are planned. Prerequisites: Biology 207 or Zoology 202, or written permission of instructor.

September-December only. (2-3; 0-0)

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. One research report or one seminar will be given by each student. Prerequisites: Biology 200, Botany 205, or Biology 203 and 204, or written permission of the instructor.

Texts: Salisbury and Ross, *Plant Physiology*; Hillman, *Papers in Plant Physiology*.

Dr. Ballantyne. (2-3; 2-3)

BIOL 334. (1 1/2) 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: Anderson, *Plants, Man and Life*; Scientific American Reprints; Baker, *Plants and Civilization*.

Drs. Ballantyne, Owens, Paden, and Styles.

September-December only. (3-0; 0-0)

BIOL 33B. (1 1/2) 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.

Texts: Street and Opik, *The Physiology of Flowering Plants*; reprints of papers from journals on applied aspects of botany; Treshow, *Environment and Plant Response*.

Dr. Ballantyne.

September-December only. (3-0; 0-0)

BIOL 343 (formerly BIOL 342). (1 1/2) 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).

Texts: Esau, *Anatomy of Seed Plants*.

Dr. Owens.

September-December only. (2-3; 0-0)

BIOL 344 (formerly BIOL 342). (1 1/2) 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, histochemistry and autoradiography. (Not open to students who have credit for Biology 342 (3).) Prerequisites: Biology 204 (Botany 205).

Text: Johansen, *Plant Microtechnique*.

Dr. Owens.

January-April only. (0-0; 2-3)

BIOL 401. (3) Current Topics in Genetics

A discussion of theories concerning the origin of life and the genetic code; population genetics and evolutionary mechanisms; the genetic control of development and behaviour; recent advances in medical genetics; and other topics. Laboratory assign-

ments will be in part experimental and in part literature reviews and seminar presentations. Prerequisites: Biology 300 or written permission of instructor.

Texts: Mettler and Gregg, *Populations Genetics*; Markert and Ursprung, *Developmental Genetics*; McKusick, *Human Genetics*, 2nd Edition; and assigned readings.

Dr. Styles. (2-3; 2-3)

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

A study of the embryonic development of representative marine organisms with experimental analysis of certain developmental phenomena. Results of individual projects undertaken in the second term will be reported in seminars. Prerequisite: Biology 206 or Zoology 301 or written permission of the instructor.

Text: To be announced.

Dr. Fields. (2-3; 2-3)

BIOL 405. (3) Cellular Physiology

Structure and function of cells. Particular emphasis will be given in laboratory exercises to the synthesis, function, and interactions of cellular organelles and molecules. Seminar presentations by students are required. Prerequisites: Biology 200 (Cell Biology) or equivalent, and written permission of the instructor.

Texts: Lehninger, *Biochemistry, The Molecular Basis of Cell Structure and Function*; Access to: Watson, *Molecular Biology of the Gene*, 2nd Edition.

Dr. 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, biogeochemical cycling and energy flows. Prerequisites: Biology 306; Zoology 301 or Biology 206. Pre- or co-requisite: Biology 304. Participation in three or four field trips is required.

Text: Original and review literature.

Dr. Ellis. (2-3; 2-3)

BIOL 408. (1½) The Biology of Pollution

An introduction to and development of aspects of the biological implications of pollution including definition, recognition, measurement and consideration of abatement. Laboratory and field work includes manipulation of organisms exposed to pollutants, lectures by visiting speakers and seminars presented by class members upon independent projects. Pre- or co-requisites: Botany 205 or Biology 203, Zoology 301 or Biology 206, or written permission of instructor; recommended: Bacteriology 200.

Texts: To be announced.

Dr. Austin. January-April. (0-0; 2-3)

BIOL 411 (formerly BOTA 411). (3) Marine and Freshwater Algae (Phycology)

A treatment of aspects of the biology of the algae, with ecological observations of the varied marine, freshwater and soil communities of Vancouver Island. Laboratory work involves taxonomy, morphology (microtechnique) and some environmental physiology and culture relevant to both macroscopic and phytoplanktonic types. One research topic paper and participation in field trips to west coast and lake algae habitats are expected. Prerequisite: Botany 205 or Biology 203.

Text: Round, *The Biology of the Algae*.

Dr. Austin. (2-3; 2-3)

BIOL 412 (formerly ZOO 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.

Dr. Ring. September-December only. (2-3; 0-0)

BIOL 414 (formerly ZOO 414). (3) **Marine Invertebrate Zoology**

Selected topics are dealt with in depth in the lectures. The emphasis is on recent research in areas having unusual zoological interest or economic significance, particularly in the area of behavioral physiology. Practical work stresses individual research projects. Pre- or co-requisites: Biology 301 or Biology 314.

Texts: For general reference, a good modern textbook of Invertebrate Zoology.

Dr. Mackie.

(2-3; 2-3)

BIOL 415 (formerly BOTA 415). (3) **Mycology and Plant Pathology**

Morphology and physiology of terrestrial and marine fungi including plant pathogenic species. The first term will consist of a general consideration of all fungal groups with emphasis on plant pathogenic forms. Ascomycetes and marine fungi will be emphasized in the second term. Specialized isolation, culture, and cytological techniques will be presented. Assignments from current literature will supplement the text. A collection of at least 25 specimens or a research project is required. Pre-requisite: Botany 205 or Biology 203 or written permission of instructor.

Text: Webster: *Introduction to Fungi*; Shaffew: *Keys to Genera of Higher Fungi*.

Dr. Paden.

(2-3; 2-3)

BIOL 417 (formerly ZOO 417). (1 1/2) **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. Co-requisite: Biology 302 (Zoology 302).

Text: Humason, *Animal Tissue Techniques*, 2nd edition.

Dr. Mackie.

September-December only. (1-4; 0-0)

BIOL 418 (formerly BOTA 418). (1 1/2) **Plant Ecology**

A study of plant communities in the context of ecosystems; vegetation structure, composition, productivity, succession; quantitative methods of community description, classification, environmental measurement. Normally one seminar and one project per student. Active participation in discussion is expected. Weekend field trips. A one week field trip may be held in early May, to some part of western North America. Pre- or co-requisites: Biology 318 (Botany 318) and Biology 306, or written permission of instructor.

Texts: Daubenmire, *Plant Communities*; Phillips, *Methods of Vegetation Study*.

Dr. Bell.

January-April only. (0-0; 2-3)

BIOL 419 (formerly ZOO 419). (1 1/2) **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. Prerequisites: Biology 417 (Zoology 417); Biology 302 (Zoology 302) advised as a pre- or co-requisite.

Texts: To be announced.

Dr. Fontaine.

January-April only. (0-0; 2-3)

BIOL 421 (formerly BOTA 421). (1 1/2) **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 tissue culture and histochemical techniques in morphogenetic studies. Pre- or co-requisites: Biology 343 and 344 (Biology 342, Botany 342); and Biology 331 (Botany 331), or written permission of instructor.

Text: Wardlaw, *Plant Morphogenesis*.

Dr. Owens.

September-December only. (2-3; 0-0)

BIOL 422 (formerly BOTA 422). (1 1/2) **Physiology of Plant Growth and Development**

An advanced study of physiological aspects of plant growth, flower initiation, dormancy and senescence. Prerequisite: Biology 331 (Botany 331) or written permission of the instructor.

Texts: Steward and Krikorian, *Plants, Chemicals and Growth*; Phillips, *Introduction to Biochemistry and Physiology of Plant Growth Substances*.

Dr. Ballantyne. January-April only. (0-0; 2-3)

BIOL 423 (formerly BOTA 423). (1 1/2) **Plant Metabolism**

A study of photosynthesis, respiration, and cell wall metabolism. Prerequisite: Biology 331 (Botany 331) or written permission of instructor.

Text: Hillman, *Papers in Plant Physiology*.

Dr. Ballantyne. September-December only. (2-3; 0-0)

BIOL 424. (1 1/2) **Biological Ultrastructure**

Cell and tissue structure as revealed by the electron microscope and interpreted in functional terms. Lectures, reading assignments and at least one seminar presentation per student. Prerequisites: Biology 200; Biology 342 (Botany 342) or Biology 302 (Zoology 302).

Texts: Assigned Readings.

(Not offered in 1972-73).

Dr. Mackie. January-April only. (0-0; 3-0)

BIOL 425 (formerly ZOO 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 co-requisite: Biology 303 (Zoology 303) or 305.

Texts: To be announced.

(Not offered 1972-73).

Dr. McInerney. (2-3; 2-3)

BIOL 426. (3) **Limnology**

Biological study of lakes and rivers. Prerequisite: Biology 306.

Texts: To be announced.

Dr. Hagmeier. (2-3; 2-3)

BIOL 427. (1 1/2) **Population Ecology**

A study of the characteristics of populations; the effects of birth rate, death rate, ingress and egress on the growth and regulation of animal numbers; current theories will be emphasized. Those registered will be expected to do considerable outside reading, and to participate in seminars. Prerequisite: Biology 306 or written permission of instructor.

Texts: To be announced. January-April only. (0-0; 2-3)

BIOL 428 (formerly ZOO 428). (1 1/2) **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.

Dr. Hagmeier. January-April only. (0-0; 2-3)

BIOL 429. (1 1/2) **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.

Texts: Siles, *Wildlife Management Techniques*.

January-April only. (0-0; 2-3)

BIOL 431 (formerly ZOO 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.

Text: Marshall, *The Life of Fishes*.

Dr. McInerney.

(2-3; 2-3)

BIOL 432 (formerly ZOO 432). (1 ½) **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).

Texts: To be announced.

January-April only. (0-0; 2-3)

BIOL 433 (formerly ZOO 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 co-requisites: Biology 302 (Zoology 302); Biology 303 or 305 (Zoology 303 or 305). Students should consult with the instructor before registration.

Texts: None.

Dr. Algard.

(1-4; 1-4)

BIOL 437. (1 ½) **Protozoology**

The protozoa will be studied as organisms, including aspects of their diversity and evolution. Prerequisites: Biology 206 or 301.

Texts: To be announced.

September-December only. (2-3; 0-0)

BIOL 440. (1 ½) **Quantitative Ecology**

The use of quantitative methods in ecologic studies. Not open to students with credit for Biology 420. Prerequisites: Biology 306. Recommended: Biology 304 and a course in computing.

Texts: To be announced.

Dr. Hagmeier.

January-April only. (0-0; 2-3)

BIOL 444. (1 ½) **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.

Texts: Tinbergen, *Animal Behaviour* or Eibl-Eibesfeldt, *Ethology* (for students continuing to Biology 445). Original and review literature.

Dr. Ellis.

September-December only. (2-2; 0-0)

BIOL 445. (1 ½) **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: Eibl-Eibesfeldt, *Ethology*. Original and review literature.

Dr. Ellis.

January-April only. (0-0; 2-2)

BIOL 450. (1 1/2) Oceanography — Phytoplankton

Aspects of the physical and chemical properties of seawater; the theory of the distribution of variables, and the water masses and currents of the oceans that influence growth of phytoplankton. The effects of light, temperature, inorganic and organic micronutrients, bacteria, and zooplankton on primary productivity will be discussed as they affect seasonal succession and geographic distributions of phytoplankton. Students will be responsible for one essay based on library research of a problem of current interest in phytoplankton ecology. Prerequisite: Biology 311 or written permission of instructor.

Text: Raymont, *Plankton and productivity in the ocean*; Fogg, *Algal cultures and Phytoplankton ecology*.

Dr. Hobson.

September-December only. (2-3; 0-0)

BIOL 451. (1 1/2) Oceanography — Zooplankton

Ecology and physiology of marine zooplankton. Lectures and seminars dealing with reproduction, vertical distribution and migration, feeding, assimilation and respiration of neritic and oceanic zooplankton. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research problem. Participation in research cruises is expected. Prerequisite: Biology 311 or written permission of the instructor. Suggested co-requisite: Biology 450.

Text: Raymont, *Plankton and Productivity in the Ocean*.

Dr. Littlepage.

January-April only. (0-0; 2-3)

BIOL 452. (1 1/2) Algal Nutrition and Metabolism

Lectures and laboratory studies including uptake and metabolism of carbon, nitrogen, phosphorus, silicon, and organic and inorganic micronutrients by algae. Students will be responsible for one essay based on library research of a problem of current interest in algal physiology and biochemistry. Prerequisites: Biology 203 or Botany 205 and Biology 331 (Botany 331) or written permission of instructor.

Dr. Hobson.

January-April only. (0-0; 2-3)

BIOL 460. (1) Honours Seminar

Required for all Biological Honours students. Participation in Departmental seminars and presentation of thesis results.

BIOL 490. (1-3) Directed Studies in Biology

Students must obtain the written consent of the Department before registering for this course.

BIOL 499. (3) Thesis or Tutorial

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 510. (3) Advanced Topics in Ichthyology

Dr. McInerney.

BIOL 511. (1-3) Marine Science Seminar

Selected topics in marine biology will be dealt with in depth.

Dr. Mackie and members of the department.

BIOL 512. (3) Advanced Marine Ecology

Dr. Ellis.

- BIOL 513. (3) **Topics in Vertebrate Anatomy and Embryology**
Dr. Algard.
- BIOL 514. (3) **Zooplankton Ecology**
Dr. Littlepage.
- BIOL 515. (3) **Physiology of Marine Animals**
Dr. Reid.
- BIOL 517. (3) **Oceanography II**
Dr. Littlepage.
- BIOL 519. (1-3) **Animal Ecology**
Dr. Bergerud.
- BIOL 520. (3) **Advanced Mycology**
Dr. Paden.
- BIOL 521. (3) **Advanced Phycology**
Dr. Austin.
- BIOL 522. (1-3) **Advanced Plant Ecology**
Dr. Bell.
- BIOL 523. (2) **Advanced Plant Physiology**
Dr. Ballantyne.
- BIOL 524. (1-3) **Plant Anatomy and Morphology**
Dr. Owens.
- BIOL 525. (3) **Recent Advances in Insect Physiology**
Dr. Ring.
- BIOL 526. (1½) **Topics in Biological Ultrastructure**
Dr. 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.
Dr. 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**
Dr. Styles.
- BIOL 531. (1½) **Selected Topics in Vertebrate Physiology**
Dr. Hayward.
- BIOL 532. (3) **Advanced Techniques in Cell Biology**
Dr. Ashwood-Smith.
- BIOL 533. (3) **Topics in Advanced Embryology of Marine Invertebrates**
Dr. Fields.

BIOL 534. (1-3) **Problems in Environmental Management**
Dr. Bell.

BIOL 535. (1-3) **Advanced Topics in Zoogeography**
Dr. Hagmeier.

BIOL 536. (1-3) **Advanced Topics in Ecology**
Dr. Hagmeier.

BIOL 550. (1-6) **Directed Studies**

BIOL 560. (1-3) **Seminar**

BIOL 599. (credit to be determined) **Thesis**

BIOL 699. (credit to be determined) **Ph.D. dissertation**

DEPARTMENT OF CHEMISTRY

- Stephen A. Ryce, B.A., Ph.D. (*Brit. Col.*), Professor and Head of Department (sabbatical leave 1972-73).
- Alfred Fischer, B.Sc., M.Sc., Ph.D. (*N.Z.*), Professor and Acting Head of the Department.
- Lewis J. Clark, B.A. (*Brit. Col.*), M.Sc. (*Wash.*), Ph.D. (*Ore. St.*), Professor (on leave).
- Alexander D. Kirk, B.Sc., Ph.D. (*Edinburgh*), Professor.
- D. J. MacLaurin, B.A.Sc. (*Brit. Col.*), M.S., Ph.D. (*Lawrence*), P.Eng., Professor.
- Robert N. O'Brien, B.A.Sc., M.A.Sc. (*Brit. Col.*), Ph.D. (*Manchester*), Professor
- Wilma E. Elias, B.A., M.A. (*Sask.*), Ph.D. (*Brit. Col.*), Associate Professor.
- Sidney G. Gibbins, B.S. (*Cal. Inst. Tech.*), Ph.D. (*Wash.*), Associate Professor.
- Kenneth C. Moss, B.Sc., A.R.C.S., D.I.C., Ph.D. (*London*), Associate Professor.
- Frank P. Robinson, A.B. (*Fisk*), Ph.D. (*Alta.*), Associate Professor.
- Walter J. Balfour, B.Sc. (*Aberdeen*), Ph.D. (*McMaster*), Assistant Professor.
- Graham R. Branton, B.Sc., Ph.D. (*Southampton*), Assistant Professor.
- Gordon W. Bushnell, M.A., B.Sc. (*Oxon.*), Ph.D. (*West Indies*), Assistant Professor.
- Thomas W. Dingle, B.Sc., Ph.D. (*Alta.*), Assistant Professor.
- Keith R. Dixon, B.A. (*Cantab.*), Ph.D. (*Strathclyde*), Assistant Professor.
- Martin B. Hocking, B.Sc. (*Alta.*), Ph.D. (*Southampton*), Assistant Professor.
- Gerald A. Poulton, B.A., Ph.D. (*Sask.*), Assistant Professor.
- Paul R. West, B.Sc., Ph.D. (*McMaster*), Assistant Professor.
- Terrance K. Davies, B.Sc. (*U. of Vic.*), Senior Scientific Assistant.
- Karel Hartman, L.I.R.I., B.Sc. (*U. of Vic.*), Senior Laboratory Instructor.
- John F. Reeves, C.D., Administrative Assistant.

UNDERGRADUATE PROGRAMMES

The Department offers Honours and Major programmes, leading to the B.Sc. degree, which provide opportunity for specialized education in chemistry. The Honours programme requires 34 units of chemistry courses from the total 61 units for the degree. The Major programme requires 24 units of chemistry courses. Each programme requires 6 units in mathematics and 6 units in physics of co-requisite courses.

Students seeking careers as professional chemists or those who wish to continue their studies through graduate school to the M.Sc. and Ph.D. level are advised to take the Honours programme. The Major programme may also provide entry to graduate school and thus to careers for which a Masters or Doctoral degree is required. It is also suitable for students who seek careers in industrial laboratories and in teaching at the secondary level.

The Department also offers a concentration in chemistry as part of the B.Sc. degree and B.A. degree General programmes. A General programme with a concentration in chemistry is suitable for students seeking careers in industry, business, teaching and other occupations. Chemistry courses which may be included in programmes leading to a B.A. or B.Sc. degree in other disciplines are also provided.

GRADUATE PROGRAMMES

Departmental offerings leading to the M.Sc. and Ph.D. degrees are outlined on page 335 of this Calendar.

**COURSE REQUIREMENTS OF
CHEMISTRY UNDERGRADUATE PROGRAMMES**

GENERAL	MAJOR	HONOURS
First Year		
Chem 124 (3)	Chem 124 (3)	Chem 124 (3)
Math 130 (3)	Math 130 (3)	Math 130 (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)
Second Year		
Chem 224 (3)	Chem 224 (3)	Chem 224 (3)
Chem 233 (3)	Chem 233 (3)	Chem 233 (3)
Either Math 231 (3) or Math 230 and 232 (6)	Either Math 231 (3) or Math 230 and 232 (6)	Either Math 231 (3) or Math 230 and 232 (6)
Other courses (3 or 6)	Phys 212 (3) Other courses (0 or 3)	Phys 212 (3) Other courses (0 or 3)
Third and Fourth Years		Third Year
Nine additional units of chemistry in courses numbered above 300 for which the required pre- requisites have been taken. (9)	Chem 314 (3) Chem 326 (3) Chem 333 (3) Chem 344 (3)	Chem 314 (3) Chem 326 (3) Chem 333 (3) Chem 344 (3) Chem 399 (1) Other courses (3)
Nine units in a second area of concentration (9)	Any two of Chem 422, 423, 433, 434, 444, 446 (3)	Fourth Year Chem 422 and 423 (3) Chem 433 and 434 (3) Chem 444 and 446 (3) Chem 499 (3) Other courses (3)
Other courses (12)	Other courses (15)	

- NOTES: 1. Students who commenced programmes prior to September 1, 1971 may substitute appropriate courses completed prior to that date for certain of the required courses above, viz. Chemistry 331 and 334 for Chemistry 333, Chemistry 424 for Chemistry 422 and 423, Chemistry 435 for Chemistry 433 and 434, Chemistry 445 for Chemistry 444 and 446.
2. Courses may be taken in different sequences and in different years than those indicated provided that the co- and prerequisite requirements are satisfied.
3. The general requirements for admission to the Third Year of an Honours Programme are specified on pages 94-96 of this Calendar. 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 Mathematics 170, 171, 323, 330.

4. Entering students with high standing in grade 11 and 12 courses may be granted permission by the Department to register directly in Second Year courses (either Chemistry 224 or Chemistry 233) in their First Year. The minimum requirements for direct entry into these courses are either (i) A standing in grade 12 chemistry, B standing in grade 12 mathematics and B standing in grade 12 physics (or in grade 11 physics, if the grade 12 course has not been taken); or (ii) eligibility for a Government of British Columbia Scholarship ($\frac{3}{4}$ fees) on the basis of examinations in chemistry and in either mathematics or physics.
5. Students considering graduate work in chemistry are advised to acquire a reading knowledge of at least one of French, German or Russian.
6. 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 72).
7. Students registering for any chemistry course which includes laboratory work are required to purchase a Chemistry Laboratory Credit Card (\$6.00) at registration. Any unused portion of this credit is refundable. Glasses or face shields must be worn by all students in laboratories. Safety glasses and Chemistry Department laboratory notebooks may be purchased in the University Bookstore. UVic laboratory manuals may be obtained through Chemistry Stores.

COURSES

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

For students whose major field lies outside the physical and biological sciences the chemistry courses which are particularly suitable as electives are Chemistry 120 (General Chemistry) and Chemistry 400 ("Chemistry for Poets"). Chemistry 400 requires no laboratory work. Students should also note the availability of Science 300 (page 250) and Liberal Arts 305 (page 199).

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: For sections numbered 2 and 3 — Mathematics 12, and Chemistry 11 or their equivalents; for section numbered 4 — Mathematics 12, and Chemistry 12 or its equivalent. Students desiring to register in Chemistry 120, but who do not have these prerequisites, should consult the Department prior to registration for permission to register. If permission to enter Chemistry 120 is granted, then registration will be in Lecture Section number 1 which has four lectures per week.

Texts: To be announced. *Chemistry 120 Laboratory Manual (1972)*.

Drs. Bushnell, Dingle, Elias, Gibbins and Robinson. (3-3*; 3-3*)

NOTE: Chemistry 120 provides a comprehensive course in General Chemistry at the First Year University level, and is suitable for all fields and programmes at this University, except those which include either Chemistry 224 or 233. Certain pre-professional programmes require Chemistry 124 (see pages 359-60).

CHEM 124. [3] **Introductory Physical and Inorganic Chemistry — Part I**

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter, and nuclear chemistry. Basic physical chemistry including thermochemistry, thermodynamics, chemical kinetics, and equilibrium in chemical systems. This course includes a laboratory illustrating the behaviour of

* Laboratories on alternate weeks.

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 these prerequisites, should consult the Department prior to registration for permission to register. If permission to enter Chemistry 124 is granted, then registration will be in Lecture Section number 1 which has four lectures per week.

Texts: Brescia, Arents, Meislich & Turk, *Fundamentals of Chemistry; Chemistry 124 Laboratory Manual (1972)*.

Drs. Brauton, Kirk, Moss and O'Brien. (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. However, students admitted directly to Chemistry 224 or 233 in their First Year under the provisions outlined in Note 4, page 132 are exempted from Chemistry 124.

CHEM 224. (3) **Introductory Physical and Inorganic Chemistry — Part II**

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 Part I. This course includes experimental laboratory applications of solution equilibria, acid-base and redox theory in chemical analysis.

Prerequisites: Chemistry 124 (or 120 with permission of the Department). See also Note 4, page 132.

Texts: K. M. Mackay & R. A. Mackay, *Introduction to Modern Inorganic Chemistry*; W. E. Dasent, *Inorganic Energetics*; Brescia, Arents, Meislich & Turk, *Fundamentals of Chemistry*; or an equivalent general chemistry text; *Chemistry 224 Laboratory Manual (1972)*.

Drs. Dingle, Dixon and Moss. (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. 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 pages 359-60). Credit will not be given for both Chemistry 230 and 233.

Prerequisites: Chemistry 120 or 124.

Texts: Morrison & Boyd, *Organic Chemistry*; Roberts, Gilbert, Rodewald & Wingrove, *An Introduction to Modern Experimental Organic Chemistry*.

Drs. Elias, Poulton, West. (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 233-333 sequence. Students who do not plan to take Chemistry 333 are advised to take Chemistry 230.

Prerequisites: Chemistry 124 or 120 (See also Note 4, page 132).

Texts: Morrison and Boyd, *Organic Chemistry*; Roberts, Gilbert, Rodewald and Wingrove, *An Introduction to Modern Experimental Organic Chemistry*.

Dr. Fischer. (3-3; 3-3)

CHEM 301. (3) **Industrial Processes and the Chemistry of Pollution**

Chemical principles used in the mining and smelting, heavy chemical, and petroleum refining industries and in the manufacture of pulp and paper, petro-chemicals, soap and detergents, and polymers. Problems and methods for waste control, by-

product utilization, and waste disposal into soil, water or air. The course is intended for students who wish to become familiar with important industrial processes and with the chemical aspects of environmental quality.

Prerequisite: Chemistry 120 or 124.

Text: R. N. Shreve, *Chemical Process Industries*.

Dr. Hocking.

(3-0; 3-0)

CHEM 314. (3) Instrumental Analysis

Modern instrumental techniques of chemical analysis including chromatography, spectroscopy, mass spectroscopy, radiochemical-, electrochemical- and diffraction methods.

Prerequisite: Chemistry 224.

Texts: Ewing, *Instrumental Methods of Chemical Analysis*; Banwell, *Fundamentals of Molecular Spectroscopy*; *Chemistry 314 Laboratory Manual (1972)*.

Dr. Branton.

(2-4; 2-4)

CHEM 326. (3) Inorganic Chemistry

Theories of chemical bonding. Applications of molecular orbital and ligand field methods to coordination compounds. Introductory coordination chemistry. The chemistry of the transition elements.

Prerequisites: Chemistry 224, Physics 212, Mathematics 231 or 230 and 232.

Texts: Cotton and Wilkinson, *Advanced Inorganic Chemistry*; Gray, *Electrons and Chemical Bonding*; *Semi Micro Qualitative Inorganic Analysis: Advanced Scheme*; *Chemistry 326 Laboratory Manual (1972)*.

Dr. Bushnell.

(3-3; 3-3)

CHEM 333. (3) Organic Chemistry — Part II

Aromatic Chemistry, polyfunctional organic compounds, introductory heterocyclic chemistry, natural products. Reaction mechanisms and spectroscopic properties of each class of compounds studied are included. Not open to students who have credit in Chemistry 331 and 334.

Prerequisites: Chemistry 233 (or 230 with permission of the Department).

Texts: Morrison and Boyd, *Organic Chemistry*; Pasto and Johnson, *Organic Structure Determination*; *Chemistry 333 Laboratory Manual (1972)*.

Dr. Robinson.

(3-3; 3-3)

CHEM 344. (3) Physical Chemistry

Introductory quantum mechanics. Kinetic theory of gases, thermodynamics, phase equilibria, solutions, electrochemistry, and chemical kinetics.

Prerequisites: Chemistry 224, Physics 212, Mathematics 231 or 230 and 232.

Texts: Barrow, *Physical Chemistry*; Crockford and Nowell, *Laboratory Manual of Physical Chemistry*.

Dr. Balfour .

(3-3; 3-3)

CHEM 399. (1) Research Participation and Seminar

Introduction to departmental research. Seminar report. For Chemistry Honours students only.

Dr. O'Brien and members of the Department.

(0-0-2; 0-0-2)

CHEM 400. (3) Chemistry and the Sciences

A lecture course (with no laboratory) in which the nature and behaviour of matter is examined from the experimental, historical and philosophical backgrounds of chemistry. This course provides an opportunity for students in areas other than the physical sciences to broaden their cultural background by including a suitable consideration of a science which plays an important role in modern society.

This senior level course involves independent reading and use of library resources, suited to students acquainted with study at the university level. It is complete in itself.

Prerequisites: First year university level chemistry or its equivalent or Chemistry 300 or permission of the Department.

Text: To be announced.

(3-0; 3-0)

CHEM 422. (1 1/2) **Structural and Theoretical Inorganic Chemistry**

A general survey of the chemistry of the solid state. Inorganic polymers. Application of ligand field theory to the spectroscopy and magnetic properties of coordination compounds.

Prerequisite: Chemistry 326.

Texts: Evans, *An Introduction to Crystal Chemistry*; Sands, *Introduction to Crystallography*; *Chemistry 422 Laboratory Manual (1972)*.

Drs. Bushnell and Gibbins. January-April only. (0-0; 3-3)

CHEM 423. (1 1/2) **Complex Inorganic Compounds and Organometallic Chemistry**

The chemistry of transition metal carbonyls and related complexes. The chemistry of compounds containing organic groups directly bonded to metals or metalloids. Hydrides, clusters and electron deficient bonding.

Prerequisite: Chemistry 326.

Texts: Coates, Green, Powell and Wade, *Principles of Organometallic Chemistry*; *Chemistry 423 Laboratory Manual (1972)*.

Drs. Dixon and Moss. September-December only. (3-3; 0-0)

CHEM 433. (1 1/2) **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. Not open to students who have credit for Chemistry 435.

Prerequisite: Chemistry 333.

Texts: Pasto and Johnson, *Organic Structure Determination*; Hendrickson, *The Molecules of Nature*; *Chemistry 433 Laboratory Manual (1972)*.

Dr. Poulton. January-April only. (0-0; 3-3)

CHEM 434. (1 1/2) **Physical Organic Chemistry**

Stereochemistry. Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity. Not open to students who have credit for Chemistry 435.

Prerequisite: Chemistry 333.

Texts: Gilliom, *Introduction to Physical Organic Chemistry*; *Chemistry 434 Laboratory Manual (1972)*.

Dr. West. September-December only. (3-3; 0-0)

CHEM 444. (1 1/2) **Chemical Kinetics and Surface Chemistry**

Mathematical treatment of chemical processes; 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. Not open to students who have credit in Chemistry 445.

Prerequisite Chemistry 344.

Text: *Chemistry 444 Laboratory Manual (1972)*.

Drs. Kirk and O'Brien. January-April only. (0-0; 3-3)

CHEM 446. (1 1/2) **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. Not open to students who have credit in Chemistry 445.

Prerequisites: Chemistry 326 and 344; Mathematics 170 or 232 are strongly recommended.

Texts: Hanna, *Quantum Mechanics in Chemistry*; *Chemistry 446 Laboratory Manual (1972)*.

Dr. Balfour. September-December only. (3-3; 0-0)

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

Dr. Fischer.

CHEM 499. (3) **Thesis**

Experimental research under the direction of faculty. For Chemistry Honours students only.

Dr. Robinson and members of the Department.

(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 522. (1 ½-3) **Current Topics in Inorganic Chemistry**

CHEM 523. (3) **Organometallic Chemistry**

CHEM 525. (3) **Theoretical Inorganic Chemistry**

CHEM 526. (1 ½-3) **Topics in Advanced Inorganic Chemistry**

CHEM 533. (3) **Organic Synthesis**

CHEM 536. (3) **Carbohydrate Chemistry**

CHEM 538. (3) **Biogenesis of Natural Products**

CHEM 545. (1 ½) **Reaction Kinetics and Reaction Rate Theory**

CHEM 546. (1 ½) **Spectroscopy and the Chemistry of Excited States**

CHEM 550. (1 ½) **Elementary Applications of Group Theory**

CHEM 554. (1 ½) **Applied Quantum Mechanics**

CHEM 555. (1 ½) **Statistical Mechanics**

CHEM 556. (1 ½-3) **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. (1 ½-3) **Current Topics in Organic Chemistry**

CHEM 633. (1 ½-3) **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 645. (1 ½) **Advanced Electrochemistry**

CHEM 699. **Ph.D. Dissertation** (Credit to be determined.)

DEPARTMENT OF CLASSICS

David A. Campbell, M.A. (*Glasgow*), M.A. (*Oxon.*), Professor and Chairman of the Department.

Herbert H. Huxley, M.A. (*Cantab.*), M.A. (*Dublin*), F.I.A.L., Professor.

Geoffrey J. D. Archbold, B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Associate Professor.

Peter L. Smith, B.A. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Associate Professor.

Gordon S. Shrimpton, B.A., M.A. (*Brit. Col.*), Ph.D. (*Stanford*), Assistant Professor.

Samuel E. Scully, B.A., M. Litt. (*Bristol*), Lecturer.

Derek A. Tumber, B.A. (*Liverpool*), M.A. (*Alta.*), Lecturer.

UNDERGRADUATE PROGRAMMES

A student may take a *General Programme in Classics*, which does not necessarily involve language study; a *Major in Classics*, with variable emphasis on Greek, Latin, and Classical studies; an *Honours Programme in either Latin or Greek*; or an *Honours Programme in Classics* (advanced study of both Latin and Greek). Students on the General and Major Programmes will normally be taking advanced courses in other departments; honours students in Latin or Greek should note that it may be possible for them to complete an honours programme in a second field, if they have the joint consent of that department and the Classics Department. It is important that students discuss their programmes with members of the Department as early as possible in the course of their studies at the University. Failure to complete prerequisites for advanced courses in this and other departments may seriously limit the type of degree open to a student in his upper years.

GENERAL

First and Second Years:

The completion of at least 3 units chosen from Departmental offerings (e.g., one of Classical Studies 100; Greek 100; Latin 100 or 140 or 240).

Third and Fourth Years:

9 units in Departmental offerings numbered 300 or above.

MAJOR

First and Second Years:

(Greek Emphasis):

Completion of Greek 200, *plus* 3 units of Latin *or* 3 units of Classical Studies.

(Latin Emphasis):

Completion of Latin 200 or 240, *plus* 3 units of Greek *or* 3 units of Classical Studies.

NOTE: Students who do not begin the study of Greek or Latin until Second Year may still undertake a classics major, but they will have to complete prerequisite courses in Third Year.

Third and Fourth Years:

15 units in Departmental offerings at or above the 300 level, of which at least 9 units will be in Greek and/or Latin. For major students, Latin 300 and Greek 300 are corequisites for other advanced courses in each language.

HONOURS

Students of good general standing who have achieved a first class or high second class standing in Latin or Greek during their first two years may be admitted, with Departmental permission, into an intensified Honours programme.

First and Second Years:

Required Courses: Greek 100; Latin 100 or 140 or 240; a second course in either Greek or Latin. Students planning to enter Honours Classics should try, if possible, to carry the study of both Greek and Latin to the 200 level.

Recommended: Classical Studies 100, English 120, English 200.

Third and Fourth Years:

Required courses in the Third and Fourth years will normally not exceed 24 units out of a total student programme of 30-36 units. Any of the requirements listed below may be completed in the First and Second Years by a student who has the necessary prerequisites.

GREEK

Greek 300, 400 and 12 additional units in Greek numbered above 300. The student must complete 3 units in Greek history (either Greek 350 or Classical Studies 330), and must complete Latin 200 or 240 unless he has special permission from the Department.

LATIN

Latin 300, 400 and 12 additional units in Latin numbered above 300. The student must complete 3 units in Roman history (either Latin 350 or Classical Studies 340), and must complete Greek 200 unless he has special permission from the Department.

CLASSICS

Greek 300, 400; Latin 300, 400; at least 9 additional units in Greek and/or Latin courses numbered above 300. The student must complete 3 units in Greek history (either Greek 350 or Classical Studies 330) and 3 units in Roman history (either Latin 350 or Classical Studies 340).

NOTE: Graduating Honours (Greek, Latin, or Classics) students will be expected to have a reading knowledge of French or German.

Recommended as an elective to Third and Fourth Year General, Major, and Honours students: Liberal Arts 305.

COURSES

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

GREEK

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.

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: Peckett and Munday, *Thrasymachus*; Goodwin and Gulick, *Greek Grammar*. It is recommended that students purchase a Liddell and Scott *Intermediate Greek-English Lexicon* for this course.

Dr. Shrimpton.

(4-0; 4-0)

GREE 200. (3) Introduction to Greek Literature

Prerequisite: Greek 100 or its equivalent. Review of grammar mainly through reading; some sight translation and prose composition. Careful reading of the following works: Plato, *Euthyphro*; Euripides, *Alceste*; Thucydides, *History of the Peloponnesian War*, Book I, Chapters 89-118; Lysias, *Against Diogenes*; and a few chapters from Xenophon, *Memorabilia*. 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.

Mr. Huxley.

(4-0; 4-0)

GREE 300. (3) **Readings in Greek Prose, Drama and Epic**

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 IV, Chapters 1-41, 53-65; and Plato, *Apology*.

Mr. Scully.

(3-0; 3-0)

GREE 350. (3) **Greek Historians**

The development of Greek historical enquiry, with emphasis on the fifth century. A reading of Herodotus, *History*, Books V and VI, and Thucydides, *History of the Peloponnesian War*, Books VI and VII.

(Not offered 1972-73.)

(3-0; 3-0)

GREE 400. (3) **Advanced Reading in Greek Oratory, Philosophy and Drama**

The basic fourth-year course for Major and Honours students; prerequisite: Greek 300. Sight translation will be regularly practised, and unprepared translation will be included in the final examination.

Texts (subject to some variation from year to year): A careful reading of Demosthenes' three Olynthiac orations; Plato, *Republic*, Books I-III; Aeschylus, *Eumenides*; and Aristophanes, *Clouds*.

(3-0; 3-0)

GREE 480. (1½) **Greek Composition, Stylistics, and Metre**

(Not offered 1972-73.)

One term only, to be announced. (2-0)

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 Homer, *Iliad*, 490B Homer, *Odyssey*, 490C Hesiod, 490D Greek Lyric Poetry, 490E Greek Tragedy (earlier period), 490F Greek Tragedy (later period), 490G Greek Comedy, 490H Greek Philosophy, 490J Greek Literary Criticism and Rhetoric, 490K Thucydides.

(490A & B were formerly 320; 490 E, F. & G. were formerly 330; 490H was formerly 340.)

One term only, to be announced. (2-0)

LATIN

Students who have received credit for high school Latin will be placed by the Department according to their ability. Normally, students with 4 years of high school Latin will register for Latin 240; those with 3 or 2 years, for Latin 140; and those with 1 year or no previous study, for Latin 100. Latin 200 or Latin 240 is a prerequisite for all Latin courses at the 300 level. Second Year students who have already completed Latin 240 or its equivalent may register for any Latin course at the 300 level.

LATI 100. (3) **Beginners' Latin**

For students with one year of high school Latin or no previous knowledge of Latin. An introduction to the Latin language with easy readings from Roman authors.

Texts: F. M. Wheelock, *Latin*; Cobban and Colebourn, *Civis Romanus*. Recommended: Allen & Greenough, *New Latin Grammar*; Cassell's *New Latin Dictionary*.

Mr. Huxley, Dr. Smith.

(4-0; 4-0)

LATI 140. (3) **Intermediate Latin**

Prerequisite: Latin 10 or 11. An accelerated review of Latin grammar, with selected readings from prose and verse authors. Some emphasis will be placed on the student's ability to read Latin aloud.

Texts: F. M. Wheelock, *Latin*; Cobban and Colebourn, *Civis Romanus*. Recommended: Allen & Greenough, *New Latin Grammar*; Cassell's *New Latin Dictionary*.
Mr. Tumber. (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: Cicero, *Pro Archia*; Tibullus, *Select Elegies*; and selected readings from other authors; *Cassell's New Latin Dictionary*; Allen & Greenough, *New Latin Grammar*; F. M. Wheelock, *Latin*.

Mr. Scully. (4-0; 4-0)

LATI 240. (3) **Introduction to Latin Literature**

Prerequisite: Latin 12 or Latin 140. An introduction to major Latin poets and prose-writers and a consideration of their style and significance. Some emphasis will be placed on sight translation, Latin composition, metre and reading aloud.

Texts: Cicero, *First Catilinarian Oration*; Pliny, *Selected Letters*; Catullus, *Selections*; Virgil, The Aristaeus Episode of *Georgics* IV (lines 281 to the end) together with *Eclogues* I, IV and VIII, *Cassell's New Latin Dictionary*; Allen & Greenough, *New Latin Grammar*.

Mr. Archbold. (4-0; 4-0)

LATI 300. (3) **Latin Literature, especially of the Golden Age**

The basic third-year course for 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*.

Mr. Campbell. (3-0; 3-0)

LATI 301 (formerly 310). (1½) **Horace**

A study of the poetic achievement of Horace in the fields of satire and the literary epistle (excluding the *Ars Poetica* and the *Epistle to Augustus*).

Texts: The prescribed edition will be the Oxford Classical Text of Horace. General works on Horace, commentaries, and relevant scholarly articles will be recommended at the beginning of the course.

(Not offered 1972-73.) September-December only. (3-0; 0-0)

LATI 302 (formerly 310). (1½) **Literary Criticism and Rhetoric**

An examination of the main sources for Latin literary criticism. Besides selected portions of Cicero and Horace there will be the reading of key passages from the letters of Seneca and Pliny, from Petronius' *Satyricon*, from Tacitus' *Dialogus*, and from Quintilian's *Institutio Oratoria*. These passages will be carefully examined and compared.

(Not offered 1972-73.) January-April only. (0-0; 3-0)

LATI 303 (formerly 320). (1½) **Virgil: Pastoral and Didactic**

A study of the poet of the *Eclogues* and the *Georgics*, with some consideration of the problems of the *Appendix Vergiliana*.

Text: The Oxford Classical Text of Virgil (ed. R. A. B. Mynors).

Dr. Smith. September-December only. (3-0; 0-0)

LATI 304 (formerly 320). (1½) **Virgil: the Aeneid**

A study of the greatest Roman epic and an evaluation of the poet's place in the classical tradition. Information about general books on Virgil and on epic poetry, together with advice on commentaries and scholarly criticism, will be supplied at the beginning of the session.

Text: The Oxford Classical Text of Virgil (ed. R. A. B. Mynors).

Mr. Huxley. January-April only. (0-0; 3-0)

LATI 305. (1½) **Cicero — the earlier period**

The earlier career of Cicero; the evolution of his political ideas and the development of his literary style. Selected readings, with an emphasis on the *Letters*.

(Not offered 1972-73.) September-December only. (3-0; 0-0)

LATI 306. (1½) **Cicero — the later period**

The later career of Cicero, and his contribution to western humanism; a careful examination of the Ciceronian style. Selected readings, with an emphasis on the philosophical works.

(Not offered 1972-73.) January-April only. (0-0; 3-0)

LATI 350. (3) **Roman Historians**

A study of Latin historiography; readings from Caesar, Sallust, Livy, Tacitus, and Ammianus Marcellinus.

(Not offered 1972-73.) (3-0; 3-0)

LATI 400. (3) **Latin Literature, especially of the Silver Age**

The basic fourth-year course for Major and Honours students; prerequisite: Latin 300. 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.

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.

Dr. Smith. (3-0; 3-0)

LATI 480. (1½) **Composition, Stylistics, and Metre**

(Not offered 1972-73.) September-December only. (2-0; 0-0)

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 Livy, 490H Tacitus, 490J History of the Latin Language (Early Period), 490K History of the Latin Language (Later Period).

(490A was formerly 360; 490B was formerly 370; 490C was formerly 330; 490D was formerly 340.) One term only, to be announced. (2-0)

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, but is recommended also for prospective majors in Classics. It is not a prerequisite for subsequent courses in Classical Studies. Any student in Second Year who has successfully completed Classical Studies 100 and wishes further work in Classical Studies should take either a course in Latin or Greek or a Classical Studies course at the 300 level. Any student in Second Year may register for one course in Classical Studies at the 300 level. Classical Studies 100 may not be taken by students who have already received credit for any course in Classical Studies at the 300 level.

Three units of credit in the Department of History will be given for Classical Studies 330 or 340. Philosophy 300 is acceptable for credit in all programmes in the Department of Classics in lieu of any 300-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 Aegean Bronze Age, 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. *Symposium*, *Apology*, *Crito* of Plato, a few books by Livy, Virgil's *Aeneid* and part of Ovid's *Metamorphoses*.

Essays will be required, and there will be a written examination.

Mr. Archbold, Dr. Shrimpton, Mr. Tumber. (3-0; 3-0)

CLAS 300 (formerly 310). (1½) **Classical Epic**

A study of the Greco-Roman epic tradition. Poets studied in translation will include Homer and Virgil.

Mr. Huxley September-December only. (3-0; 0-0)

CLAS 301. (1½) **Mythology of Greece and Rome**

A study of the Greek and Roman myths and legends that have an important place in English and European literature and art. An important work to be read will be Ovid's *Metamorphoses*.

Dr. Smith. January-April only. (0-0; 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 will be followed by some consideration of the plays of Seneca.

Mr. Scully. September-December only. (3-0; 0-0)

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 1972-73.) January-April only. (0-0; 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, trans. Aubrey de Selincourt, *The Histories*; Thucydides, trans. Sir Richard Livingstone, *The History of the Peloponnesian War*.

(Not offered 1972-73.) (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*.

Mr. Archbold. (3-0; 3-0)

CLAS 370. (1 ½) 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, history, and oratory.

Mr. Campbell.

September-December only. (3-0; 0-0)

CLAS 371 (formerly 350). (1 ½) Archaeology of Ancient Greece

A study of the archaeological remains from the Aegean Bronze Age, fifth-century Athens, and other sites of importance. Slide lectures, and a final slide examination.

Dr. Shrimpton.

January-April only. (0-0; 3-0)

CLAS 430 (formerly 460). (1 ½) Greek History Seminar

Intensive study of selected topics in Greek history. Prerequisite or co-requisite: Classical Studies 330 or permission of the Department.

Dr. Shrimpton.

September-December only. (2-0; 0-0)

CLAS 440 (formerly 460). (1 ½) Seminar in the History of the Roman World

Intensive study of selected topics in the development of the Roman world. Prerequisite or co-requisite: Classical Studies 340 or permission of the Department.

Mr. Tumber.

January-April only. (0-0; 2-0)

Students should note the availability of Science 300 (page 250) as an elective in their senior years.

GRADUATE COURSES

CLAS 510. (3) Classical Epic

CLAS 520. (3) Classical Drama

CLAS 530. (3) Ancient Historiography

CLAS 540. (3) Lyric and Elegiac Poetry

CLAS 560. (3) Seminar in Augustan Poetry

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 ECONOMICS

- Leo I. Bakony, B.A. (*Brit. Col.*), Ph.D. (*Wash.*), Professor, and Chairman of the Department.
- Gordon W. Bertram, B.A. (*Brit. Col.*), Ph.D. (*Calif.*), Professor. (Leave of absence 1972-73.)
- W. R. Derrick Sewell, B.Sc.Econ. (*London*), M.A., Ph.D. (*Wash.*), Professor.
- G. Reid Elliott, B.A. (*Sask.*), M.A., Ph.D. (*Tor.*), Professor Emeritus.
- J. Colin H. Jones, B.A. (*Wales*), M.A. (*Montana St.*), Ph.D. (*Queen's*), Associate Professor. (Leave of absence 1972-73.)
- Leonard Laudadio, B.A. (*Puget Sound*), M.A., Ph.D. (*Wash.*), Associate Professor.
- Izzud-Din Pal, B.A., M.A. (*Punjab*), M.Sc.Econ. (*London*), Ph.D. (*McGill*), Associate Professor.
- Richard A. L. Carter, B.A. (*R.M.C.*), M.A., Ph.D. (*Queen's*), Assistant Professor.
- Robert V. Cherneff, B.A. (*U. of Vic.*), M.A., Ph.D. (*Wash.*), Assistant Professor.
- Gerald L. Lassen, B.A. (*Texas*), M.A. (*Wis.*), Assistant Professor.
- William D. Walsh, B.Com. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Assistant Professor.
- Gerald R. Walter, B.A., M.A., Ph.D. (*Calif.*), Assistant Professor.
- J. Trevor Matthews, B.A. (*Brit. Col.*), M.B.A. (*Stanford*), Lecturer.
- Joseph Schaafsma, B.A., M.A. (*McMaster*), Lecturer.
- James E. Currie, B.Com. (*Brit. Col.*), M.B.A. (*McMaster*), Part-time Lecturer.
- Robert W. McQueen, B.Com. (*Brit. Col.*), C.A., Part-time Lecturer.

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 regulations governing the prerequisite courses.

GENERAL, MAJOR AND HONOURS PROGRAMMES

Requirements:

- (i) For General Programme with 9 units in Economics:
 - (a) Economics 200.
 - (b) Economics 302 and 6 additional units in Economics courses numbered 300 or above.
- (ii) For Major:
 - (a) Economics 200 with at least a second class standing.
 - (b) Economics 302, or 300 and 301, 321, 340, and additional units in Economics over the 300 level to a total of 15.
 - (c) Mathematics 100 and 101 (or 130) or 151 and 102 (formerly 140) or 180 (formerly 150) unless permitted by the Department to omit this requirement in special circumstances.
- (iii) For Honours:
 - (a) Mathematics 100 and 101 (or 130) or 151 and 102 (formerly 140) or 180 (formerly 150) unless permitted by the Department to omit this requirement in special circumstances;
 - (b) Economics 200 with at least a high second class standing.
 - (c) Economics 300, 301, 321, 340, 341, 470 and 21 additional units of which at least 12 units must be in Economics courses numbered above 300 and at least 6 units must be in another subject or subjects with the approval of the Department.

Recommended: Commerce 151 (1½ units) and 190 (1½ units), 3 units of Mathematics in addition to Mathematics 151 and 102 or 180 (formerly 140 or 150), Political Science 200 or 216 (formerly 318).

- (d) Admission to 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. Students will be admitted to 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 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. There will be a comprehensive examination in Economics 470 at the end of the Fourth Year in which at least a second class standing will be required for Honours.

COURSES

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

Economics 200 is a prerequisite for all Third Year courses but, in special cases, Economics 200 may be taken concurrently with Economics 340 and 341 with the permission of the Department. Economics 302, or 300 and 301, is a prerequisite for all courses numbered 400 and above. Permission to take Economics 300 or 302 concurrently with a course numbered 400 and above may be granted under exceptional circumstances.

ECON 100. (3) **Introduction to Economics**

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.

Text: To be announced.

Members of the Department: sections to be announced. (3-0; 3-0)

ECON 200. (3) **Principles of Economics**

The principles of economic analysis with special reference to the theory of demand, the theory of the firm, fluctuations in income and prices, monetary and fiscal policies for economic stabilization. This is the basic course in economic theory and is a prerequisite for all courses numbered 300 and above.

Prerequisites: None; not open to first year students.

Text: To be announced.

Members of the Department: sections to be announced. (3-0; 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.

Dr. Laudadio. (3-0; 3-0)

ECON 301. (3) **Macroeconomic Theory (formerly Economics 400)**

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.

Members of the Department. (3-0; 3-0)

ECON 302. (3) Intermediate Economic Theory

The analysis of consumer behaviour; the study of allocation of resources under competitive and non-competitive market conditions; the measurement and determination of national income, employment, and prices.

Text: To be announced.

Members of the Department.

(3-0; 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.

Dr. Cherneff.

September-December only. (3-0; 0-0)

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. (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.

Dr. Walsh.

(3-0; 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.

Members of the Department.

(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.

Members of the Department.

(3-0; 3-0)

ECON 325. (1½) Public Finance

A discussion of taxation and expenditure policies with an emphasis on Canada. Micro-economic effects of these policies will be examined in detail.

Text: To be announced.

Mr. Lassen.

September-December only. (3-0; 3-0)

ECON 326. (1½) Fiscal Policy and Related Issues

A discussion of 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.

Mr. Schaafsma. January-April only. (0-0; 3-0)

ECON 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.

Members of the Department. September-December only. (3-0; 0-0)

NOTES: 1. Prerequisite: Mathematics 151 and 102 (formerly 140), or Mathematics 180 (formerly 150) or permission of the Department.

2. This course may be taken concurrently with Economics 200 or Economics 201 only with the permission of the Department.

ECON 341. (1½) Statistical Inference

Probability Theory, Sampling Theory, Confidence Limits, Tests of Hypotheses, Regression and Correlation. Research Project.

Prerequisite: Economics 340, and Mathematics 130 or Math 151* and 102* or permission of the Department. (*Formerly Mathematics 140.)

Text: To be announced.

Dr. Carter. January-April only. (0-0; 3-0)

ECON 350. (1½) Soviet Economics

An examination of the functioning of Soviet-type economic systems, the principles of economic planning and coordination, and the role of Marxian economic theory. The major emphasis is on the Soviet Union; China and the Soviet-type economies of Eastern Europe are studied briefly.

Text: To be announced. Supplementary reading.

Members of the Department. January-April only. (0-0; 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 200.

Texts: Taylor, *A History of Economic Thought*; Newman, Gayer, Spencer, *Source Readings in Economic Thought*.

Mr. Lassen. September-December only. (3-0; 0-0)

ECON 403 (formerly 401). (1½) Selected Topics in the History of Economic Thought

In-depth study of the economic models of Smith, Ricardo, Marx, Marshall, and Keynes. A seminar paper written by the student is an essential part of the course. (Not open to students who have credit for Economics 401 (3).)

Prerequisites: Economics 402.

Text: To be announced.

Mr. Lassen. January-April only. (0-0; 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. Term paper.

Dr. 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 302 or Economics 300 and 301 or permission of the Department. Economics 305 is recommended.

Text: To be announced. Supplementary reading.

Dr. Cherneff.

January-April only. (0-0; 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.

(Not offered 1972-73.)

(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.

Dr. Walter.

September-December only. (3-0; 0-0)

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.

Dr. Walter.

January-April only. (0-0; 3-0)

ECON 420. (3) Theory of Economic Development

Theories of economic growth; role of the non-economic factors in economic development; planning and financing economic development; some lessons of experience in growth and change.

Text: To be announced. Term paper.

Members of the Department.

(3-0; 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 given to the transference of industrialization techniques to non-European countries.

Text: To be announced.

January-April only. (0-0; 3-0)

ECON 422. (1½) American Economic History

The economic history of the United States from colonial times to the present. Special emphasis on the techniques of the new economic history applied to the American experience.

Text: To be announced. Supplementary reading.

September-December only. (3-0; 0-0)

ECON 423. (1½) Selected Topics in Economic History

The quantitative techniques of the "new economic history"; their application to analysis of trends in Canadian and International Economic History. Topics include railroads, growth, mechanics of adjustment.

Prerequisites: Economics 321, 340, 341 or approval of instructor.

Text: To be announced. September-December only. (3-0; 0-0)

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. Special emphasis will be placed on resource development problems in Canada and in British Columbia.

Prerequisite: Economics 200 is a prerequisite for all courses numbered 300 and above.

Text: To be announced. Term papers First and Second terms.

Dr. Sewell. (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*.

Dr. Carter. (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.

Dr. Bakony. (3-1; 2-2)

ECON 470. (3) Honours Seminar

NOTE: For Honours students only.

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 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.

Mr. Currie. September-December only. (3-0; 0-0)

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.

Mr. McQueen. January-April only. (0-0; 3-0)

GRADUATE COURSES

(Consult Department for courses offered in any given year.)

ECON 500. (1 ½) **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. (1 ½) **Macro Economic Theory**

Macro economic relationships, static and dynamic models, properties of dynamic models, policy analysis with large dynamic models.

ECON 505. (1 ½) **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. (1 ½) **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. (1 ½) **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. (1 ½) **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.

Pre-requisite: Elementary calculus and macro economic theory.

ECON 515. (1 ½) **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. (1 ½) **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. (1 ½) **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. (1 ½) **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. (1 ½) **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. (1 1/2) **Quantitative Methods**

Review of basic statistical inference techniques with extensions relevant to economic analysis. Applications to specific problems.

Pre-requisite: Economics 340 or equivalent.

ECON 545. (1 1/2) **Econometrics**

Seminar in single equation and simultaneous equation techniques and applications. Simulation experiments with large econometric models. Optimal decision procedures.

Pre-requisite: Economics 445 or equivalent.

ECON 550. (1 1/2) **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. (1 1/2) **Directed Studies**

May be offered in areas A or B, each for 1 1/2 units. Students may elect to take either or both in any one Winter Session.

ECON 599. (3) **Thesis**

DEPARTMENT OF ENGLISH

- Roy F. Leslie, B.A., M.A., Ph.D. (*Manchester*), Professor and Head of the Department.
- John D. Peter, M.A. (*Cantab.*), B.A., LL.B., D. Litt. (*S. Africa*), Professor.
- Robin Skelton, B.A., M.A. (*Leeds*), F.R.S.L., Professor.
- William Benzie, M.A., M.Ed., Ph.D. (*Aberdeen*), Associate Professor, Director of Major and General Programmes.
- Charles D. Doyle, B.A., M.A. (*N.Z.*), Ph.D. (*Auckland*), Associate Professor.
- John G. Hayman, M.A. (*Oxon.*), M.A. (*Cornell*), Ph.D. (*Northwestern*), 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.
- Burton O. Kurth, B.A. (*Brit. Col.*), Ph.D. (*Calif., Berkeley*), Associate Professor, Director of Honours Programme.
- Chester L. Lambertson, B.A., M.A. (*Alta.*), Ph.D. (*Harvard*), Associate Professor.
- Robert G. Lawrence, M.A. (*New Brunswick*), Ph.D. (*Wisconsin*), Associate Professor, Director of Library-Ordering.
- Frederick Mayne, B.A., Ph.D. (*Witwatersrand*), Associate Professor.
- G. Grant McOrmond, C.D., M.A. (*Sask.*), Associate Professor, Director of Freshman English.
- Colin J. Partridge, B.A. (*Nottingham*), Cert. Ed. (*London*), Ph.D. (*Nottingham*), Associate Professor, Director of American and Commonwealth Division.
- Herbert F. Smith, A.B., A.M. (*Boston*), Ph.D. (*Rutgers*), Associate Professor, Director of Graduate Programme.
- Lionel Adey, B.A., M.A. (*Birmingham*), Ph.D. (*Leicester*), Assistant Professor.
- Norman W. Alford, B.A. (*London*), Ph.D. (*Texas*), Assistant Professor. (Leave of absence 1972-73.)
- Michael R. Best, B.A., Ph.D. (*Adelaide*), Assistant Professor. (Leave of absence 1972-73.)
- Thomas R. Clary, B.A. (*Queens Coll.*), M.A., Ph.D. (*Princeton*), Assistant Professor.
- Anthony S. G. Edwards, B.A. (*Reading*), M.A. (*McMaster*), Assistant Professor.
- Anthony B. England, B.A., M.A. (*Manchester*), Ph.D. (*Yale*), Assistant Professor.
- Leonore H. Ewert, B.A. (*Upland Coll.*), M.A., Ph.D. (*Claremont*), Assistant Professor.
- Melvyn D. Faber, B.A. (*Chicago*), M.A., Ph.D. (*Calif., Los Angeles*), Assistant Professor.
- Bryan N. S. Gooch, B.A., M.A. (*Brit. Col.*), Ph.D. (*London*), A.R.C.T. (*Tor.*), F.T.C.L. (*London*), Assistant Professor. (Leave of absence 1972-73.)
- Velma L. Gooch, B.Ed., M.A. (*Alta.*), Senior Lecturer.
- Patrick Grant, B.A. (*Queen's, Belfast*), D.Phil. (*Sussex*), Assistant Professor.
- Patricia Köster, B.A. (*Brit. Col.*), M.A. (*Calif., Berkeley*), Ph.D. (*London*), Assistant Professor.
- Samuel L. Macey, B.A. (*Brit. Col.*), Ph.D. (*Wash.*), F.I.W.S.P., Assistant Professor. (Leave of absence 1972-73.)
- Victor A. Neufeldt, B.A. (*Brit. Col.*), Ph.D. (*Ill.*), Assistant Professor.
- Florence K. Riddle, B.A. (*Reed Coll.*), M.A. (*Yale*), Ph.D. (*Wash.*), Assistant Professor.
- Robert M. Schuler, B.A. (*Bellarmino*), M.A., Ph.D. (*Colorado*), Assistant Professor.
- 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.

Henry Summerfield, B.A., M.A. (*Oxon.*), M.Litt. (*Durham*), Assistant Professor.
 Robert S. Sward, B.A. (*Illinois*), M.A. (*Iowa St.*), Assistant Professor.
 Reginald C. Terry, B.A. (*Leicester*), M.A. (*Bristol*), Ph.D. (*London*), Assistant Professor. (Leave of absence 1972-73.)
 David S. Thatcher, B.A. (*Cantab.*), M.A. (*McMaster*), Ph.D. (*Alta.*), Assistant Professor.
 Bruce E. Wallis, B.A. (*Rutgers*), M.A. (*Harvard*), Ph.D. (*Princeton*), Assistant Professor.
 Trevor L. Williams, B.A., M.A. (*Manchester*), Ph.D. (*Wales*), Assistant Professor.
 Edward R. Zietlow, B.A. (*Dakota Wesleyan*), M.A. (*Boston*), Ph.D. (*Wash.*), Assistant Professor.
 Dennis E. Brown, B.A., M.A. (*London*), Lecturer.
 Alan F. Dilnot, B.A., B.Phil. (*Oxon.*), Lecturer.
 Alexander N. Hutchison, M.A. (*Aberdeen*), Lecturer.
 Constance M. Rooke, B.A. (*Smith Coll.*), M.A. (*Tulane*), Lecturer.
 Norma Rowen, B.A. (*Oxon.*), Lecturer.
 Lawrence W. Russell, B.A. (*U. of Vic.*), M.A. (*Cal. State, Hayward*), Lecturer, Director of Creative Writing Programme.
 Ingrid Sheeter, B.A. (*Oxon.*), Lecturer.
 Stella Slade, B.A. (*London*), Dip. Ed. (*Oxon.*), M.A. (*Dalhousie*), Lecturer.
 Gordon A. J. Watt, M.A. (*Aberdeen*), Lecturer.
 Carol Wootton, B.A. (*U. of Vic.*), M.A. (*Brit. Col.*), A.R.C.T. (*Tor.*), L.R.S.M. (*London*), Lecturer.
 Derk Wynand, B.A., M.A. (*Brit. Col.*), Lecturer.

PREREQUISITES

All students in the First Year who do not pass the qualifying examination in the use of English are required to take English 110. For 1972-73, the qualifying examination will be taken by all freshmen students on Saturday, September 2, 1972. (Students will be informed in the registration instructions of the specific time and place). The examination will consist of one essay to be chosen from a wide list of subjects. The results will be posted before registration. English 120 (or its equivalent elsewhere) is prerequisite to all other English courses, except that, in special circumstances and with the permission of the Department, students who have distinguished themselves in English 110 may be allowed to proceed to Second Year English courses. Students who pass the qualifying examination, or who are exempted from it, and who plan to take English 110 as an elective, must consult the Department.

English 200, 201, 203, 204, or 205 is prerequisite for all English courses numbered 390 or above, except where otherwise indicated. English 201, 203, 204, or 205 may be substituted for English 200 by all students who do not wish to major or honour in English, or who do not wish to choose English as one of their fields of concentration in the General Programme. English 201 and English 203 may also be taken for additional credit by students who must enrol in English 200 or in both English 204 and English 205.

Students who demonstrate that they have mastered the material normally covered in any course listed below may be permitted to enrol in courses for which that course is a prerequisite. In particular, students who elect English 201 or 203 instead of 200, or both 204 and 205, and who subsequently desire to major or honour in English, or take English as one of their fields of concentration in the General programme, may take a comprehensive examination to prove their competence in the field covered by English 200. This examination will normally be given at the beginning of the academic year; those who pass will be considered to have satisfied the prerequisite for which English 200 is normally required, but no units of credit for 200 will be assigned. English 204 and 205 may not be challenged. However, if a student has taken either 204 or 205, he may challenge the course not taken in order to complete the 204/205

prerequisite for General, Major or Honours programmes. No credit for the challenged course will be assigned.

All students who are likely to take more than two senior English courses, i.e. courses numbered 390 and above, are advised to take English 200 or both English 204 and English 205.

All students wishing to honour or major 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.

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).

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. Since such classes are normally small enough to meet as tutorial or seminar groups, they make greater demands on a student's initiative and judgment than work in a General or Major course. 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 programme.

Prerequisites for admission to Third Year Honours include a First or high Second Class mark in English 200 or in English 204 and English 205, and the approval of the Head of the Department. In the last three years candidates will offer at least 45 units of credit. Students are advised to take English 245 in their Second Year, if possible. In their Third and Fourth Years, they are also required to take 15 units, consisting of the following English courses: 440: The History of the English Language; 441 or 443 or 444 (at least *one* of these Medieval English courses is required); 446: Third Year Honours Seminar; 499: Graduating Essay or Directed Reading and four of the Tutorials 451 to 456 (although in certain cases two of these may be replaced by a regular English course after consultation with the Head of the Department).

The one-term Honours Tutorials (451-456) are intended to offer individual guidance in period readings, together with discussions of major themes and ideas, particularly in those areas of English Literature in which a student is not taking full senior level courses. To permit concentration on primary sources, term essays or reports are not required. Tutorials are open to Honours students, and to students majoring in English by permission of the Head of the Department. They will be limited to 15 students each.

The programmes of Honours students are subject to the approval of the Head of the Department, and the choice of electives is subject to modification in the light of a student's entire programme. From 18 units of electives, 12 units must be taken from English courses numbered 390 and above; a Shakespeare course is strongly recommended and 6 additional units may be taken from these courses or from courses in approved fields outside the Department.

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 their work on their Directed Reading project.

MAJOR

Students wishing to major in English should take in their First Year: English 120,¹ or English 120 and English 204 or English 205; Second Year: English 200 or both English 204 and English 205 (or successfully challenge English 200); Third and Fourth Years: a total of 15 units in English courses numbered 390 and above including at least one course in each of the following areas: (a) one of Chaucer, Shakespeare, or Milton and Spenser; (b) English Literature before 1750 other than the course selected

under (a); (c) English or American Literature from 1750-1900. In special circumstances, one or more of these requirements may be modified with the permission of the Head of the Department of English. Students desiring advice about their choice of courses are invited to see the secretary of the Department, who will arrange consultation with departmental advisors.

One term tutorials (English 451-456) are open to English Majors, as well as to Honours students, by permission of the Head of the Department, subject to accommodation being available. These tutorials are intended to offer individual guidance in period readings, together with discussions of major themes and ideas, particularly in those areas of English Literature in which a student is not taking full senior level courses. To permit concentration on primary sources, term essays or reports are not required.

GENERAL

Students wishing to take English as one of the fields of concentration in their General programme should take in their First Year: English 120,¹ or English 120 and English 204 or English 205; Second Year: English 200 or both English 204 and English 205 (or successfully challenge English 200); Third and Fourth Years: a total of 9 units in English courses numbered 390 and above. Students desiring advice about their choice of courses are invited to see the secretary of the Department, who will arrange consultation with departmental advisors.

CREATIVE WRITING

The Creative Writing Programme offers students a three-year course of study with specialization in poetry, fiction or drama during the last two years. The introductory course, English 202, is recommended for all students interested in writing. However, students of proven ability may be permitted to enter advanced courses with the approval of the individual instructor.

The Creative Writing Programme has two main functions. The first is to assist students who wish to become professional writers. The second is to help students with more general interests to broaden their appreciation of literature and develop their capacity for self-expression. The programme is intended for all university students, with no special emphasis upon English majors.

AMERICAN LITERATURE

Students considering concentrating in this field should refer to the prescriptions for courses 203, 426, 427, 428, 429 and 435.

COURSES

FIRST YEAR

Students who pass the qualifying examination may elect to take English 120 or English 120 and English 204 or 205 after consultation with the Department.

ENGL 110. (3) *The Use of English*

The major emphasis will be placed on problems in writing by a study of prose literature: the Essay, Short Story and Novel; themes and exercises are required.

Students are urged not to purchase their texts until they have consulted with their permanent instructor following the commencement of lectures.

Instructors will select their texts from the following list: Birk & Birk, *Understanding and Using English*, or Hoole, *The Fundamentals of Clear Writing*, or Dawe, *Profile of a Nation*; Mizener, *Modern Short Stories: The Uses of the Imagination* (Revised

¹ In approved cases, students who are required to take English 110 may be permitted in their second year to take English 200 or English 204 and/or English 205 in the following year.

edition), or Booth & Burhans, *31 Stories*; Huxley, *Brave New World*; Steinbeck, *Of Mice and Men*; Kesey, *One Flew Over the Cuckoo's Nest*; Thoreau, *Walden*; Carson, *Silent Spring*; Mowat, *Never Cry Wolf*.

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).

Members of the Department.

(3-0; 3-0)

ENGL 120. (3) Literature of English-Speaking Countries

A study of the major genres of English literature, with special emphasis upon the Short Story, the Novel, the Drama, and Lyrical and Narrative Poetry from 1870 to the present day. Attention will be paid to essay writing and a demonstration of critical awareness.

Texts: Individual instructors will choose five or six novels and five or seven plays from the following list:

(a) *Novels*

Achebe, *Things Fall Apart*; Waugh, *A Handful of Dust / Decline and Fall*; Conrad, *Under Western Eyes*; Dickens, *Great Expectations*; Faulkner, *Light in August*; Fowles, *The Collector*; Greene, *The Power and the Glory*; Hardy, *Tess of the d'Urbervilles*; James, *The Turn of the Screw*; Lawrence, *Sons and Lovers*; Richler, *The Apprenticeship of Duddy Kravitz*; Vonnegut, *Slaughterhouse-Five*;

(b) *Plays*

Shakespeare, *Othello*, *Coriolanus* or *Antony and Cleopatra*; Pinter, *The Caretaker*; Albee, *Who's Afraid of Virginia Woolf?*; Beckett, *Waiting for Godot*; Miller, *The Crucible*; Osborne, *Look Back in Anger*; *Modern Drama*, ed. Reinert.

(c) *Short Stories*

Mizener, *Modern Short Stories* or Taylor, *The Short Story*;

(d) *Poetry*

Geddes, *Twentieth Century Poetry and Poetics*;

(e) *Optional Texts:*

Birk & Birk, *Using English Effectively*; Mailer, *Armies of the Night*.

Approved editions of the above texts will be available in the University Bookstore.

Members of the Department.

(3-0; 3-0)

NOTE: Students may take English 204 or English 205 concurrently with English 120 after consulting the Department.

SECOND YEAR

ENGL 200. (3) A survey of British Literature from the Elizabethan to the Romantic Period

Essays will be required.

Open to all students, but prerequisite for those who wish to major or honour in English, or who choose English as one of their fields of concentration in the General Programme.

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.

Texts: One work by Shakespeare; Joyce, *Portrait of the Artist as a Young Man*; Forster, *Passage to India*; Fitzgerald, *The Great Gatsby*; Hardy, *Jude the Obscure*; Eliot, *Selected Poems*; Hemingway, *The Snows of Kilimanjaro, and Other Stories*; Bellow, *The Adventures of Augie March*; Styron, *The Long March*; Camus, *The Plague*; Cary, *The Horse's Mouth*; Beckett, *Endgame*; Lawrence, *The Complete Short Stories*, Vol. 1; Brecht, *The Caucasian Chalk Circle*; Conrad, *Heart of Darkness*.

Students are warned that individual instructors may substitute up to four of the set texts with works of their own choice.

Written work, namely essays and/or exams, will normally be required as a basis of evaluation, although other complementary or alternative approved methods may be used at the instructor's discretion in consultation with his students.

Members of the Department. (3-0; 3-0)

ENGL 202. (3) **Introduction to Creative Writing**

A seminar offering practice in writing the short story, the one-act play and contemporary verse forms, with introductory discussions of technique in these areas. Permission of the Creative Writing Division is required.

Texts: To be announced.

Mr. L. Russell, Mr. R. Sward, Mr. D. Wynand. (3-0; 3-0)

ENGL 203. (3) **An Introduction to American Literature**

A survey designed both for 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 for his section by each instructor and supplemented by additional readings in the major writers (such as Whitman, Hawthorne, Twain, Henry James, Faulkner). Background and critical readings may be required, or simply recommended, by individual instructors.

Text: *The American Tradition in Literature*, eds. Bradley, Beatty and Long, (Norton), 3rd ed., shorter.

Dr. C. Partridge, Dr. N. C. Smith. (3-0; 3-0)

ENGL 204. (3) **British Literature from Choucer to Milton**

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. (Not open to students with credit for English 200.)

Notes:

- (a) Before enrolling in English 204 all students must first consult the English Department.
- (b) English 204 *plus* English 205 have the status of English 200 as a prerequisite for General, Major and Honours programmes.
- (c) Either English 204 or English 205 may serve as a prerequisite for a maximum of two upper year courses as do English 201, English 203, etc.

Texts: Special topic: "The pursuit of knowledge". Major authors and works: Chaucer, *Sir Gawain and the Green Knight*, *Medieval and Tudor Drama*; More, *Utopia*; Sidney; Spenser; Marlowe, *Doctor Faustus*; Shakespeare, *Hamlet and the Tempest*; Bacon, *Seventeenth Century Poetry*, ed. Hugh Kenner (Donne, Jonson, Marvell, etc.); Browne, *Pseudodoxia Epidemica*; Tourneur, *The Revenger's Tragedy*; Milton.

Pre- or co-requisite: English 120. (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. (Not open to students with credit for English 200.)

Notes:

- (a) Before enrolling in English 205 all students must first consult the English Department.
- (b) English 204 *plus* English 205 have the status of English 200 as a prerequisite for General, Major and Honours programmes.
- (c) Either English 204 or English 205 may serve as a prerequisite for a maximum of two upper year courses, as do English 201, English 203, etc.

Texts: Selected poetry and prose of Blake, Swift, Pope, Dryden, Johnson, Wordsworth, Coleridge; *Four Great Comedies of the Restoration*, ed. Brooks Atkinson. New York; Bantam, 1958; *The Major English Romantic Poets*, ed. William H. Marshall. New York; Washington Square Press, 1968; *The Major Victorian Poets*, ed. William H. Marshall. New York; Washington Square Press, 1967. Selected novels to be announced.

Pre- or co-requisite: English 120. (3-0; 3-0)

ENGL 245. (3) **Practical Criticism**

A seminar giving practice in individual judgment of literary forms, with some introduction to the principles of criticism. 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 Department.

Mr. D. Brown, Dr. A. Jenkins, Dr. C. Lambertson, Mrs. C. Rooke, Mr. G. Watt.

(3-0; 3-0)

THIRD AND FOURTH YEARS

ENGL 300. (3) **English Composition**

The study of the principles of good writing and the development of them by writing weekly essays. *For credit in the Faculty of Education only.*

Texts: A good dictionary, such as *The Concise Oxford, Webster's Collegiate, Random House; Roget's Thesaurus*; An English handbook (e.g. Perrin, *An Index to English*); Millet, *Reading Poetry*, or Perrine, *Sound and Sense*; a selected book of essays.

Dr. L. Adey, Dr. C. Lambertson, Miss S. Slade.

(3-0; 3-0)

ENGL 301. (3) **Children's Literature**

A survey of children's literature, its sources and development, with emphasis upon the study of selected 19th and 20th century works. The course is designed to develop critical awareness of excellence in children's books and give an idea of the resources at present available in this field. One essay of approximately 2000 words, and one or two short reports or surveys (500-1000 words) will be required in each term. *For credit in the Faculty of Education only.*

Prerequisite: Permission of the Head of the Department.

Texts: Johnson et al., eds., *Anthology of Children's Literature*. Others to be announced.

A reading list is available for those intending to take the course in the 1972-73 year. Students must be prepared to read extensively.

Mrs. M. Cutt.

(3-0; 3-0)

ENGL 390. (same as Linguistics 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 linguistics science to an understanding of the language. So that Modern English may be seen in its proper perspective, some attention will be given to the history of the language, including the development of Canadian English.

A fair amount of additional reading is provided in mimeograph form. Students are also provided with a list of reference books. Assignments usually require original and independent research.

Dr. Scargill and Dr. Kess.

(3-0; 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.

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.

Dr. M. Faber, Mrs. V. Gooch, Dr. V. Neufeldt, Mr. G. Watt.

(3-0; 3-0)

ENGL 401. (3) **The Theory and Practice of Poetry**

A Creative Writing course which includes the study of the nature of the creative process, the nature of verbal communication, and prosody.

Prerequisite: Consent of the Creative Writing Division.

Prof. R. Skelton.

(3-0; 3-0)

ENGL 402. (3) **The Theory and Practice of Fiction**

A Creative Writing course which includes the study of prose structures and emphasizes individual student work in the novel and shorter prose forms.

Prerequisite: Consent of the Creative Writing Division.

Dr. E. Zietlow. (3-0; 3-0)

ENGL 403. (3) **The Theory and Practice of Drama**

A Creative Writing course which includes the study of the various dramatic forms and conventions, with emphasis upon individual student work, involving theatre-lab sessions.

Prerequisite: Consent of the Creative Writing Division.

Mr. L. Russell. (3-0; 3-0)

ENGL 404. (3) **The Writing of Poetry**

An advanced Creative Writing course for students interested in poetry.

Prerequisites: English 401 and/or the consent of the Creative Writing Division.

Mr. R. Sward. (3-0; 3-0)

ENGL 405. (3) **The Writing of Fiction**

An advanced Creative Writing course for students interested in fiction.

Prerequisites: English 402 and/or the consent of the Creative Writing Division.

Dr. E. Zietlow.

ENGL 406. (3) **The Writing of Drama**

An advanced Creative Writing course for students interested in drama.

Prerequisites: English 403 and/or the consent of the Creative Writing Division.

Mr. L. Russell. (3-0; 3-0)

ENGL 407. (3) **Medieval Literature in Translation**

A survey of the major English literary texts of the Middle Ages. The texts will range from *Beowulf* to Dunbar and will probably include a representative selection of Medieval lyrics, morality plays, and romances, as well as major works by Chaucer, the Gawain poet, and Mallory.

Mr. A. Edwards. (3-0; 3-0)

ENGL 410. (3) **The Renaissance Background of Ideas**

A study of the main currents of thought contributing to late Medieval and Renaissance literature.

Dr. P. Grant. (3-0; 3-0)

ENGL 411. (3) **The Development of English Drama to 1642**

Main emphasis is on such major Elizabethan and Jacobean dramatists as Marlowe, Webster, Jonson, Middleton, and Ford.

Texts: *Everyman and Medieval Miracle Plays*, ed. A. C. Cawley, (*Everyman*); *Elizabethan and Stuart Plays*, ed. C. R. Baskerville, etc.

Dr. R. Schuler. (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.

Dr. M. Faber, Dr. B. Kurth. (3-0; 3-0)

ENGL 414. (3) **Special Studies in Shakespeare**

Intensive study of a few plays and related critical issues. English 413 is not a prerequisite but students must have a general knowledge of Shakespeare's work. Since enrolment is limited, permission of the Head of the Department is necessary.

(Not offered this year but will be offered in 1973-74). (3-0; 3-0)

- ENGL 418. (3) **Renaissance Non-Dramatic Poetry and Prose (excluding Epic)**
 From Wyatt through the metaphysical poets, with major emphasis upon Sidney, Donne, Bacon, Jonson, Herbert and Marvell.
 Prerequisites: English 200, 201 or 203, or 204 and/or 205.
 Texts: To be announced.
 Dr. T. Sherwood. (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 traditions of Epic poetry in Renaissance England.
 Prerequisites: English 200 or 201 or 204 and/or 205.
 Texts: To be announced.
 Dr. P. Grant. (3-0; 3-0)
- ENGL 420. (3) **Literature of the Restoration and the Augustan Periods**
 An examination of the literature of the Restoration and earlier 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 and Swift.
 Texts: *Six Restoration Plays*, ed. John Harold Wilson, followed by the selected works of Dryden, Swift and Pope.
 Dr. P. Köster. (3-0; 3-0)
- ENGL 421. (3) **Literature of the Mid and Late 18th Century**
 A study of the works of Dr. Johnson, Thomson, Gray, Burns, Collins, Cowper, Crabbe and Blake. Particular emphasis will be placed on Johnson and his Circle and Blake.
 Texts: To be announced.
 (Offered this year but will not be offered in 1973-74).
 Mr. H. Summerfield. (3-0; 3-0)
- ENGL 422. (3) **British Drama from the Restoration to the end of the 19th Century**
 A study of the major types of drama: Restoration comedy and tragedy, heroic drama, "laughing and sentimental" comedy of the eighteenth century, ballad opera, romantic drama, Victorian melodrama, and the "New Drama" of social concern.
 Texts: To be announced.
 (Not offered this year but will be offered in 1973-74). (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, *Robinson Crusoe*, and *Moll Flanders*; Richardson, *Pamela*; Fielding, *Shamela*, *Joseph Andrews* and *Tom Jones*; Sterne, *Tristram Shandy* and *Sentimental Journey*. The course will also include a Gothic novel; an oriental novel, and works of Smollett, Fanny Burney, and Jane Austen.
 Background reading: Walter Allen, *The English Novel*, or Ian Watt, *The Rise of the Novel*.
 Dr. T. Cleary. (3-0; 3-0)
- ENGL 424. (3) **The British Novel in the 19th Century**
 Texts: Austen, *Northanger Abbey*, *Pride and Prejudice*; Charlotte Bronte, *Jane Eyre*; Emily Bronte, *Wuthering Heights*; Butler, *The Way of All Flesh*; Dickens, *Bleak House*; Disraeli, *Sybil*; Conan Doyle, *The Hound of the Baskervilles*; Eliot, *Middlemarch*; Hardy, *Return of the Native*; Meredith, *The Egoist*; Radcliffe, *The Mysteries of Udolpho*; Scott, *Heart of Midlothian*; Mary Shelley, *Frankenstein*; Stevenson, *The Master of Ballantrae*; Thackeray, *Vanity Fair*; Trollope, *Barchester Towers*; Walpole, *Castle of Otranto*; Wilde, *The Picture of Dorian Gray*.
 Dr. B. Wallis. (3-0; 3-0)

ENGL 426. (3) **Problems in American Literature**

One seminar course is offered for 1972-73. The course will not be repeated the following year.

Myths of Reality: The course will focus upon the ways in which creative artists reconstruct social or historical reality. Selected novels, poems and plays will be examined in an analysis of the imaginary worlds fashioned by their creators for the purposes of commenting upon, and evaluating, "real" life. Themes of pastoralism, small town life, finance capitalism and urbanisation will be discussed. Parallel references to other new-world literatures (Canadian and Australian) will be made.

Texts: Sherwood Anderson, *Winesburg, Ohio*; Dreiser, *Sister Carrie*, *The Financier*, *An American Tragedy*, Faulkner, *Absalom, Absalom!*, *The Sound and the Fury*, *The Wild Palms*, Frost, *Selected Poems*, Grove, *The Master of the Mill*, Malamud, *The Assistant*, *The Fixer*, Arthur Miller, *Death of a Salesman*, *A View from the Bridge*, *The Crucible*, Sinclair Ross, *As for Me and My House*, Steinbeck, *The Grapes of Wrath*, Stevens, *Selected Poems*, Patrick White, *The Tree of Man*.

Enrollment limited to 20 students.

Dr. C. Partridge. (3-0; 3-0)

ENGL 427. (3) **American Prose and Poetry to the Early Twentieth Century**

America, Amerika: Visions of American Society. A historical survey of the problems of American society as seen by her writers.

Prologue: De Tocqueville, *Democracy in America*; First term: readings in Crèvecoeur, Franklin, Cooper, Irving, Hawthorne, Melville, Thoreau, Whitman, and Dickens; Second term: readings in Twain, Warner, Howells, James, Adams and other selected writers of realism and local colour; Epilogue: Arnold, *Discourses in America*, Kafka, *Amerika*.

There will be a good deal of outside reading, both primary and secondary. One long paper each term, exams probably optional.

Dr. H. F. Smith. (3-0; 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.

Texts: Selected stories of Irving, Poe, Hawthorne, Crane, Melville, Twain and James; Brown, *Wieland*; Cooper, *The Deerslayer*; Hawthorne, *The Scarlet Letter*; Howells, *The Rise of Silas Lapham*; Norris, *McTeague*; Melville, *Typee*, *Moby-Dick*, *The Confidence-Man*; Twain, *Huckleberry Finn*, *A Connecticut Yankee in King Arthur's Court*; James, *The Portrait of a Lady*, *The Spoils of Poynton*.

Dr. N. C. Smith. (3-0; 3-0)

ENGL 429. (3) **Twentieth Century American Fiction**

Detailed critical study of the texts, with some reference to contemporary experience and prevalent ideas.

Texts (full list): Sherwood Anderson, *Winesburg, Ohio*; Edith Wharton, *The Custom of the Country*; Theodore Dreiser, *An American Tragedy*; John Dos Passos, *Manhattan Transfer*; Willa Cather, *My Antonia*; William Faulkner, *The Sound and the Fury*; *As I Lay Dying*; Henry Roth, *Call it Sleep*; John Steinbeck, *The Grapes of Wrath*; Nathaniel West, *The Day of the Locust*; Allen Tate, *The Fathers*; Richard Wright, *Native Son*; Lionel Trilling, *The Middle of the Journey*; Ralph Ellison, *Invisible Man*; William Styron, *Lie Down in Darkness*; Flannery O'Connor, *Wise Blood*; Bernard Malamud, *The Assistant*; Saul Bellow, *Mr. Sammler's Planet*; Edward Lewis Wallant, *The Pawnbroker*.

Dr. C. Doyle. (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.

Texts: *Byron*; *Coleridge*; *Keats*; *Shelley*; *Wordsworth*.

Approved editions of texts will be available in the University Bookstore.

Dr. A. England. (3-0; 3-0)

ENGL 431. (3) **Victorian Poetry and Prose (1830-1890)**

The course will emphasize Tennyson, Browning, Arnold and Hopkins but will include most of the other poets of the period. In addition some of the main movements of criticism and ideas will be studied.

Texts: Buckley, *Poems of Tennyson*; Smalley, *Poems of Robert Browning*; Culler, *Poetry and Criticism of Matthew Arnold*; Pick, *A. Hopkins Reader*; Lang, *The Pre-Raphaelites and Their Circle*; Buckler, *Prose of the Victorian Period*.

Mrs. V. Gooch, Dr. F. Riddle.

(3-0; 3-0)

ENGL 433. (3) **Modern Period, English and Irish Literature, 1890-1914**

This course aims to present the period 1890-1914 in all its diversity while also affording close study of Hardy, Shaw, the Aesthetic Movement, & Conrad (to 1914). Yeats will be treated fully (to 1939).

Texts: Hardy, *Jude the Obscure*; Housman, *Selected Poems*; Yeats, *Collected Poems*; Synge, *Four Plays & The Aran Islands*; Shaw, choices from *Genius of the Irish Theatre*; Wells, *Tono-Bungay*; Wilde, *Plays, Prose Writings & Poems*; Conrad, *An Outcast of the Islands, Lord Jim*; Galsworthy, *The Man of Property*. A few further texts to be announced.

(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, Edward Thomas, Edith Sitwell, T. S. Eliot, Louis MacNiece, William Empson, Dylan Thomas, Kathleen Raine, and others.

Prof. Robin Skelton.

(3-0; 3-0)

ENGL 435. (3) **Modern American Poetry**

Detailed study of the poetry of Stevens, Pound, Hart Crane, W. C. Williams, the Fugitives, Berryman, Robert Lowell, as well as reading of examples of the work of such poets as Marianne Moore, Elizabeth Bishop and Sylvia Plath. Provision will be made for consideration of recent developments in the Black Mountain, Beat Poets and other practitioners of open form.

Texts: Wallace Stevens, *Selected Poems* (Vintage); Ezra Pound, *Selected Poems* (New Directions); Hart Crane, *Complete Poems* (Anchor Book); John Berryman, *Homage to Mistress Bradstreet* (Noonday); Robert Lowell, *Life Studies* and *For the Union Dead* (Noonday); W. C. Williams, *Selected Poems* (New Directions); Sylvia Plath, *Ariel* (Faber).

Dr. Carol Johnson.

(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 of some of their contemporaries and successors. Emphasis is critical rather than historical. Essays are required and students are urged to form their own judgments with little reference to the works of critics.

Texts: Joyce, *A Portrait of the Artist as a Young Man, Ulysses*; Lawrence, *Women in Love*. 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.

Dr. J. Peter, Dr. T. Williams.

(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 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: Shaw, *Pygmalion, Heartbreak House*; Maugham, *The Constant Wife*; Coward, *Private Lives*; O'Casey, *Juno and the Paycock*; Eliot, *The Cocktail Party*;

Fry, *The Lady's Not for Burning*; Beckett, *Waiting for Godot*; Behan, *The Quare Fellow*; Osborne, *Look Back in Anger*; Delaney, *A Taste of Honey*; Wesker, *Roots* (in *Wesker Trilogy*); Pinter, *The Caretaker*; N. F. Simpson, *One Way Pendulum*; Arden, *Sergeant Musgrave's Dance*; Shaffer, *The Royal Hunt of the Sun*; Tom Stoppard, *Rosencrantz and Guildenstern are Dead*; O'Neill, *The Iceman Cometh*; *The Emperor Jones*; Odets, *Awake and Sing*; Steinbeck, *Of Mice and Men*; Rice, *The Adding Machine*; Wilder, *Our Town*; Maxwell Anderson, *Winterset*; Miller, *A View from the Bridge*; Albee, *Who's Afraid of Virginia Woolf?*; Auden, *The Ascent of F.6.*

Background reading: Ibsen, *The Wild Duck*; Strindberg, *Miss Julie*; Brecht, *The Caucasian Chalk Circle*; Chekov, *Uncle Vanya*; Ionesco, *The Bald Soprano.*

Dr. F. Mayne, Dr. D. Thatcher. (3-0; 3-0)

ENGL 438. (3) **Canadian Literature**

A survey of Canadian creative literature in English, primarily poems, novels, and short stories, including literature written in and about French Canada (in translation). The emphasis will be on the twentieth century utilizing earlier literature chiefly as it contributes to the objective of understanding ourselves better as Canadians. The course will include a consideration of regional literature and influences from abroad.

Texts: *Canadian Anthology*, revised edition, ed. C. Klinck and R. Watters (Gage); *15 Canadian Poets*, eds. Geddes & Bruce (Oxford); *Canadian Short Stories*, second series, ed. R. Weaver (Oxford); *New Canadian Library* (McClelland & Stewart) editions of: Leacock, *Sunshine Sketches*; Ostenso, *Wild Geese*; Callaghan, *Such is my Beloved*; Roy, *The Tin Flute*; Buckler, *The Mountain and the Valley*; E. Wilson, *Swamp Angel*; M. Laurence, *The Stone Angel*; optional reading of other poetry and fiction.

Assignments: One research paper each term.

Dr. R. Lawrence. (3-0; 3-0)

ENGL 439. (3) **Commonwealth Literature**

Three regions are designated for detailed study—Australasia, the British West Indies and Black Africa. The course will concentrate on twentieth-century novels, short stories and poetry; it will attempt to discuss two factors—(a) the essential value of the particular literary works, (b) cultural problems of identity and self-expression confronting both creative artists and people in the new-world or newly independent territories. Approximately one third of the course will be devoted to each territorial area, and it is hoped that equal attention will be given to the three literary genres.

Texts: The following authors will be among those studied: *Australasia*: Katherine Mansfield, Randolph Stow, Patrick White, John Mulgan, Judith Wright, Kenneth Slessor, Frank Sargeson. *British West Indies*: Edward Brathwaite, Louise Bennett, V. S. Naipaul, Derek Walcott. *Africa*: Chinua Achebe, James Ngugi, Gabriel Okara, Christopher Okigbo, Wole Soyinka.

Dr. C. 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 fourth year.

Texts: A. C. Baugh, *A History of the English Language.*

Dr. R. F. Leslie. September-December only. (1½-0; 0-0)

ENGL 441. (3) **Old English Literature**

A study of the language and major literary texts of the Anglo-Saxons.

Texts: *Bright's Old English Reader*. New edition by F. G. Cassidy & R. Ringler; *Old English Literature: Twenty-two Analytical Essays*, eds. Martin Stevens and Jerome Mandel; P. H. Blair, *Introduction to Anglo-Saxon England*; *Beowulf and the Fight at Finsburg*, ed. F. Klaeber.

Dr. R. F. Leslie. (3-0; 3-0)

ENGL 443. (3) **Chaucer**

A study of Chaucer with emphasis on the *Canterbury Tales*.

Texts: *The Complete Work of Geoffrey Chaucer*, ed. F. N. Robinson; *The Age of Chaucer* (Pelican Guide to English Literature), ed. Boris Ford. Other texts to be announced.

Dr. A. Jenkins.

(3-0; 3-0)

ENGL 444. (3) **Middle English Literature**

A study of the major literary works and genres of the later medieval period (excluding Chaucer) including *Sir Gawain and the Green Knight*, *Pearl*, *Piers Plowman*, and selections from romances, lyrics and drama.

Texts: To be announced.

Mr. A. Edwards.

(3-0; 3-0)

ENGL 446. (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.

Text: *Criticism: The Major Texts*, ed. Walter J. Bate.

Dr. W. Benzie, Dr. B. Kurth.

(3-0; 3-0)

ENGL 448. (3) **Studies in Canadian Literature**

This course will stress Canadian Literature of the twentieth century, with particular emphasis on the literature of the past fifty years. Students are recommended to take the existing survey course in Canadian Literature, English 438, but the latter is not a prerequisite.

Texts: To be announced.

(3-0; 3-0)

*ENGL 451. (1 ½) **Honours Tutorial: Mediaeval**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Dr. R. Leslie, Mr. A. Edwards.

(3-0)

*ENGL 452. (1 ½) **Honours Tutorial: Renaissance, minus Shakespeare**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Miss N. Rowen.

(3-0)

*ENGL 453. (1 ½) **Honours Tutorial: Seventeenth Century to Milton**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Miss N. Rowen.

(3-0)

*ENGL 454. (1 ½) **Honours Tutorial: Dryden through the Eighteenth Century**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Dr. J. Hayman.

(3-0)

*ENGL 455. (1 ½) **Honours Tutorial: Nineteenth Century**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Dr. L. Adey, Dr. V. Neufeldt.

(3-0)

*ENGL 456. (1 ½) **Honours Tutorial: American Literature to 1914**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Dr. H. F. Smith.

(3-0)

*To be offered in the first and second term, or in both terms, in accordance with the demand, as determined at Registration.

ENGL 490. (3) **Directed Reading in English**

Students must obtain the consent of the Head of the Department before registering for this course.

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. (2-0; 2-0)

GRADUATE COURSES AND SEMINARS

ENGL 500. (3) **Bibliography and Methods of Research and Criticism**

Mr. A. Edwards. (3-0; 3-0)

ENGL 510. (3) **Studies in Old English Literature**

Dr. R. Leslie. (3-0; 3-0)

ENGL 515. (3) **Studies in Middle English Literature**

Dr. R. Leslie. (3-0; 3-0)

ENGL 520. (3) **Studies in Renaissance Literature**

Dr. B. Kurth. (3-0; 3-0)

ENGL 530. (3) **Studies in the Literature of the 17th Century**

Dr. J. Peter. (3-0; 3-0)

ENGL 540. (3) **Studies in the Literature of the 18th Century**

(3-0; 3-0)

ENGL 550. (3) **Studies in the Literature of the 19th Century**

(3-0; 3-0)

ENGL 560. (3) **Studies in the Literature of the 20th Century**

(3-0; 3-0)

ENGL 570. (3) **Studies in American Literature**

Dr. C. Doyle. (3-0; 3-0)

ENGL 580. (3) **Studies in Commonwealth Literature**

(3-0; 3-0)

ENGL 590. (3) **Directed Reading**

(3-0; 3-0)

ENGL 595. (3) **Seminar in Creative Writing**

Prof. Robin Skelton.

ENGL 599. (Credit to be determined) **M.A. Thesis**

ENGL 699. (Credit to be determined) **Ph.D. Dissertation**

DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

- Olivier M. Abrioux, L. ès L., D.E.S. (*Paris*), Ph.D. (*Aberdeen*), Professor and Head of the Department.
- Gwladys V. Downes, B.A., M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Professor.
- W. Harry Hickman, B.A., M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Professor.
- Jean-Paul Vinay, L. ès L., D.E.S. (*Paris*), M.A. (*London*), Agrégé de l'Université de France, officier d'Académie, F.R.S.C., Professor.
- 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.
- David A. Griffiths, B.A., M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Associate Professor.
- Ronald R. Jeffels, C.D., B.A., B.Ed. (*Alta.*), M.A. (*Cantab.*), Associate Professor.
- Bérangère B. Steel, L. ès L. (*Paris*), Associate Professor.
- Jeanne E. Adam, L. ès L. (*Toulouse*), Assistant Professor.
- Barrington F. Beardsmore, B.A. (*Liverpool*), M.A. (*McMaster*), Ph.D. (*Brit. Col.*), Assistant Professor.
- John C. E. Greene, B.A., M.A. (*Alta.*), Docteur de l'Université de Grenoble, Assistant Professor.
- Elaine Limbrick, B.A. (*London*), Docteur du III^e cycle (*Poitiers*), Assistant Professor.
- Jean-Pierre Mentha, L. ès Sc.Soc. (*Geneva*), M.Ed. (*Brit. Col.*), Assistant Professor.
- Gérald Moreau, B.A. (*Man.*), M.A. (*Laval*), Docteur de l'Université de Poitiers, Assistant Professor.
- Jennifer R. Walters, B.A. (*London*), L. ès L. (*Lille*), Ph.D. (*London*), Assistant Professor.
- Kenneth R. Prior, B.A. (*London*), Lecturer.
- Derek J. Turton, B.A. (*Leeds*), Cert.Ed. (*Nottingham*), M.Phil. (*Leeds*), Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

NOTE: All students planning to take a Major or Honours in the Department of French must take English 200 and Linguistics 100 section C (or Linguistics 360). For those on the General Programme, Linguistics 100 section C is recommended.

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. 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.

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 Head 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 high school); Second Year: French 285 and 290; Third and Fourth Years: French 302, 402 and 490 and at least 12 more units (French courses numbered above 400), selected with the approval of the Head of the Department.

COURSES

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

FREN 160 (formerly 140). (3) **Elementary Composition and Oral Practice**

(Prerequisite: French 11) — Instruction in French grammar and composition, based on a grammar text and on numerous short readings. Regular compositions will be required. One hour a week will be spent in the language laboratory drilling orally basic grammatical patterns.

NOTE: Not open to those who have completed Grade 12 French.

Texts: Hope, *Spoken French in Review* (2nd Edition); G. Gougenheim, *Dictionnaire Fondamental*; Larousse, *French-English, English-French Dictionary*; E. C. Bearman, *Lisons les Journaux*; Simenon, *La Pipe de Maigret*.

Members of the Department.

(3-1; 3-1)

FREN 180. (3) **French Language and Literature**

(Prerequisite: French 12) — Study of contemporary French texts, grammar, composition, and pronunciation.

Texts: *Dictionnaire Moderne* (Larousse). Other texts to be announced.

Members of the Department.

(3-1; 3-1)

FREN 260 (formerly 240). (3) **Intermediate Composition and Contemporary Literature**

(Prerequisite: French 160 or equivalent) — 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.

Texts: Hope, *Spoken French in Review* (2nd Edition); G. Gougenheim, *Dictionnaire Fondamental*; Larousse, *French-English, English-French Dictionary*; and others to be announced.

Members of the Department.

(3-1; 3-1)

FREN 280. (3) **French Language and Literature**

(Prerequisite: French 180 or equivalent) — This course is given in French. Literary texts are studied and there are frequent written assignments during the term. The formal grammar work consists of a continuous review of essential points in order to aid the student in his writing.

Texts: André Gide, *La Symphonie Pastorale*; François Mauriac, *Thérèse Desqueyroux*; J.-P. Sartre, *Huis-Clos*; and other texts to be announced.

Members of the Department.

(3-0; 3-0)

FREN 285. (3) **French Language and Literature**

(Prerequisite: French 180) — 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.

Texts: Molière, *Le Malade Imaginaire*, Editions Bordas; F. S. Giese and W. F. Wilder, *French Lyric Poetry*; Racine, *Andromaque*, Editions Bordas; Voltaire, *Can-*

dide; Gide, *La Symphonie pastorale*, (Livre de poche); Giraudoux, *La Guerre de Troie n'aura pas lieu* (Livre de poche Université); Mauriac, *Thérèse Desqueyroux* (Livre de poche Université); and others to be announced.

Members of the Department.

(3-0; 3-0)

FREN 290. (3) **French Oral and Written Practice**

(Prerequisite: French 180) — This course is given in French and written exercises are expected from the class every week.

Texts: O'Brien, Lafrance and Brachfeld, *Advanced French*; Jean-Paul Sartre, *Les Jeux sont faits*; A. Alvernhe, Y. Brunsvick and P. Ginestier, *En France* (Didier); *Dictionnaire moderne* (Larousse).

Members of the Department.

(3-1; 3-1)

FREN 302. (3) **Composition and Stylistics**

This course, conducted entirely in French, will require frequent written exercises involving vocabulary and grammar; translations, stylistic commentaries; compositions.

Texts: Sonet et Shortliffe, *Review of Standard French*; E. Rostand, *Cyrano de Bergerac*; P. Ginestier, A. Maillet, A. Alvernhe, *Culture et Civilisation françaises*, (Didier).

Members of the Department.

(2-2; 2-2)

FREN 310. (3) **French Literature in Translation**

This course will cover one major aspect of French Literature and will vary in content each year. For 1972-73 will consist of a study of Contemporary French Theatre and its background.

Prerequisites: English 120 (or the former English 100). No knowledge of French required. Open to students in any faculty as an elective; open only as an outside elective to students concentrating in French, with permission of department.

Texts: To be announced.

(3-0; 3-0)

FREN 350. (3) **An Advanced course in French, with concentration on oral work, using *Voix et Images de France***

This course is designed to meet the needs of teachers-in-training and of secondary school teachers of French. Admission requires the consent of the Head of the French Department.

Credit will be given as part of a major in the Faculty of Education or as an elective. It can also be taken as an elective in the Faculty of Arts and Science.

Mr. Mentha, Mrs. Adam.

(1-5; 1-5)

*FREN 360. (3) **Aspects of French Culture**

(Prerequisites: May be taken as a terminal course in French by those students having completed French 280, or (with a mark of B- or better) French 260 (240). May also be taken, as a supplementary course, concurrently with French 285 and/or 290 and/or 350. Does not form part of a General concentration, Major or Honours degree in French, and may not be taken by students enrolled in the third or fourth years of these programmes. In cases not covered above, special permission can be given by the Head of the Department.)

The course is designed to develop, in a broad cultural context, the student's oral and written expression in French. Until mid-February, the course will attempt to define French culture, dealing with social and political problems and the arts, with some historical background. The rest of the year will be devoted to French-Canadian society. Regular oral and written practice; and three or four major compositions or oral presentations chosen according to the student's area of interest.

Texts: Bouraoui, *Créaculture 1 & Créaculture 2*; La Pierre, *Québec, hier et aujourd'hui*, Moreau, *Anthologie des romans canadiens-français*.

Dr. J. Greene, Dr. G. Moreau.

(3-0; 3-0)

* As many as possible of the courses marked with an asterisk will be offered in 1972-73. Before registering, students of French should consult the Head of the Department.

FREN 402. (3) **Composition, Translation and Stylistics**

(Prerequisite: French 302) — French Composition; French and English Translation; Stylistic commentary on French texts.

Texts: to be announced. (3-0; 3-0)

FREN 409. (3) **Literature of the Seventeenth Century**

A study of Baroque, Précieux and Classical poetry; the Theatre; the Novel, and other prose *genres* of the period.

Texts: Lagarde et Michard, *XVII^e Siècle*; and others to be announced. (3-0; 3-0)

*FREN 410 (formerly 401). (3) **Literature of the Eighteenth Century**

Principal literary, social and philosophic trends of Eighteenth Century France.

Texts: Havens, *The Age of Ideas*, and principal writings of Prévost, Marivaux, Voltaire, Rousseau, Diderot, Laclous. (3-0; 3-0)

FREN 411. (3) **Nineteenth Century Part I (Romanticism)**

A study of the leading French authors of the first half of the nineteenth century.

(Not offered in 1972-73.) (3-0; 3-0)

FREN 412. (3) **Nineteenth Century Part II**

Realism, naturalism and idealism in the novel and in poetry.

Texts: Guthrie and Diller, *French Literature and Thought since the Revolution*; Bourget, *Le Disciple*; Flaubert, *Madame Bovary*; Fromentin, *Dominique*; Huysmans, *A Rebours*; Labiche, *Le Voyage de Monsieur Perrichon*; Maupassant, *Boule de Suif*; Zola, *Germinal*. (3-0; 3-0)

*FREN 414. (3) **Poetry from Baudelaire to the Surrealists**

A systematic study of the Parnassian movement, the origins and significance of symbolism, the Decadent school and Post-World War I poetic trends.

Texts: To be announced. (3-0; 3-0)

FREN 415. (3) **Modern French Theatre**

Class discussion and individual reports in French bearing on the plays studied. Monthly essays based on outside reading.

Texts: Guicharnaud, *Modern French Theatre from Giraudoux to Genêt*; Representative plays by Anouilh, Beckett, Camus, Claudel, Cocteau, Giraudoux, Ionesco, Montherlant, Sartre, Viana, etc. (3-0; 3-0)

FREN 416. (3) **Modern French Novel**

(Not offered in 1972-73.) (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: Bissette, Geslin, Parent, *Histoire de la littérature canadienne-française*; Hamelin, *Le Théâtre au Canada français*; Moreau, *Anthologie du roman canadien-français*; Sylvestre, *Anthologie de la poésie canadienne-française*; selected works by Bissette, Blais, Gelin, Hébert, Hémon, Langevin, Lemelin, Roy, Thériault and others.

Monthly essays and classroom *exposés*. (3-0; 3-0)

* As many as possible of the courses marked with an asterisk will be offered in 1972-73. Before registering, students of French should consult the Head of the Department.

FREN 421. (1½) **Renaissance Literature**

An introduction to the principal literary works of the Renaissance in France and a study of the history of ideas based upon the following texts:

Texts: Rabelais, *Gargantua*; Montaigne, *Essais*; and selected works of the Pléiade poets; Lagarde et Michard, *XVII^e siècle*; Bonnot, *Humanisme et Pléiade*.

September-December only. (3-0; 0-0)

FREN 422. (1½) **Medieval Literature**

Study of a number of medieval literary works in the original. Students will learn to read medieval French and acquire some knowledge of the principal literary *genres* of the period.

Texts: Larousse, *Dictionnaire d'Ancien français*; Champion, *Aucassin et Nicolette*, Chantefable du XIII^e siècle.

January-April only. (0-0; 3-0)

FREN 425. (3) **History of the Language**

Principles of structural and historical linguistics applied to the description of the growth and structure of the French language.

(Not offered in 1972-73.)

(3-0; 3-0)

FREN 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.

Texts: Vinay and Darbelnet, *Stylistique comparée du français et de l'anglais* (Montréal, Beauchemin); *Cahier d'exercices No. 2* (Montréal, Beauchemin).

Prof. J.-P. Vinay.

(3-0; 3-0)

FREN 430. (3) **Directed Reading Course**

(3-0; 3-0)

FREN 431. (1½) **Directed Reading Course**

September-December only. (3-0; 0-0)

FREN 432. (1½) **Directed Reading Course**

January-April only. (0-0; 3-0)

FREN 490. (3) **Honours Tutorial**

Honours students only. Students will meet one hour a week with an assigned tutor, throughout Third and Fourth Years, to do reading beyond that assigned in lecture courses, and other work as necessary, with a view to preparing the final written and oral comprehensive examinations.

NOTE: Students should note the availability of *Liberal Arts 305* (page 199) as an elective in their senior years.

DEPARTMENT OF GEOGRAPHY

Charles N. Forward, B.A., M.A. (*Brit. Col.*), Ph.D. (*Clark*), Professor and Head of the Department.

Bryan H. Farrell, B.A. (*Cant.*), M.A. (*Wash.*), Ph.D. (*Auck.*), Professor.

W. R. Derrick Sewell, B.Sc.Econ. (*London*), M.A., Ph.D. (*Wash.*), Professor.

Rudolph Wikkramatileke, B.A. (*Ceylon*), M.A. (*Clark*), Ph.D. (*London*), Professor.

Charles H. Howatson, B.A., M.A. (*Brit. Col.*), Associate Professor.

Colin K. Campbell, M.A. (*Aberdeen*), M.A. (*Brit. Col.*), Ph.D. (*Bristol*), Assistant Professor.

Harold D. Foster, B.Sc., Ph.D. (*London*), Assistant Professor.

David Chuen-Yan Lai, B.A., M.A. (*Hong Kong*), Ph.D. (*London*), Assistant Professor.

Francis M. Leversedge, B.A. (*Brit. Col.*), Assistant Professor.

Malcolm A. Micklewright, B.A., Ph.D. (*Wash.*), Assistant Professor.

Peter E. Murphy, B.Sc., Teachers Dip. (*London*), M.A., Ph.D. (*Ohio St.*), Assistant Professor.

J. Douglas Porteous, B.A., M.A. (*Oxon.*), Ph.D. (*Hull*), Assistant Professor.

Stanton E. Tuller, B.A. (*Ore.*), M.A., Ph.D. (*Calif., Los Angeles*), Assistant Professor.

Bret Wallach, A.B., M.A., Ph.D. (*Calif.*), Assistant Professor.

Colin J. B. Wood, B.A. (*Wales*), M.A., Ph.D. (*McMaster*), Assistant Professor.

Gilian D. McDade, B.A. (*Witwatersrand*), Senior Laboratory Instructor.

John F. Bryant, Senior Academic Assistant.

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 Mathematics 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 Majors and Honours students may take the required Geography 321 and one of 322, 323 in their second year, if they so wish. Moderate fees will be charged students in Geography 323, 401, 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. in Geography.

General — 15 units: 101; 3 units chosen from 201, 203, 204 and 205; and 9 units of courses numbered 300 or above, 3 units of which selection must be a regional course.

Major — 24 units: 101; 203; 3 units chosen from 201, 204 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.

Honours — 33 units minimum: 101; 203; 3 units chosen from 201, 204 and 205; 321 and one of 322, 323; 499; and 18 other 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.

Departmental Requirements for the B.Sc. 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, 401, 402, 441, 442, 450, 451 and 459.

Major — 24 units: 101, 203; 3 units chosen from 201, 204 and 205; 321, and one of 322, 323; 12 units of courses chosen from 350, 370, 371, 372, 373, 374, 375, 376, 377, 401, 402, 441, 442, 450, 451 and 459. All majors students are required to obtain:

- (a) Three units of credit from Mathematics 100 and 101 (or 130), or 151 and 102, or 170 and 171, or 180.
- (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
 - Bacteriology 200
 - Biology 150, 200, 203, 204, 206, 207
 - Chemistry 111, 120, 124, 224, 230, 233
 - Geology 200
 - Mathematics 200, 201, 210, 230, 231, 232, 240, 271, 272
 - Physics 101, 103, 121, 211, 212, 213

Honours — 33 units minimum: 101; 203; 3 units chosen from 201, 204 and 205; 321 and one of 322, 323; 499; and 18 other 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.

COURSES

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

Geography 101 is prerequisite to all other geography courses. This prerequisite may be waived by the Department in certain circumstances.

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.

Dr. Wallach, Dr. Wood. (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.

Mr. Leversedge. (2-2; 2-2)

GEOG 203. (3) **Physical Geography**

A study of meteorology, climatology, geomorphology, pedology, biogeography, hydrology, and their inter-relationships.

Dr. Tuller, Dr. Foster. (2-2; 2-2)

GEOG 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;

DEPARTMENT OF GEOGRAPHY — UNDERGRADUATE COURSE STRUCTURE

First Year	101 (3) Introduction to Geography		
Second Year	203 (3) Physical; 201 (3) Economic; 204 (3) Canada; 205 (3) Cultural		
Third and Fourth Years			
Techniques and Methods	Urban, Economic and Cultural	Resources and Physical	Regional
321 (1½) Introduction to Quantitative Methods in Geography	305 (3) Urban	350 (3) Introduction to Resources	360 (3) Introduction
322 (1½) Air Photo Interpretation	307 (3) Historical	370 (1½) Hydrology	W. Pacific Rim
323 (1½) Cartography	311 (3) Economic & Cultural Change	371 (1½) Water Resources Management	
	340 (1½) Population	372 (1½) Climatology	
	341 (1½) Industrial	373 (1½) Applied Climatology	
	342 (1½) Transportation & Commodity Flows	374 (1½) Biogeography	
	343 (1½) Regional Analysis	375 (1½) Biospheric Resources	
		376 (1½) Geomorphology	
		377 (1½) Applied Geomorphology	
401 (1½) Advanced Cartography	440 (1½) Seminar on Urban Geography of Canada	441 (3) Research Seminar in Applied Climatology	408 (3) Europe
402 (3) Advanced Quantitative Methods	444 (1½) Urban Transportation and Land Use	442 (3) Legal and Admin. Aspects of Resources	410 (3) W. Canada
445 (3) History & Nature of Geog.	446 (1½) Regional Development & Planning	450 (3) Decision-Making in Resources Management	462 (3) Soviet Union
490 (1-3) Directed Studies	447 (1½) Urbanization in Developing Countries	451 (3) Water Resources Planning and Policy-Making	463 (3) S. E. Asia
499 (3) Honours Seminar & Essay	448 (3) Urban Social Geography Analysis	459 (3) Recreational Resource Analysis	464 (3) China
			465 (3) Japan
			466 (3) Australia
			467 (3) South Pacific

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.

Dr. Forward, Dr. Micklewright, Mr. Howatson. (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.

Dr. Campbell. (2-2; 2-2)

TECHNIQUES AND METHODS

GEOG 321 (formerly 300). (1 ½) 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 Geog 300).

Dr. Murphy. September-December. Also January-April. (2-2)

GEOG 322 (formerly 300). (1 ½) 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 Geog 300).

Dr. Lai. September-December only. (2-2; 0-0)

GEOG 323 (formerly 300). (1 ½) 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 Geog 300).

Dr. Micklewright. January-April only. (0-0; 2-2)

GEOG 401. (1 ½) Advanced Cartography

This course is intended to add to the cartographic skills and knowledge taught in Geography 323. The course includes advanced techniques, such as scribing photo-mechanical work, the mathematical analysis of map projections, and advanced work in aerial photography. Field trips may include visits to governmental mapping agencies.

Prerequisite: Geography 323 or 300.

Dr. Micklewright. September-December only. (2-2; 0-0)

GEOG 402. (3) Advanced Quantitative Methods in Geography

The course will introduce more advanced statistical techniques which are applicable to geographic research. Emphasis will be placed upon the problems of application and interpretation, with the students being given the opportunity to apply techniques to empirical research.

Prerequisite: Geography 321 or 300 or permission. (2-2; 2-2)

GEOG 445. (3) The History and Nature of Geography

Geography from ancient times to the present; the most important geographers and an assessment of their contributions; significant contemporary geographic concepts and developments.

Dr. Farrell.

(0-0-3; 0-0-3)

GEOG 490. (1-3) 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.

GEOG 499. (3) Honours Seminar and Essay

The seminar meets monthly and students in their third and fourth years of the Honours Programme are expected to attend. Seminars attempt to develop critical scholarly attitudes towards work within the group and towards outside readings. Discussions focus on such topics as research design and style as related to the Honours essay; contemporary trends in geography; and other appropriate topics suggested by members. The essay, submitted at the end of the fourth year will be supervised by a faculty member and will embody first-hand research, especially field-work. It will be of a standard markedly higher than that usually associated with a term essay but not so high as the standard demanded for a Master's thesis.

URBAN, ECONOMIC AND CULTURAL

GEOG 305. (3) 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 planning the urban environment.

Dr. Porteous.

(3-0; 3-0)

GEOG 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.

(3-0; 3-0)

GEOG 311. (3) The 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.

Dr. Wikkramatileke.

(3-0; 3-0)

GEOG 340. (1 ½) Population Geography

The role of population and labor force in the growth and decline of the economies of regions and the impact of changes in numbers and composition of the population on decisions on public investments and policies will be considered, both from a theoretical viewpoint and in the context of case studies. Selected demographic and graphic techniques will be dealt with, as will the use and interpretation of census materials. (Not open to students who have taken Geography 304).

September-December only. (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).

Dr. Lai.

September-December only. (3-0; 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.

January-April only. (0-0; 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).

January-April only. (0-0; 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 305 or permission.

Dr. Forward.

September-December only. (0-0-3; 0-0-0)

GEOG 444. (1½) Urban Transportation and Land Use

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 305 or permission.

Dr. Porteous.

January-April only. (0-0; 3-0)

GEOG 446. (1½) Regional Development and Planning

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 305 or 350 or permission.

Dr. Murphy.

September-December only. (3-0; 0-0)

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 305 or permission.

Dr. Lai.

January-April only. (0-0; 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 involve the city planner, and are expected to undertake a modest research project.

Prerequisite: Geography 305 or permission.

Dr. Porteous and Dr. Murphy.

(3-0; 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. These resources may include land, water, the atmosphere, fisheries, wildlife and forests. 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, such as rapidly growing population, increasing urbanization and demands for improved environmental conditions, will be emphasized.

Prerequisite: Geography 203 and Geography 201, 204 or 205, or permission.

(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 registering for Geography 371. (Not open to students with credit for Geography 320.)

Prerequisite: Geography 203 or permission.

Dr. Foster.

September-December only. (2-2; 0-0)

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.

Dr. Sewell.

January-April only. (0-0; 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 processes 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. (Not open to students with credit for Geography 302.)

Prerequisite: Geography 203 or permission.

Dr. Tuller.

September-December only. (2-2; 0-0)

GEOG 373 (formerly 351). (1 ½) 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).

Dr. Tuller.

January-April only. (0-0; 2-2)

GEOG 374 (formerly 306). (1 ½) Biogeography

An analysis of the areal distribution of biotic systems. Origins, dispersals, evolution, and limiting physical biotic and cultural factors as they relate to present day distribution patterns will be considered. The spatial model as a biographic methodology will be presented. (Not open to students with credit for Geography 306.)

Prerequisite: Geography 203 or permission.

September-December only. (2-2; 0-0)

GEOG 375 (formerly 352). (1 ½) Biospheric Resources

The ways in which man's modification of various sectors of the biosphere influence the total ecosystem involved. Specific examples will be chosen from the fields of forest, range, and watershed management; fishing, agriculture and pollution. (Not open to students who have taken Geography 306 before 1970-71 or Geography 351.)

Prerequisite: Geography 374 (formerly 306) or Biology 306.

January-April only. (0-0; 2-2)

GEOG 376 (formerly 312). (1 ½) 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.

Dr. Foster.

September-December only. (2-2; 0-0)

GEOG 377 (formerly 354). (1 ½) Applied Geomorphology

A detailed analysis of the social relevance of geomorphology. Topics will be selected from the following: the gravel industry, transportation planning, mineral prospecting, mass movement prediction, soil erosion, siting of new towns, prevention of coastal erosion and reservoir silting. The course will involve outside readings, field trips and participation in a group research project. (Not open to students with credit for Geography 412 before 1970-71 or Geography 354.)

Prerequisite: Geography 376 (formerly 312) or permission.

Dr. Foster.

January-April only. (0-0; 2-2)

GEOG 441. (3) Seminar in Physical Geography

Section 1: Research Seminar in Applied Climatology.

The purpose of this course is to acquaint students with principles and modern methods in applied microclimatology through actual research experience. Depending on group size and interest, one or more practical projects of concern and significance in the local area will be selected from the fields of urban, agricultural or forest climatology. Course work will involve the completion of a group research project,

including the development of an appropriate research design, collection of field observations, data analysis, and formulation of relevant conclusions.

Prerequisite: Geography 372 (formerly 302) and 373 (formerly 351) or permission.
Dr. Tuller. (0-0-3; 0-0-3)

GEOG 442. (3) Seminar in Human Geography

Section 1: Legal and Administrative Aspects of Resources.

A study of laws, judicial interpretations, and administrative policies affecting land, water, forests, minerals, fuels, range land, recreational development and coordination, with special attention to Canada.

Prerequisite: Geography 350.
Dr. Wallach. (0-0-3; 0-0-3)

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 on the human and physical landscapes.

Prerequisite: Geography 350 or permission.
Dr. Wood. (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.

Prerequisites: Geography 350, 370 (formerly 320) and 371 (formerly 353) or permission.

Dr. Sewell, Dr. Foster. (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.
Dr. Campbell. (2-2; 2-2)

REGIONAL

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.

Dr. Wikkramatileke, Dr. Farrell.

(3-0; 3-0)

GEOG 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.

(3-0; 3-0)

GEOG 410. (3) Geography of Western Canada

A study of the 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.

Mr. Howatson.

(3-0; 3-0)

GEOG 462. (3) Geography of the Soviet Union

A spatial analysis of Soviet economic development from a conceptual viewpoint. Patterns, processes and problems of economic space are examined in terms of spatial strategies—those distinctive characteristics of space-utilization seen as affording maximum support to adopted objectives of Soviet Society. Seven broad strategies are discussed: autarky, diffusion, rectification, polarisation, sectoral dominance, intensification and instability of space-polity. Analysis emphasises the role of political ideology, global perception, historical antecedents, centralised decision-making and resource endowment as factors encouraging strategy adoption.

Mr. Leversedge.

(3-0; 3-0)

GEOG 463 (formerly 308). (3) The 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.

Dr. Wikkramatileke.

(3-0; 3-0)

GEOG 464. (3) Geography of China

A detailed analysis of the physical and cultural landscapes of China, followed by an intensive study of certain regions. Emphasis will be placed on geographic aspects of contemporary socio-economic and political conditions in Mainland China within the framework of the East Asian Communist bloc. The course will also discuss the technique of research and study methods of less advanced countries where statistical information is lacking, incomplete, inaccurate or unavailable.

Dr. Lai.

(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.

(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.

(3-0; 3-0)

GEOG 467. (3) Geography of The South Pacific

The geographic study of New Zealand and the major groups of the Oceanic Pacific area (Polynesia, Melanesia and Micronesia). The area will be viewed in context within 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 alien cultural contact, restricted markets, limited resources, isolation and political and economic development.

Dr. Farrell.

(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.

Mr. Howatson.

(2-2; 2-2)

Students should note the availability of Liberal Arts 305 (page 199), Science 300 (page 250), and Pacific Studies 300 (pages 218-219) as electives in their senior years.

GRADUATE COURSES

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

GEOG 500. (1 ½) Graduate Callaquium in Geagrophy

GEOG 501. (3) Graduate Seminar in Physical Geagrophy

GEOG 502. (3) Graduate Seminar in Human Geagrophy

GEOG 503. (3) Graduate Seminar in Regional Geagrophy

GEOG 504. (3) Graduate Seminar in the History and Nature of Geagrophy

GEOG 505. (1-6) Directed Studies in Geagrophy

GEOG 506. (1 ½) Field Course in Geagrophy

GEOG 507. (3) Graduate Seminar in Quantitative Methads in Geagrophy

GEOG 540. (3) Graduate Seminar in Urban Preamblems

GEOG 550. (3) Graduate Seminar in Resaurces

GEOG 561. (3) Graduate Seminar in Research Preamblems in the Geagrophy of British Calumbia

GEOG 599. (credit to be determined) M.A. Thesis

GEOG 699. (credit to be determined) Ph.D. Dissertation

DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURE

J. Beattie MacLean, B.A. (*Brit. Col.*), M.A., Ph.D. (*Wash.*), Professor and Head of the Department.

Herta M. Hartmanshenn, Ph.D. (*Marburg*), Professor.

Walter E. Riedel, B.Ed., M.A. (*Alta.*), Ph.D. (*McGill*), Associate Professor.

Michael L. Hadley, B.A. (*Brit. Col.*), M.A. (*Man.*), Assistant Professor.

Nora E. Haimberger, B.A., M.A., Ph.D. (*Wash.*), Assistant Professor.

Rosemary Picozzi, B.A. (*Reading*), Ph.D. (*Brit. Col.*), Assistant Professor.

Rodney T. K. Symington, B.A. (*Leeds*), Ph.D. (*McGill*), Assistant Professor.

Carol Wootton, B.A. (*U. of Vic.*), M.A. (*Brit. Col.*), A.R.C.T. (*Tor.*), L.R.S.M. (*London*), Lecturer. (Leave of absence 1972-73.)

Jean Macintyre, M.A. (*Edinburgh*), Part-time Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

NOTE: 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 English 200 and Linguistics 100 (Section D).

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. The course numbered 302 should be taken normally in the Third Year.

An Honours programme in the Department of Germanic Languages and Literature normally requires a total of 66 units over a four-year period.

Students specializing in German (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 Head will be happy to assist students with their selection of courses.

PROGRAMMES IN GERMAN

General — German 100 or 140 (or equivalent); German 200 and 201 or 202 (or equivalent); nine units of German courses chosen from 302 and those numbered 400 or above.

Major — German 100 or 140 (or equivalent); German 200 and 201 or 202 (or equivalent); German 302, 410, and at least nine units of courses numbered 400 or above. German 404 is recommended.

Honours — German 100 or 140 (or equivalent); German 200 and 201 or 202 (or equivalent); German 302, 410 and at least fifteen units of courses numbered 400 or above. German 404 is strongly recommended.

N.B. For both Major and Honours students, English 413 is strongly recommended as an elective course.

COURSES

Students from secondary schools with credit from German IX, X, XI (Beginners), will register for German 140; those with advanced credits from secondary schools, or junior colleges, or those who are fluent in German will be placed at an appropriate level.

GERM 100. (3) **Beginners' German**

Introduction to the language; basic grammar, practice in written and spoken German; elementary readings; films on the life and culture of Germany, Austria and Switzerland. (For students who have had no German studies.)

Texts: Kurtz and Politzer, *German* (rev. ed.); Hagboldt, *Allerlei*.

Members of the Department.

(3-1; 3-1)

N.B. *Credit cannot be granted for both German 100 and German 140.*

GERM 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: Kurtz and Politzer, *German* (rev. ed.); von Hofe, *Die Mittelstufe* (Third Edition).

Members of the Department.

(3-1; 3-1)

GERM 200 (formerly 290). (3) **Intermediate German**

Conversation, composition and grammar. (Not open to students who have credit for German 290.)

Prerequisite: German 100 or 140 or equivalent.

Texts: Politzer, *Active Review of German*; Bonnell and Sedgwick, *Conversations in German*.

Dr. Picozzi, Dr. Haimberger.

(3-1; 3-1)

GERM 201 (formerly 240). (3) **Survey of German Culture**

General survey of the German cultural heritage through readings, films, music, etc. (Not open to students who have credit for German 240.)

Prerequisite: German 100 or 140 or equivalent; German 200 is normally prerequisite to or co-requisite with this course.

Texts: MacLean, Kriegel, Hartmanshenn, *2000 Jahre deutsches Leben*; Steinhauer, *Kulturlesebuch für Anfänger*.

Members of the Department.

(3-1; 3-1)

GERM 202 (formerly 260). (3) **Introduction to German Literature**

Literary readings with emphasis on modern period. (Not open to students who have credit for German 260.)

Texts: Diller, *Unterwegs*; Frisch, *Biedermann und die Brandstifter*; Dürrenmatt, *Besuch der alten Dame*.

Dr. Riedel.

(3-1; 3-1)

Normally a student may elect TWO ONLY of German 200, 201, 202 in any one year.

GERM 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:

- (a) Any student who has been exempted from, or who has successfully completed first year English or equivalent.
- (b) Any student enrolled in the Department of Music, Faculty of Fine Arts.
- (c) General, Major or Honours students of German by permission of the Department, as an elective.

Dr. Haimberger.

(3-0;3-0)

GERM 302. (3) **Advanced Composition and Stylistics**

Intensive practice in oral and written composition, style analysis and discussions.

Texts: Sutcliffe, *German Translation and Composition*; Steinhauer, *Stilvolles Deutsch*.

Dr. Hartmanshenn, Dr. Riedel.

(3-1; 3-1)

GERM 310. (3) **German Literature in English Translation**

A study of major authors from the 18th Century to the present day. (Prerequisite: English 100, or English 120.)

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: Lessing, *Nathan the Wise*; Goethe, *Great Writings of Goethe*; Bentley, ed. *The Classical Theatre*, Vol. II, (*Egmont, Mary Stuart, Don Carlos, Penthesilea, Prince of Homburg*); Büchner, *Complete Plays and Prose*; Spender, ed. *Great German Short Stories*; Hauptmann, *The Weavers*; Mann, *Death in Venice & other Stories*; Kafka, *The Penal Colony and Other Stories*; Hesse, *Steppenwolf*; Brecht, *The Life of Galileo*; Frisch, *The Fire Raisers*; Dürrenmatt, *The Visit*; Weiss, *Marat/Sade*.

Dr. Symington.

(3-0; 3-0)

GERM 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: Harry Steinhauer, *Read, Write, Speak German*; MacLean, Kriegel, Hartmanshenn, *2000 Jahre deutsches Leben*; 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.

Dr. Hartmanshenn.

(3-0; 3-0)

GERM 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: Büchner, *Danton's Tod, Woyzeck*; Hebbel, *Maria Magdalena*; Nestroy, *Der Zerrissene*; Grillparzer, *Der Traum ein Leben*; Storm, *Immensee*; Keller, *Kleider machen Leute*; Meyer, *Der Schuss von der Kanzel*, and others.

Dr. Symington.

(3-0; 3-0)

GERM 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, *Liebelein*; 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*.

Dr. Riedel.

(3-0; 3-0)

GERM 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: Borchert, *Draussen vor der Tür., Ausgewählte Erzählungen*; Böll, *Das Brot der frühen Jahre*; Frisch, *Die chinesische Mauer, Andorra*; Dürrenmatt, *Die Physiker*; Hochwälder, *Das heilige Experiment*; Grass, *Katz und Maus*; Weiss, *Marat/Sade*, and others.

Dr. Synington.

(3-0; 3-0)

GERM 404. (3) The Romantic Movement

A study of prose and poetry of the period. Attention will also be given to the historic, social, artistic, religious and philosophical background.

Texts: Stenzel, *Die deutschen Romantiker* (Vols. I and II). Additional works will be announced.

(Not offered in 1972-73.)

(3-0; 3-0)

GERM 408. (3) German Poetry from 1830 to the Present

Studies in Realism, Naturalism, Impressionism, Expressionism, and contemporary trends in German poetry.

Texts: Echtermeyer and von Wiese, *Deutsche Gedichte. Twentieth-Century German Verse* (Penguin Edn.).

(Not offered in 1972-73.)

(3-0; 3-0)

GERM 410. (3) The Classical Period

Literature of the eighteenth and early nineteenth century with emphasis on the works of Lessing, Schiller and Goethe.

Texts: Lessing, *Nathan der Weise*; Schiller, *Gedichte*; Schiller, *Die Jungfrau von Orleans*; Boyd, *Goethe's Poems*; Goethe, *Faust I* und *Auswahl aus Teil II*; Goethe, *Hermann und Dorothea*; Friedenthal, *Goethe, sein Leben und seine Zeit*.

Dr. Hartmanshenn.

(3-0; 3-0)

GERM 412. (3) Baroque to Sturm und 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: H. Cysarz (ed.), *Deutsche Barocklyrik*; Grimmelshausen, *Der abenteuerliche Simplicissimus*; Gryphius, *Herr Peter Squenz*; Lohenstein, *Cleopatra*; Lessing, *Kritik und Dramaturgie, Die Erziehung des Menschengeschlechts, Emilia Galotti*; Daly, Doerksen, *Sturm und Drang*; Schiller, *Die Räuber*, and others.

Dr. Picozzi.

(3-0; 3-0)

GERM 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.

Dr. Hadley.

(3-0; 3-0)

GERM 430. (3) Directed Reading Course

(By permission, for Honours or Major students.)

(3-0; 3-0)

GERM 490. (3) Honours Seminar

(The Seminar may include a graduating essay.)

(3-0; 3-0)

DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

Pablo Cabañas, Licenciado, Doctor en Filosofía y Letras (*Madrid*), Professor and Head of the Department.

Ross E. Butler, Jr., B.A., M.A. (*Ore.*), Ph.D. (*Arizona*), Assistant Professor (Portuguese and Spanish).

Jerrold L. Mordaunt, B.A., M.A. (*Utah*), Ph.D. (*Stanford*), Assistant Professor (Spanish).

Gillian M. Briggs, B.A. (*London*), Lecturer (Spanish).

Robert M. Flores, B.A., M.A. (*Ore.*), Lecturer (Spanish).

David F. Henn, B.A., M.A. (*Durham*), Lecturer (Spanish).

David C. McDougall, B.A., M.A. (*Sheffield*), Lecturer (Spanish).

Lucio Marampon, B.A., M.A. (*Brit. Col.*), Lecturer (Italian).

Caroline Monahan, B.A., M.A. (*Brit. Col.*), Lecturer (Spanish).

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 take English at the 200 level and either Linguistics 100 or Linguistics 360.

Students wishing to take courses in Spanish at the Third and Fourth Year level are reminded that they must have the prerequisites of the first two years, including Spanish 290.

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.

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 Head 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.

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 higher.

Honours—First Year: Spanish 100; Second Year: Spanish 260 and 290; Third and Fourth Years: Spanish 302 and at least fifteen units of courses numbered 400 or higher.

COURSES

SPANISH

SPAN 100. (3) **Beginners' Spanish**

Intensive oral method with grammar, composition, translation, and work in the language laboratory.

Texts: Zenia Sacks da Silva, *Beginning Spanish*, 2nd ed. and Tape Manual; supplementary reading material to be announced.

Members of the Department. (3-1; 3-1)

SPAN 240. (3) **Intermediate Spanish**

(Normally intended as a terminal course in Spanish). Intensive review of grammar; translation, composition, oral work.

Texts: Da Silva and Lovett, *A Concept Approach to Spanish*, 2nd ed.; Altabé, *Temas y diálogos*; Sastre, *Escuadra hacia la muerte*.

Members of the Department. (3-1; 3-1)

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: Calderón, *El alcalde de Zalamea*, ed Dunn (Pergamon); García Lorca, *Yerma*; Azuela, *Los de abajo*; Sender, *Réquiem por un campesino español*; and an anthology to be announced.

Miss Briggs, Mr. Henn. (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: To be announced.

Miss Monahan. (4-0; 4-0)

SPAN 302. (3) **Advanced Composition and Stylistics**

Intensive training in oral and written composition.

Text: Eoff and Ramírez, *Composición-Conversación*. Other text to be announced.

Mr. Flores. (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*.

Dr. Cabañas. (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*.

Dr. 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 1972-73; to be offered 1973-74.)

(3-0; 3-0)

SPAN 403. (3) **Introduction to the Golden Age**

Spanish literature of the sixteenth and seventeenth centuries, with the exception of the novel.

Texts: Wardropper, *Teatro español del siglo de oro*; Terry (ed.), *An Anthology of Spanish Poetry, 1500-1700, Parts I and II*; Garcilaso de la Vega, *Poesías castellanas completas* (ed. Rivers).

(Not offered in 1972-73.)

(3-0; 3-0)

SPAN 404. (3) **The Literature of Spanish America**

An introduction to the modern literature of Spanish America, with selected texts.

Students will be required to write essays on the prescribed texts.

Texts: Rómulo Gallegos, *Canta-claro*; Julio Cortázar, *Los premios*; Miguel Angel Asturias, *El Señor Presidente*; Horacio Quiroga, *Cuentos*; Hernández, *Martin Fierro*; Ruben Darío, *Azul, Prosas profanas, Cantos de vida y esperanza*; Pablo Neruda, *Veinte poemas de amor y una canción desesperada, Residencia en la tierra*.

Miss Briggs.

(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: *Amadis de Gaula*; Montemayor, *La Diana*; *El Abencerraje*; *Lazarillo de Tormes*; Alemán, *Guzmán de Alfarache*; Quevedo, *El Buscón*.

Miss Monahan.

(3-0; 3-0)

SPAN 406. (3) **Medieval Literature**

Study of Spanish language and literature from 1140 to 1500.

Texts: López Estrada, *Introducción a la literatura medieval española*; Kohler, ed., *Antología de la literatura española de la Edad Media*.

Dr. 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*; Zorrilla, *Don Juan Tenorio*; Galdós, *Fortunata y Jacinta*.

(Not offered in 1972-73.)

(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: J. R. Jiménez, *Segunda antología poética*; Guillén, *Cántico*; Salinas, *La Voz a ti debida*; García Lorca, *Romancero gitano, La casa de Bernarda Alba*; Valle-Inclán, *Sonata de primavera, Sonata de estío, Luces de Bohemia, Romance de lobos*; Pérez de Ayala, *Belarmino y Apolonio*; Cela, *La colmena*.

Mr. Henn.

(3-0; 3-0)

SPAN 425. (3) **History of the Spanish Language**

A study of the development of the Spanish language from its beginnings to the present day.

Prerequisite: 200 level in Spanish, including Spanish 290.

Texts: Spaulding, *How Spanish Grew*; Lapesa, *Historia de la lengua española*.
(Not offered in 1972-73.) (3-0; 3-0)

SPAN 430. (3) **Directed Reading Course**
For Honours and Major students.
(May be offered in 1972-73.)
Dr. Cabañas. (3-0; 3-0)

SPAN 490. (3) **Honours Seminar, or Graduating Essay** (3-0; 3-0)

PORTUGUESE

PORT 100. (3) **First Year Portuguese**
Intensive oral method with grammar, composition, translation and work in the Language Laboratory.
Text: Modern Language Association, *Modern Portuguese*.
Dr. Butler. (3-1; 3-1)

PORT 200. (3) **Second Year Portuguese**
Intensive oral method, review of grammar, composition, translation, and work in the Language Laboratory.
Prerequisite: First year Portuguese or equivalent.
Text: To be announced.
Dr. Butler. (3-1; 3-1)

ITALIAN

ITAL 100. (3) **First Year Italian**
Introduction to the language with conversation, grammar, and reading exercises.
Texts: Speroni-Golino, *Basic Italian*.
Mr. Marampon. (3-1; 3-1)

ITAL 200. (3) **Second Year Italian**
Review of grammatical exercises; reading of contemporary Italian authors; conversation exercises.
Texts: Young-Cantarella, *Corso d'italiano*.
Mr. Marampon. (3-1; 3-1)

ITAL 300. (3) **A cultural approach to Italian language and literature**
This course is designed primarily for third and fourth year students majoring in Classics, English, Fine Arts, History, Modern Languages, etc. The course will be given in English during the first term and in Italian in the second.
Prerequisites: Competence to the 200-level in a second romance language other than Italian. (3-0; 3-0)

ITAL 302. (3) **Advanced Composition and Stylistics**
Intensive training in oral and written composition.
Texts: Young and Cantarella, *Corso d'italiano*.
Mr. Marampon. (3-0; 3-0)

ITAL 403. (3) **Introduction to Renaissance Literature**
Renaissance literature with emphasis on Dante, Petrarca, Boccaccio, Macchiavelli, Castiglione, etc.
Prerequisite: *Second Year Italian*. (3-0; 3-0)

DEPARTMENT OF HISTORY

- James E. Hendrickson, B.A. (*Sask.*), B.Ed. (*Alta.*), M.A., Ph.D. (*Ore.*), Associate Professor and Head of the Department.
- Sydney W. Jackman, B.S., M.A. (*Wash.*), A.M., Ph.D. (*Harvard*), F.S.A., F.R.Hist.S., Professor.
- Reginald H. Roy, C.D., B.A., M.A. (*Brit. Col.*), Ph.D. (*Wash.*), F.R.Hist.S., Professor of Military History and Strategic Studies.
- William M. Leary, B.A. (*Wayne St.*), M.A., Ph.D. (*Princeton*), Associate Professor.
- Alfred E. Loft, B.A. (*Brit. Col.*), Associate Professor.
- W. George Shelton, B.A., M.A. (*Man.*), Ph.D. (*Pa.*), Associate Professor.
- William M. Baker, B.A. (*Tor.*), M.A. (*Carleton*), Ph.D. (*Western*), Visiting Assistant Professor.
- Brian W. Dippie, B.A. (*Alta.*), M.A. (*Wyoming*), Ph.D. (*Texas*), Assistant Professor.
- Charlotte S. M. Girard, B.A. (*Brit. Col.*), M.A., Ph.D. (*Bryn Mawr*), Assistant Professor.
- Jan Kupp, B.A., M.A., Ph.D. (*Man.*), Assistant Professor.
- Robert J. McCue, B.A., B.Ed. (*Alta.*), M.A., Ph.D. (*Brigham Young*), Assistant Professor.
- John Money, B.A., M.A., Ph.D. (*Cantab.*), Assistant Professor.
- Patricia E. Roy, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*Brit. Col.*), Assistant Professor. (Leave of absence 1972-73.)
- Donald L. Senese, A.B., Ph.D. (*Harvard*), Assistant Professor.
- David A. T. Stafford, B.A., M.A. (*Cantab.*), Ph.D. (*London*), Assistant Professor.
- E. Patricia Tsurumi, B.A. (*Brit. Col.*), A.M., Ph.D. (*Harvard*), Assistant Professor.
- Wesley T. Wooley, A.B. (*Ill.*), A.M., Ph.D. (*Chicago*), Assistant Professor.
- Harry J. Bridgman, B.A. (*Brit. Col.*), M.A. (*Queen's*), Lecturer.
- Charles W. Cowan, B.A. (*Alta.*), Lecturer.
- Kenneth C. Dewar, B.A. (*Alta.*), M.A. (*Tor.*), Lecturer.
- Ernest R. Forbes, B.A. (*Mt. Allison*), M.A. (*Dalhousie*), Lecturer. (Leave of absence 1972-73).
- Phyllis M. Sherrin, B.A. (*Tor.*), M.A. (*Carleton*), Lecturer.
- Brian Smith, M.A. (*Queen's*), Part-time Lecturer.

GRADUATE PROGRAMME

The Department offers opportunities for study and research leading to the M.A. degree. For further information about the Graduate Programme, see the section of this calendar dealing with the Faculty of Graduate Studies, and consult the departmental Graduate advisor.

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 year, 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 adviser to Majors. Students interested in majoring in history are advised to consult the Majors adviser in their first year if possible. Majors must have their third and fourth year programmes approved by the Majors adviser.

HONOURS

The Honours Programme is designed to permit students of proven ability to study history more intensively than is possible in the Major and General Programmes. Students who are particularly interested in history or who are contemplating graduate study are strongly advised to consider enrolling in the Honours Programme. The Honours Programme involves a larger number of courses than a Major, including specialized seminars in methodology and historiography (History 491 and 492) and the preparation of a graduating essay under the direction of an individual tutor (History 498 and 499). Because more work is done in seminars and under the supervision of a tutor, there are greater opportunities for individual attention than is possible in the Major and General Programmes. To avoid over-specialization, Honours students are encouraged to choose courses from more than one area of history.

The Honours Programme normally consists of 36 units of course work in the combined third and fourth year as follows:

Third Year		Fourth Year	
History 491	1½ units	History 490	1½ units
History 498	1½ units	History 492	1½ units
Advanced History	9 units	History 499	6 units
Related non-History	3 units	Advanced History	3 units
Elective	3 units	Related non-History	3 units
		Elective	3 units

In addition, Honours candidates are required to demonstrate a reading knowledge of a modern language other than English (either by obtaining credit in a language course to the 200 level, or by passing a special examination) and to defend their graduating essay in an oral examination.

Admission to the Honours Programme requires a high second-class standing in 6 units of introductory history courses. Applicants should apply in person to the adviser to Honours students, normally before the last day of lectures in the spring term of their second year. Successful candidates will be notified by mail not later than July 1 of their acceptance as Honours candidates.

Honours candidates are required to have their programme approved by the Honours adviser. Candidates whose performance is unsatisfactory may be required at any time to transfer from the Honours to the Major Programme. Admission to the fourth year of the Honours Programme is conditional upon satisfactory performance in the third year.

COURSES

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

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. In 1972-73 the course will consist of a series of lectures by Professor Jackman. The lectures will consider European History from the Council of Nicea to the Congress of Vienna with special emphasis on the role of personality in history.

Dr. Jackman. (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.

Dr. Dippie, Dr. Wooley. (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.

Mr. Cowan, Dr. Money. (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.

Mr. Bridgman, Mr. Dewar, Dr. Kupp, Mr. Loft. (3-0; 3-0) or (2-0-1; 2-0-1)

HIST 238 (formerly 204). (3) **Medieval Europe**

Europe from the fall of the western Roman Empire to the Renaissance: a study of feudalism, manorialism, the church, and the political and intellectual life that characterized the Middle Ages.

Dr. McCue. (3-0; 3-0)

HIST 240 (formerly 200). (3) **History of Modern Europe**

A survey of European history from the Renaissance to the twentieth century. This course is recommended to all Majors and Honours candidates and to students wishing a single course in European history. It (or History 238) is strongly recommended to students wishing to take advanced courses in European history.

Dr. Girard, Mr. Loft, Dr. Shelton. (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.

Section I. Mr. Loft — 3 lectures per week. (3-0; 3-0)

Section II. Mr. Dewar, Dr. Leary, Dr. Senese, Dr. Stafford, Dr. Tsurumi — 2 lectures per week and one tutorial. (2-0-1; 2-0-1)

HIST 250 (formerly 111). (3) **Europe and a Wider World, 1415-1808**

A survey of the first colonial empires in Asia, America, and Africa; from the Age of Discovery to the colonial American revolutions. This course is strongly recommended to students wishing to take advanced courses in the expansion of Europe.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 252. (3) **History of the Far East**

An introduction to the political, social, economic, and philosophical developments in the Far East.

Dr. Tsurumi. (3-0; 3-0)

ADVANCED COURSES

American

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 to the Spanish-American War, with particular concentration on certain significant themes.

Dr. 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.

Dr. Leary. (3-0; 3-0)

HIST 306. (1 ½) **American History Since 1945**

A half-year lecture course. A study of American diplomacy, politics, and society since the Second World War. The course will include such topics as the Negro revolt, the post-war economy, the fate of liberal reform, as well as trends in American literature, art, music, and religion.

Dr. Wooley. January-April only. (0-0; 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.

Dr. Dippie. (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.

(Not offered in 1972-73.) (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 in 1972-73.) (3-0; 3-0)

HIST 319. (1 ½ or 3) **Seminar in American History**

Selected topics in American history. Enrolment limited, and consent of instructor required for registration. Students are advised to consult the Department about the specific topics to be considered.

Dr. Leary. September-December only. (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.

Dr. Money.

(3-0; 3-0)

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.

Dr. 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.

Dr. Jackman.

(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.

Mr. Cowan.

(3-0; 3-0)

HIST 338. (1 ½ or 3) **Seminar in British History**

Selected topics in British history. Enrolment limited and consent of instructor is required for registration. Students are advised to consult the Department about the specific topics to be considered.

(Not offered in 1972-73.)

(0-0; 3-0)

NOTE: History 402 may also be counted as a course in British history.

Canadian

HIST 340 (formerly 302). (3) **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.

Dr. Kupp.

(3-0; 3-0)

HIST 342 (formerly 326). (3) **British North America, 1763-1867**

The British colonies in North America from the Peace of Paris to Confederation.

Mr. Bridgman.

(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 to their political manifestations.

(3-0; 3-0)

HIST 348. (3) **Social and Intellectual History of Canada**

An examination of major aspects of Canadian social and intellectual life.

(May not be offered in 1972-73.)

(3-0; 3-0)

HIST 350 (formerly 303). (3) **The Canadian West**

A study of the West within the national context. Particular emphasis will be given to transportation, settlement, and regional discontent.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 352. (3) **French Canada**

A study of social, economic, and political aspects of French Canada's history since 1763.

To be announced. (3-0; 3-0)

HIST 356 (formerly 420). (3) **Canadian Constitutional History**

A study of the evolution of the Canadian Constitution from 1763 to the present.

Mr. Smith. (3-0; 3-0)

HIST 358. (1 1/2 or 3) **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. For 1972-73, the topic will be the social, intellectual, and economic developments of Canada in the late nineteenth and twentieth centuries: growth of industrial capitalism, and group and class responses to it; urbanization; social structure; the role of the state; economic and social relations to the British and American empires.

Mr. Dewar. (3-0) or (3-0; 3-0)

HIST 359. (1 1/2 or 3) **Seminar in Canadian History**

Selected topics in Canadian history. Enrolment limited and consent of instructor required for registration. Students are advised to consult the Department about the specific topics to be considered.

(3-0) or (3-0; 3-0)

NOTE: History 494 may also be counted as a course in Canadian history.

European

HIST 360. (1 1/2) **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.

Dr. Girard. September-December only. (3-0; 0-0)

HIST 361. (1 1/2) **The Reformation**

A history of the men, and the political and religious factors involved in the upheavals of the Protestant and Roman Catholic reformations.

Dr. McCue. January-April only. (0-0; 3-0)

HIST 362 (formerly 314). (3) **Europe, 1648-1815**

Europe from the Peace of Westphalia through the Age of Louis XIV and the Enlightenment, to the French Revolution, Napoleonic Wars, and Battle of Waterloo: a consideration of the dramatic changes in European civilization between Westphalia and Waterloo.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 364 (formerly 415). (3) **Europe in the Nineteenth Century**

The evolution of Europe from 1815 to 1914, with special emphasis on the political, economic, and social thought of the period.

(Not offered in 1972-73.) (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 communication between these and major political, social, and economic changes. Approximately half the course will deal with the period since 1945.

Dr. 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.

Dr. Shelton.

(3-0; 3-0)

HIST 370 (formerly 406). (3) **France, 1789-1945**

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.

Dr. Girard.

(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.

Dr. Stafford.

(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.

Dr. 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.

Dr. Senese.

September-December only. (3-0; 0-0)

HIST 389. (1½ or 3) **Seminar in European History**

Selected topics in European history. Enrolment limited and consent of instructor required for registration. Students are advised to consult the Department about the specific topics to be considered. For 1972-73, the seminar will examine topics in the social, political, and economic thought of Europe in the sixteenth, eighteenth and nineteenth centuries.

Dr. McCue.

September-December. (3-0; 0-0)

Dr. Shelton.

January-April only. (0-0; 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.

Dr. R. H. Roy.

(3-0; 3-0)

HIST 400. (3) **Intellectual History of Europe**

A study of the major movements of thought from the early Middle Ages to the twentieth century.

(Not offered in 1972-73.)

(3-0; 3-0)

NOTE: Upon written permission from the Head of the Department of History, Classical Studies 330 or 340 may also be counted as a course in European History.

Expansion of Europe

HIST 401 (formerly 311). (3) **The Discovery and Settlement of North America**

Colonial North America from the Age of Reconnaissance to the American Revolutions.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 402 (formerly 411). (3) **Empire and Commonwealth**

A study of British imperial evolution from the disruption of the First British Empire to the present.

Mr. Cowan. (3-0; 3-0)

HIST 404. (1 ½) **The Discovery and Conquest of Latin America, 1474-1551**

The era of Columbus, Cortes, and Pizarro: an analysis of the motives for exploration and the techniques of discovery; and a survey of pre-Columbian American empires and the factors contributing to their conquest by the conquistadores.

(Not offered in 1972-73.) (3-0; 0-0)

HIST 405 (formerly 305). (3) **Latin America: The Colonial Period**

The discovery of the New World and rise and fall of the Iberian-American empires.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 407. (3) **Latin America Since 1808**

The emergence of the independent republics of Latin America from Bolivar to the present. An inquiry into the revolutionary tradition of modern Latin America with particular emphasis on the struggle for independence, the phenomenon of military dictatorships, and the social changes associated with the Mexican Revolution of 1910 and the age of Fidel Castro. Particular emphasis will be given to events in the twentieth century and to the four republics of Mexico, Brazil, Argentina and Cuba.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 409. (1 ½) **European Imperialism, 1880-1914**

A study of the last great age of imperialism before its disintegration at the Peace of Versailles. A survey of the economic, political, and strategic myths upon which imperialism depended and of the social and international consequences of the struggle for empire.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 413. (3) **Modern China**

An intensive study of developments in China during the nineteenth and twentieth centuries.

(Not offered in 1972-73.) (3-0; 3-0)

HIST 414. (3) **Modern Japan**

An intensive study of development in Japan since the Meiji Restoration.

Dr. Tsurumi. (3-0; 3-0)

HIST 416. (1 ½ or 3) **Seminar in Expansion of Europe**

Selected topics in the expansion of Europe. Enrolment limited and consent of instructor required for registration. Students are advised to consult the Department about the specific topics to be considered.

(Not offered in 1972-73.) (3-0) or (3-0; 3-0)

Specialized Courses

HIST 490. (1 ½ or 3) **Directed Reading**

Students must obtain the consent of the Department before registering.

Members of the Department.

HIST 491 (formerly 333). (1 ½) **Seminar in Methodology**

The historian's craft, its tools and skills. This course is normally restricted to honours students and to graduate students in the first year of a two-year programme. Consent of the instructor is required.

Dr. Wooley.

September-December only. (3-0; 0-0)

HIST 492 (formerly 433). (1 ½ or 3) **Seminar in Historiography**

This course is designed to introduce students to the history of the writing of history. Enrolment limited. One and one-half units required of all students in the Honours Programme. Consent of instructor required.

Dr. Hendrickson.

(3-0) or (3-0; 3-0)

HIST 493 (formerly 333). (1 ½) **Seminar in Philosophy of History**

A study of the various interpretations of the meaning and purpose of history. Enrolment limited and consent of instructor required for registration.

(Not offered in 1972-73.)

(3-0; 0-0)

HIST 494 (formerly 439). (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. Consent of instructor required.

Dr. R. H. Roy.

(3-0; 3-0)

HIST 498. (1 ½) **Honours Tutorial**

Directed readings offered by the instructor supervising a student's graduating essay. Members of the Department.

HIST 499. (6) **Graduating Essay in Honours**

The preparation of a research paper from 75-125 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 the courses offered in any given year.

HIST 510 (formerly 512). (1 ½ or 3) **Seminar in American History**

HIST 520 (formerly 501). (1 ½ or 3) **Seminar in British History**

HIST 530 (formerly 526). (1 ½ or 3) **Seminar in Canadian History**

HIST 531 (formerly 503). (1 ½ or 3) **Seminar in Western Canadian History**

HIST 532 (formerly 539). (1 ½ or 3) **Seminar in Canadian Defence Policy**

HIST 540 (formerly 505). (1 ½ or 3) **Seminar in European History**

HIST 580. (1 ½ or 3) **Seminar in Specialized Topics**

HIST 582. (1 ½ or 3) **Seminar in Historiography**

HIST 584. (1 ½ or 3) **Seminar in Intellectual History**

HIST 585. (1 ½ or 3) **Seminar in Diplomatic History**

HIST 590. (1 ½ or 3) **Directed Reading**

HIST 599. (Credit to be determined) **M.A. Thesis**

LIBERAL ARTS

Course Chairman, 1972-73: Rodney T. K. Symington, B.A. (*Leeds*), Ph.D. (*McGill*),
Assistant Professor (German).

L A 305. (3) **The Background of Western Literature**

The aim of the course is to investigate some of the origins of Western man and his society. By means of works that are considered significant and by means of lectures on specific topics, the course will examine various lines of development in western civilization. Instructors from different departments form the course committee and lead the weekly seminars. Lecturers from other departments are invited to talk to the class. While the format of the course is flexible, the normal procedure is a one-hour lecture, followed by a two-hour seminar in which the topic of the week is discussed in depth. Seminar groups are arranged on a quarterly basis and at the end of each quarter the student changes both group and instructor, so that during the course of the year he will come into contact with instructors from different disciplines.

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.

Prerequisite: A 3.5 Grade Point average or permission of the Course Chairman.

(1-2; 1-2)

DEPARTMENT OF LINGUISTICS

M. H. Scargill, B.A., Ph.D. (*Leeds*), F.R.S.C., Professor.

Jean-Paul Vinay, L. ès L., D.E.S. (*Paris*), M.A. (*London*), Agrégé de l'Université de France, Officier d'Académie, F.R.S.C., Professor.

Geoffrey N. O'Grady, B.A. (*Sydney*), Ph.D. (*Indiana*), Associate Professor.

Thomas M. Hess, B.A. (*Colo.*), M.A., Ph.D. (*Wash.*), Assistant Professor.

Thomas E. Hukari, B.A. (*Ore.*), M.A., Ph.D. (*Wash.*), Visiting Assistant Professor.

Joseph F. Kess, B.S. (*Georgetown*), M.A., Ph.D. (*Hawaii*), Assistant Professor.

Henry J. Warkentyne, B.A. (*West Ont.*), M.A., Ph.D. (*London*), Assistant Professor.

NOTE: Unless otherwise stated, the prerequisite for any course in Linguistics is some knowledge of a language other than English, or permission of the Department.

INDIVIDUAL COURSES

Students who wish to take just one or two courses in Linguistics, rather than a full programme, may be interested in the following courses. Linguistics 100 is a course of general interest at the first-year level. Linguistics 360 is a senior Linguistics course of general interest, although it is of special value to students in Classical and Modern Languages. Linguistics 390 is intended for students who have a particular interest in the English Language. Linguistics 340, 361 and 400 should be of interest to students in Anthropology who wish to have some training in the techniques of analysing and recording languages they may meet in the field. Linguistics 100, 250, 420 and 480 should be of interest to students in Classical and Modern Languages. 481 and 482 should be of interest to mathematicians. Linguistics 250 is of special concern to students with an interest in phonetics and speech therapy, 392 for students interested in the distinctive features of Canadian English.

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, Psychology.

Students who begin the study of Linguistics as a Major in their first or second years should take Linguistics 100, Linguistics 250, and then five senior courses in Linguistics in their third and fourth years.

Students who begin the study of Linguistics as a Major in their third or fourth years should take Linguistics 360 or 361 and four other senior courses in Linguistics.

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 a senior Linguistics course in each of the third and fourth years additional to those required for the major, one of which must be Linguistics 499.

SAMPLE PROGRAMMES FOR A MAJOR IN LINGUISTICS

With a concentration of electives
in English

With a concentration of electives
in Mathematics

Year

<p>I. Linguistics 100 English 110 or 120 A language Elective (Philosophy 202 recommended) Elective (A Science course recommended)</p>	<p>Linguistics 100 Mathematics 100 and 101, or 102 and 151 English Philosophy 202 A language</p>
<p>II. Linguistics 250 English 200, 204 or 205 The language begun in the first year Elective (If Linguistics 100 has not been taken, it must be taken here.)</p>	<p>Linguistics 250 Mathematics 200 and 201, or 240 The language of first year Elective (If Linguistics 100 has not been taken, it must be taken here.) Elective</p>
<p>III. Linguistics 390 Linguistics 370 or 380 Linguistics 340 English 400 or a senior English course by permission of the Department. Elective (if no previous Linguistics courses have been taken, Linguistics 360 or 361 will be taken here.)</p>	<p>Linguistics 370 recommended; another senior linguistics course allowed. Linguistics 380 recommended; another senior linguistics course allowed. Mathematics 110 and 210 Mathematics 170 An elective (if no previous courses in linguistics have been taken Linguistics 360 or 361 will be taken here.)</p>
<p>IV. Linguistics 392 or elective Linguistics 430 A senior Linguistics Course English 440 A senior English course</p>	<p>Linguistics 482 Linguistics 340 A course selected in consultation with the Mathematics Department Two senior Linguistics courses</p>

Students in English who wish to have Linguistics as a second area of concentration should take Linguistics 100 and at least three senior Linguistics courses, including Linguistics 390. Students in English who begin the study of Linguistics in their third year may satisfy the requirements for Linguistics as an area of concentration by taking Linguistics 360 or 361 and two other senior Linguistics courses, including Linguistics 390.

Students in Mathematics who wish to have Linguistics as a second area of concentration should take Linguistics 100 and three senior courses in Linguistics, including Linguistics 482. Students in Mathematics who wish to begin the study of Linguistics as an area of concentration in their third year should take Linguistics 360 or 361 and two other senior Linguistics Courses, including Linguistics 481 or 482.

COURSES

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

LING 100. (3) Introduction to Linguistics

The nature of language. Elementary methods of language analysis. The major language families of the world. Principles of historical and comparative linguistics. Illustrations will be taken from various languages, but each section of Linguistics 100 will emphasize certain areas, as follows: Sections A, B (English), C (Romance), D (Germanic), E, F (General).

The final grade will be based on a substantial number of assignments completed in class and outside.

Text: *Introductory Essays in Linguistics.*

J.-P. Vinay, and members of the Department.

(2-0-1; 2-0-1)

LING 250. (3) **Phonology**

This course will deal with the theory of the production and nature of speech sounds in general, and provide practice in recognizing, transcribing, and producing a wide variety of such sounds. Attention will be given to the ways in which the sound systems of particular languages are structured.

This is a laboratory-type course, and the final grade is largely based on work completed there and on outside assignments.

Prerequisite: Linguistics 100 or permission of the Department.

Texts: Smalley, *Manual of Articulatory Phonetics and Workbook*.

Dr. O'Grady.

(3-0; 3-0)

LING 340 (formerly 460). (3) **Morphology and Syntax**

The theory of the descriptive analysis of words (morphology). Grammatical analysis at the sentence level (syntax), based on several contemporary models of grammar.

Prerequisite: Linguistics 100 or equivalent or permission of the Department.

Texts: Jacobs and Rosenbaum, *English Transformational Grammar*; Bach and Harms (Ed.), *Universals in Linguistics Theory*.

Dr. Hukari.

(3-0; 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, most of the material listed in Linguistics 100. Not open to students with Linguistics 100.

Texts: Gleason, *Introduction to Descriptive Linguistics and Workbook*.

Dr. Hukari.

(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. Not open to students who have had Linguistics 100.

The final grade will be based on a fair number of assignments.

Prerequisite: An introductory course in Anthropology.

Texts: Bloomfield, *Language History*, and W. Chafe, *Meaning and Structure of Language*.

Dr. Hess.

(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 psychopathology of language, covering such topics as the nature and function of language, language acquisition, and language change; the pathology of linguistic behaviour, language and cognition. (This course alternates with Linguistics 570.)

Prerequisite: Permission of both Departments.

Texts: To be announced.

Drs. Kess, Hoppe.

(3-0; 3-0)

LING 380. (3) **Experimental Phonetics**

The study of the acoustic and detailed articulatory properties of speech sounds. Introduction to such instruments as the Sound Spectrograph and Electronic Vocal Analog.

This is primarily an experimental laboratory course and the final grade is based on written reports of experiments.

Prerequisite: Ling. 100, Ling. 250 or permission of the Department.

Texts: Lehiste, *Readings in Acoustic Phonetics*; Ladefoged, *Elements of Experimental Phonetics*.

Dr. Warkentyne.

(2-1; 1-2)

LING 390. (English 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. So that Modern English may be seen in its proper perspective, attention will be given to the history of the language, including the development of Canadian English.

This course is divided into 3 sections. Section 1 is for those students who have had previous courses in Linguistics. Sections 2 and 3 are for those students who have had no previous courses in Linguistics.

Text for Section 1: Pyles, *The Origins and Development of the English Language*.

Texts for Sections 2 and 3: Robertson and Cassidy, *The Development of Modern English*; Hungerford, *English Linguistics*.

Drs. Scargill and Kess. (3-0; 3-0)

LING 392. (3) **Canadian English**

A description of the distinctive features of modern Canadian English, especially in vocabulary and pronunciation, and an explanation of the reasons for those features. Some attention will be given to regional varieties of Canadian English.

Prerequisite: Permission of the instructor.

Texts: To be announced.

Dr. Scargill. (3-0; 3-0)

LING 400. (3) **Field Methods and Techniques in Language Analysis**

Field methods and techniques in language analysis, using informants or recordings or both. The Department is particularly interested in American Indian and Eskimo languages.

Prerequisites: Linguistics 250 and 340.

The final grade is based on class participation and papers.

Text: W. J. Samarin, *Field Linguistics*.

(Not offered in 1972-73.) (3-0; 3-0)

LING 420. (3) **Historical and Comparative Linguistics**

The historical and comparative method in the study of Indo-European languages. In the second term, the linguistic structure of Sanskrit will be introduced as a prime example of an Indo-European language. Reading of selected texts.

Prerequisite: Linguistics 100 or 360 or equivalent.

Dr. Hess.

LING 430. (3) **Dialectology**

The study of regional and social dialects with emphasis on Canada. Principles of lexicography.

Four or five substantial assignments are the basis of the final grade.

Prerequisites: Linguistics 100 or 360 or permission of the Department.

Texts: *Readings in American Dialectology* by Allen & Underwood; Hulbert, *Dictionaries: British and American*.

(Not offered in 1972-73.) (3-0; 3-0)

LING 448. (1 ½) **Directed Reading in Linguistics**

Members of the Department. September-December only. (3-0; 0-0)

LING 449. (1 ½) **Directed Reading in Linguistics**

Members of the Department. January-April only. (0-0; 3-0)

LING 450 (formerly 350). (1 ½) **Seminar in Languages**

An elementary analysis of a language. First term: Finnish.

Prerequisites: Linguistics 100 and 250.

Texts: To be announced.

Dr. Hukari. September-December only. (3-0; 0-0)

- LING 451 (formerly 350). (1 ½) **Seminar in Languages**
 An elementary analysis of a language. Second term: Japanese.
 Prerequisites: Linguistics 100 and 250.
 Dr. Warkentyne. January-April only. (0-0; 3-0)
- LING 480. (1 ½) **Contrastive Linguistics**
 The comparison of the phonological and syntactic structure of two or more languages to show similarities and differences.
 Prerequisites: Permission of the Departments.
 Texts: To be announced.
 Dr. Hess. September-December only. (3-0; 0-0)
- LING 481. (1 ½) **Introduction to Computer Linguistics**
 Principles of computer analysis and synthesis of language data. The design and use of automatic dictionaries. Exercises in mechanical translation.
 For students with a strong mathematical background or inclination.
 (Offered in alternate years.)
 Prerequisite: Permission of the instructor and Mathematics 170 or equivalent.
 (Not offered in 1972-73.) January-April only. (0-0; 3-0)
- LING 482. (1 ½) **Mathematical Linguistics**
 Introduction to the formulation of algebraic models of language. The relationship of algebraic models to automata theory.
 Prerequisite: Permission of the instructor and Mathematics 151 or equivalent.
January-April only. (0-0; 3-0)
- LING 499. (3) **Honours Essay**
 An essay required of honours students in the fourth year.

GRADUATE COURSES

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

- LING 501. (1 ½-3) **Seminar in Canadian English**
- LING 502. (1 ½) **Seminar in Linguistic Theories**
 An introduction to the principles and methodological techniques of linguistic theories of language analysis other than the generative-transformational approach.
(3-0; 3-0)
- LING 503. (1 ½) **Seminar in Grammatical Theory**
 Recent developments in semantic/syntactic theory. (3-0; 3-0)
- LING 504. (3) **Seminar in Machine Translation** (3-0; 3-0)
- LING 505. (1 ½) **Seminar in Phonological Theory**
 Recent developments in phonological analysis; particular emphasis will be placed on phonological universals. (3-0-0)
- LING 506. (1 ½) **Seminar in Lexicography**
 An introduction to the theory of lexicography and to the practice of dictionary-making, monolingual, bilingual, and automatic. (3-0-0)
- LING 513. (1 ½) **Problems in Grammatical Analysis**
 Special studies selected on an individual basis to allow a student to pursue a particular topic in grammatical analysis. (3-0-0)

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. (3-0-0)

LING 517. (1½-3) **Experimental Phonetics Laboratory**

Special topics in the synthesis and analysis of speech. Sound spectrograph, electronic vocal analogue, and other sound equipment will be used for experiment. (0-2-1)

LING 520. (1½) **North American Indian Languages**

A survey of the language families of North America and a detailed grammatical examination of several languages chosen from different families. (3-0-0)

LING 521. (1½) **Austronesian Linguistics**

A survey of the languages of the Austronesian language family, taking into account their genetic and typological relationships. Detailed attention will be given to a description of at least one member language of the family. (3-0-0)

LING 522. (1½) **Far Eastern Linguistics**

A survey of the Japanese, Chinese, and Korean languages. One of these languages will receive a detailed description. (3-0-0)

LING 523. (1½) **Australian Linguistics**

An outline of the history of research on the Australian aboriginal languages, with emphasis on comparative Pama-Nyungan. (3-0-0)

LING 524. (1½) **Romance Linguistics**

Recent developments in comparative Romance linguistics; particular emphasis will be placed on contrastive features. (3-0-0)

LING 570. (1½) **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 the pathology of linguistic behaviour. Alternates with Ling. 370.

Prerequisites: Permission of both departments. (3-0-0)

LING 580. (1½-3) **Linguistics Seminar**

The contents of this course will vary.

May be repeated for credit. (3-0-0)

LING 599. (Credit to be determined) **Thesis**

DEPARTMENT OF MATHEMATICS

- O. Phoebe Noble, B.A. (*Brit. Col.*), Associate Professor, Acting Head of Department.
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*), Visiting Professor.
Alan B. Tayler, M.A., D.Phil. (*Oxford*), Visiting Professor.
Ian Barrodale, B.Sc. (*Wales*), M.A. (*Brit. Col.*), Ph.D. (*Liverpool*), Associate Professor.
Ernest J. Cockayne, M.A. (*Oxon.*), M.Sc. (*McGill*), Ph.D. (*Brit. Col.*), Associate Professor.
Roger R. Davidson, B.Sc. (*Queen's*), Ph.D. (*Florida*), Associate Professor. (On leave 1972-73).
Fernand E. Deloume, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*U.S.C.*), 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.
Albert E. Hurd, B.A., M.A. (*Tor.*), Ph.D. (*Stanford*), Associate Professor.
D. Elizabeth Kennedy, B.A., M.A. (*Brit. Col.*), Associate Professor.
Walter P. Kotorynski, B.A. (*West. Ont.*), M.A., Ph.D. (*Tor.*), Associate Professor.
Robert A. MacLeod, B.Sc. (*Alta.*), M.S. (*Cal. Tech.*), Ph.D. (*Alta.*), Associate Professor.
Hari M. Srivastava, B.Sc., M.Sc. (*Allahabad*), Ph.D. (*Jodhpur*), F.R.A.S. (*London*), F.N.A.Sc. (*India*), Associate Professor.
Arne P. Baartz, M.A., Ph.D. (*Ore.*), Assistant Professor.
Leon Bowden, B.Sc. (*London*), B.Litt. (*Oxon.*), Ph.D. (*London*), Assistant Professor.
Stanley R. Clark, B.A.Sc. (*Brit. Col.*), M.Sc. (*Aberdeen*), Ph.D. (*Manchester*), Assistant Professor.
Byron L. Ehle, A.B. (*Whitman*), M.S. (*Stanford*), Ph.D. (*Waterloo*), Assistant Professor.
Denton E. Hewgill, B.Sc., Ph.D. (*Brit. Col.*), Assistant Professor.
Bruce R. Johnson, B.S., M.A. (*Ore. St.*), Ph.D. (*Ore.*), Assistant Professor.
Zdislav, V. Kovarik, M.A. (*Prague*), Visiting Assistant Professor.
David J. Leeming, B.Sc. (*Brit. Col.-Vic. Coll.*), M.A. (*Ore.*), Ph.D. (*Alta.*), Assistant Professor.
Marion-Josephine Lim, M.Sc. (*N.Z.*), Ph.D. (*Brit. Col.*), Visiting Assistant Professor.
C. Robert Miers, B.A. (*Knox Coll.*), M.A., Ph.D. (*Calif., Los Angeles*), Assistant Professor.
Donald J. Miller, B.Sc., Ph.D. (*McMaster*), Assistant Professor.
Gary G. Miller, M.Sc., Ph.D. (*Missouri*), Assistant Professor.
Charles E. Murley, B.A. (*Colorado*), M.S., Ph.D. (*Wash.*), Assistant Professor.
Douglas D. Olesky, B.Sc., M.Sc. (*Alta.*), Ph.D. (*Tor.*), Assistant Professor.
William E. Pfaffenberger, M.A., Ph.D. (*Ore.*), Assistant Professor.
James Riddell, M.Sc., Ph.D. (*Alta.*), Assistant Professor.
Frank D. K. Roberts, M.A. (*Cantab.*), M.Sc., Ph.D. (*Liverpool*), Assistant Professor.
Earl D. Rogak, B.Ch.E. (*Cooper Union*), M.S.E., Ph.D. (*Mich.*), Assistant Professor.
H. Paul Smith, B.A., M.Ed. (*Brit. Col.*), M.A. (*Wash.*), Assistant Professor.
Pauline van den Driessche, B.Sc., M.Sc. (*Imp. Coll.*), D.I.C., Ph.D. (*Wales*), Assistant Professor.

Regina W. Butler, B.A. (*New York*), M.A. (*Calif.*), Ph.C. (*Wash.*), Visiting Lecturer.
 Flora Baartz, B.Sc., M.Sc. (*Ore.*), Part-time Lecturer.
 George M. Lancaster, B.Sc. (*Liverpool*), Ph.D. (*Sask.*), Part-time Lecturer.
 Clarence W. Montgomery, B.A. (*Queen's*), M.A. (*Brit. Col.*), Part-time Lecturer.
 Donald H. Potts, B.Sc., Ph.D. (*Calif. Inst. of Tech.*), Part-time Lecturer.
 Jean Sargent, M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Part-time Lecturer.

GENERAL, MAJOR AND HONOURS 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

- (a) Mathematics 100 and 101 (or 130)
- (b) Mathematics 110 and 210 (or 232)
- (c) Mathematics 200 and 201 (or 230)
- (d) 9 additional units of Mathematics courses numbered 300 or higher.

Major

- (a) Mathematics 100 and 101 (or 130)
- (b) Mathematics 110 and 210 (or 232)
- (c) Mathematics 200 and 201 (or 230)
- (d) Mathematics 330 and 332.
- (e) 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

- (a) Mathematics 100 and 101 (or 130)
- (b) Mathematics 110 and 210 (or 232)
- (c) Mathematics 170 and 171
- (d) Mathematics 200 and 201 (or 230)
- (e) Mathematics 271 and 272
- (f) Mathematics 330 and 332
- (g) Mathematics 349
- (h) 6 units chosen from Mathematics 370, 371, 373, 471, 472, 473, 474, 448, 449, of which at least 3 units are numbered 400 or higher.

Honours

Students will be permitted to enrol in the Honours Programme only if they have the consent of the Department. In general, this will require a second class average or higher in at least 15 units of courses in their second year and a grade of B or higher in each of their first and second year Mathematics courses.

- (a) Mathematics 100 and 101 (or 130)
- (b) Mathematics 110 and 210 (or 232)
- (c) Mathematics 200 and 201 (or 230)
- (d) Mathematics 325, 333, 334, 336, 338
- (e) Completion of one of the following emphases:
 - (i) Pure Mathematics
 - (a) 15 units from 309, 315, 326, 339, 367, 433, 435, 441, 465 of which at least 9 units are numbered 400 or higher.
 - (ii) Applied Mathematics
 - (a) Mathematics 326, 445
 - (b) 10½ additional units of Mathematics chosen in consultation with the Department.

- (iii) Probability and Statistics
 - (a) Mathematics 170, 171, 253, 349, 435
 - (b) 9 additional units of statistics numbered 300 or higher of which at least 3 units are numbered 400 or higher.
- (iv) Computing Science
 - (a) Mathematics 170, 171, 271, 272, 349, 449
 - (b) 6 additional units from 370, 371, 373, 471, 472, 473, 474, 448 of which at least 3 units are numbered 400 or higher
 - (c) 3 additional units of Mathematics chosen in consultation with the Department.
- (v) Department approved option
 - (a) Fifteen units of Mathematics 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 130, 170, 171, 230, 232, 253, 271 and 272 in the first two years a student would maintain most options until the third year.

An honours programme in Physics and Applied Mathematics is being considered. Interested students should consult the Departments of Mathematics and Physics.

NOTES

- (1) All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.
- (2) Any student who demonstrates to the Department that he has mastered the material of a course may be granted advanced placement.
- (3) 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.

COURSES

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

MATH 012. (no credit) **Pre-Calculus Mathematics** (1½ fee units)

The essentials of Mathematics 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 only. (3-0; 0-0)

MATH 100. (1½) **Calculus I**

The derivative; differentiation of polynomials, rational, trigonometric, logarithmic and exponential functions; the definite integral; application of differentiation and integration.

Prerequisite: Mathematics 12 or its equivalent.

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

MATH 101. (1½) **Calculus II**

Techniques of integration, applications of integration, Taylor's formula; infinite series.

Prerequisite: Mathematics 100 or its equivalent.

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

MATH 102 (formerly one-half of 140). (1½) **Calculus for Social Science Students**

Calculus of one variable with applications to the social and biological sciences.

Prerequisite: Mathematics 12 or its equivalent.

Not open to students who have credit in Mathematics 100.

January-April only. (0-0; 3-0)

MATH 110. (1½) Algebra and Geometry

Complex numbers, linear equations, determinants and solid geometry.

Prerequisite: Mathematics 12 or its equivalent.

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

MATH 130. (3) Calculus I and II

Same as Mathematics 100 (first term) and Mathematics 101 (second term).

Prerequisite: Mathematics 12 or its equivalent. (3-0; 3-0)

MATH 151 (formerly one-half of 140). (1½) Finite Mathematics for Social Science Students

Sets, logic, combinations, introduction to probability, matrix algebra.

Prerequisite: Mathematics 12 or its equivalent or Mathematics 012 which may be taken concurrently.

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

MATH 160. (3) Fundamental aspects of Mathematics for the Elementary Teacher

For credit only in the Faculty of Education. A student who has obtained credit for any university mathematics course will normally not be permitted to register for credit in Mathematics 160. (3-0; 3-0)

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 programmes for the IBM 370/145.

Prerequisite: Mathematics 12 or its equivalent.

Students intending to take a major or honours in Mathematics with a computing science option should take Mathematics 170 in the first term.

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

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: Mathematics 170. January-April only. (0-0; 2-2)

MATH 180 (formerly 150). (3) General Mathematics

An intuitive introduction to calculus, elementary matrix algebra and probability.

Prerequisite: Mathematics 11 or Mathematics 91 or equivalent.

Not open to students who have completed Mathematics 12. (3-0; 3-0)

MATH 200. (1½) Calculus III

Differentiation of vectors, functions of several variables, chain rule and gradient, potential functions and curve integrals, higher order partial derivatives and applications, introduction to differential equations.

Prerequisite: A grade of C or higher in Mathematics 101 (or 130) and Mathematics 110 (which may be taken concurrently).

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

MATH 201. (1½) Calculus IV

Functions of several variables, multiple integrals, Green's theorem, Fourier series. Introduction to analysis including proofs of some theorems assumed in earlier work.

Prerequisite: Mathematics 110, 200 and Mathematics 210 which may be taken concurrently. January-April only. (0-0; 3-0)

MATH 210. (1½) Linear Algebra I

An introduction to the algebra of matrices and linear transformations.

Prerequisite: Mathematics 110.

NOTE: This course is open to first year students who have taken Mathematics 110 in the first term.

September-December. Also 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 101 (or 130).

Corequisite: Mathematics 232.

(3-0; 3-0)

MATH 231. (3) Second Year Calculus

Calculus of functions of several variables including gradient, directional derivative and divergence. Maxima and minima including problems with one constraint. Simple theory of envelopes. Multiple integrals using rectangular, cylindrical and spherical geometry. Application of multiple integrals to problems in the physical sciences. Introduction to differential equations of first order and differential equations of first and second order with constant coefficients with applications to problems in physics. Fourier series and basic theory of functions of a complex variable.

NOTE: This course may not in general be included as part of the Mathematics department's requirement for the Major or Honours programme.

Prerequisite: Mathematics 101 (or 130).

(3-0; 3-0)

MATH 232. (3) Introductory Linear Algebra

Same as Mathematics 110 (first term) and Mathematics 210 (second term).

(3-0; 3-0)

MATH 240. (3) Mathematics for Social Science Students I I

Linear algebra, probability, multi-variable calculus, difference and differential equations.

Prerequisite: Mathematics 140; or Mathematics 151 and Mathematics 100; or Mathematics 151 and Mathematics 102.

NOTE: Students who have obtained credit for Mathematics 100 and 101 (or 130) may enrol for Mathematics 240 provided they enrol for Mathematics 151 concurrently.

(3-0; 3-0)

MATH 253. (1) 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 FORTRAN programming is desirable but not necessary. Credit cannot be obtained for both 253 and 343.

Prerequisite: Mathematics 130 or Mathematics 151 and 102.

(3-0; 3-0)

MATH 271. (1½) Computer Fundamentals

This is the final course of the introductory sequence in Computing Science (170, 171, 271). Here, the student is exposed to the other major levels of programming activity, i.e. machine and assembly language programming, in the controlled environment of a hypothetical decimal computer. This hypothetical computer (UVIC-70) is simulated on the IBM 370/145.

A variety of other topics are covered, including assembler and compiler construction, hardware design, analog computers, and software. In addition other programming languages are studied.

Prerequisite: A grade of C or higher in Mathematics 171.

September-December only. (3-1; 0-0)

MATH 272. (1½) Computers and 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 370/145 computer as the example machine, however other systems are also discussed. Students are taught to program in assembler language using a subset of the IBM System/360 assembler language.

Prerequisite: Mathematics 271. January-April only. (0-0; 3-1)

Students with a D grade in Second Year Mathematics courses are advised not to register for further courses in Mathematics.

MATH 303. (3) Applied Analysis

Topics from advanced calculus with applications to the physical sciences.

Prerequisites: Mathematics 231 or Mathematics 230 and 232.

NOTE: This course may not in general be included as part of the Mathematics Department's requirements for the major or honours degrees. (3-0; 3-0)

MATH 309. (1½) Introduction to Manifolds

Functions on E_n , differentiation, integration, integration on chains, integration on manifolds, selected topics. Not open to students who have credit for Mathematics 331.

Prerequisites: Mathematics 230 and 232.

January-April only. (0-0; 3-0)

MATH 315 (formerly 211). (1½) Linear Algebra II

Further topics in linear algebra including canonical forms and inner product spaces. Primarily for Honours students.

Prerequisites: B or higher in each of Mathematics 201 and 210 (or 230 and 232) and the consent of the Department. September-December only. (3-0; 0-0)

MATH 323. (3) Differential equations and their Applications to the Physical Sciences

Special methods for first order differential equations, linear differential equations of first and higher orders with constant coefficients. Selected second order differential equations with variable coefficients with special attention to Bessel's and Legendre's equations. Systems of linear differential equations, Laplace Transforms, 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.

Prerequisites: Mathematics 231 or Mathematics 230 and 232.

NOTE: This course may not in general be included as part of the Mathematics Department's requirements for the general, major or honours degrees. (3-0; 3-0)

MATH 325. (1½) Ordinary Differential Equations

Theory of ordinary differential equations. Existence, uniqueness theorems. Cauchy-Peano and Picard theorems. Theory of linear systems and related boundary problems.

Primarily for Honours students.

Prerequisites: B or higher in each of Mathematics 201 and 210 (or 230 and 232) and the consent of the Department.

September-December only. (3-0; 0-0)

MATH 326. (1½) Partial Differential Equations

Derivation of the fundamental equations of mathematical physics; classification of second order equations; equations of hyperbolic, parabolic, and elliptic types; potential theory.

Primarily for honours students.

Prerequisite: Mathematics 325.

January-April only. (0-0; 3-0)

MATH 330. (3) Advanced Calculus

Convergence and uniform convergence in \mathbb{R}^n with applications to series and Fourier series. Basic geometry of curves. Green's, Stokes', and the divergence theorems for vector fields. Introduction to complex analysis, including integration and residue theory.

Prerequisites: Mathematics 230 and 232 (or 201 and 210) or high standing in Mathematics 231. (3-0; 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). (3-0; 3-0)

MATH 333. (3) Algebra I

Algebraic Structures.

Primarily for Honours students.

Prerequisites: B or higher in each of Mathematics 201 and 210 (or 230 and 232) and the consent of the Department. (3-0; 3-0)

MATH 334. (1½) Foundations of Analysis

Sets and functions, the real number system, set equivalence, sequences and series, introduction to point set and metric topology, limits and continuity in metric spaces.

Primarily for honours students. Not open to students who have credit for 335.

Prerequisite: Mathematics 230 and 232. September-December only. (3-0; 0-0)

MATH 336. (1½) Real Analysis I

Lebesgue measure and integration, differentiation, Fourier series, Riemann and Stieltjes integration.

Primarily for Honours students. Not open to students who have credit for 335.

Prerequisite: Mathematics 334. January-April only. (0-0; 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 only. (0-0; 3-0)

MATH 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.

Prerequisites: Mathematics 332 or B— or higher in Mathematics 210 (or 232). (3-0; 3-0)

MATH 340. (3) Probability

Introduction to probability theory and its applications. Historical development of the definition of probability. Basic properties of probability as a function defined on sets. Conditional probability. Random variables and probability distributions. Mathematical expectation. Sums of random variables. Basic limit theorems. Special topics include Markov chains, Poisson processes and reliability theory.

Prerequisites: Mathematics 201 and 210 (or 230 and 232). (3-0; 3-0)

MATH 343. (3) Statistical Methods

Elementary probability theory, distribution functions, sample spaces, and the formulation of statistical hypotheses. Elementary statistical limit theorems. Brief discussion of typical problems of statistical inference: point estimation, confidence intervals, stratified sampling, regression and correlation analysis, distribution-free methods. Primarily for the non-major who has a working knowledge of calculus, and for the major who intends to take no further work in statistics.

Credit cannot be obtained for both 253 and 343.

Prerequisites: Mathematics 201 or 230 or 240. (3-0; 3-0)

MATH 345. (3) Differential Equations

First order differential equations; second and higher order linear differential equations including the use of the Laplace transform; systems of linear differential equations, the method of successive approximations; series solutions including Legendre polynomials and Bessel functions; Fourier series; partial differential equations.

Prerequisites: Mathematics 201 (or 230) and Mathematics 210 (or 232) and Mathematics 330, which may be taken concurrently. (3-0; 3-0)

MATH 349. (3) Numerical Analysis I

This two-semester course provides an introduction to most of the topics in numerical analysis. The areas covered are error analysis, roots of equations, linear systems of equations, linear programming, matrix algebra, eigenvalue problems, interpolation and extrapolation, numerical integration and differentiation, Monte Carlo methods, numerical solution of ordinary and partial differential equations, approximations to functions and data, function minimization. Brief references are also made to difference equations, boundary value problems, integral equations, nonlinear systems of equations, and nonlinear programming. The laboratory period is used to discuss problems arising from the weekly assignments.

Prerequisites: Mathematics 171 and Mathematics 201 (or 230). (3-1; 3-1)

MATH 362. (1 1/2) 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 339.

Prerequisite: Mathematics 230 or 240 or equivalent.

September-December only. (3-0; 0-0)

MATH 366. (1 1/2) Geometry

Topics chosen from Euclidean, projective, differential and non-Euclidean geometries.

Students proposing to teach Mathematics in secondary school are urged to take this course. Not open to students who have credit for 337.

Prerequisites: Mathematics 201 and 210 (or 230 and 232).

January-April only. (0-0; 3-0)

MATH 367. (1 1/2) Introduction to Differential Geometry

Theory of curves, surfaces, first fundamental form, tensor calculus, gaussian and mean curvature, geodesic curvature, mappings.

Prerequisites: Mathematics 230 and 232.

September-December only. (3-0; 0-0)

MATH 370. (1 1/2) 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 programmes and their run-time representation during evaluation is considered, but the actual writing of compilers is taught in Mathematics 471. The concepts discussed are illustrated by programming assignments in PL/1, which is used as the example language.

Prerequisites: Mathematics 201 and 272.

September-December only. (3-0; 0-0)

MATH 371. (1 1/2) Systems Programming

This course considers in some detail the various problems which must be solved if a computer is to function efficiently and still provide the services required by its various users. The specific hardware features and software programmes which are needed under various operational conditions (batch processing, multiprogramming, time sharing, etc.) are considered. Several projects involving the programming and testing of software components are included in the course.

Prerequisite: Mathematics 370.

January-April only. (0-0; 3-0)

MATH 373. (1 ½) 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: Mathematics 370.

January-April only. (0-0; 3-0)

MATH 410. (1 ½) Algebra for Scientists I

Eigenvalues and eigenvectors; diagonalization, theorems; quadratic forms and bilinear forms.

NOTE: This course is intended primarily for fourth year and graduate students in Physics and Chemistry.

Prerequisites: Mathematics 210, Mathematics 323 or 345 and Physics 321 (which may be taken concurrently).
September-December only. (3-0; 0-0)

MATH 412. (1 ½) Algebra for Scientists II

Symmetry groups and their representations with applications.

Prerequisites: Mathematics 410 or permission of the Instructor.

January-April only. (0-0; 3-0)

Note: Admission to the following courses is by permission of the Instructor or of the Department.

MATH 430. (1 ½) 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 the calculus. (Not open to students who have credit for Mathematics 335.)

Primarily for students in Secondary Education or those taking a major in Mathematics.

Prerequisites: Mathematics 330 or 332 or honours equivalent or consent of the Department.
September-December only. (3-0; 0-0)

MATH 431. (1 ½) Topics in Complex Analysis

A continuation of the complex analysis begun in Mathematics 330. (Not open to students with credit for 441).

Primarily for students taking a major in mathematics.

Prerequisite: Mathematics 330 or honours equivalent.

January-April only. (0-0; 3-0)

MATH 433. (3) Algebra II

Further topics in Algebra. Primarily for Honours students.

Prerequisite: Mathematics 333.

(3-0; 3-0)

MATH 435. (3) Real Analysis II

Category and convergence; Lebesgue measure and integration; introduction to normed linear spaces. Primarily for Honours students.

Prerequisites: Mathematics 334 and 336 or the consent of the Department.

(3-0; 3-0)

MATH 441. (3) Complex Analysis

A study of functions of a complex variable, including integration and differentiation. Sets of points in the complex plane; analytic and elementary functions; complex integrals; power series; calculus of residues; analytic continuation; conformal representation. Credit cannot be obtained for both 338 and 441.

Prerequisites: Mathematics 330 or 331.

(3-0; 3-0)

MATH 443. (3) Mathematical Statistics

Development of probability and distribution theory. A discussion of statistical limit theorems. A study of problems in statistical inference with emphasis on the general decision problem, the properties of estimators, and the theory of tests of hypotheses. The development and application of parametric and distribution-free procedures.

Prerequisites: Mathematics 330 and 332 (or honours equivalent) or the consent of the Department. (3-0; 3-0)

MATH 445. (3) Modern Methods in Differential Equations

Introduction to the theory of partial differential equations and applications to physical and chemical phenomena. Topics will be selected from: introduction to Hilbert space theory and its application to spectral problems for differential equations, direct methods in the calculus of variations and applications to approximate solution of boundary value problems, theory of distributions, optimal control.

Prerequisite: Mathematics 325 or 345 or the consent of the Department. (3-0; 3-0)

MATH 448 (formerly 481). (3) Introductions to Operations Research

This two-semester course introduces the student to many of the techniques used in operations research. Both the mathematical theory and the practical application of these methods are discussed. Topics covered are: linear programming, the simplex method, applications of linear programming, duality theory, the revised simplex method, transportation and personnel-assignment algorithm, game theory, network analysis, PERT and critical path, dynamic programming, queueing theory, sampling, simulation and Monte Carlo, inventory theory, nonlinear programming.

Prerequisite: Mathematics 349. (3-0; 3-0)

MATH 449. (3) Numerical Analysis II

This course, which is primarily for Honours students, consists of a thorough discussion of two topics (one topic per semester) selected from: numerical linear algebra, approximation theory, optimization techniques, and the numerical solution of differential equations.

Prerequisite: Mathematics 349 and 336 (which may be taken concurrently). (3-0; 3-0)

MATH 465 (formerly 411). (3) Introduction to Topology

Basic concepts of point set topology; a choice of topics from elementary algebraic topology and general topology.

Prerequisites: Mathematics 330 (which may be taken concurrently) or 336 (which may be taken concurrently) and the consent of the Department. (3-0; 3-0)

MATH 471. (1 1/2) 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.

Prerequisites: Mathematics 370. September-December only. (3-0; 0-0)

MATH 472. (1 1/2) Theory of Computability

This course provides an introduction to the theory of machines. It is only offered when a sufficient number of students are interested in registering for the course.

Prerequisite: Mathematics 171 and Mathematics 332. January-April only. (0-0; 3-0)

MATH 473 (formerly 470). (1 1/2) 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 will comprise one or more of the following

topics: graph theory, combinatorics, artificial intelligence, switching theory, automata theory, and information retrieval.

Prerequisite: Mathematics 171 and 332 (which may be taken concurrently). Credit cannot be obtained for both 473 and 470. September-December only. (3-0; 0-0)

MATH 474 (formerly 470). (1½) **Topics in Computing Science I 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 and information retrieval.

Prerequisite: Mathematics 171 and 332 (which may be taken concurrently). Credit cannot be obtained for 474 and 470. January-April only. (0-0; 3-0)

MATH 480. (3) **Seminar in Mathematics**

Students must consult the Department before registering.

MATH 490 (formerly 470). (3) **Directed Studies in Mathematics**

Students must consult the Department before registering.

GRADUATE COURSES

Certain of the following courses will be offered each year. Interested students should consult the department.

MATH 510. (4) **Abstract Algebra**

MATH 511. (1-4) **Topics in Matrix Theory and Linear Algebra**

MATH 520. (4) **Number Theory**

MATH 530. (4) **Analysis**

MATH 531. (4) **Functional Analysis**

MATH 540. (4) **Topology**

MATH 550. (1-4) **Topics in Applied Mathematics**

MATH 551. (4) **Differential and integral equations**

MATH 554. (4) **Time Series Analysis**

MATH 555. (1-4) **Topics in Probability and Statistics**

MATH 560. (4) **Probability and Stochastic processes**

MATH 561. (4) **Decision theory and statistical inference**

MATH 562. (4) **Distribution-free and rank-order statistics**

MATH 563. (4) **Analysis of Variance**

MATH 570. (1-4) **Topics In numerical analysis**

MATH 571. (1-4) **Topics in Computing Science**

MATH 572. (1-4) **Topics In Optimization**

MATH 573. (4) **Advanced Computer Systems**

MATH 574. (4) **Non-Numerical Computing**

MATH 575. (4) **Models of Computation**

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.

MATH 581. (1-4) **Directed Studies**

MATH 585. (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.

PACIFIC STUDIES PROGRAMME

Programme Chairman, 1972-73: Bryan H. Farrell, B.A. (*Cantab.*), M.A. (*Wash.*), Ph.D. (*Auckland*), 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 Chairman, Pacific Studies Committee, as soon as possible after entering the University, so guidance may be given to help in course selection during the first and second years.

Specific requirements are as follows: 9 units consisting of Pacific Studies 300, 400, and 401, and no fewer than 12 other units selected from courses listed below of which no more than six units may be chosen from the 100 and 200 levels. As the programme will be associated with a major in an established discipline, courses credited towards the major but listed below may be used to fulfill the programme requirements as well. All students are strongly recommended to register in an appropriate language.

Course list: Anthropology 320, 326, 328, 329, 345, 346; Economics 323, 350, 405; English 439; Geography 360, 462, 463, 464, 465, 466, 467; History 252, 374, 402, 409, 413, 414, 416; Linguistics 400, 450, 451; Philosophy 332; Political Science 312, 315, 317; Chinese 100, 200; French 160, 180, 240; Japanese 100, 200; Portuguese 100, 200; Russian 100, 200; Spanish 100, 240.

Further information may be obtained by consulting the Chairman, Room 138, Cornett Building or the following committee members:

Louis A. Hobson, B.S. (*Humboldt St. Coll.*), M.S., Ph.D. (*Wash.*), Assistant Professor, Biology, R. 0032 Cunningham Building

Hsin-I Hsiao, B.A. (*Tunghai*), Lecturer, Slavonic & Oriental Studies, R. 158 Sedgewick Building

William M. Leary, Jr., B.A. (*Wayne St.*), M.A., Ph.D. (*Princeton*), Associate Professor, History, R. 382 Cornett Building

Richard Shutler, Jr., A.B., M.A. (*Calif., Berkeley*), Ph.D. (*Arizona*), Associate Professor, Anthropology & Sociology, R. 217 Cornett Building

Henry J. Warkentyne, B.A. (*West. Ont.*), M.A., Ph.D. (*London*), Assistant Professor, Linguistics, R. 348 Clearihue Building.

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; genetic 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; economic dominance in the Pacific. An underlying theme will be Canada's role and her relationship to Pacific problems and development.

Prerequisite: Permission of Pacific Studies Committee. (3-0; 3-0)

PACI 400. (3) **Seminar in Pacific Studies**

The seminar will be concerned with a discussion of major contemporary issues together with a detailed analysis of problems in two out of the following four areas; East Asia; Southeast Asia; Australia and New Zealand; and the Pacific Islands.

Attention will be paid throughout the course to Canadian relationships with the Pacific area.

Prerequisite: Pacific Studies 300 and permission of Pacific Studies Committee.

(Not offered in 1972-73.)

(0-0-3; 0-0-3)

PACI 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.

Prerequisites: Pacific Studies 300 and permission of Pacific Studies Committee.

(Not offered in 1972-73.)

DEPARTMENT OF PHILOSOPHY

- Kenneth W. Rankin, M.A., Ph.D. (*Edin.*), Professor and Chairman of the Department.
Howard J. N. Horsburgh, M.A. (*Glasgow*), B.Litt. (*Oxon.*), Professor.
Charles B. Daniels, A.B. (*Chicago*), D.Phil. (*Oxon.*), Associate Professor.
John H. Woods, B.A., M.A. (*Tor.*), Ph.D. (*Mich.*), Associate Professor.
Alan R. Drengson, B.A., M.A. (*Wash.*), Ph.D. (*Ore.*), Assistant Professor.
Eike-Henner Kluge, B.A. (*Calgary*), A.M., Ph.D. (*Mich.*), Assistant Professor.
John M. Michelsen, B.A., M.A., Ph.D. (*Wash.*), Assistant Professor.
D. Hector Monro, M.A. (*N.Z.*), Commonwealth Research Fellow (Foundation Professor of Philosophy at Monash University, Australia).

GENERAL, MAJOR AND HONOURS PROGRAMMES

General—Nine units in courses in Philosophy numbered 300 or above with all prerequisites for such courses satisfied.

Major—Philosophy 100, 202, 300, 302, 306 or 308, three additional units in courses numbered 300 or higher, and three additional units in courses 400 or higher. (21 units).

Honours—Philosophy 100, 202, 300, 302, 306, 308, 400, 499, three additional units in courses numbered 300 or higher, and six additional units in courses numbered 400 or higher. (30 units).

Honours candidates must maintain at least a B average in their courses in Philosophy.

COURSES

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

NOTE: Courses in the 100 and 200 series are recommended for the general student as well as for students intending to major in Philosophy. Each of these courses may be taken by any registered student: e.g. *courses in the 200 series may be taken in the first as well as in any later year.* Other courses in philosophy may be taken by satisfying the listed prerequisites *or* with the 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 prior to registration.

PHIL 100. (3) Introduction to Philosophy

An investigation into such fundamental questions as "Am I free?", "Is there right and wrong?", "Does what I do matter?", "Is it reasonable for me to believe in God?", "Can any society be just?", "What, if anything, can I know?", and "Should I pursue happiness?". A major purpose of the course is to help students to reflect more effectively on their experience.

NOTE: This is a multi-sectioned course. Problems and approaches differ from section to section. One section, for instance, will provide an historical survey of thought throughout certain philosophically active periods. But in most sections a broad range of problems will be discussed in some detail with not much emphasis upon historical origin. Students who look for orientation towards philosophy in general are advised to enrol in one of the latter.

(3-0; 3-0)

PHIL 202. (3) **Logic I**

A development of the logical techniques for handling arguments drawn from everyday discourse and an investigation of key concepts involved by these techniques, e.g. argument, implication, validity, fallacy, meaning, truth, existence, quantity, relation, possibility and necessity. (3-0; 3-0)

PHIL 211. (3) **Existentialism**

A selective study of the works of such leading existentialist thinkers as Kierkegaard, Jaspers, Heidegger, Sartre, Marcel, and Buber. (3-0; 3-0)

PHIL 212. (3) **Philosophy of Religion**

A study of the following: the main arguments for the existence of God; the nature and varieties of religious experience; the main strands in different religious traditions; the nature of religious language; the problem of evil; and arguments for and against immortality. (3-0; 3-0)

PHIL 221. (1½) **Philosophy of Natural Science**

An introductory survey of the subject matter, objectives, methods, and presuppositions of natural science. Discussion of how scientific knowledge is arrived at, how it is supported, and how it changes. September-December only. (3-0; 0-0)

PHIL 223. (1½) **Philosophy of the Social Sciences**

Problems raised by the enterprise of a science of man. Topics to be considered are: the notion of human action, values and social science, objectivity and ideology, social facts, social law and their reduction, theory construction, models, and measurement.

January-April only. (0-0; 3-0)

PHIL 232. (1½) **Social Ethics**

An examination of the individual in relation to society with particular emphasis upon his rights and obligations. Attention will be given to the diverse ideals of aristocracy, fascism, liberalism, socialism and democracy. Questions for consideration: What sort of social order is just? What sort of social action is right?

September-December only. (3-0; 0-0)

PHIL 233. (1½) **The Philosophy of Education**

A philosophical analysis of educational concepts, especially those figuring in discussions of educational tasks and in the advocacy of educational policies. Attention will be given to questions of value after they have been sorted out from what are, in the ordinary sense, scientific questions. Readings will be drawn principally from contemporary writings. January-April only. (0-0; 3-0)

PHIL 242. (3) **Aesthetics**

An examination of principal theories concerning the nature of art, the creative process, aesthetic experience and criticism. (3-0; 3-0)

PHIL 245. (3) **Mediaeval Philosophy**

An introduction to major philosophical issues and figures between the second half of the fourth and second half of the fourteenth century, A.D., both in the Christian West and the Islamic World. Topics to be discussed will include the nature and existence of God, theories of knowledge and perception, social, political and moral philosophies, the problem of reason and faith, the theory of universals and the problem of evil. Figures to be dealt with include St. Augustine, St. Anselm, Al-Ghazali, Avicenna, Averroes, St. Thomas Aquinas, Scotus, Ockham, Autrecourt, and Eckhart.

(3-0; 3-0)

PHIL 300. (3) **Plato and Aristotle**

A study of the origins and development of philosophic thought in Ancient Greece. Particular emphasis on the metaphysics and theories of knowledge of Plato and Aristotle through detailed examination of some of their major works.

Prerequisite: Philosophy 100, or permission of the Instructor. (3-0; 3-0)

PHIL 302. (3) **Moral Philosophy**

An inquiry into the nature of morality and the justification of moral judgments. Some main topics of moral philosophy will be discussed: e.g. moral disagreement, the role of reason in the resolution of moral conflicts, the relationship between responsibility and guilt, rights and duties, moral relativism vs. moral absolutism, the relationship between happiness and virtue, etc.

Prerequisite: Philosophy 100, or permission of the Instructor. (3-0; 3-0)

Not all the following courses will be offered every year. For fuller information see the Departmental handout.

PHIL 306. (3) **The Rationalists**

An intensive study of the major writings of Descartes, Spinoza and Leibniz, with emphasis on their treatment of various epistemological and metaphysical issues. Works covered: Descartes' *Meditations, Discourse on Method and Principles of Philosophy*; Spinoza's *Ethics*; and Leibniz's *Monadology, Discourse on Metaphysics*, and assorted logical writings.

Prerequisite: Philosophy 100, or permission of the Instructor. (3-0; 3-0)

PHIL 308. (3) **The Empiricists**

An intensive study of the major writings of Locke, Berkeley and Hume, with emphasis on their treatment of various epistemological and metaphysical issues. Works covered: Locke's *Essay on Human Understanding*; Berkeley's *Three Dialogues* and *Principles of Human Knowledge*; and Hume's *Treatise of Human Nature*.

Prerequisite: Philosophy 100, or permission of the Instructor. (3-0; 3-0)

PHIL 324. (3) **Philosophy of History**

Speculative and critical philosophies of history. Analysis of the systems of Vico, Hegel, Marx, Toynbee, Niebhur. The language of historical description. The uniqueness of historical events. The controversy about historical explanation. Problems about causes. Objectivity.

Prerequisite: Philosophy 100, History 200, or permission of the Instructor.

(3-0; 3-0)

PHIL 326. (1 1/2) **Selected Topics in Political Philosophy**

An examination of the philosophical doctrines and arguments involved in the justification of political decisions. An analysis of such fundamental concepts of political discourse as the following: the common good, authority, justice, natural law, natural rights, sovereignty. An examination of the relationship between the state and the individual.

Prerequisite: Philosophy 100 or Political Science 300, or permission of the Instructor. September-December only. (3-0; 0-0)

PHIL 328. (1 1/2) **Selected Topics in the Philosophy of Law**

An inquiry into the nature and function of law. Special attention will be given to the relationship between law and morality; the logic of legal concepts; the relationship between the law and justice; the justifiability of civil disobedience; the relationship between systems of law and the nature of social order.

Prerequisite: Philosophy 100, or permission of the Instructor.

January-April only. (0-0; 3-0)

PHIL 332. (3) **Eastern Philosophy**

A study of basic texts and major philosophical systems of Hinduism, Buddhism, Confucianism, and Taoism.

Prerequisite: 6 units in Philosophy, or permission of the Instructor. (3-0; 3-0)

PHIL 334 (3) **Meaning and Language**

An examination of various accounts of meaning and the functions of language. Particular attention to be given to the logical atomists, the logical positivists, linguistic analysts such as the later Wittgenstein, Ryle, and Austin, and recent writings on structural analysis.

Prerequisites: Philosophy 100, 202, or permission of the Instructor. (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 400. (3) **Kant**

Intensive study of Kant's epistemology and metaphysics, principally as presented in *The Critique of Pure Reason*.

Prerequisites: Philosophy 100, 306 or 308, and an additional 3 units in Philosophy, or permission of the Instructor. (3-0; 3-0)

PHIL 402. (3) **Logic I I**

Structure and properties of formal deductive systems. Axiomatic development of propositional and predicate calculi. Problems of completeness, consistency, decidability, and independence.

Prerequisite: Philosophy 202 or Mathematics 332 or 333, or permission of the Instructor. (3-0; 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 emphasis of the course will be announced at the beginning of the year.

Prerequisite: 6 units in Philosophy, or permission of the Instructor. (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.

Prerequisite: 6 units in Philosophy, or permission of the Instructor. (3-0; 3-0)

PHIL 410 (formerly 406). (1 ½) **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.

(Not open to students who have credit for Philosophy 406 (3), except by permission.)

Prerequisites: Philosophy 100 and an additional 6 units in Philosophy, or permission of the Instructor. September-December only. (3-0; 0-0)

PHIL 411 (formerly 406). (1 ½) **Designated Philosopher(s) or Topic(s) I 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 an extension of Philosophy 410.

(Not open to students who have credit for Philosophy 406 (3), except by permission.)

Prerequisite: Philosophy 100, Philosophy 410 (when offered) and an additional 6 units in Philosophy, or permission of the Instructor.

January-April only. (0-0; 3-0)

PHIL 414. (3) **Philosophy of Mind**

An examination of theories of mind in its relation to the body — dualism, physicalism, behaviourism, functionalism — and of such basic psychological concepts as belief, desire, intention, voluntary action, emotion, imagination, feeling.

Prerequisites: Philosophy 100, 306 or 308, or permission of the Instructor.

(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 in Philosophy, or permission of the Instructor.

September-December only. (3-0; 0-0)

PHIL 418. (1½) **Theory of Perception**

A study of such theories of perception as realism, representationalism, and phenomenalism.

Prerequisite: 6 units in Philosophy or permission of the Instructor.

January-April only. (0-0; 3-0)

PHIL 432. (3) **Metaphysics**

An analysis of fundamental metaphysical concepts, including substance, quality, relation, causality, space, time, and the self.

Prerequisite: 6 units in Philosophy, or permission of the Instructor.

(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 in Philosophy, or permission of the Instructor.

PHIL 499. (0) **Honours Seminar**

Corequisite for final honours courses.

GRADUATE COURSES

Students will concentrate 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. A supplement of course work, fitted to individual needs and interests, may also be prescribed. Normally this would not exceed two courses. To qualify for admission, however, candidates should have a good Honours degree in Philosophy or its equivalent.

PHIL 500. (3) **Problems in Philosophy**

PHIL 502. (3) **Directed Studies**

PHIL 599. (9-15) **M.A. Thesis**

DEPARTMENT OF PHYSICS

- Harry W. Dosso, B.A., M.Sc., Ph.D. (*Brit. Col.*), Professor and Head of the Department.
- John L. Climenhaga, M.A. (*Sask.*), Ph.D. (*Mich.*), Professor.
- R. Michael Pearce, B.Sc. (*McGill*), M.A., Ph.D. (*Brit. Col.*), Professor.
- Lyle P. Robertson, B.A., M.A., Ph.D. (*Brit. Col.*), Professor.
- Walter M. Barss, B.A., M.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor.
- John M. Dewey, B.Sc., Ph.D. (*London*), Associate Professor.
- Gerhart B. Friedmann, B.Sc., M.A. (*Madras*), Ph.D. (*Brit. Col.*), Associate Professor.
- Grenville R. Mason, B.A.Sc. (*Brit. Col.*), M.Eng. (*McMaster*), Ph.D. (*Alta.*), 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).
- Harry M. Sullivan, B.Sc. (*Queen's*), B.Sc. (*Carleton*), M.Sc. (*McGill*), Ph.D. (*Sask.*), Associate Professor.
- John T. Weaver, B.Sc. (*Bristol*), M.Sc., Ph.D. (*Sask.*), Associate Professor.
- George A. Beer, B.A.Sc., M.Sc. (*Brit. Col.*), Ph.D. (*Sask.*), Assistant Professor.
- J. Anthony Burke, A.B., A.M., Ph.D. (*Harvard*), Assistant Professor (Astronomy).
- R. Montgomery Clements, B.A.Sc., M.A.Sc. (*Brit. Col.*), Ph.D. (*Sask.*), Assistant Professor.
- Fred I. Cooperstock, B.Sc. (*Man.*), Ph.D. (*Brown*), Assistant Professor.
- James P. Elliott, B.S. (*Ill. Inst. of Tech.*), Ph.D. (*Stanford*), Assistant Professor.
- F. David A. Hartwick, B.Eng. (*McGill*), M.A., Ph.D. (*Tor.*), Assistant Professor (Astronomy).
- Robert E. Horita, B.A.Sc., M.A.Sc., Ph.D. (*Brit. Col.*), Assistant Professor.
- Donald E. Lobb, B.E., M.Sc., Ph.D. (*Sask.*), Assistant Professor.
- Charles E. Picciotto, A.B., M.A., Ph.D. (*Calif.*), Assistant Professor.
- Jeremy B. Tatum, B.Sc. (*Bristol*), Ph.D. (*London*), Assistant Professor (Astronomy).
- Chi-Shiang Wu, B.S. (*Nat. Taiwan U.*), M.S., Ph.D. (*Western Res. U.*), Assistant Professor.
- Donald E. Stenton, B.Sc. (*Brit. Col.-Vic. Coll.*), Senior Laboratory Instructor.
- Kenneth O. Wright, M.A. (*Tor.*), Ph.D. (*Mich.*), F.R.C.S., Director, Dominion Astrophysical Observatory, Honorary Professor.

For information on courses of study leading to the M.Sc. or Ph.D. degrees consult the calendar under *Faculty of Graduate Studies*.

The programmes and course descriptions for Astronomy follow those for Physics.

PHYSICS UNDERGRADUATE PROGRAMMES

For a B.Sc. degree, students may take the General, the Major, the Honours Physics programme. For a B.A. degree, students may choose the General programme in Physics for one of their fields of concentration.

An honours programme in Physics and Applied Mathematics is being considered. Interested students should consult the Departments of Physics and Mathematics.

Admission to the third and fourth years of the Honours programme requires the permission of the Department. Students in the Honours programme will be expected to maintain at least second class standing.

<i>Year</i>	<i>General or Major</i>	<i>Honours Phys</i>
I.	Phys 101 or 121 Math 130	Phys 101 or 121 Math 130 Chem 120 or 124
II.	Phys 211 or 213 Phys 212 Math 231 (or 230 and 232)	Phys 211 or 213 Phys 212 Math 230 Math 232
III.	(Phys 313) Phys 322 Math 303 or 330 Math 323 or 345	(Phys 313) Phys 321 Phys 322 Phys 413 Math 330 Math 345 or 323
IV.	Phys 412† Phys 413 Phys elective(s)	Phys 410†, 420† Phys 412†, 421† Phys 422† Phys 423† Phys 429 Phys 460 Phys electives Math 410†

† — 1½ units

Astronomy 200 is a recommended elective in the second year.

Physics 121, 212, 213 Sequence

Physics 121 is restricted to students who have obtained at least second class standing in B.C. Secondary School Physics 12 and Mathematics 12 and have the consent of the Department. Consent may be obtained in person during Registration. Physics 121 will normally be followed by Physics 212 and 213 in the second year. Physics 313 will be omitted.

Physics 101, 211, 212, 313 Sequence

Physics 101 is required by students who have not obtained at least second class standing in Physics 12 and Mathematics 12. Students who have obtained credit for Physics 11 only must register in a special section with modified course content, while those who have not obtained credit for Physics 11 must register in Section 1 with 5 lectures per week. Physics 101 will normally be followed by Physics 211 and 212 in the second year and by Physics 313 in a subsequent year. Physics 213 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 321, 410†, 425†, 426†, 427†, and Astronomy courses.

Physics 413 is recommended in the third year if credit has been obtained for Physics 213.

Physics 412† is not required in the General programme if credit has been obtained for Physics 313.

Fourth year students are invited to attend Physics 460, Physics Seminar.

HONOURS PHYSICS PROGRAMME

The electives in the fourth year comprise $4\frac{1}{2}$ units, normally chosen from Physics 424†, 425†, 426†, 427†, Mathematics 412† and Astronomy courses.

PHYSICS COURSES

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

Where *consent of the Department* is specified as a course prerequisite, this consent must be obtained from the Department Head or his nominee.

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 Science 300 (page 250) and Liberal Arts 305 (page 199).

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**

The basic physical concepts of mechanics, heat, sound, light, electricity and magnetism. This course, rather than Physics 121, is required of students who have not obtained at least second class standing in B.C. Secondary School Physics 12 and Mathematics 12. Students who have credit for Physics 11 only must register in a special section (3 or 5) with modified course content, while those who have not obtained credit for Physics 11 must register in Section 1 with 5 lectures per week.

Prerequisite: Mathematics 130 (may be taken concurrently).

Text for Sections 1,3,5: Weber, Manning and White, *College Physics*.

Text for Sections 2,4,6: Bueche, *Introduction to Physics for Scientists and Engineers, Workbook in Physics for Science and Engineering Students*.

Drs. Beer, Friedmann, Horita, Mason and Sullivan. (3-3; 3-3)

PHYS 103. (3) **A Survey of Physics**

From Newton's mechanics to nuclear physics — a description of ideas, principles and their applications. This course is intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. Credit cannot be obtained for both Physics 101 and Physics 103.

Text: Gamow and Cleveland, *Physics Foundations and Frontiers*.

Drs. Dewey, Lobb, Pearce. (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 second-class standing in B.C. Secondary School Mathematics 12 and Physics 12, Mathematics 130 (may be taken concurrently) and consent of the Department, which may be obtained during registration.

Text: Alonso and Finn, *Fundamental University Physics*, Volume 1.

Drs. Dosso, Elliott. (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 231 (may be taken concurrently) or Mathematics 230 and 232 (both may be taken concurrently).

Text: Alonzo and Finn, *Fundamental University Physics*, Volume 1.

Dr. Picciotto.

(3-3*; 3-3*)

PHYS 212. (3) **Electricity and Magnetism, Electronics, and Modern Physics**

Fundamentals of electricity and magnetism, introductory electronics and topics in modern Physics. Laboratories on alternate weeks.

Prerequisites: Physics 101 or 121, Mathematics 231 (may be taken concurrently), or Mathematics 230 and 232 (both may be taken concurrently).

Texts: Halliday and Resnick, *Physics*, Part II; Beiser, *Modern Physics*.

Drs. Clements, Sandhu and Wu.

(3-3*; 3-3*)

PHYS 213. (3) **Optics, Wave Motion, Heat and Elementary Thermodynamics**

Optics (geometrical and physical), wave motion and, in the second term, heat and the elementary theory and applications of thermodynamics. Laboratories on alternate weeks.

Prerequisites: Physics 121 or 211, Mathematics 231 (may be taken concurrently), or Mathematics 230 and 232 (both may be taken concurrently).

Texts: Webb, *Elementary Wave Optic*; Weinreich, *Fundamental Thermodynamics*.

Dr. Barss.

(3-3*; 3-3*)

PHYS 313. (3) **Optics, Wave Motion, Heat and Thermodynamics**

Optics (geometrical and physical), wave motion, heat and the theory and applications of thermodynamics. Credit cannot be obtained for both Physics 213 and Physics 313.

Prerequisites: Physics 121 or 211, Mathematics 231 or Mathematics 230 and 232.

Texts: Morgan, *Introduction to Geometrical Optics*; Lec and Sears, *Thermodynamics*.

Dr. Sandhu.

(3-3; 3-3)

PHYS 321. (3) **Classical Mechanics**

Analytic mechanics of particles, rigid bodies, Lagrangian and Hamiltonian mechanics, potential functions, wave equation, modes of oscillation.

Prerequisites: Physics 121 or 211, Mathematics 303 or 330 and 323 or 345 or equivalent courses (any may be taken concurrently), and consent of the Department.

Text: Symon, *Mechanics*, 3rd Ed.

Dr. Cooperstock.

(3-0; 3-0)

PHYS 322. (3) **Electricity and Magnetism**

Fundamentals of electricity and magnetism, basic circuit theory, and concepts of electric and magnetic fields leading up to Maxwell's equations.

Prerequisites: Physics 121 or 211, and 212, Mathematics 303 or 330 and 323 or 345 or equivalent courses (any may be taken concurrently), or consent of the Department.

Text: Kurrelmeyer and Mais, *Electricity and Magnetism*.

Dr. Barss.

(3-3; 3-3)

PHYS 410. (1½) **Topics in Mathematical Physics I**

Cartesian tensors, with applications; elementary topics in functions of a complex variable applied to physical problems.

Prerequisites: Physics 121 or 211, Mathematics 303 or 330, and 323 or 345, or equivalent courses.

* Laboratories on alternate weeks.

Text: Butkov, *Mathematical Physics* (which will also serve for Physics 420), or selected paperbacks, to be announced.

Dr. Elliott.

September-December only. (3-0; 0-0)

PHYS 412. (1 1/2) **Advanced Optics**

Advanced geometrical and physical optics; lenses, optical instruments, interference, diffraction, polarization, spectroscopy.

Prerequisites: Physics 213 or 313, Physics 322 or consent of the Department, Mathematics 303 or 330 and 323 or 345 (any may be taken concurrently).

Text: Fowles, *Introduction to Modern Optics*.

Dr. Mason.

September-December only. (3-0; 0-0)

PHYS 413. (3) **Introductory Modern Physics**

The major phenomena in the field of atomic and nuclear physics.

Prerequisites: Physics 212, Physics 213 or 313 (the latter may be taken concurrently) or permission of the Department; Mathematics 303 or 330 and 323 or 345 or equivalent courses (any may be taken concurrently).

Text: Weidner and Sells, *Elementary Modern Physics*, 2nd Ed.

Dr. Robertson.

(3-3; 3-3)

PHYS 420. (1 1/2) **Topics in Mathematical Physics I I**

Mathematical methods for physicists, with special emphasis on the solution of boundary value problems; contour integration, gamma function, asymptotic expansions, Fourier and Laplace transforms; generalized functions and Green's functions.

Prerequisites: Physics 410 or equivalent and consent of the Department.

Text: Butkov, *Mathematical Physics*, or selected paperbacks, to be announced.

Dr. Elliott.

January-April only. (0-0; 3-0)

PHYS 421. (1 1/2) **Statistical Mechanics**

Boltzmann, Bose-Einstein and Fermi Dirac statistics.

Prerequisites: Physics 213 or 313, Physics 321, Mathematics 330 and 323 or 345, and consent of the Department.

Text: Knuth, *Statistical Thermodynamics*.

Dr. Picciotto.

January-April only. (0-0; 3-0)

PHYS 422. (1 1/2) **Electromagnetic Theory**

Potential theory, Maxwell's equations, electromagnetic waves.

Prerequisites: Physics 322, Mathematics 303 or 330 and 323 or 345 or equivalent courses, and consent of the Department.

Text: Corson and Lorrain, *Electromagnetic Fields and Waves*.

Dr. Horita.

September-December only. (3-0; 0-0)

PHYS 423. (1 1/2) **Introductory Quantum Mechanics**

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin.

Prerequisites: Physics 321 and 413, Mathematics 330 and 323 or 345 or equivalent courses, Mathematics 410 or equivalent (may be taken concurrently), and consent of the Department.

Text: Eisberg, *Modern Physics*.

Dr. Picciotto.

September-December only. (3-0; 0-0)

PHYS 424. (1 1/2) **Modern Physics**

Time-independent perturbation theory, identical particles, Fermi gas, multi-electron atoms, specific heat of solids, nuclear models, collision theory. Topics in nuclear, atomic and solid state physics.

Prerequisites: Physics 423, and consent of the Department.

Text: Eisberg, *Modern Physics*.

Dr. Mason.

January-April only. (0-0; 3-0)

PHYS 425. (1 1/2) **Electronics**

Electronic circuit theory with applications.

Prerequisites: Physics 322, Mathematics 303 or equivalent courses.

Text: Brophy, *Basic Electronics for Scientists*.

Dr. Clements.

January-April only. (0-0; 3-0)

PHYS 426. (1 1/2) **Fluid Mechanics**

Introduction to basic theory of flow, kinematics of flow, Navier-Stokes equations, boundary layers, turbulent flow, introduction to compressible flow.

Prerequisites: Physics 213 or 313, Mathematics 303 or 330 and 323 or 345 or equivalent (any may be taken concurrently).

Text: Landau-Lifshitz, *Fluid Mechanics*.

Dr. Pearce.

January-April only. (0-0; 3-0)

PHYS 427. (1 1/2) **Geophysics**

Physics of the earth, including atmospheric studies and extra-terrestrial effects. Structure and composition of the earth, elementary seismology, and geomagnetism.

Prerequisites: Physics 322 (may be taken concurrently), Mathematics 303 or 330 and 323 or 345 or equivalent (any may be taken concurrently).

Text: Garland, *Introduction to Geophysics*.

Dr. Horita.

January-April only. (0-0; 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 413, Physics 421, 422 and 423 (all three may be taken concurrently) and consent of the Department.

Text: One of: Melissinos, *Experimental Modern Physics*; Braddick, *The Physics of Experimental Methods*; or Mark and Olson, *Experiments of Modern Physics*.

Dr. Clements.

(0-6; 0-6)

PHYS 460. (0) **Physics Seminar**

Talks by students, faculty, and outside speakers.

(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 UNDERGRADUATE PROGRAMMES

Major and Honours Astronomy programmes are offered for the B.Sc. degree.

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.

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.

<i>Year</i>	<i>Major</i>	<i>Honours</i>
III.	Astr 300 (Phys 313) Phys 322 Math 303 or 330 Math 323 or 345	Astr 300 (Phys 313) Phys 321 Phys 322 Phys 413 Math 330 Math 345 or 323
IV.	Astr 400† or 401† Astr 403†, 404† Phys 412† Phys 413	Astr 400† or 401† Astr 403†, 404† Astr 429 Astr 460 Phys 410†, 420† Phys 412† Phys 422† or 423† Electives

† 1½ units.

Students wishing to enter the third year of the Major or Honours programme without having completed Astronomy 200 will normally be required to take Astronomy 200 in their third year. Astronomy 300 should then be deferred to the fourth year.

Physics 313 is required if credit has not been received for Physics 213 in the second year. Astronomy 300 may be deferred to the fourth year.

MAJOR PROGRAMME

Third and fourth year students are invited to attend Astronomy 460, Astronomy Seminar.

HONOURS PROGRAMME

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.

Students selecting the Physics 423† option are reminded of the Mathematics 410† co-requisite.

The electives, chosen in consultation with the Physics Department, are normally selected from Physics 421†, 424†, 425†, 426†, 427†.

ASTRONOMY COURSES

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

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: Abell, *Exploration of the Universe*.

Dr. Burke.

(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 130.

Text: Menzel, Whipple and de Vaucouleurs, *Survey of the Universe*.

Dr. Tatum.

(3-3; 3-3)

ASTR 300. (3) **Galactic and Dynamical Astronomy**

Galactic and dynamical astronomy, galactic structure and stellar dynamics; the techniques of positional astronomy; introductory celestial mechanics, including the two body problem, the three body problem, and perturbation theory.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 121 or 211, Mathematics 303 or 330 and 323 or 345 or equivalent (any may be taken concurrently); Physics 321 is recommended.

Text: Van de Kamp, *Elements of Astromechanics*.

Drs. Burke, Tatum.

(3-0; 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.

* Laboratories on alternate weeks.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 322, 413 (may be taken concurrently), Mathematics 303 or 330 or equivalent.

Text (Optional): Steinberg and Lequeux, *Radio Astronomy* (translated by Bracewell).

(Offered in 1972-73; not offered in 1973-74.)

Dr. Burke.

January-April only. (0-0; 3-0)

ASTR 401. (1½) **Modern Astronomy**

A variety of modern topics, such as solar physics, cosmology, galaxies, radar astronomy.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 413 (may be taken concurrently), Mathematics 303 or 330, and 323 or 345 or equivalent courses.

(Not offered in 1972-73; Offered in 1973-74.)

Dr. Hartwick.

January-April only. (0-0; 3-0)

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, Physics 413 (may be taken concurrently), Mathematics 303 or 330, and 323 or 345 or equivalent courses.

Text: Unsöld, *The New Cosmos*.

Dr. Hartwick.

September-December only. (3-0; 0-0)

ASTR 404. (1½) **Introduction to Astrophysics II**

The structure and evolution of the stars; interstellar matter; high energy astrophysics.

Prerequisites: Astronomy 403 or consent of the Department.

Text: Unsöld, *The New Cosmos*.

Dr. Hartwick.

January-April only. (0-0; 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.

Members of the Department.

(0-6; 0-6)

ASTR 460. (0) **Astronomy Seminar**

Talks by students, faculty and outside speakers.

(2-0; 2-0)

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

Students must obtain the consent of the Department before registering.

ASTRONOMY GRADUATE COURSES

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 511. (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

- Neil A. Swainson, B.A., B.Ed., M.A. (*Brit. Col.*), Associate Professor and Chairman of the Department.
- Ronald I. Cheffins, B.A., LL.B. (*Brit. Col.*), LL.M. (*Yale*), Professor.
- Edgar S. Efrat, B.A. (*Reed Coll.*), M.A., Ph.D. (*Texas*), Associate Professor.
- Howard L. Biddulph, B.S. (*Brigham Young*), M.A., Ph.D. (*Indiana*), Assistant Professor.
- Max S. Power, B.A. (*Colo. Coll.*), B.A. (*Oxon.*), M.A., M.Phil., Ph.D. (*Yale*), Assistant Professor.
- Richard J. Powers, B.A. (*New Mexico*), M.A., Ph.D. (*Claremont*), Assistant Professor.
- Peter R. Robbins, B.A. (*Brit. Col.*), B.A. (*Cantab.*), Ph.D. (*London*), Assistant Professor.
- Mark H. Sproule-Jones, B.Sc. (Econ.) (*London*), M.A., Ph.D. (*Indiana*), Assistant Professor.
- Norman J. Ruff, B.Sc. (Econ.) (*Southampton*), M.A. (*McMaster*), Lecturer.
- James J. Gow, B.L., Ph.D., LL.D. (*Aberdeen*), Part-time Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

Third and Fourth Year students not enrolled in the general, major or honours programmes may take as a free elective any upper level course in Political Science for which no prerequisite or other restriction is specified.

General—A concentration in political science under the general programme requires the successful completion of Political Science 200 and 9 units of courses numbered 300 or above. Political Science 200 should be completed before registration in third or fourth year courses, but permission to take it and upper courses concurrently may be granted by the Department.

Major—Political Science 200 is generally considered to be a prerequisite for the Major programme, although in some cases the Department may modify this requirement. In addition, 15 upper division units are required, of which a minimum of 3 units of course work must be selected 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 maintained high standards in their general university work, and have received a grade of B or higher in Political Science 200, or have the consent of the Department. Students seeking admission to the Honours programme should apply by August 1. An overall B average in the Third Year is required to continue Honours in the Fourth Year.

Third and Fourth Year Honours students are required to attend and participate in the Departmental Seminar. Fourth Year Honours students are required to complete successfully a programme of directed research and graduating essay. (Political Science 499).

Honours students must take at least 24 units in Political Science, selected from courses numbered 300 or above. Six of these must be Political Science 307 and 499. Honours students must select three units of course work in each of at least three of the Groups I-VI.

Students should note the availability of Liberal Arts 305 (page 199) as an elective in their senior years. Students considering graduate work in Political Science are STRONGLY advised to take *either* Political Science 300 *or* Political Science 301 and 302. Major and Honours students are urged to consult a Faculty Member in the Department prior to the planning of their Third and Fourth Years' programmes.

COURSES

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

POLI 200. (3) **Introduction to Political Science**

A general introduction to the study of politics. The course is designed to acquaint the student with the nature of the political process, to generate an awareness of the world of politics, its problems and its variety, and to introduce the student to Political Science as a discipline.

Multiple Sections. (Offered annually.) (3-0; 3-0)

POLI 216 (formerly 318). (3) **Canadian Government and Politics**

An introduction to the structures and processes of government in Canada. The course will include an examination of the social context and political culture, development of the constitutional framework, federal-provincial relationships, provincial and local government, the Crown, prime minister and cabinet, parliamentary structures and legislative process, legislative-executive relationships, the public service, organized groups, political participation, development and nature of the party system, party organization, parties in the political process and an overview of political development in Canada. Credit cannot be obtained for Political Science 216 and 318. Open only to students registered in their second year and above.

Mr. Ruff.

(Offered annually.) (3-0; 3-0)

GROUP 1 — POLITICAL THEORY

POLI 300. (3) **Problems in Political Philosophy**

An examination of persistent political problems and arguments, concepts and metaphors, from Plato to the present day—for example: social justice; political obligation; ideas of freedom; force, power and authority; common good and general will; natural right; social contract; political education. Emphasis will be placed equally upon analysis and explication of such problems, their historical context and development, and the interpretation of their primary textual sources.

Dr. Robbins.

(Offered annually.) (3-0; 3-0)

POLI 301. (1½) **Ancient and Medieval Political Thought**

The political experience of the ancient and medieval periods of European history as reflected primarily in the writings of Plato, Aristotle, Augustine, Thomas Aquinas and Marsilius of Padua. (This course cannot be taken for credit if credit was received for Political Science 300 prior to 1971).

Dr. Robbins.

(Not offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 302. (1½) **Political Thought from Machiavelli to Marx**

An examination of six major texts in the development of modern political thought. Some attention will also be paid to lesser known writings and to less commanding figures.

Prescribed reading: Machiavelli, *The Prince*; Hobbes, *Leviathan*; Locke, *Second Treatise of Government*; Rousseau, *The Social Contract*; Burke, *Reflections on the French Revolution*; Marx and Engels, *The Communist Manifesto*.

(This course cannot be taken for credit if credit was received for Political Science 300 prior to 1971.)

Dr. Robbins.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 307. (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.)

Dr. Sproule-Jones.

(Offered annually.)

(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.

Dr. Robbins.

(Not offered 1972-73; offered 1973-74.)

(3-0; 3-0)

POLI 407. (3) Contemporary Political Thought

An examination of the major twentieth century contributions to the development of normative political theory. Much 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.

Prescribed reading: Nietzsche, *The Twilight of the Idols*; Freud, *Civilisation and Its Discontents*; Niebuhr, *Moral Man and Immoral Society*; Fromm, *Escape from Freedom*; Marcuse, *Eros and Civilisation*; Merleau-Ponty, *Humanism and Terror*; Fanon, *The Wretched of the Earth*; Oakeshott, *Rationalism in Politics*; Goodman, *Growing Up Absurd*; Camus, *The Rebel*; Bay, *The Structure of Freedom*.

Dr. Robbins.

(Offered 1972-73; not offered 1973-74.)

(3-0; 3-0)

POLI 408. (1½) Communist Political Thought

A topical analysis of the major contributions to political theory in Marxist-Leninist thought; comparative analysis of the evolution of official value systems in Communist countries; Marxist revisionism and intellectual dissent in political thought. (It is recommended that students have taken a previous course in political theory or in Communist studies.)

Dr. Biddulph.

(Not offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 3-0)

GROUP II — COMPARATIVE GOVERNMENT

POLI 310. (3) The Governments of the United Kingdom and United States

Studies of British and American governments and politics — comparative analyses of the parliamentary and presidential systems, federal and unitary structures and related problems.

Dr. Efrat.

(Offered annually.)

(3-0; 3-0)

POLI 311. (3) Western European Government 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.

(Offered annually.) (3-0; 3-0)

POLI 312. (3) Communist Political Systems

An analysis of governmental processes in Communist ruled political systems, with emphasis upon 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 systems.

Dr. Biddulph.

(Offered annually.) (3-0; 3-0)

POLI 315. (1 1/2) 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.

Dr. Biddulph.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 316 (formerly 419). (3) Issues in Canadian Federalism

A study of the dynamics and contemporary problems of Canadian federalism. The course will survey the framework and development of the federal system and concentrate on an analysis of selected questions which currently confront the federal and provincial levels of government. Credit cannot be obtained for both Political Science 316 and 419. Restricted enrolment: Third and Fourth Year students.

Mr. Ruff.

(Offered annually.) (3-0; 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.

Dr. Efrat.

(Offered annually.) (3-0; 3-0)

POLI 319. (1 1/2) An Introduction to Comparative Federalism

The origins and theories of federal systems. Federal constitutions and politics; federalism and constitutional change. Some case studies of twentieth-century federal experience.

Dr. Efrat.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 416 (formerly 418). (1 1/2) 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.

Prerequisite: Political Science 216 (Canadian Government and Politics), or the permission of the instructor.

Mr. Ruff.

(Offered annually.) January-April only. (0-0; 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.

Dr. Efrat.

(May be offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 3-0)

GROUP III — PUBLIC LAW

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 216 before taking this course.

Mr. Cheffins.

(Offered annually.)

(3-0; 3-0)

POLI 325. (1½) Law and Public Policy — Part I

An introduction to the role of law in society with special emphasis on Canada. A description and analysis of the judicial structure in Canada and the processes of the judiciary in the English-speaking world, including such problems as the sources of law, the difficulties of fact finding, the role of the jury, and the use of precedent. The problems of order and legal change will be discussed with illustrations drawn from Canadian criminal law. There will be one written assignment and one formal examination at the end of the term.

Mr. Cheffins.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 327. (1½) Law and Public Policy — Part II

This course continues the examination of the role of law in society begun in Political Science 325. Particular jurisprudential topics considered include the nature and definition of justice and its relationship to the content and processes of law. The traditional schools of legal philosophy will be studied, and there will be an examination of the relationship between law and morals and the limits of effective legal action.

Mr. Cheffins.

(May be offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 3-0)

POLI 420. (3) Administrative Law

Study of the relation between law and the administrative process; procedures and powers of administrative tribunals; and judicial and legislative control of administrative action.

Prerequisite: Political Science 320 or 325, or the permission of the instructor.

Dr. Gow.

(Offered annually.)

(3-0; 3-0)

POLI 421. (3) Advanced Constitutional Law

An advanced legal analysis of specific Canadian Constitutional issues which may include the following: civil liberties, the Supreme Court of Canada, the search for an amendment formula and constitutional revision, the impact of the division of legislative power on public policies.

Prerequisite: Political Science 320 (Constitutional Law).

Mr. Cheffins.

(May be offered 1972-73; may be offered 1973-74.)

(3-0; 3-0)

POLI 427. (3) Jurisprudence

Advanced study of contemporary jurisprudential theory including an examination of legal realism, natural law, positivism, sociological jurisprudence and recent studies in the field of judicial behaviour. Special emphasis will be placed on studying law as a social science and analyzing the relationship between law and politics.

Prerequisite: Political Science 325 or a grade of "A-" or higher in Political Science 320, and the permission of the instructor.

Mr. Cheffins.

(Offered annually.)

(3-0; 3-0)

GROUP IV — POLITICAL BEHAVIOUR

POLI 330. (1 ½) 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.

Dr. Sproule-Jones.

(May be offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 3-0)

POLI 331. (1 ½) 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.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 332. (1 ½) Interest Groups and Parties

This course will both survey the key theoretical and research studies on interest groups and political parties, and pay particular attention to the analysis of organizational structures and influence in B.C. politics. Course obligations will include one examination and a research project.

Dr. Sproule-Jones.

(May be offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 3-0)

POLI 435. (3) Political Institutions and Public Policy (formerly Political Decisions)

The course will apply Public Choice theory to the analysis of political institutions and institutional behaviour. Consideration will be given to the theory of public goods and externalities, methods of evaluating the efficiency of public services, and the design of institutional arrangements to reflect the demands of the citizen-consumer for diverse public policies. Emphasis will be placed on public policies in B.C. in general and Greater Victoria in particular. Course obligations will include a research project on a local policy problem or aspect of a local problem in the Spring Term.

Dr. Sproule-Jones.

(Offered annually.)

(3-0; 3-0)

POLI 436. (1 ½) Analytic Democratic Theory

The various meanings given the term "democracy" will be explored. From these, three modern usages will be selected for intensive analysis: (1) democracy as the dispersion of influence, or polyarchy; (2) democracy as a balanced political system; and (3) democracy as majority rule.

(Not offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 3-0)

GROUP V — 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.

Dr. R. J. Powers.

(Offered annually.)

(3-0; 3-0)

POLI 342. (1½) **International Law**

An introductory seminar in the principles and practices of international law. The focus will be both historical and contemporary, and the emphasis will be on the political implications of international law.

Dr. R. J. Powers.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

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.

(May be offered 1972-73; may be offered 1973-74.)

January-April only. (0-0; 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.

Dr. R. J. Powers.

(Offered annually.)

(3-0; 3-0)

GROUP VI — PUBLIC ADMINISTRATION

POLI 350. (3) **Public Administration**

An introduction to the evolution of the administrative 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.

Mr. Swainson.

(Offered annually.)

(3-0; 3-0)

POLI 454. (1½) **Introduction to Local and Regional Government**

A seminar in the following topics: the theory of local government; a comparative study of the local and regional governments of the United Kingdom, France, the United States and Canada; power and politics in the local community; the public finance of local government; inter-governmental relationships; the local bureaucracy; current policy issues for local and regional governments.

Mr. Swainson.

(May be offered 1972-73; may be offered 1973-74.)

September-December only. (3-0; 0-0)

POLI 455. (1 ½) The Government and Politics of Metropolis

A seminar in the following topics: the metropolitan community, models and types; the complexities of metropolitan government; current social and economic maladies; the need for and structural roads to integrated governmental action; integration via the marketplace; the politics of structural reform; metropolis and 'superior' levels of government; the secular city and the City of God.

Mr. Swainson.

(Offered annually.)

January-April only. (0-0; 3-0)

GROUP VII — HONOURS

POLI 490 (formerly 480). (1-3) Directed Reading

Directed reading and/or research for Honours Students under the supervision of an available faculty member. Open to Majors only with the permission of the Department.

POLI 499 (formerly 490). (3) Directed Research and Graduating 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. (1 ½ or 3) Seminar in the Political Theory of Philosophical Idealism

POLI 511. (1 ½ or 3) Seminar in Democracy, Ideology and Societal Change

POLI 512. (1 ½ or 3) Seminar in Communist Political Development

POLI 516. (1 ½ or 3) Seminar in Canadian Politics

POLI 517. (1 ½ or 3) Seminar in African Politics

POLI 520. (1 ½ or 3) Seminar in Canadian Constitutional Problems

POLI 535. (1 ½ or 3) Seminar in Public Choice

POLI 540. (1 ½ or 3) Seminar in International Relations

POLI 550. (1 ½ or 3) Seminar/Colloquium in Administrative Behaviour

POLI 590. (Credit to be determined) Directed Readings

POLI 599. (Credit to be determined, but usually 3 to 6 units) Thesis

DEPARTMENT OF PSYCHOLOGY

- Otfried Spreen, B.A. (*Bonn*), Dipl.-Psych., Ph.D. (*Freiburg*), Professor and Chairman of the Department.
- Alex Bavelas, B.S. (*Springfield*), M.A. (*Iowa*), Ph.D., (*M.I.T.*), Professor.
- William H. Gaddes, M.A. (*Brit. Col.*), Ph.D. (*Claremont*), Professor.
- G. Alexander Milton, B.A. (*West. Wash.*), M.S. (*Ore.*), Ph.D. (*Stanford*), Professor.
- G. Alfred Forsyth, B.A. (*Dickinson Coll.*), M.S. (*N. Carolina*), Ph.D. (*Purdue*), Visiting Associate Professor.
- Gordon Neville Hobson, B.A., M.A., Ph.D. (*Alta.*), Associate Professor.
- Ronald A. Hoppe, A.B. (*Mich.*), M.A., Ph.D. (*Mich. St. U.*), Associate Professor and Assistant Chairman of the Department.
- Richard B. May, B.A. (*Whitman*), M.A., Ph.D. (*Claremont*), Associate Professor.
- Charles W. Tolman, B.S., M.S., Ph.D. (*Wash.*), Associate Professor.
- H. Edward Tryk, B.A. (*San Jose*), M.A., Ph.D. (*Ore.*), Associate Professor.
- R. Leslie W. Wright, B.A., M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Associate Professor.
- Loren E. Acker, A.A., B.A., Ph.D. (*Calif., Los Angeles*), Assistant Professor.
- Janet H. Bavelas, A.B., M.A., Ph.D. (*Stanford*), 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.
- Lorne K. Rosenblood, B.S. (*Case Western Reserve*), M.A., Ph.D. (*Ohio*), Assistant Professor.
- Frank J. Spellacy, B.A. (*West. Wash.*), M.Sc. (*Ore.*), Ph.D. (*U. of Vic.*), Assistant Professor.
- David R. T. Walker, B.A. (*U. of Vic.*), M.A. (*Iowa*), Lecturer.
- D. Bactiar Lubis, M.D. (*Djakarta*), Visiting Scholar.

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.Sc. or B.A. in psychology, see pages 95-96. A student taking a Major or Honours programme is encouraged to consult a member of the Department early in his academic career.

The Department of Psychology recognizes the right of a student to demonstrate competence in any area of these programmes by passing an appropriate examination. General — Psychology 100 is strongly recommended in the first year. Psychology 200 or 220 or 230 or 240 is required (usually taken in the second year). Students must complete a minimum of three upper level (third and fourth year) courses (9 units) during their third and fourth years.

Major — Psychology 100 is strongly recommended in the first year, Psychology 200 or 220 or 230 or 240 is required (usually taken in the second year). Psychology 301 is strongly recommended. Major students must take Psychology 300 plus a minimum of four additional psychology courses (12 units) numbered above 300 in their third and fourth years.

Honours — Students seeking an Honours degree in Psychology should apply to the Honours Advisor of the Department before the start of their third year, although

under some circumstances an applicant may be accepted at the start of his final year. Psychology 100 is strongly recommended in the first year. Psychology 200 or 220 or 230 or 240 is required (usually taken in the second year). Psychology 300, 301, 400 or 401, and 499 are required, plus an additional three psychology courses (9 units) numbered above 300 in their third and fourth years. At least one of these additional courses must be chosen from each group (A and B).

A

- Psychology 311 Learning
- Psychology 411 Perception
- Psychology 414 Motivation
- Psychology 415 Human Neuropsychology
- Psychology 423 Psychological Psychology
- Psychology 434 Animal Behavior

B

- Psychology 330 Personality
- Psychology 331 Social Psychology
- Psychology 335 Developmental Psychology
- Psychology 402 Experimental Social Psych.
- Psychology 430 Abnormal Psychology

A 3.5 grade point average for all work and a 5.5 grade point average in Psychology are normally minimum Departmental requirements for an Honours degree.

Outside electives are recommended in the third and fourth years.

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, or 415 or 423 or 434 are encouraged to take Biology 150. Members of the department will be happy 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).

A

- Psychology 311 Learning
- Psychology 411 Perception
- Psychology 414 Motivation
- Psychology 415 Human Neuropsychology
- Psychology 423 Psychological Psychology
- Psychology 434 Animal Behavior

B

- Psychology 330 Personality
- Psychology 331 Social Psychology
- Psychology 335 Developmental Psychology
- Psychology 402 Experimental Social Psych.
- Psychology 430 Abnormal Psychology

NOTE: The Bachelors degree in Psychology is intended primarily to prepare the student for further advanced study in Psychology or related fields (Education, Social Welfare, etc.), and in no way 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.

COURSES

PSYC 100. (3) **General Psychology**

A survey of the current status of selected problems in psychology including motivation, learning, perception, brain processes, psychological testing, and applications to school, industry, and personal adjustment.

Members of the Department.

(3-0; 3-0)

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.

Dr. Wright.

(2-2; 2-2)

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.

Drs. Gaddes, J. Bavelas, Wright.

(2-2; 2-2)

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 drugs 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.

Text: E. R. John, *Mechanisms of Memory*.

Drs. Spellacy, Walker.

(2-2; 2-2)

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.

Dr. Rosenblood.

(2-2; 2-2)

NOTE: Students may receive credit for only one of these second year courses, Psychology 200 or 220 or 230 or 240.

For Psychology courses numbered 300 or above, Psychology 200 or 220 or 230 or 240 is a prerequisite unless an exemption is specifically stated in the course description. If a student is in doubt about this requirement he should consult the department, 196 Cornett.

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.

Prerequisites: Mathematics 180 or Mathematics 102/151 or Mathematics 130, or recent completion of Mathematics 12, or acceptable alternative qualifications as decided by the Instructor.

Drs. Forsyth, Tolman, Wright.

(2-3; 2-3)

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.

Dr. Hobson. (3-0; 3-0)

PSYC 311. (3) **Learning**

A critical survey of the basic experimental findings and theories of the learning process. Experiments with both animals and humans may be conducted.

Dr. Goldwater. (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.

Text: Mischel, *Introduction to Personality*.

Dr. J. Bavelas. (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.

Text: Jones & Gerard, *Foundations of Social Psychology*.

Dr. Hoppe. (3-0; 3-0)

PSYC 334. (3) **Personnel 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 counseling, 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.

Dr. A. Bavelas. (2-2; 2-2)

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.)

Texts: Milton Section: Wesley, F., *Child Rearing Psychology* and Longstreth, L., *Psychological Development of the Child*.

Drs. Acker, Gaddes, Milton. (2-2; 2-2)

PSYC 350. (3) **Environmental Psychology**

The course is concerned with the study of the interrelationships between the physical environment (both built and natural) and man's behaviour in that environment. Coverage of this newly emerging area of investigation will account for and develop the work of psychologists, other social scientists, planners and designers in this field. A field project may be required. The contributions of different areas of psychology — primarily social, experimental and psychophysics — to this area will be emphasized. (A second year psychology course is not required).

(Not offered in 1972-73.) (3-0; 3-0)

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 and language change, the pathology of language and cognition.

Students may be admitted at the discretion of the instructors and/or their Departments. Two term papers will be required. Linguistics 100 and Psychology 100 are recommended. (A second-year psychology course is not required).

Drs. Hoppe, Kess. (3-0; 3-0)

PSYC 390. (3) Special Problems in Psychology

Directed independent study for the student. Complete arrangements must be made with an instructor in the Department before registering.

Members of the Department.

PSYC 400. (3) Advanced Research Methods

Experimental design and statistical techniques will be applied to problems in psychology. A brief review of hypothesis testing and nonparametric statistics will be followed by extensive treatment of analysis of variance, regression, factor analysis and multivariate analysis of variance. Emphasis will be placed upon problems of application and interpretation.

Prerequisite: Psychology 300 or equivalent.

Drs. Forsyth, 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.

Texts: Nunnally, *Psychometric Theory* and Cronbach, *Essentials of Psychological Testing*, 3rd Ed.

Drs. Spellacy, Tryk. (2-2; 2-2)

PSYC 402. (3) Experimental Social Psychology

An examination of research and methodology in selected areas of social psychology. Individual research projects may be conducted.

Prerequisite: Psychology 300, equivalent, or permission of the instructor.

Dr. A. Bavelas. (3-0; 2-2)

PSYC 411. (3) Perception

The experimental study of visual and auditory perception. Topics to be discussed may include sensory processes, psychophysics, hearing and speech perception, visual perception, the perception of art, and the effects of environment on perception. Students are expected to conduct an experiment or prepare a term paper in the area of perception.

Text: Bartley, *Principles of Perception*.

Drs. Forsyth, Spreen. (2-2; 2-2)

PSYC 414. (3) Motivation

The first half of the course emphasizes the physiological variables involved in motivation, and the second emphasizes the motivational issues arising from natural science versus human science models. From both points of view, the basic concern is with human behaviour. Psychology 300 and 311 are recommended as a basic preparation.

Drs. Walker, Hobson. (3-0; 3-0)

PSYC 415. (3) Human Neuropsychology

The study of brain-behaviour relationships. The first term of the course is primarily concerned with the neurophysiological and neuroanatomical bases of behaviour. The second term focusses upon research and clinical studies in neuropsychology. Demonstrations of selected patients with cerebral lesions at the Royal Jubilee Hospital will be arranged during the second term. One term paper is required. Biology 150 is recommended.

Dr. Spellacy. (2-2; 2-2)

PSYC 423. (3) **Physiological Psychology**

One term; Introduction to neuroanatomy and neurophysiology, research techniques in physiological psychology, experimental findings from primarily animal research. Topics will include the sensory systems, brain mechanisms underlying sleep and attention, and the physiological bases of motivation, learning and memory. The other term: 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 psychophysiological research; physiological correlates of emotion, sleep and dreaming, and psychopathology; conditioning of autonomic responses; lie detection; and psychosomatic disorders. Biology 150 is recommended.

Drs. Goldwater, Walker. (2-2; 2-2)

PSYC 430. (3) **Abnormal Psychology**

Definitions and models of the behaviour disorders; study of behaviour disorders with regard to social attitude, 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.

Texts: Ullman & Drasner, *A Psychosociological Approach to Abnormal Behaviour* and Bugental, *Challenge of Humanistic Psychology*.

Drs. Tryk, Acker. (3-0; 3-0)

PSYC 432. (3) **Survey of Clinical Psychology**

An introductory survey of clinical psychology, including clinical research, methods of behaviour assessment and modification, and the role of the clinical psychologist in the community. Tentative structure of the course includes guest speakers, lectures and discussion. Admission is open only to third and fourth-year students. (A second-year psychology course is not required as a prerequisite).

Drs. Duncan, Tryk. (3-0; 3-0)

PSYC 434. (3) **Animal Behaviour**

A study of the phylogeny, functions and processes of animal behaviour from both the field-descriptive and laboratory-experimental points of view. This course is given in association with Biology 444 and 445 and students may not register for both Psychology 434 and Biology 444 - 445.

Prerequisite: Biology 150. Recommended: Psychology 300 or Biology 304.

Drs. Tolman, Ellis. (2-2; 2-2)

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 (or equivalent) and written consent of department. (A second year psychology course is not required as a prerequisite).

Text: Robinson and Robinson, *The Mentally Retarded Child*.

Dr. Spreen. (3-0; 3-0)

PSYC 490. (3) **Advanced Special Problems in Psychology**

Independent study for the advanced student. Complete arrangements must be made with an instructor in the Department before registering.

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.

Dr. Tolman, Members of the Department. (2-2; 2-2)

NOTE: Students may take Liberal Arts 305 (page 199) and/or Science 300 (page 250) as an elective in their senior years.

GRADUATE COURSES

Students must consult the Department concerning courses offered in any year.

PSYC 501. (1 ½-4 ½) **Proseminar**

PSYC 502. (1-4 ½) **Research Apprenticeship**

PSYC 503. (1-6) **Clinical Psychology I**

PSYC 504. (1 ½-6) **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. (1 ½-6) **Animal Learning**

PSYC 506. (1 ½-6) **Human Learning**

PSYC 507. (1 ½-6) **Personality**

PSYC 508. (1 ½-6) **Motivation**

PSYC 509. (1 ½-6) **History of Psychology**

PSYC 510. (1 ½-6) **Theories of Psychology**

PSYC 511. (1 ½-6) **Comparative Psychology**

PSYC 512. (1 ½-6) **Physiological Psychology**

PSYC 513. (1 ½-6) **Sensory Psychology**

PSYC 514. (1 ½-6) **Perception**

PSYC 515. (1 ½-6) **Human Neuropsychology**

PSYC 516. (1 ½-6) **Psychotherapy**

PSYC 517. (1 ½-6) **Research Methods in Psychology**

PSYC 518. (1 ½-6) **Psychometric Methods**

PSYC 519. (1 ½-6) **Social Psychology**

PSYC 520. (1 ½-6) **Developmental Psychology**

PSYC 521. (1 ½-6) **Human Factors**

PSYC 522. (1 ½-6) **Personnel Psychology**

PSYC 523. (1 ½-6) **Psychopathology**

PSYC 524. (1 ½-6) **Psychological Assessment**

PSYC 525. (1 ½) **Learning Disorders**

PSYC 526. (1 ½) **Social Processes**

PSYC 527. (1 ½) **Social Design**

PSYC 528. (1 ½) **Clinical Psychology**

PSYC 529. (1 ½-6) **Psychophysiology**

PSYC 530. (1 ½-6) **Animal Motivation and Conflict**

PSYC 531. (1 ½-6) **Environmental Psychology**

PSYC 532. (1 ½-6) **Pharmacopsychology**

PSYC 570. (1 ½) **Psycholinguistics**

Courses PSYC 505 to PSYC 524 and 529-532 inclusive may be taken in areas A, B, C and/or D. More than one area may be taken in any one Winter Session to a maximum of 6 units at the discretion of the student's Supervisory Committee. Each area carries 1½ units of credit. The specific content of each area will be designated prior to registration.

PSYC 599. (3-6) **Thesis**

PSYC 602. (1-6) **Independent Research**

PSYC 603. (1-6) **Clinical Psychology I I**

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 699. (3-15) **Ph.D. Dissertation**

SCIENCE

Course Chairman, 1972-73: Gerhart B. Friedmann, B.Sc., M.A. (*Madras*), Ph.D. (*Brit. Col.*), Associate Professor (Physics).

SCIE 300. (3) **The Natural Sciences**

This course is directed to the promotion of a better understanding, among non-scientists, of what the natural scientists attempt; and of what they achieve and fail to achieve. It will be concerned with concepts and attitudes rather than the techniques. No formal laboratories are associated with this course.

The course is intended primarily for students whose main field of studies is outside the natural sciences.

The format of the course is flexible, but the normal procedure will involve lectures and seminars so that students will come in contact with the instructors from different science disciplines.

Prerequisite: This course is open to non-science students in their third and fourth years and to others with the permission of the Course Chairman. (1-0-2; 1-0-2)

DEPARTMENT OF SLAVONIC AND ORIENTAL STUDIES

Terence M. Rickwood, B.A., Ph.D. (*Liverpool*), Assistant Professor and Head of the Department.

Hsin-i Hsiao, B.A. (*Tunghai*), Lecturer (Chinese and Japanese).

Nicholas V. Galichenko, B.A., M.A. (*Brit. Col.*), Lecturer (Russian).

Zelimir Juricic, B.A., M.A. (*Brit. Col.*), Lecturer (Russian and Serbo-Croatian).

Isabel M. Heaman, B.A.Litt. (*Oxon.*), Part-time Lecturer (Russian).

Michiko Warkentyne, B.A. (*Tokyo*), B.A. (*West. Ont.*), Part-time Lecturer (Japanese).

GENERAL, MAJOR AND HONOURS PROGRAMMES

NOTE: All students planning to take a concentration in a General Programme or Major or Honours in the Department of Slavonic and Oriental Studies must take English 200 and Linguistics 100 (Section E or F).

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. The course numbered 302 must be taken in the Third Year.

An Honours programme in Russian usually requires a total of 66 units over a four-year period.

Students specializing in Russian (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 Head will be happy to assist students with their selection of courses.

NOTE: Students are advised that over the next few years Russian literature courses given in translation, with the exception of Russian 403, may be phased out and given in Russian.

PROGRAMMES IN RUSSIAN

General — First Year: Russian 100; Second Year: Russian 200 and 201; Third and Fourth Years: Russian 302 and six units of Russian courses numbered 400 and above.

Major — First Year: Russian 100; Second Year: Russian 200 and 201; Third and Fourth Years: Russian 302, 406, and at least nine units of Russian courses numbered 400 and above.

Honours — First Year: Russian 100; Second Year: Russian 200 and 201; Third and Fourth Years: Russian 302, 406, and at least twelve units of Russian courses numbered 400 and above.

COURSES

RUSS 100. (3) **First Year Russian**

Basic grammar and composition, elementary reading, oral drills in the language laboratory.

Texts: Stilman and Harkins, *Introductory Russian Grammar*; A. Tolstoy, *Detstvo Nikity*.

Members of the Department.

(3-1; 3-1)

RUSS 200. (3) **Second Year Russian**

Completion of the grammar, translation and composition, selected reading, conversational practice.

Prerequisite: Completion of Russian 100 or its equivalent, or the permission of the instructor.

Texts: Stilman and Harkins, *Introductory Russian Grammar*; S. Khavronina, *Russian As We Speak It*; L. Tolstoy, *Kavkazskii Plennik*.

Dr. Rickwood.

(4-0; 4-0)

RUSS 201 (formerly 300). (3) **Nineteenth Century Russian Literature Part I: Romanticism and Naturalism**

This course, intended as an introduction to Russian literature, includes poetry and short stories of the early nineteenth century.

Prerequisite: Completion of Russian 100. (Credit cannot be obtained for both Russian 201 and Russian 300).

Texts: Pushkin, *Pikovaya Dama*, *Tsygany*; Lermontov, *Demon*, *Taman'*; Gogol, *Shinel'*; *Desyat' russkikh poetov*.

Mrs. Heaman.

(3-0; 3-0)

RUSS 302. (3) **Intermediate Composition and Stylistics**

This course, conducted in Russian, emphasizes translation of selected passages, the regular composition of essays, and conversational skill.

Prerequisite: Completion of Russian 200.

Texts: Borrás and Christian, *Russian Syntax*; Borrás and Christian, *Russian Prose Composition*; P. Waddington, *Advanced Translation From Russian Prose*; Sholokhov, *Sud'ba Cheloveka*.

Mr. Galichenko.

(3-0; 3-0)

RUSS 306. (3) **Nineteenth Century Russian Literature Part II: Realism**

A study of the development of Russian Realism from 1830.

Prerequisite: Completion of Russian 200.

Texts: Pushkin, *Evgenii Onegin*; Lermontov, *Geroi Nashego Vremeni*; Gogol, *Mertvye Dushi*; Turgenev, *Otsy i deti*; Tolstoy, *Sevastopol'skie Rasskazy*; Goncharov, *Oblomov*; Dostoevsky, *Zapiski iz Mertvogo Doma*; Chekhov, *Muzhiki*, *Chelovek v Futlyare*.

Dr. Rickwood.

(3-0; 3-0)

RUSS 390. (3) **Russian for Scientists**

Rapid survey of grammar; reading of modern Soviet scientific journals.

Prerequisite: Open to all students. (Students who have passed Russian 100 cannot receive credit for this course).

Text: Dennis Ward, *Russian for Scientists*.

Members of the Department.

(3-0; 3-0)

RUSS 400. (3) **History of the Russian Language**

(Not offered in 1972-73; offered in 1973-74.)

(3-0; 3-0)

*RUSS 401. (3) **Soviet Literature (in translation)**

Special emphasis on the literature of the 1920's, the development of Socialist Realism, and post-1956 trends in Soviet literature.

Prerequisite: Open to all students.

Texts: Zamiatin, *We*; Babel, *Red Cavalry*; Fadeev, *The Rout*; Sholokhov, *The Quiet Don*; Ilf and Petrov, *The Golden Calf*; Gladkov, *Cement*; Pasternak, *Doctor Zhivago*; Solzhenitsyn, *One Day in the Life of Ivan Denisovich*, *The Cancer Ward*; Brown, *Russian Literature Since the Revolution*.

Dr. Rickwood.

(3-0; 3-0)

* NOTE: Students taking this course towards a Major or Honours in Russian must have Russian 200 as a prerequisite and must take a fourth lecture hour in Russian.

*RUSS 402. (3) **History of Russian Drama (in translation)**

Studies in Russian drama from the eighteenth century to the Soviet period.

Prerequisite: Open to all students.

(Not offered in 1972-73; offered in 1973-74.)

(3-0; 3-0)

*RUSS 403. (3) **Dostoesky and Tolstoy (in translation)**

A study of the major works of these writers against the historical, social, religious and artistic background of nineteenth century Russia. Essays and special topics will be assigned periodically.

Prerequisite: Open to all students.

Texts: Dostoevsky, *Crime and Punishment*, *The Idiot*, *The Devils*, *The Brothers Karamazov*; Tolstoy, *Childhood, Boyhood and Youth*, *War and Peace*, *Anna Karenina*, *Resurrection*.

Mr. Galichenko.

(3-0; 3-0)

RUSS 404. (3) **Eighteenth Century Russian Literature**

A study of the main trends in eighteenth century Poetry, Drama and Prose.

Texts: Selected works of Lomonosov, Sumarokov, Fonvizin, Derzhavin, Krylov, Knyazhnin, Radishchev, Karamzin.

Mr. Juricic.

(3-0; 3-0)

RUSS 405. (3) **Russian Poetry, 1815 to the Present**

Studies in Romanticism, Realism, Symbolism, Acmeism, Futurism, and some developments in recent Soviet verse.

Prerequisite: Completion of Russian 302.

Texts: *Russkie Poety XIX Veka*; *Russkaya Literatura XX Veka*; *Penguin Book of Russian Verse*.

Mr. Juricic.

(3-0; 3-0)

RUSS 406. (3) **Advanced Composition and Stylistics**

This course, conducted in Russian, will stress written composition, stylistic analysis, conversational fluency.

Prerequisite: Completion of Russian 302.

Texts: Borrás and Christian, *Russian Prose Composition*; P. Waddington, *Advanced Translation from Russian Prose*; Kazakov, *Selected Short Stories*.

Mr. Galichenko.

(3-0; 3-0)

RUSS 430. (3) **Directed Reading**

Emphasis, which may change from year to year, will include Kievan and Muscovite literature. Required reading will be drawn from the following texts: *Povest' Vremennykh Let*; *Pouchenie Vladimira Monomakha*; *Skazanie o Borise i Glebe*; *Slovo o Polku Igoreve*; *Zadonshchina*; *Puteshestvie Afanasiya Nikitina*; *Perepiska Knyaza Kurbskogo s Ivanom Groznym*; *Domostroy*; *Povest' o Frole Skobeeve*; *Povest' o Karpe Sutulove*; *Sochineniya Protopopa Avvakuma*.

Prerequisite: Completion of Russian 302 and the permission of the Department.

(3-0; 3-0)

RUSS 499. (3) **Honours Essay**

* NOTE: Students taking this course towards a Major or Honours in Russian must have Russian 200 as a prerequisite and must take a fourth lecture hour in Russian.

SERBO-CROATIAN

SERB 300. (3) **First Year Serbo-Croatian**

Introduction to the literary language of Yugoslavia. Essential grammar, spoken and written drills; elementary reading in Yugoslav prose and poetry.

Prerequisite: Completion of 200 level course in a foreign language or its equivalent, or the permission of the instructor.

Texts: Babic, Slavno, *Serbo Croatian Reading Passages*; Partridge, Monica, *Serbo-Croatian: Practical Grammar and Reader*.

Mr. Juricic.

(3-0; 3-0)

JAPANESE

JAPA 100. (3) **First Year Japanese**

First introductory course in the Japanese language (romanized approach). Japanese letters will be introduced in the second term.

Texts: Niwa & Matsuda, *Basic Japanese for College Students*; Sakade, Florence, *A Guide to Reading & Writing Japanese*.

Mr. Hsiao.

(4-1; 4-1)

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.

Texts: Niwa & Matsuda, *Basic Japanese for College Students*; Sakade, Florence, *A Guide to Reading & Writing Japanese*.

Mrs. Warkentyne.

(4-1; 4-1)

CHINESE

CHIN 100. (3) **First Year Chinese**

First introductory course in Mandarin (romanized approach). Chinese characters will be introduced in the second term.

Texts: DeFrancis, *Beginning Chinese*; DeFrancis, *Character Text for Beginning Chinese*.

Mr. Hsiao.

(4-1; 4-1)

CHIN 200. (3) **Second Year Chinese**

Reading of standard and simplified Chinese characters, as well as conversational practice.

Prerequisite: Completion of Chinese 100 or its equivalent.

Text: DeFrancis, *Intermediate Chinese Reader (pt. 1)*.

Mr. Hsiao.

(4-1; 4-1)

SOCIAL WORK

COURSES OFFERED

SW 400. (3) **Social Work**

Introduction to the philosophy, concepts, and practice of social work in modern society. (3-0; 3-0)

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.

FACULTY OF EDUCATION

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FACULTY OF EDUCATION

- K. George Pedersen, B.A. (*Brit. Col.*), M.A. (*Wash.*), Ph.D. (*Chicago*), Associate Professor and Dean of the Faculty.
- 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.
- John A. Downing, B.A. (*Birkbeck Coll.*), Ph.D. (*London*), Professor.
- Geoffrey P. Mason, M.A. (*Brit. Col.*), Ph.D. (*Wash. St.*), Professor.
- Fred T. Tyler, B.Sc., M.A., M.Ed. (*Alta.*), Ph.D. (*Calif.*), Professor.
- Robert D. Armstrong, B.Ed., B.A., M.Ed. (*Alta.*), Ed.D. (*Calif.*), Associate Professor.
- Franklin E. Churchley, A.R.C.T., L.R.C.T. (*Royal Cons. Mus.*), B.Mus. (*Tor.*), M.A., Ed.D. (*Columbia*), Associate Professor.
- Jean D. Dey, B.Ed., M.Ed. (*Alta.*), Ed.D. (*Calif., Berkeley*), Associate Professor.
- John D. Eckerson, B.S., M.A. (*Wash.*), Ph.D. (*Ore.*), Associate Professor.
- Charles G. Galloway, B.A. (*Cent. Wash. Coll. of Ed.*), M.A. (*Harvard*), Ph.D. (*Calif.*), Associate Professor. (Leave of absence 1972-73.)
- Cary F. Goulson, M.A. (*Brit. Col.*), Ed.D. (*Tor.*), Associate Professor. (Leave of absence 1972-73.)
- Edgar B. Horne, B.A.Sc., B.A., M.A. (*Brit. Col.*), Ph.D. (*Illinois*), Associate Professor.
- A. Richard King, B.A. (*West. Wash. Coll. of Ed.*), Ph.D. (*Stanford*), Associate Professor.
- Donald W. Knowles, B.A., B.Ed., M.Ed., Ph.D. (*Alta.*), Associate Professor.
- Fred L. Martens, B.A., B.Ed. (*Brit. Col.*), M.S. in P.E. (*Wash.*), Ph.D. (*Ore.*), Associate Professor.
- Norma I. Mickelson, B.Ed. (*Brit. Col. - Vic. Coll.*), M.A. (*U. of Vic.*), Associate Professor.
- Richard H. J. Monk, B.A. (*Brit. Col.*), M.Ed., Ph.D. (*Wash.*), Associate Professor.
- Edward E. Owen, B.A., M.A. (*Auckland*), Associate Professor.
- Vance R. Peavy, B.A., M.A. (*Colo. St. Coll.*), D.Ed. (*Ore.*), Associate Professor.
- James Ward, B.A. (*Sheffield*), Ph.D. (*Manchester*), 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. (*West. Wash. St. Coll.*), Ed.D. (*Brit. Col.*), Assistant Professor.
- Irvin K. Burbank, B.Ed. (*Alta.*), M.S., Ed.D. (*Utah St.*), Assistant Professor.
- Gerald A. Carr, B.A., B.S., M.S. (*Calif., Los Angeles*), Assistant Professor.
- John C. Cawood, B.Ed., M.Ed. (*Brit. Col.*), Assistant Professor.
- Martin L. Collis, Dip. P.E. (*Loughborough*), M.S. (*Idaho*), Ph.D. (*Stanford*), Assistant Professor.
- William K. Cross, B.Ed. (*Brit. Col.*), M.A. (*Wash. St.*), Assistant Professor.
- Donald R. Daus, B.S. (*Winona St. Coll.*), M.S., Ph.D. (*Ore. St.*), Assistant Professor.
- Peter O. Evanechko, B.Ed., M.Ed., Ph.D. (*Alta.*), Assistant Professor.
- John F. Hall, A.B., A.M. (*Stanford*), M.S., Ph.D. (*Ore. St.*), Assistant Professor.
- Maureen C. Hibberson, B.P.E. (*Brit. Col.*), M.A. (*Ore.*), Assistant Professor.
- Christopher E. Hodgkinson, B.Sc.Econ. (*London*), M.Ed., Ed.D. (*Brit. Col.*), Assistant Professor.
- Bruce L. Howe, B.S., M.S., Ph.D. (*Ore.*), Assistant Professor.
- James T. Jickling, B.Ed. (*Brit. Col.*), M.F.A. (*Inst. Allende, Mexico*), Assistant Professor.

- Terry D. Johnson, B.Ed., M.A., Ed.D. (*Brit. Col.*), Assistant Professor.
 Werner W. Liedtke, B.Ed., M.Ed., Ph.D. (*Alta.*), Assistant Professor.
 Margaret McHugh, B.A. (*Utah*), M.A.Ed. (*Idaho St.*), Ph.D. (*Ore.*), Assistant Professor.
 Margaret M. Moody, M.Sc. (*Ore.*), Assistant Professor.
 Walter Muir, B.Ed., M.Ed., Ph.D. (*Alta.*), Assistant Professor.
 Lloyd O. Ollila, B.S., M.A., Ph.D. (*Minn.*), Assistant Professor.
 Roger A. Ruth, B.S., M.S. (*Kansas St. Teacher's Coll.*), Assistant Professor.
 John J. Sheppy, B.A., M.Ed. (*Brit. Col.*), Assistant Professor.
 Peter Shostak, B.Ed., M.Ed. (*Alta.*), Assistant Professor.
 Marion A. Small, B.Ed. (*Brit. Col.*), M.Ed. (*West. Wash. Coll. of Ed.*), Assistant Professor.
 Robert Swailes, B.S.A. (*Man.*), M.Ed. (*Brit. Col.*), Assistant Professor.
 Hugh Taylor, B.A. (*Brit. Col.*), M.Ed. (*Ore. St.*), Ed.D. (*Wash. St.*), Assistant Professor.
 Henry G. Timko, B.S. (*Kutztown St. Coll.*), M.A., Ed.D. (*Ill.*), Assistant Professor.
 Beverly A. Timmons, B.A. (*Chico St. Coll.*), M.S., D.Ed. (*Ore.*), Assistant Professor.
 Ronald E. Tinney, B.A. (*Brit. Col.*), Ph.D. (*Minn.*), Assistant Professor.
 James H. Vance, B.Sc. (*Alta.*), M.A. (*Wash.*), Ph.D. (*Alta.*), Assistant Professor.
 Margery M. Vaughan, L.R.S.M. (*Royal School of Music*), Mus.G. (*West. Ont.*), B.Mus. (*Tor.*), M.Litt (*Durham*), Ed.D. (*Georgia*), Assistant Professor.
 Carl R. Viesti Jr., B.A. (*Catholic U. of America*), M.S. (*Bridgeport*), Ph.D. (*Ore.*), Assistant Professor.
 Richard L. Williams, B.S. (*St. Cloud St. Coll.*), M.S. (*Cornell*), Assistant Professor.
 R. Anne McLaughlin, B.Com. (*Brit. Col.*), M.Sc. (*Ore.*), Senior Lecturer.
 Ruth M. Caron, B.F.A. (*Massachusetts*), M.S. (*Ore.*), Visiting Lecturer.
 David Docherty, B.Sc., M.Sc., (*Ore.*), Lecturer.
 Geoffrey S. Hodder, B.Ed., M.A. (*U. of Vic.*), Lecturer.
 Leslie H. Peake, Dip. in P.E. (*St. Paul's Coll., Bristol*), M.Sc. (*Springfield Coll.*), Lecturer.
 Geoffrey D. Potter, B.A. (*Sir George Williams*), Lecturer.
 Kerry C. Quorn, B.A. (*Whitworth*), M.A. (*Guam*), Visiting Lecturer.
 E. Ann Shafer, A.B. (*Pacific Union Coll.*), M.A. (*San Fran. St. Coll.*), Lecturer.
 Larry D. Yore, B.S., M.A. (*Minn.*), Lecturer.

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 in the Faculty of Education:

A. THE BACHELOR OF EDUCATION DEGREE:

A1. ELEMENTARY CURRICULUM

- a. Regular Programme
- b. Transitional Programme

A2. SECONDARY CURRICULUM

B. THE BACHELOR OF EDUCATION (ELEMENTARY) DEGREE

C. DIPLOMA PROGRAMMES FOR GRADUATES:

C1. ELEMENTARY CURRICULUM

C2. SECONDARY CURRICULUM

D. INTERNSHIP PROGRAMMES:

D1. ELEMENTARY CURRICULUM

(Not offered 1972-73.)

D2. SECONDARY CURRICULUM

(Not offered 1972-73.)

E. POST-BACHELOR OF EDUCATION (ELEMENTARY) DEGREE PROGRAMME

F. GRADUATE STUDIES IN EDUCATION

ADMISSION TO THE FACULTY OF EDUCATION

GENERAL REQUIREMENTS

For admission to the Faculty of Education applicants must meet general University requirements specified on pages 37-42, and in addition where applicable, requirements specified under the following section entitled *Minimum Requirements for Admission to Professional Years*. Not all fully qualified applicants will be accepted if the number of applicants exceeds the number provided for in each year or programme of studies. The University reserves the right to refuse admission to this Faculty on the grounds of physical handicaps or for other reasons, including unsatisfactory academic records.

Admission to the Faculty of Education may also be denied to those who are unable to demonstrate good use of English. Applicants whose native tongue is not English may be required to pass oral and written tests in English before being admitted to the Faculty.

In all cases, students who are entering the Faculty are required to submit a course (or programme) planning form to the Education Advising Centre prior to registration in September.

Students who have registered in another Faculty in September and who seek to transfer into a professional year of the Faculty of Education will not be allowed to do so after the fifth day of instruction.

For purposes of admission to the Faculty of Education, Grade Point Averages are normally based on work done in winter sessions in which 15 units have been attempted.

Subject to the general regulations of the University governing admission with advanced standing and transfer credit, and to the decision of the Faculty Admissions Committee, applicants who hold a British Columbia teaching certificate and who have completed studies through another Faculty or institution, may receive credit for courses already completed provided the courses meet the requirements of their programmes in Education. Normally, such students will be granted 15 units of credit for professional training.

Students who apply to take courses for credit towards a Bachelor of Education degree, and who have not taken relevant academic/professional courses during the previous ten years, must have their status evaluated by the Faculty Admissions Committee, and may be required to complete successfully up to 18 units of specified courses before they can proceed toward the degree. In special cases, where a student has obvious deficiencies in his professional background, even though he has taken a course or courses during the previous ten years, the Faculty Admissions Committee may require him to bring his background up to date by completing specified work before proceeding towards the degree.

Education courses are not open to students in other Faculties except by permission of the instructor. A student may receive retroactive credit upon transfer to the Faculty of Education for course work taken for no credit while registered in another Faculty. Normally such credit will be granted only to students who have received prior approval of the Education Advising Centre.

A programme is being planned within the Bachelor of Education (Elementary Curriculum) degree which will require four years before initial certification. However, there are no immediate plans to discontinue the present programme which leads to initial certification after three years.

MINIMUM REQUIREMENTS FOR ADMISSION TO PROFESSIONAL YEARS

A candidate who does not fully meet the following requirements for admission to a professional year may petition the Faculty of Education Admissions Committee for special consideration of his case.

A. THE BACHELOR OF EDUCATION DEGREE

A1. ELEMENTARY CURRICULUM

- (a) Regular Programme — (For students previously registered in this degree programme.)

Credit in at least 24 units that must include:

Education 297	0 units
Education 200	3 units
Core course(s) in art or music or physical education	3 units
English 100, 110, or 120	3 units
Mathematics 160 or other approved mathematics	3 units
Education 145 or other laboratory science	3 units
Geography 101 or History 230 or 242	3 units

A G.P.A. of 3.00 in the immediately preceding year is required.

- (b) Transitional Programme — (Normally for students transferring to this degree programme.)

Credit in at least 24 units that must include:

English	6 units
Mathematics	3 units
A laboratory science	3 units
Geography (equivalent to 101)	3 units
History	3 units

A G.P.A. of 3.00 (UVic C+) in the immediately preceding year is required.

Transitional students are required to complete an eight-day post-session practicum at the end of the year immediately preceding their entrance into this programme, or equivalent school experience in the fall term in addition to the regular student-teaching requirements, to be arranged by the Student Teaching Office.

A2. SECONDARY CURRICULUM

Completion of:

- 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 immediately preceding junior-level courses in that the area will be included to a total of 9 units);
- the specified co-requisites; and
- the courses in Education required in the first four years of the programme.
- 1972-73 only: A G.P.A. of 3.00 in the immediately preceding year.
1973-74 and following: A G.P.A. of 3.00 in the immediately preceding two years.

B. THE BACHELOR OF EDUCATION (ELEMENTARY) DEGREE

Students will not be accepted into this programme who have not already completed professional training and 15 units of acceptable first year work (see page 280).

C. DIPLOMA PROGRAMMES FOR GRADUATES

C1. ELEMENTARY CURRICULUM

1972-73: A degree, acceptable to the Faculty as to content, with a minimum G.P.A. of 3.00 (UVic C+) on the best 21 units of acceptable senior courses.

1973-74: The G.P.A. requirement shall be a minimum of 3.00 (UVic C+) in the immediately preceding *two* years.

The academic preparation for the Elementary Diploma Programme normally shall include the following:

English	6 units
Mathematics	3 units
Laboratory Science	3 units
Geography or History	3 units

Under exceptional circumstances, if a student lacks any of the above as prerequisites he may be admitted to the Elementary Diploma Programme provided that he is prepared to correct deficiencies. It is to be expressly understood that a student *will not be awarded the diploma nor be recommended for a teaching certificate until all courses specified by the Faculty of Education Admissions Committee are successfully completed*. Candidates are strongly urged to make up deficiencies before entering the diploma programme.

Elementary Diploma students are required to complete an eight-day post-session practicum at the end of the year immediately preceding their entrance into the Faculty of Education, or equivalent school experience in the fall term in addition to the regular student teaching requirements, to be arranged by the Student Teaching Office.

C2. SECONDARY CURRICULUM

The applicant must possess:

- (a) a degree from a recognized university with the equivalent of at least 9 units of work in the senior courses in each of two of the following subjects: art, biology or botany or zoology, chemistry, English, French, geography, German, history, Latin, mathematics, music, physical education, physics, Spanish, theatre; with a G.P.A. of 3.00 (UVic C+) in the senior courses that constitute each of the teaching subjects; or
- (b) a Master's or Honour's degree in one of the subjects listed in (a); or
- (c) a degree from a recognized university with the equivalent of at least 15 units of work in senior courses in any one of the subjects listed in (a) with a G.P.A. of 3.00 (UVic C+) in these courses. An additional 9-unit sequence of junior and senior course work in a second teaching subject area;

and in addition to have attained:

1972-73 only: A G.P.A. of 3.00 (UVic C+) in the immediately preceding year.

1973-74 and following: A G.P.A. of 3.00 (UVic C+) in the immediately preceding two years.

D. INTERNSHIP PROGRAMMES

These programmes have been suspended and will not be offered in 1972-73.

D1. ELEMENTARY CURRICULUM

Admission requirements for this programme are the same as for the Regular Programme, A1. (a) of the Bachelor of Education (Elementary Curriculum) degree *EXCEPT* that two years of the programme must be completed.

D2. SECONDARY CURRICULUM

Admission requirements for this programme are identical to those for the Diploma Programme, C2., Secondary Curriculum.

GENERAL INFORMATION

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.

The Faculty is presently considering a 10-year limitation on courses applicable to a degree. Students who are working on programmes should consult the Education Advising Centre regarding implications of this proposal.

It is expected that each student within the Faculty of Education will make a commitment to a particular programme and two teaching areas (except on the 4-year programme — one area only), either through seminar contact or direct negotiation with the Advising Centre, and file a record of his selection with the Advising Centre no later than the first term of the third year. When the student has notified the Advising Centre of his choice of programme and teaching area(s), and an official Programme Outline has been formalized, it is the student's responsibility to contact the Advising Centre for permission to make any adjustments or substitutions, etc. *Since course numbers and teaching areas may be revised from year to year, it is advisable for students to consult the Education Advising Centre prior to registering in any session.*

Advisors are available by appointment. It is important that interviews be scheduled in advance by telephone or letter as there is no guarantee that casual "drop-ins" can be accommodated.

STANDING AND CREDIT

Commencing 1971-72 at the University of Victoria, successful completion of the professional year (including Diploma programme as well as regular and transitional professional years) will require a G.P.A. of 3.00 on all work taken during that year for the purpose of determining eligibility for a teaching credential.

Students should refer to the general statements on pages 32-33, 64-73 of this Calendar. In addition, to be eligible for the Bachelor of Education degree, the candidate must normally have earned:

- (a) a mark of at least D 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 work of the teaching areas as specified for the secondary programme;
- (d) a G.P.A. of 3.00 on all work taken subsequent to the professional year.

A student who meets the minimum requirement for Pass standing in a given year but whose standing is nevertheless considered by the Faculty to be unsatisfactory, will be placed on probation for the following year. At the end of that year the probationary category may be removed, or if there has been insufficient improvement, the student will not be permitted to proceed to the next higher year. If a student fails to qualify for admission to the professional year a year's extension may be granted to complete these requirements. This year shall be considered probationary. Students who fail to meet the stated requirements shall be denied entry to the professional year and 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.

Reference is made to the general university regulations given on pages 32-33, 64-73.

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 198, 298, 398, 498 and 798. All arrangements for school experience and student teaching are made through the seminars and Student Teaching Office which is located in the MacLaurin Building.

Students on the intermediate option may elect either of the following programmes for their professional year as places are available. All primary option students will take the 3-3-3 programme.

- (1) 3-3-3 Programme: This programme provides for student teaching in three practica of three weeks each during the regular year.
- (2) 2-10 Programme: In this programme, students will be assigned to schools in the Victoria area for an initial two-week period of school experience prior to the beginning of their courses in September. They will then return to the University to complete all course work and seminars. Class schedules will allow one free day each week for visits to schools. In February students will begin a ten-week practicum in the schools under the supervision of their faculty seminar leaders. The programme will end in April with a final two weeks of lectures and seminars at the University. While the programme will begin earlier in the year than the regular student teaching programme, it will also end earlier.

Students in Education who will be undertaking Education 197, 297, 797, 398 or 798 should allow an additional \$50 to \$100 for travel to schools. Where a post-session practicum is required, students are reminded that their year is not completed until the middle (or end) of May. Only those students resident in the Victoria area may normally expect to take their post-session practicum in School Districts #61, #62 or #63.

TEACHER CERTIFICATION

The Public Schools Act of British Columbia requires that any person employed as a teacher in any public school hold a teacher's certificate issued by the Provincial Department of Education. Sole authority to issue such teaching certificates rests with the Department of Education, Parliament Buildings, Victoria, and all enquiries concerning certification must be directed to the Registrar of that Department. A degree or a transcript of credit from a university or teacher's college is not a certificate of authority to teach.

The following general statement on certification policy was provided by the Registrar's Branch of the Department of Education at the time the Calendar went to print. Information on subsequent changes which may have been made by the Department of Education, or clarification on specific certification problems, must be obtained from that same source.

The Professional Certificate and the Standard Certificate are the two types of regular teaching certificates currently issued by the Department of Education. The Professional Certificate requires completion of an acceptable four or five-year post-secondary school programme, normally culminating in a suitable university degree, and the Standard Certificate, of a minimum three-year post-secondary school programme of approved professional and academic preparation. All acceptable programmes must evidence completion of at least one year or the equivalent of basic teacher education including suitable study of teaching methodology, educational foundations (such as educational psychology, philosophy, history, sociology), measurement and

evaluation, either elementary or secondary school curricula, and supervised observation and practice teaching.

In general, approved preparation programmes leading to *initial certification as a secondary school teacher* require at least four, and normally five or more years of professional and academic or specialist studies at the University. The certificate issued to those qualifying is the Professional. *Initial certification as an elementary school teacher* may be at either the Standard or the Professional Certificate level, depending upon the particular preparation programme undertaken.

All initial certificates issued are interim, valid for up to four years. Permanent Professional and Standard Certificates may be authorized after the teacher has satisfied additional conditions including proof of at least two years of recent satisfactory teaching service in British Columbia schools.

Persons possessing minimal British Columbia teacher certification issued under previous regulations (Elementary B, Elementary C) or under current regulations (Teaching Licence issued for certain *approved* teacher preparation programmes of less than three years' duration), and those holding Standard Certificates may qualify for higher certification by completing approved preparation programmes at the University. Teacher preparation programmes approved by the Department of Education for higher certification are premised upon the applicant's standing on a suitable degree programme. Consequently, course work to be undertaken must be carefully planned in accordance with the programme or degree requirements of the Faculty of the University in which the applicant is registered. Attention is drawn to course requirements for degree programmes as prescribed in the Calendar of the University. All inquiries concerning such requirements must be made at the appropriate Faculty at the University (see page 263 "Academic Advice").

In summary, providing full basic teacher professional education is included, under current regulations teachers generally may qualify for the types of certificates noted below by completing the appropriate specified standing on a degree programme in the Faculty of Education.

Full Fourth Year or Full Fifth Year Professional Certificate
Full Third Year Standard Certificate

Those with *basic teacher professional education acceptable to the Department of Education* (at least one university year or the equivalent) may proceed to a suitable *Bachelor of Arts or other appropriate degree* and, under *current* regulations, normally qualify for certification as follows:

Full Third Year or Full Fourth Year Professional Certificates
Full Second Year Standard Certificate

APPLICATION FOR TEACHER CERTIFICATION

It must be recognized that the sole responsibility for teacher certification rests with the Department of Education in Victoria.

The *initial application* for a teaching certificate by a candidate who has completed basic professional training at the University must be made on a form provided by the Department of Education which is sent out with a student's Statement of Grades at the end of the Winter Session. This form, duly completed by the applicant and accompanied by a registration fee of \$5.00 and birth certificate, must be forwarded direct to *The Registrar, Department of Education, Parliament Buildings, Victoria.*

It is also the responsibility of a teacher to make application to *The Registrar, Department of Education*, for any change in certification, including permanent certification, or for extension of interim certification. Such applications can be made by letter to the above official. In cases where completion of course work satisfies requirements for a type of certificate which may be made permanent, providing other requirements for permanent certification already have been satisfied (including two years of recent satisfactory teaching in British Columbia schools), the teacher must make simultaneous but separate application for permanent certification in the normal fashion through his or her District Superintendent of Schools.

As soon as possible after the conclusion of each Winter Session, the University reports to the Department of Education on the academic record of each student

registered in the Faculty of Education who has successfully completed basic professional training. Students have the right to request in writing that information on their academic records be omitted from the report to the Department of Education. Since the type of certificate issued is dependent upon the student's standing with the University, the report gives the Department of Education the necessary information upon which to base its assessment of the candidate's eligibility for the teaching credential for which he has applied.

A person who has previously completed basic professional training and plans to apply to the Department of Education for a change in certification, but who has been registered in another faculty during the Winter Session, must request the Registrar of the University to send a statement of standing to that Department.

PROVISIONS FOR TEACHERS WITH CERTIFICATES FROM OTHER PROVINCES OR COUNTRIES

All enquiries must be directed to the Registrar of the Department of Education, Parliament Buildings, Victoria. For an individual who has qualified for certification, there are opportunities to advance certification level through the undertaking of various university degree programmes by means of university summer session or full-time winter session studies. Admission and placement in terms of university degree studies is determined by the university at which the individual registers, not by the Department of Education. Placement on a degree programme, therefore, is not made by the university on the basis of the certificate issued by the Department of Education but on the amount of appropriate course credit recognized on admission. Advancement of certification thereafter is related to the obtaining of a given standing toward a specific degree at an approved institution.

TEACHER QUALIFICATION SERVICE

The Teacher Qualification Service, sponsored jointly by the B.C. Teachers' Federation and the B.C. School Trustees' Association, provides an advisory service to teachers and school boards and evaluates teacher qualifications.

The Service acts only upon application and only after the individual has been granted a British Columbia Teaching Certificate (or has been assured of being granted such a certificate) by the Provincial Department of Education.

Qualifications are evaluated and categories assigned on the basis of complete years of professional preparation; partial years are not evaluated. At present the Teacher Qualification Service recognizes six categories, each corresponding to the number of years of training acceptable to the Teacher Qualification Service. One of the years must be a professional year.

Broadly speaking, the B.C. Teaching Licence qualifies for Teacher Qualification Service category 1 or 2, the Standard Certificate for category 3 or 4, and the Professional Certificate for category 4, 5 or 6. Teacher Qualification Service category 6 requires a minimum of six years of training and a Master's degree.

"Request for Evaluation" forms are available from the Teacher Qualification Service office, #220-1070 West Broadway, Vancouver 9; the Education Advising Centre, Room 250, MacLaurin Building; and the Registrar's Office, Building M.

A. THE BACHELOR OF EDUCATION DEGREE

A1. ELEMENTARY CURRICULUM

A programme is being planned which will require four years before initial certification. However, there are no immediate plans to discontinue the present programme which leads to initial certification after three years.

Every candidate for this degree is required to complete at least 75 units. This programme extends over five regular sessions and the professional year must be taken as a "package", i.e. all courses shown in the programme as the "Professional Year" normally must be taken during one winter session. Under certain circumstances permission may be granted by the Education Advising Centre for students to take up to 3 additional units of Education courses with the professional year to a maximum of

18 units. However, students are cautioned that difficulties may arise in so doing due to the heavy load of the professional year and the fact that only professional year courses are cancelled during practica. Arts courses may not be taken with this year because six weeks or more of lectures would be lost during practica. In programmes involving certain teaching areas Years Four and Five may readily be taken in Summer Sessions.

Students on the Elementary programme will elect to follow either the Primary Option or the Intermediate Option.

Students on the Elementary programme may take, as electives, courses specifically designated for secondary school teachers provided they secure prior permission from the Education Advising Centre.

Students entering this programme with advanced standing from another faculty or institution will be required to make up any deficiency. In some instances, therefore, students will need work beyond the minimum degree requirement of 75 units.

Course Requirements:

The degree requires successful completion of the following as a minimum:

a. Education:	24-25½ units
Education 197	0
Education 297	0
Education 797	3
Education 200	3
Education 305	3
Education 340, or 342 and 343	3
Education 420, 423, 425, or 427	3
Education 301	1½
Education 401	1½
Curriculum and Instruction, 700 series	6-7½
b. Core Courses:	21 units
English 120, and one of 200, 201, 203, 300	6
History 230 or 242	3
Geography 101	3
Mathematics 160* or other approved mathematics	3
Education 145 or other laboratory science**	3
Approved course(s) in art education, music education or physical education	3
c. Two teaching areas and electives***	30 units
	<hr/>
	TOTAL 75-76½ units

* Mathematics 160 is not acceptable for credit in the mathematics or mathematics/science teaching areas.

** Students electing Chemistry 120 or 124 as the laboratory science must complete Chemistry 111 or 121 (lab.), respectively, for a total of 4 units.

*** When choosing electives, students should note the following:

1. Psychology 335 is not normally acceptable for credit in the Faculty of Education because the course content is similar to Education 305 and 406.
2. Not more than 3 units of additional courses applicable to a student's particular teaching area may be taken without permission of the Advising Centre.
3. General University regulations require a minimum of 21 units of courses numbered 300 or 400.

Programme by Years:

a. Regular Programme

Year One:

Education 197	0	
English 120	3	
History 230 or 242	3	
Education 145 or other laboratory science (see Core Courses p. 267)	3	
Approved three units from the following:		
Art Education 100;		
Music Education 106 and one of Music Education 105, 207, 208, 209;		
Physical Education 149; or 100, 142 and 143 for students on a physical education teaching area	3	
A course in a teaching area if required (e.g. Mathematics 130); or elective	3	15 units

Year Two: Pre-Professional Year (1972-73)

Education 297	0	
Education 200	3	
English 200, 201, 203, or 300	3	
Geography 101	3	
Mathematics 160 or approved mathematics unless a First Year mathematics course has already been completed	3	
A course in a teaching area or elective	3	15 units

Year Three: Professional Year (1972-73)

Education 301	1½	
Education 305	3	
Education 401	1½	
Education 742 (Primary or Intermediate)	2	
Education 744	1½	
Education 745	1	
Education 746	1	
Education 797	3	
*Primary: Two of Education 701, 705 or 706 or 707, 747	2	
*Intermediate: One of Education 701, 705 or 706 or 707, 747	1	15½-16½ units

*Students will not choose Education 701 if they have completed Art Education 100; nor Education 705, 706 or 707 if they have completed 3 units of music education; nor Education 747 if they have completed courses in physical education. However, students are permitted to take Education 747 *in addition* to the normal requirements of their professional year provided that they have not completed PE 149.

Years Four and Five:

Education 340 (Primary) or 342 and 343 (Intermediate)	3	
Education 420, 423, 425 or 427	3	
Courses in teaching areas and electives	24	30 units

TOTAL UNITS 75½-76½

b. **Transitional Programme:** (Normally for students transferring to this degree programme; see page 261 for admission requirements.)

Years One and Two:

English 120 (equivalent)	3	
English 200, 201, 203, or 300 (equivalent)	3	
Mathematics	3	
Laboratory science	3	
Geography 101 (equivalent)	3	
History	3	
Teaching area, prerequisites, or electives	12	30 units

Year Three: Transitional Professional Year (1972-73)

Education 200	3	
Education 305	3	
Education 701	1	
Education 705, 706, or 707	1	
Education 742 (Primary or Intermediate)	2	
Education 744	1½	
Education 745	1	
Education 746	1	
Education 747	1	
Education 797	3	17½ units

Years Four and Five:

Education 301*	1½	
Education 340 (Primary) or 342 and 343 (Intermediate)	3	
Education 401*	1½	
Education 420, 423, 425, or 427	3	
Courses in teaching areas and electives	21	30 units

TOTAL UNITS 77½

* Required in Year Four.

TEACHING AREAS (ELEMENTARY)

Art Education:

Core: Art Education 100

Area:

History in Art 100 or 120	3	
Art Education 300	3	
Art Education 301	3	
Art Education 302 or Visual Arts elective	3	
Art Education 400	3	15

Creative Drama:

Theatre 181	3	
Two of Theatre 382, 394, 481	6	
Two of Education 300, 344, 495*	3	12

* May be taken only subsequent to 9 units in Theatre.

Early Childhood Education:

Education 341	3	
Approved electives (3 units must be in Arts and Science)	6	
Either of the following options:	3	12
Kindergarten Option:		
Education 440	1½	
Education 441	1½	
Primary Option:		
Education 440	1½	
Education 342	1½	

Language Arts:

Linguistics 390*	3	
Either of the following options:	9	12
Primary option:		
Education 341	3	
Education 342	1½	
Education 343	1½	
3 units from:	3	
Education 344, 347,		
348, 415, 442,		
Theatre 181, 382,		
Library Education 430, 432, 433.		
Intermediate option:**		
English 301 or Education 341	3	
Education 347	1½	
Education 348	1½	
3 units from:	3	
Education 344, 415, 442,		
Theatre 181, 382,		
Library Education 430, 432, 433.		

* If an approved course in linguistics has been taken, the student may select 3 additional units from the listed optional courses.

** Education 342 and 343 must be included in the core.

Library Education:

Library Education 430	3	
Library Education 432	1½	
Library Education 433	1½	
Education 341* or English 301	3	
Education 360	1½	
Approved elective**	1½	12

* Students on the primary option must take Education 341.

** Education 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 Mathematics 100/101 (or 130); 151/102; 110/210; or other 3 units of Mathematics by special permission.

Area:

Education 443	1½	
Education 444	1½	
Approved mathematics	9	12

In planning a sequence of courses, students must consider prerequisites. Mathematics 102, 151, 240, 343, 110, 210, 170, 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: Mathematics 100, 101, 110, 170, 171, 200, 201, 210, 332.

The following courses are not acceptable for credit in the mathematics teaching area or in the core when the teaching area is mathematics: Mathematics 012, 160, 180, 203, 360.

Mathematics/Science:

Core: Approved mathematics (3 units); approved laboratory science (3 or 4 units).

Area:

Approved mathematics	3	
Approved science	6	
Approved mathematics and/or science	6	15

Science courses in this area and core must be selected to meet the following requirements:

1. At least 3 units from Education 145, Physics, or Chemistry (latter requires 4 units);
2. At least 3 units from Biology or Bacteriology;
3. At least 3 additional units chosen from: Biology, Bacteriology, Physics, Chemistry, Astronomy, Geology, Geography 203 or 302, Education 345, Physical Education 241, Science 300.

Further science electives will be chosen from those listed in 3 above. Students on the four-year Bachelor of Education (Elementary) degree programme will substitute an elective for Education 345 in Year Four.

The following courses are not acceptable for credit in the Mathematics/Science teaching area or in the core when Mathematics/Science is the teaching area: Mathematics 012, 160, 180, 203, 360.

Music Education:

Core: Music Education 106 and one of Music Education 105, 207, 208, 209.

Area:

Music Education 100	1½	
Music Education 306	1½	
Music Education 309	1½	
Approved Music and/or Music Education	10½	15

All students accepted in this area will be required to complete one of the following:

- (a) one year in a university performance group; or
- (b) equivalent participation in an off-campus performance group approved by the Music Education Section.

Students wishing to enter the Music Education teaching area must first consult with the Music Education Section regarding acceptance. Any student presenting an A.R.C.T. or equivalent diploma will have his diploma evaluated by the Music Education Section. Up to 6 units of credit may be granted for his diploma at the discretion of the Music Education Section toward specific courses required on the teaching area.

Physical Education:

Core: Physical Education 100, 142, 143.

Corequisite: Biology 150.

Area:

Physical Education 101	0	
Physical Education 151	1½	
Physical Education 241	3	
Approved Physical Education (PE 341, 342, or 442; PE 444* or 445; PE 345; PE 446; PE 460)	7½	12

* Students should have taken Education 301 before attempting Physical Education 444. Those who have not completed Education 301 must have special permission and must be prepared to spend extra time in this course.

Returning students who require Physical Education 340 and/or 440 will register for Physical Education 100 and/or 101 to complete the activity areas formerly taken under Physical Education 340 and/or 440.

Entry into the Physical Education teaching area is limited. Candidates whose dossier is not complete (including medical report, transcript, and letter of experience) by August 15 cannot be considered. Application for Admission or Re-Registration must be made by the due dates given on pages 36 and 37.

1. *Medical*: All students planning on entering this teaching area must have a full medical examination within four months prior to registration. Even before completing the Application for Admission to the University, and in any case before July 1, students should write to the Admissions Office for medical cards; these must be fully completed, including the medical examiner's statement and returned to the University Health Service by August 15. The line on the card headed "Faculty" should be clearly marked "Physical Education Teaching Area."

2. *Transcripts*: In addition to submitting transcripts for admission to this faculty as specified on pages 37 and 38, a student wishing to enter this teaching area must submit by *August 15* to the Physical Education Section a transcript of his previous year's work. If he is planning to enter the programme as a second year student, he should supply the Physical Education Section with transcripts for the previous two years. Applicants for First and Second Year should have C+ or equivalent standing in their last year in Secondary School and/or in First Year University.
3. A student must request a form from the Admissions Office on which to describe his experience in physical education, athletics and recreation activities in secondary school and the community. This should be completed and returned to the Physical Education Section by August 15.
4. *Physical Proficiency Test*: The standards achieved on this examination will be included in the criteria for acceptance to the programme. Students planning to enter this teaching area will undergo a physical proficiency examination at 8:30 a.m. on Wednesday, August 30th, in the Gymnasium. Gym clothing will be required. Students should expect to be in Victoria three days.

Students are advised to include chemistry and biology in their secondary school programmes. Students who do not have at least Chemistry 11 and Biology 11 may be denied acceptance into the Physical Education teaching area.

Regulation uniforms, which may be obtained at the University Bookstore, are required by all students specializing in physical education.

Students who fail to qualify for acceptance to this area on first application and who intend to re-apply in their second year are warned that 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.

Completion of a Physical Education teaching area requires attendance in at least three regular winter sessions, exclusive of the professional year.

Remedial:

Education 300	1½	
Education 402	1½	
Education 415	1½	
Education 416	1½	
Education 417	3	
Education 342 and 343*	0-3	
Approved remedial options	3-6	15

*Education 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:

1. Education 145, Physics, or Chemistry*
2. Biology or Bacteriology

Area:

A laboratory science chosen from the other group above	3-4	
One of:	3	
Astronomy 120, 200, Geology 200, Geography 203, Alternative approved by the Science Education Section.		
Science elective chosen from any subject listed above or Education 345, Science 300, Geography 302, Physical Education 241 (Education 145 may not be chosen)	3	
Education 445	3	12-13

*Chemistry 121 must be taken with 124, and 111 with 120.

Students on the four-year Bachelor of Education (Elementary) programme will substitute an elective for Education 345 in Year Four.

Social Studies:

Anthropology 339 or other approved		
anthropology	3	
Education 346	3	
Six units of senior Geography or 6 units of Senior History	6	12

Special Classes:

Education 407	1½	
Education 415	1½	
Education 416 or 442	1½	
4½ units chosen from Education 402, 408, 409A, 409B, 409C*, 409D, 409E, 442, 416	4½	9

*Education 496 is recommended in addition to the above for students specializing in teaching the mentally retarded.

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 is acceptable as a teaching area (elementary).

A2. SECONDARY CURRICULUM

This programme is designed for the preparation of secondary school teachers. It consists of a minimum of 75 units and requires specialization in two subject areas normally taught in the secondary schools of B.C. In each of these areas including pre-requisite courses, students must complete no fewer than 15 units and not more than 24 units. For graduation, a G.P.A. of 3.00 must be obtained in the senior courses of each subject area. The calculation of a teaching area G.P.A. on the secondary programme shall be based on all senior courses of the teaching area. When less than nine units of senior courses are taken the minimum basis for the calculation shall include the senior courses and one or more of the immediately preceding junior-level courses from the same teaching area to a total of 9 units. In addition, a G.P.A. of 3.00 must be attained in the work of the professional year. A G.P.A. of 3.00 is required in work taken subsequent to the professional year.

The programme ordinarily requires attendance at five winter sessions; during each of the five years a seminar and professional experience or student teaching will be required. The professional year is taken as a "package" in Year Five, i.e. all courses shown in the programme as the "Professional Year" must normally be taken during one winter session. Students are cautioned against taking courses in addition to those specified for this year; approval of the Education Advising Centre is required before any such courses can be taken.

Students in the secondary programme may take, as electives, courses specifically designated for elementary school teachers provided they secure special permission from the Education Advising Centre.

Course Requirements:

The degree requires successful completion of the following as a minimum:

a. Education:		21 units
Education 198, 298, 398, 498	0	
Education 301	1½	
Education 303	1½	
Education 401	1½	
Education 406	3	
Education 420, 423, 425, or 427	3	
Education 430 (or elective if Education 498 completed)	1½	
Education 798	3	
Education electives	3	
Curriculum and Instruction, 750-769	3	

b. Courses chosen from two teaching areas (including prerequisites and co-requisites)	45	45 units
c. Electives*	9	9 units

TOTAL 75 units

* When choosing electives students should note the following:

1. Psychology 335 is not normally acceptable for credit in the Faculty of Education because the course content is similar to Education 305 and 406.
2. General University regulations require a minimum of 21 units of courses numbered 300 or 400.

Programme by Years:

Year One:

Education 198	0	
English 110 or 120	3	
Teaching areas	6	
Corequisites and/or electives	6	15 units

Year Two:

Education 298	0	
Teaching areas	9	
Corequisites and/or electives	6	15 units

Year Three:

Education 398	0	
*Education 300, 360, 403, 430, or other approved education elective	1½	
Education 303	1½	
Teaching areas and/or electives	12	15 units

*All students in physical education and guidance will take Education 301.

Year Four:

Education 498	0	
Education 406	3	
Teaching areas and/or electives	12	15 units

Year Five: Professional Year

Education 798	3	
One of Education 750 to 769 (first teaching area)	1½	
One of Education 750 to 769 (second teaching area)	1½	
Education 301*	1½	
Education 401	1½	
Education 430 or approved elective**	1½	
Education 420, 423, 425, or 427	3	
Approved Education elective	1½	15 units

TOTAL 75 units

*Students in physical education or guidance teaching areas who have completed Education 301 will substitute a senior Education elective.

**Students may substitute an approved elective in place of Education 430 provided they have completed units on school law and organization in Education 498.

Programme for those who have completed professional training:

Students who have completed two or three years of university work including a professional year at this university or who hold a teaching certificate issued by the Department 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:

- (1) As a minimum the student must meet the unit requirements, teaching area requirements, and G.P.A. requirements as stated in section A2, page 273.
- (2) Only the following education courses* of the secondary programme must be completed: Education 301; 401; 406; one of 420, 423, 425, 427; two of 750-769 (in the two teaching areas); 430 or 498 or teaching experience in B.C. public schools.
*Courses taken prior to enrolment on this programme may be substituted for the above if approved by the Education Advising Centre.
- (3) A student will be considered to have met the minimum requirements for Year Four only when 15 units or less are required to complete the degree and for Year Three only when 33 units or less are required to complete the degree (and provided 30 units have been completed in addition to a professional year).

TEACHING AREAS (SECONDARY):

The minimum required in each of the two teaching areas is 15 units. In addition to these 30 units a total of 15 units is required made up of corequisites and additional area courses. Only with prior permission of the Education Advising Centre may exceptions be permitted to any of the following subject and course requirements.

Art:

Corequisites:

English 120	3
English 200 or 201	3..... 6

Area:

Art Education 100	3
History in Art 100 or 120	3
Art Education 300	3
Art Education 301	3
Art Education 400	3.....15

Additional area courses may be chosen from Art Education 302, 303, 304; or, with prior approval of the Art Education Section, from courses in Visual Arts or History in Art.

Biological Sciences:

Corequisites:

Chemistry 121 and 124, or 111 and 120	4
Chemistry 230 and 231	3
English 110 or 120	3
Physics 101, 103, or 121 (unless Physics 12 completed)	3
Mathematics 130 only if Physics 101 or 121 selected	3..... 10-16

Area:

Biology 150*	3
Biology 203/204	3
Biology 206/207	3
Biology 300/306	3
One of: Biology 200, 303, 305, 331, 405	3.....15

*Students excused Biology 150 by the Biology Department (see page 113) will substitute 3 units in Biology or Bacteriology.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

Chemistry:

Corequisites:

English 110 or 120	3	
Mathematics 130	3	
Mathematics 231 or equivalent	3	
Physics 101 or 121	3	
Physics 212	3	15

Area :

Chemistry 121 and 124	4	
Chemistry 221 and 224	3	
Chemistry 231 and 233	3	
Chemistry 344	3	
Chemistry 326 or 333	3	16

Additional area courses will be chosen from Chemistry 326, 333.

English:

Corequisites:

Linguistics 100	3	
Linguistics 390	3	6

Area :

English 120	3	
English 200	3	
English 400	3	
English 434 or 435	3	
English 437	3	15

Additional area courses will be chosen from English 413, 423 or 424, 433, 430 or 431, 429 or 438. English 413 is recommended in a sequence of 18 units or more. English 203 may be taken in a 21- or 24-unit sequence, but no other course in American literature may be taken.

French:

Corequisites:

English 120	3	
English 200	3	6

Area :

French 180	3	
French 285	3	
French 290	3	
French 302	3	
French 350*	3	15

*Where a student can demonstrate competence in oral French satisfactory to the instructor in Education 754, 3 units of French numbered 400 or higher may be substituted for French 350.

Additional area courses will be chosen from those numbered 400 or higher.

General Science:

Corequisites:

English 110 or 120	3	
Mathematics 130	3	
Mathematics 231 (or 230 and 232) only if Physics 212 or 213 elected	3-6	6-12

Area:	
Biology 150	3
Chemistry 111 and 120, or 121 and 124	4
Physics 101 or 121	3
Biology 300 and 306	3
Chemistry 221 and 224, or 230 and 231, or 233 and 231	3
Physics 212 or 213 or Astronomy 120 or 200	3
Geology 200	3.....22

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

Geography:

Corequisites:	
English 120	3
English 200 or 201	3..... 6
Area:	
Geography 101	3
Geography 201, 203, or 205	3
Geography 204	3
Geography 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 or 24 units of geography are advised to take both Geography 305 and 350.

German:

Corequisites:	
English 120	3
English 200	3..... 6
Area:	
German 100 or 140	3
German 200	3
German 202	3
German 302	3
Senior German (400 or higher)	3.....15

Additional area courses will be chosen from those numbered 400 or higher.

Guidance:

This teaching area is not open to students in their first or second year. Students now registered in this area may complete the programme as described on their programme outlines.

Education 300, 302, 417, 418, 419 will continue to be offered and may be taken by other interested students as well as those completing the Guidance area.

History:

Corequisites:	
English 120	3
English 200 or 201	3..... 6
Area:	
Courses in History chosen to meet the following requirements:	
1. at least 3 units in Canadian History	
2. at least 3 units in modern European or contemporary world history	
3. at least 6 units junior-level	
4. at least 9 units senior-level	15.....15

Political Science 216 or 316 may be elected in place of one history course. Students in this area may not elect History/History in Art 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.

History/History in Art:

Corequisites:

English 120	3
English 200 or 201	3..... 6

Area:

History courses must be chosen to meet the following requirements:	12
1. at least 12 units of history with at least 6 of these at the senior level	
2. at least 3 units of Canadian History	
3. at least 3 units of modern European or contemporary world history	
History in Art 120 or 390	3
Nine further units from History in Art (excluding HA 490)	9.....24

This is a 24-unit area for students wishing to take History and History in Art as one area. Students in this area may not elect History as their second area.

Industrial Education:

Corequisites:

English 110 or 120	3
Chemistry 121 and 124, or 111 and 120, or Physics 101 (Mathematics 130 required) or 103	3-4
Mathematics 130, 180, 100 and 101, 102 and 151, 110 and 210, or 232	3.....9-10

Area:

Courses chosen in consultation with the Chairman, Division of Industrial Education, Faculty of Education, U.B.C.	33.....33
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Students planning to enter Industrial Education must be acceptable to the Division of Technical and Vocational Education, Department of Education. An interview with officials of that Department should be arranged by January 15 prior to undertaking course work at Burnaby.

Students entering the regular degree programme will take all the corequisites in Year One plus Education 200 and either a course from the second teaching area or an elective. Upon completion of this year they may be accepted by the Division of Technical and Vocational Education to enter the Division of Industrial Education at Burnaby to take Industrial Education courses. Upon completion of this phase they are required to return to the University to complete an additional year's work towards the degree before being eligible for a teaching credential.

Latin:

Corequisites:

English 120	3
English 200	3
Classical Studies 100 or Greek 100	3..... 9

Area:

Approved Latin courses (including Latin 240)	15
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Additional area courses may include 3-6 units of senior Classics.

Mathematics:

Corequisites:

English 110 or 120	3..... 3
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Area:

Mathematics 100 and 101, or 130	3
Mathematics 110 and 210, or 232	3
Mathematics 200 and 201, or 230	3
Mathematics 332 or 333	3
Mathematics 170 and 171	3.....15

Additional area courses may include Mathematics 271 and 272.

Mathematics 362 and 366 are strongly recommended.

Music:

Corequisites:

English 110 or 120 3

Area:

Approved Music and/or Music Education 15
Music performance groups (see below) 0-2½..... 15-17½

Additional area courses must be approved by the Music Education Section.

Students wishing to enter the Music teaching area must first consult with the Music Education Section regarding acceptance. Any student presenting an A.R.C.T. or equivalent diploma will have his diploma evaluated by the Music Education Section. Up to 6 units of credit may be granted for his diploma at the discretion of the Music Education Section toward specific courses required on the teaching area.

All students accepted in this area will be required to complete one of the following:

- (a) two years in a university performance group (Music 150, 151, 152, 153, 154, 155); or
- (b) one year in each of two university performance groups (as specified in (a) above plus Music Education 100); or
- (c) equivalent participation in an off-campus performance group(s) approved by the Music Education Section.

Physical Education:

Corequisites:

English 110 or 120 3
Biology 150 3..... 3-6

Area:

Physical Education 100 0
 Physical Education 101 0
 Physical Education 142 1½
 Physical Education 143 1½
 Physical Education 151 1½
 Physical Education 241 3
 Physical Education 350 1½
 Physical Education 450 1½
 Physical Education 460 1½
 Physical Education 443 1½
 One of Physical Education 341, 342, 441, 444* 1½.....15

* Education 301 is prerequisite to Physical Education 444 and must therefore be included in Year Three in place of the Education elective (which will be picked up in Year Five in place of Education 301 as per programme). Those students who do not complete this prerequisite must have special permission to enter Physical Education 444 and must be prepared to spend extra time in this course.

REFER TO PAGE 271 FOR INFORMATION REGARDING ACCEPTANCE INTO THIS AREA.

Physics:

Corequisites:

English 110 or 120 3
 Mathematics 130 3
 Mathematics 231 (or 230 and 232) 3-6
 Mathematics 303 or 330 or 331 3
 Mathematics 323 or 345 3..... 15-18

Area:

Physics 101, 211, 212 and 313 12
 or Physics 121, 212 and 213 or 9
 Physics 322 3
 Physics 413 3..... 15-18

Students are urged to seek advice from the Science Education Section regarding this area.

Social Studies:

Corequisites:

English 120	3	
English 200 or 201	3	6

Area:

Geography 101	3	
Geography 201, 203, or 205	3	
Geography 204	3	
Canadian History	3	
Modern European or contemporary world history	3	
History electives	3	
Additional courses in geography* or history	6	24

* If further geography courses are desired, Geography 305 or 350 must be taken.

This is a 24-unit area for students wishing to take geography and history as one teaching area. In the professional year students will elect either Education 755 or 758. Students in this area may not elect Geography or History as their second area.

Theatre:

Corequisites:

English 120	3	
English 200 or 201	3	6

Area:

Theatre 100	3	
Theatre 105	3	
Theatre 120	3	
Theatre 181	3	
Theatre 312	3	
Theatre 330	3	
Theatre 382	3	21

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen from those numbered 300 or higher.

B. THE BACHELOR OF EDUCATION (ELEMENTARY) DEGREE

This programme is being phased out by Senate approval in 1968. Students who have completed professional training and 15 units of acceptable first year work may be accepted on this programme but will be required to complete the degree by 1977; otherwise, if they wish to proceed to a degree, it will be necessary to transfer to the five-year Bachelor of Education (Elementary Curriculum) degree programme. In so doing, credit for all courses previously completed cannot be assured.

In this programme students are required to complete only one of the teaching areas listed on pages 269 to 273 in addition to the specific education and core courses.

Course Requirements:

The degree requires successful completion of the following as a minimum.

a. Education		24 units
Education 297	0	
Education 797	3	
Education 200	3	
Education 305	3	
Education 345	3	
Education 360	1½	
Education 420, 423, 425, or 427	3	
Curriculum and Instruction, 700 series	7½	

b. Core Courses	21-22 units
English 120, one of 200, 201, 203, 300	6
History 230 or 242	3
Geography 101	3
Approved courses in art education, music education or physical education	3
Education 145 or other laboratory science	3-4
Mathematics 160* or other approved mathematics	3
c. Teaching Area and electives**	21 units

TOTAL 66/67 units

* Mathematics 160 is not acceptable for credit in the mathematics or mathematics/science teaching areas.

** When choosing electives, students should note the following:

1. Students concentrating on the primary option must include Education 340.
2. Psychology 335 is not normally acceptable for credit in the Faculty of Education because the course content is similar to Education 305 and 406.
3. Not more than 3 units of additional course-work applicable to a student's particular teaching area may be taken without permission of the Advising Centre.
4. General University regulations require a minimum of 21 units of courses numbered 300 or 400.

C. DIPLOMA PROGRAMMES

These are one-year professional programmes for graduates of a faculty other than Education who are interested in elementary or secondary teaching and who meet the requirements for admission (see page 262). Successful completion of these programmes requires a G.P.A. of 3.00. Students who have completed senior psychology courses should consult the Education Advising Centre regarding possible modification to the programme.

C1. ELEMENTARY CURRICULUM

Education 797	3
*Education 200	3
Education 301	1½
Education 360	1½
Education 401	1½
Two of Education 701, 705 or 706 or 707, 747	2
Education 742 (Primary or Intermediate)	2
Education 744	1½
Education 745	1
Education 746	1.....18

*Students with acceptable background in psychology may be permitted to register in a special section of Education 200. All such students will register for the regular Education 200 and change sections during the first week of lectures if permission is granted by their Education 200 instructor.

C2: SECONDARY CURRICULUM

Education 798	3	
Education 301	1½	
Education 303	1½	
Education 401	1½	
Education 406	3	
Education 420, 423, 425, or 427	3	
Education 430	1½	
One of Education 750 to 769 (first teaching area)	1½	
*One of Education 750 to 769 (second teaching area)	1½	18

*Students presenting only one teaching area will be required to complete Education 495 or another approved education elective in place of this requirement. Arrangements should be made through the Education Advising Centre.

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 of work. 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 work of the fifth year.

The programme will include the following in the order given provided they have not been completed as part of the degree:

- (a) Education 301 and 401;
- (b) A second teaching area;
- (c) Education 340, or 342 and 343 (to be taken only if necessary to bring total to 15 units);
- (d) Approved senior electives (to be taken only if necessary to bring total to 15 units).

Junior-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 year has been completed.

F. GRADUATE STUDIES IN EDUCATION

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 page 325 of the Calendar. Inquiries concerning Graduate Studies in Education should be directed to the Dean of the Faculty of Graduate Studies or to the Graduate Advisor of the Faculty of Education.

COURSES IN THE FACULTY OF EDUCATION

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

Any unforeseen changes in course offerings will be announced at the time of Registration.

UNDERGRADUATE COURSES

EDUCATION

EDUC 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. (3-2; 3-2)

EDUC 197. (0) **First-Year Elementary Seminar and School Experience**

Consists of a weekly seminar and school experience to be arranged throughout the year by the Student Teaching Office. (1-0; 1-0)

EDUC 198. (0) **First-Year Secondary Seminar**

Group meetings will be arranged from time to time for purposes of communication and to arrange for counselling. Students will be advised of the date of these meetings and of the faculty members to whom they will be assigned. (1-0; 1-0)

EDUC 200. (3) **Introduction to Educational Psychology**

The application of psychological principles to elementary classroom practice.

Students with acceptable background in Psychology may be permitted to register in a special section of Education 200. All such students will register for the regular Education 200 and change sections during the first week of lectures if permission is granted by their Education 200 instructor. (3-0; 3-0)

EDUC 297. (0) **Pre-Professional Year Elementary Seminar and School Experience**

Consists of weekly seminars and school experience to be arranged throughout the year by the Student Teaching Office. Part of the school experience must consist of a continuous block of at least five days, probably as a post-session practicum.

Students entering Education 297 without having completed Education 197 must make arrangements with the Student Teaching Office for the September Experience requirement. (2-0; 2-0)

EDUC 298. (0) **Second-Year Secondary Seminar**

Group meetings will be arranged from time to time for purposes of communication and to arrange for counselling. Students will be advised of the date of these meetings and of the faculty members to whom they will be assigned. (1-0; 1-0)

EDUC 300. (1 ½) **Seminar in Human Communication and Interaction**

A study of effective human communication including verbal and non-verbal factors, group variables affecting communication, individual and group change. Students will conduct independent projects of their own choice and will, through seminar, directly experience individual and group influences on interpersonal communication.

Prerequisite: Consent of instructor.

September-December. Also January-April.

Dr. Peavy.

(3-0)

EDUC 301. (1 ½) **Introduction to Measurement in Education**

Elementary statistics, test validity and reliability, marking and grading.

Dr. Ayers, Dr. Mason, Dr. Taylor.

(1½-0; 1½-0)

EDUC 302. (1 ½) 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: Education 301 or consent of instructor.

January-April only.

Dr. Taylor.

(0-0; 3-0)

EDUC 303. (1 ½) Introduction to Psychology of Classroom Learning.

An introduction to the psychology of learning in the secondary school.

September-December. Also January-April.

(3-0)

***EDUC 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.

Credit cannot be granted for both Education 305 and Education 406. (3-0; 3-0)

***EDUC 340. (3) Research and Programme Development in Primary Education**

Trends, issues and research in kindergarten and primary education as the basis for curriculum development, organization, and instruction.

Mrs. Mickelson, Mrs. Schafer.

(3-0; 3-0)

EDUC 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.

Dr. Johnson.

(3-0; 3-0)

***EDUC 342. (1 ½) Foundations of Reading**

Consideration of the processes and psychology of reading. Developmental scope and sequence.

September-December only.

Dr. Evanechko, Mr. Quorn.

(3-0; 0-0)

***EDUC 343. (1 ½) Reading in the Elementary School**

Components of a total reading programme: examination, evaluation, and construction of instructional materials; curricular organization.

Prerequisite: Education 342.

January-April only.

Dr. Ollila, Mr. Quorn.

(0-0; 3-0)

EDUC 344. (1 ½) 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.

January-April only.

Dr. Armstrong.

(0-0; 3-0)

***EDUC 345. (3) Selected Topics in General Science**

In depth studies of scientific concepts basic to the new elementary school science curricula.

Mr. Sheppy, Mr. Swailes.

(2-2; 2-2)

***EDUC 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

* The professional year is prerequisite to this course.

advanced organizers of resource materials; unit planning and preparation and the evaluation of procedures.

Enrolment in this course is limited.

Prerequisite: Consent of the instructor. (3-0; 3-0)

***EDUC 347. (1 ½) Foundations of Elementary School Language**

A study of the language of elementary school children and of the nature of the listening, speaking and writing processes.

September-December only.

Dr. Armstrong. (3-0; 0-0)

***EDUC 348. (1 ½) Language in the Elementary School**

The development of curriculum in the elementary school language programme: a study of methods and materials.

January-April only.

Dr. Evanechko. (0-0; 3-0)

EDUC 360. (1 ½) 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.

September-December. Also January-April.

Mr. Potter. (3-0)

EDUC 361. (1 ½) 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 360 or consent of instructor.

(Not offered 1972-73.)

EDUC 371. (1 ½) Outdoor Recreation

Study of the outdoor environment as an educational medium; organization of outdoor programmes and practical laboratory experiences in camping skills and outdoor recreational pursuits.

Prerequisite: Consent of instructor.

September-December only.

Dr. Howe. (3-0; 0-0)

EDUC 398. (0) 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. In this year, students will act as teacher aides and as a prerequisite to Education 498 must complete an adequate amount of school experience during the year. This total may be accumulated on a weekly basis or by means of a two-week post-session practicum in April to be arranged by the Student Teaching Office. (1-0; 1-0)

EDUC 401. (1 ½) Evaluation of Learning

The measurement of educational objectives, test item construction and improvement, reporting pupil progress.

Co- or Prerequisite: Education 301.

Dr. Ayers, Dr. Mason, Dr. Taylor. (1½-0; 1½-0)

* The professional year is prerequisite to this course.

***EDUC 402. (1 ½) Individual Testing**

Theory and practice in the use of individual tests in education. Students will be required to spend three hours per week in the Learning Assistance Centre diagnosing learning problems.

Prerequisite: Education 301.

January-April only.

Dr. Tinney.

(0-0; 3-0)

EDUC 403. (1 ½) Social Psychology of School and Classroom

The application of social learning theory to school and classroom management.

Prerequisite: Education 200 or 303.

(Not offered 1972-73.)

(3-0)

EDUC 406. (3) Psychology of Adolescence

The physiological, psychological, social, and educational aspects of adolescence.

Credit cannot be granted for both Education 406 and Education 305. (3-0; 3-0)

***EDUC 407. (1 ½) The Exceptional Child — Cognitive and Affective Functions**

A consideration of children for whom the intellectual demands of the regular classroom are inappropriate — the gifted, the mentally retarded, the culturally disadvantaged, and the emotionally disturbed. Characteristics and programme modifications. This course is prerequisite to Education 409A, 409B, 409C, 409D, 409E.

September-December only.

Mr. Ruth.

(3-0; 0-0)

***EDUC 408. (1 ½) The Exceptional Child — Sensory and Motor Functions**

A consideration of children whose sensory or motor defects or chronic illnesses render the regular school programme inappropriate — the visually or auditorially handicapped, children with orthopedic defects or chronic illnesses limiting activity, cerebral palsy and other neurological deficits. Characteristics and programme modifications.

January-April only.

Mr. Ruth.

(0-0; 3-0)

***EDUC 409A. (1 ½) 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 407.

January-April only.

Mr. Ruth.

(0-0; 3-0)

***EDUC 409B. (1 ½) Education of the Exceptional Child — the Slow Learner**

Developing a philosophy for educating the slow learner; an examination of the current research; interpretation, diagnosis and remediation techniques; evaluating programme effectiveness.

Prerequisite: Education 407.

(Not offered 1972-73.)

***EDUC 409C. (1 ½) Education of the Exceptional Child — the Mentally Retarded**

Selection procedures; curriculum modifications; effective teaching methods; currently operating programmes; evaluating programme effectiveness.

Prerequisite: Education 407.

January-April only.

Mr. Ruth.

(0-0; 3-0)

* The professional year is prerequisite to this course.

***EDUC 409D. (1 1/2) 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 407.

***EDUC 409E. (1 1/2) Education of the Exceptional Child — Emotionally Disturbed**

Identifying emotionally maladjusted children; school consequences of maladjustment; techniques of therapeutic intervention; psycho-educational programmes; school and community resources.

Prerequisite: Education 407.

January-April only.

Dr. Ward.

(0-0; 3-0)

EDUC 413. (1 1/2) Mental Health

An examination of the principles of mental health and their application to the classroom.

(Not offered 1972-73.)

(3-0)

***EDUC 415. (1 1/2) Diagnosis of Learning Difficulties**

A consideration of theories relevant to the causes and correction of learning difficulties; common tests used in a 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.

September-December only.

Dr. Tinney.

(3-0; 0-0)

***EDUC 416. (1 1/2) Remediation of Learning Difficulties**

A continuation of Education 415 with emphasis on the general principles of remedial instruction; remedial programmes in present use; the development of specific remedial programmes for selected cases. Students will be required to spend three hours per week in the Learning Assistance Centre preparing a diagnostic workup and remedial programme for children with learning problems. This course is open to students on the elementary programme only.

Prerequisite: Education 415.

January-April only.

Dr. Tinney.

(0-0; 3-0)

EDUC 417. (3) Introduction to Counselling

An introduction to the principles and practices of counselling.

Enrolment in this course is limited.

Prerequisite: Consent of the instructor.

Dr. M. McHugh, Dr. Peavy.

(3-0; 3-0)

EDUC 418. (1 1/2) Vocational Development and Occupational Choice

Theories of career choice. Research from the area of psychology and sociology of careers. Survey of relevant appraisal techniques. Sources and interpretation of educational and occupational data.

Enrolment in this course is limited to students in senior years.

Prerequisite: Education 417 (may be taken concurrently), Education 419, and consent of the instructor.

January-April only.

(0-0; 3-0)

* The professional year is prerequisite to this course.

EDUC 419. (1 1/2) Individual and Group Counselling

Basic counselling orientations; essentials of interviewing; group process analysis; advantages and limitations of group counselling.

Enrolment in this course is limited.

Prerequisite: Education 417 (may be taken concurrently), and consent of the instructor.

September-December only.

Dr. McHugh.

(2-2; 0-0)

***EDUC 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.

Dr. Monk.

(3-0; 3-0)

***EDUC 423. (3) History of Education**

Development of educational theory and practice from the time of ancient Greece to the present.

(3-0; 3-0)

EDUC 425. (3) Anthropology and Education

Theory and perspectives from cultural anthropology relevant to the processes of education and operations of schools.

Dr. King.

(3-0; 3-0)

EDUC 427. (3) Sociology of Education

The social structure of western civilization and its significance for education.

(Not offered 1972-73.)

EDUC 430. (1 1/2) The Organization and Administration of the B.C. School System

Functions and duties of educational personnel as based on the B.C. Public Schools Act. Administration and organization of the individual school and classroom. Professional and community relationships.

September-December. Also January-April.

(3-0)

***EDUC 431. (1 1/2) An 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.

January-April only.

(0-0; 3-0)

***EDUC 440. (1 1/2) 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.

Prerequisite: Education 340 or consent of instructor.

September-December only.

Dr. Dey.

(3-0; 0-0)

***EDUC 441. (1 1/2) 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 440 or consent of instructor.

January-April only.

Dr. Dey.

(0-0; 3-0)

* The professional year is prerequisite to this course.

***EDUC 442. (1 ½) Corrective Reading Instruction**

Classroom diagnosis and treatment of reading difficulties; prevention of reading disabilities; corrective classroom procedures.

Prerequisite: Education 342 and 343 and 415.

January-April only.

Dr. Ollila.

(0-0; 3-0)

***EDUC 443. (1 ½) Mathematics Curriculum in the Elementary School**

Principles of curriculum development and their application to elementary school mathematics; history of mathematics education; psychology of mathematics learning; research on elementary mathematics curriculum and instruction.

Prerequisite: Education 744 or Mathematics 203.

(Not offered 1972-73.)

(3-0)

***EDUC 444. (1 ½) Mathematics Instruction in the Elementary School**

Teaching strategies; learning activities; classroom organization; instructional materials, their function and use; laboratory methods.

Prerequisite: Education 744 or Mathematics 203.

September-December only.

Dr. Liedtke.

(3-0; 0-0)

***EDUC 445. (3) Science Education**

The nature of scientific inquiry, studies of the research in science teaching, comparative curricula, and contemporary thinking in science education. Laboratory work in the preparation and use of experimental materials.

(3-3; 3-3)

***EDUC 450. (3) Individualizing Instruction for Continuous Progress**

(Not offered 1972-73.)

†EDUC 490. (3) Principles of Teaching Second Languages

The application of linguistic principles in teaching second languages including contrastive language analysis, methods, materials; gradation, presentation, repetition, and measurement in lesson development. Attention given to automated language teaching.

Prerequisite: One of Linguistics 100, 210, 360, 390.

(Not offered 1972-73.)

EDUC 495. (1 ½) Directed Studies

Research projects, directed reading, or additional course work as approved by the Dean of Education or his designate. Education 495 may be repeated but permission will not normally be given for a total of more than 3 units.

***EDUC 496. (1 ½) Practicum in Teaching the Mentally Retarded**

Supervised practice in teaching the mentally retarded. A post-session practicum in May will also be required.

Prerequisite: Education 409C (may be taken concurrently).

Mr. Ruth.

(0-0; 0-3)

***EDUC 497. (3) Practicum in Individualizing Instruction**

Opportunities will be provided for team teaching and for the use of teacher aides.
(Not offered 1972-73.)

Prerequisite: Education 398.

(1-0; 1-0)

* The professional year is prerequisite to this course.

† Approved for credit in the Faculty of Arts and Science.

EDUC 498. (0) Fourth-Year Secondary Seminar

A programme of individual tutoring experiences by assignment in teams to various schools. Seminars for instruction in school law, classroom management and other matters will be regularly held. An average of approximately one hour per week including field experiences will be required.

EDUC 701. (1) Curriculum and Instruction in Art

A study of the curriculum organization and techniques of instruction in elementary art. (2-0; 2-0)

EDUC 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. (1-1; 1-1)

EDUC 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)

EDUC 707. (1) Music for Classroom Teachers — Advanced

Methods, materials and philosophy of music education for elementary classroom teachers. Designed for students with considerable musical background, for example, the A.R.C.T. diploma. (1-1; 1-1)

EDUC 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)

EDUC 744. (1½) Curriculum and Instruction in Elementary Mathematics

A study of the curriculum organization and techniques of instruction in elementary mathematics.

September-December. Also January-April. (1-1)

EDUC 745. (1) Curriculum and Instruction in Elementary Science

A study of the curriculum organization and techniques of instruction in elementary science.

September-December. Also January-April. (1-2)

EDUC 746. (1) Curriculum and Instruction in Elementary Social Studies

A study of the curriculum organization and techniques of instruction in elementary social studies.

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

EDUC 747. (1) Curriculum and Instruction in Elementary Physical Education

A study of the curriculum organization and techniques of instruction in elementary physical education.

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

EDUC 750-769. Curriculum and Instruction in Secondary School Subjects

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. (2-0; 2-0)

EDUC 750. (1½) Art

Mr. Jickling.

EDUC 753. (1½) English

Dr. Monk.

EDUC 754. (1½-3) **Second Language**

Students with teaching areas in French, German, Latin and Spanish will enrol for this course. Those who present one such teaching area will be credited with 1½ units, and two such areas, 3 units.

EDUC 755. (1½) **Geography**

Mr. Cross.

EDUC 757. (1½) **Guidance**

EDUC 758. (1½) **History**

EDUC 759. (1½) **Industrial Education**

EDUC 761. (1½) **Mathematics**

Dr. Horne.

EDUC 762. (1½) **Music**

Dr. Churchley.

EDUC 764. (1½) **Physical Education**

Dr. Martens.

EDUC 767. (1½) **Theatre**

EDUC 769. (1½-3) **Science**

Students with teaching areas in biology, chemistry, physics, or general science will enrol for this course. Those who present one such teaching area will be credited with 1½ units; those with two teaching areas will be credited with 3 units.

Mr. Sheppy, Mr. Swailes.

EDUC 797. (3) **Seminar and Elementary Student Teaching**

For students registered in the professional year, elementary programme. This course may be satisfied by various patterns of practica which may include a post-session practicum of three weeks.

Transitional and Diploma students are required to complete an eight-day post-session practicum at the end of the year immediately preceding their entrance into the Faculty of Education, or equivalent school experience in the fall term in addition to the regular student teaching requirements, to be arranged by the Student Teaching Office.

EDUC 798. (3) **Seminar and Secondary Student Teaching**

For students registered in the professional year, secondary programme.

ART EDUCATION

A E 100. (3) **Art Education**

A study of the growth and development of Art Education, classroom management, teaching techniques in art as related to elementary grades. (3-0; 3-0)

A E 300. (3) **Art Education (Advanced)**

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, Education 701, or consent of instructor.

Mr. Hodder, Mr. Shostak. (3-0; 3-0)

A E 301. (3) **Three-Dimensional and Crafts**

Teaching methods and techniques involving carving, modelling, constructions, and other three-dimensional problems and crafts related to the elementary grades.

Prerequisite: Art Education 100, Education 701, or consent of instructor.

Mrs. Small. (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 will include work with children and a parallel study of the visual development of children.

Mr. Cawood.

(3-0; 3-0)

A E 303. (1 ½) 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 701 or consent of instructor.

Mr. Cawood.

(2-0; 2-0)

A E 304. (1 ½) Crafts in the Classroom

An introductory course in crafts for elementary and secondary teachers; a practical, laboratory investigation of various craft media which can be used in the school system.

Prerequisite: Art Education 100 or Education 701 or consent of instructor.

Mr. Jickling.

(2-0; 2-0)

***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 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, or consent of the instructor.

Miss Moody (Elementary), Mr. Hodder (Secondary).

(3-0; 3-0)

MUSIC EDUCATION

M E 100. (1 ½) The Teaching of Choral and Classroom Singing

Materials and rehearsal techniques for use with school choral activities.

September-December only.

Dr. Bradley.

(3-0; 0-0)

M E 105. (1 ½) Music Fundamentals for Classroom Teachers

Introduction to music for schools. This course will normally be followed by Music Education 106 in the second term.

September-December only.

Dr. Bradley, Dr. Vaughan.

(3-0; 0-0)

M E 106. (1 ½) 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.

Co- or Prerequisite: Music Education 105 or equivalent.

September-December. Also January-April.

Dr. Bradley, Dr. Vaughan.

(3-0)

* The professional year is prerequisite to this course.

- ME 207 (formerly 107). (1 ½) **Educational Materials for Listening**
 Continuation and development of classroom music activities with special emphasis on listening experiences.
 Prerequisite: Music Education 106.
 January-April only.
 Dr. Bradley. (0-0; 3-0)
- ME 208 (formerly 108). (1 ½) **Piano Class for Classroom Teachers**
 Development of piano keyboard skills useful in classroom music.
 Prerequisite: Music Education 106.
 January-April only.
 Dr. Churchley. (0-0; 3-0)
- ME 209. (1 ½) **Creativity in Music Education**
 The relationship of theories of creative behaviour to classroom music teaching. Seminars and workshops.
 Prerequisite: Music Education 106.
 September-December only.
 Dr. Vaughan. (3-0; 0-0)
- ME 306. (1 ½) **Music Activities in the Elementary School (Advanced)**
 A study of modern methods, materials, and objectives pertaining to the teaching of music in elementary schools.
 Prerequisite: Music Education 106 or equivalent.
 January-April only.
 Dr. Churchley. (0-0; 3-0)
- ME 307. (1 ½) **Music Activities in the Secondary Schools (Advanced)**
 A study of modern methods, materials, and objectives pertaining to the teaching of music in secondary schools.
 Prerequisite: Consent of instructor.
 January-April only.
 Dr. Bradley. (0-0; 3-0)
- ME 308. (1 ½) **Piano Class for Classroom Teachers (Advanced)**
 Continuation of development of piano keyboard skills useful in classroom music.
 Prerequisite: Music Education 208 or equivalent.
 September-December only.
 Dr. Churchley. (2-2; 0-0)
- ME 309. (1 ½) **Foundations of Music Education**
 Implications of philosophical, sociological and psychological principles for music education.
 Pre- or Corequisite: Music Education 306 or 307.
 September-December only.
 Dr. Vaughan. (3-0; 0-0)
- ME 400. (3) **Special Study in Music Education**
 An individualized study of a particular field in music education carried out under the direction of a member of Faculty. Regular seminars will be included.
 Prerequisite: Consent of instructor.
 (Not offered 1972-73.) (3-0; 3-0)

LIBRARY EDUCATION

*LE 430. (3) **Selection and Organization of Library Materials**

The library as a resource centre; collecting, evaluating and organizing materials; cataloguing books, etc.

Mr. Hamilton.

(3-0; 3-0)

LE 432. (1½) **The School Library and the Teacher** (formerly one-half LE 431)

The library as a vital part of the teacher's programme, its philosophy and services. For all teachers — elementary and secondary.

(Not offered 1972-73.)

(3-0)

*LE 433. (1½) **The School Librarian** (formerly one-half LE 431)

The role of the school librarian, administration of a school library, staffing, supervision.

(Not offered 1972-73.)

(3-0)

PHYSICAL EDUCATION

PE 100. (0) **Year 1 — Basic Skills in Physical Education Activities**

(1½ fee units)

Proficiency in the skills in the following areas: areas 1, 2, and 3; one of the activities in each of areas 4, 5, and 6; five of the activities in area 7 for men and four in area 7 for women.

Area 1 Swimming

Area 2 Track and Field

Area 3 Gymnastics (intermediate)

Area 4 Badminton, Tennis

Area 5 Dance

Area 6 Curling, Golf, Archery

Area 7 (Men) Softball, Basketball, Soccer, Volleyball, Rugby, Ice Hockey, Field Hockey

Area 7 (Women) Softball, Basketball, Soccer, Volleyball, Field Hockey

NOTE: Students may be exempted from Physical Education 100, 101, or part thereof, by demonstrating proficiency in a skills test given during the first week of lectures. Students are expected to complete the courses in the required basic skills in the first two years; most students should plan to spend a minimum of three hours per week in these courses.

PE 101. (0) **Year 2 — A Continuation of Physical Education 100 (Year 1)** (1½ fee units)

PE 142. (1½) **Human Potential**

An introduction to the physical, emotional and social aspects of human growth and human interpersonal relationships.

September-December. Also January-April.

Dr. Collis.

(3-0)

PE 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.

September-December. Also January-April.

Dr. Howe, Dr. Martens.

(3-0)

PE 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

* The professional year is prerequisite to this course.

skills by student is required and a percentage of the grade is based on performance.

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 151. (1½) Theory and Practice in Fundamental Movement

A study of basic movement skills and basic principles of movement. Practical aspects include rhythmic, tumbling, skills, and movement education.

September-December. Also January-April.

Mr. Docherty. (2-2)

PE 241. (3) Human Physiology and Anatomy

Structure and function of the following systems of the human body: skeletal, articular, muscular, circulatory, respiratory, digestive, nervous, urinary and reproductive.

Dr. Eckerson. (2-2; 2-2)

PE 341. (1½) 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 or permission.

January-April only.

Dr. Collis. (0-0; 3-0)

PE 342. (1½) History and Principles of Physical Education

Interpretative study and analysis of the principles and practices of physical education through their historical development; current trends, social and cultural implications; relationship to education.

September-December only.

Mr. Carr. (3-0; 0-0)

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-relationship of these programmes.

January-April only.

Mr. Howe. (0-0; 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 or permission of instructor.

January-April only.

Dr. Bell. (0-0; 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 747 or PE 149 or 3 units of PE teaching area.

January-April only.

Mr. Peake. (0-0; 3-0)

- PE 350. (1 1/2) Theory and Techniques of Teaching Skills in Team Games**
 Methods of teaching softball, basketball, soccer, field hockey, volleyball, rugby.
 Prerequisites: Physical Education 100, 101, 151.
 September-December only.
 Dr. Howe. (3-0; 0-0)
- PE 441. (1 1/2) 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.
 September-December only.
 Dr. Collis. (3-0; 0-0)
- PE 442. (1 1/2) Motor Learning**
 Implications of perceptual-motor development for learning; psychology of motor-skill acquisition.
 September-December only.
 Dr. Bell. (3-0; 0-0)
- PE 443. (1 1/2) Organization and Administration of Physical Education**
 Budget and finance; personnel; facilities, equipment and supplies; scheduling; public relations; organization and management of physical education and athletics.
 January-April only.
 Dr. Martens. (0-0; 3-0)
- PE 444. (1 1/2) Evaluation in Health and 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: Education 301.
 September-December only.
 Mr. Docherty. (3-0; 0-0)
- PE 445. (1 1/2) 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.
 September-December only.
 Dr. Eckerson. (3-0; 0-0)
- PE 450. (1 1/2) Theory and Techniques of Teaching Skills in Individual Activities**
 Methods of teaching minor games, swimming, badminton, tennis, wrestling, dance, track and field, gymnastics.
 Prerequisites: Physical Education 100, 101, 151.
 January-April only.
 Mr. Docherty. (0-0; 3-0)
- PE 460. (1 1/2) Advanced Skills: Coaching and Officiating**
 In-depth study of two areas selected by the student. Advanced skill level, knowledge and ability to coach and officiate will be required in the two areas. Electives: Badminton, Basketball, Field Hockey, Soccer, Volleyball, Track and Field, Dance, Gymnastics, Swimming, Softball, Tennis, Rugby, Wrestling.
 Prerequisites: Physical Education 100, 101, 151. Candidates are asked to consult the Physical Education Section before registering.
 September-December. Also January-April. (1-1)
- PE 446. (1 1/2) 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 747 or PE 149 or 3 units of P.E. teaching area.

(Not offered 1972-73.)

(3-0)

INDUSTRIAL EDUCATION

These courses are offered only at the British Columbia Vocational School, Burnaby.

I E 250. (3) **Technology of Woodworking I**

Fundamentals of bench and machine woodwork; design and layout; hand and machine tool maintenance. (2-4; 2-4)

I E 251. (3) **Technology of Metalworking I**

An introduction to bench metalwork and light machine work; lathe and shaper operations; heat treatment of carbon steel; forging; founding; welding and related metallurgy; project planning; teaching aids and shop management. (2-4; 2-4)

I E 253. (3) **Principles of Technical Drawing**

Lettering; descriptive geometry; orthographic projection; sections; auxiliary views; sketching; technical illustrating; fastenings; methods of drawing reproduction; surface development. (2-4; 2-4)

I E 254. (1 1/2) **Oxyacetylene and Arc Welding**

Oxyacetylene: fusion welding mild steel; flame cutting; testing and inspection of welds; bronze welding; silver alloy brazing, aluminum welding. Arc: practice in common types of weld in mild steel; bronze welding. (1-2; 1-2)

I E 255. (3) **Electricity in Industrial Education I**

D.C. fundamentals and circuits; D.C. motors and generators; signal circuits; electro-chemical devices; D.C. measurement; residential wiring circuits. (3-3; 3-3)

I E 256. (3) **Electronics in Industrial Education I**

Fundamental circuits; vacuum tubes and semi-conductor devices as applied amplifiers and power supplies; measurements.

Prerequisite: Industrial Education 255.

(0-0; 3-3)

I E 257. (1 1/2) **Industrial Coatings**

Theory and practice of applying industrial finishing materials; manual and mechanical application to wood, metal and synthetic surfaces.

Prerequisite: Industrial Education 250, 251.

(1-2; 1-2)

I E 258. (3) **Power Mechanics Theory and Practice**

Heat engines — internal and external combustion types; fuels; mechanical and hydraulic power transmission; power control. (3-3; 3-3)

I E 350. (3) **Technology of Woodworking II**

Design and layout of contemporary furniture; elementary finishing; production principles and techniques.

Prerequisite: Industrial Education 250.

(2-4; 2-4)

I E 351. (3) **Technology of Metalworking II**

An intermediate course in bench metalwork and light machine work; operations on lathe, shaper, surface grinder and milling machine; heat treatment; forging, welding and related metallurgy; student design and manufacture individual items.

Prerequisite: Industrial Education 251.

(2-4; 2-4)

I E 352. (3) **Technology of Building Construction I**

Design and construction of single unit residential buildings; custom and prefabrication methods; western platform frame and post and beam construction.

Prerequisite: Industrial Education 250.

(2-4; 2-4)

- IE 353. (3) **Design in Industrial Education**
Functional structural and aesthetic aspects of design applied to Industrial Education projects. (2-4; 2-4)
- IE 354. (3) **Patternmaking and Foundry Practice**
Influence of foundry techniques and metallurgy on design; practical application of various types of patterns; core box making; green sand moulding; core-making; gating; practice; melting and pouring brass, iron, and aluminum alloys.
Prerequisite: Industrial Education 251. (2-4; 2-4)
- IE 355. (3) **Electricity in Industrial Education II**
Single and polphase circuit analysis, alternating current machinery and controls; generation and distribution of electrical energy.
Prerequisite: Industrial Education 255. (3-3; 3-3)
- IE 356. (3) **Electronics in Industrial Education II**
Data generation, transmission, and receiving systems; principles of HF, VHF, UHF, and microwave communication systems. R.F. measurements.
Prerequisite: Industrial Education 256. (3-3; 3-3)
- IE 357. (3) **Materials Technology in Industrial Education**
Wood and materials directly derived from wood; metals and alloys; synthetics; adhesives; physical testing of materials.
Prerequisites: Industrial Education 250, 251. (3-3; 3-3)
- IE 358. (3) **Automotive Theory and Practice I**
General construction of power plant, auxiliary systems, fuels, carburetion, lubrication, cooling systems, clutch, gear box, rear axles, drive shafts, universal joints, front suspension and steering gears, brakes.
Prerequisites: Industrial Education 258, 251. (2-4; 2-4)
- IE 359. (1½) **Measurement Theory and Practice**
Principles and practices of electrical measurements; design and construction of measurement devices.
Prerequisites: Industrial Education 255, 256. (1-2; 1-2)
- IE 450. (3) **Millwork Theory and Practice**
Furniture and fixture design; layout and production; custom and mass production methods; prefabrication techniques.
Prerequisite: Industrial Education 250. (2-4; 2-4)
- IE 451. (3) **Technology of Metalworking III**
Methods of forming, joining, machining, heat treatment and finishing of metals. Design analysis and the development of manufacturing techniques.
Prerequisite: Industrial Education 351. (2-4; 2-4)
- IE 452. (3) **Technology of Building Construction II**
Design and construction of industrial commercial buildings; level and transit; estimating and contracting.
Prerequisites: Industrial Education 250, 352. (2-4; 2-4)
- IE 453. (1½) **Problems in Graphic Representation**
Specific drafting problems associated with each of the following specialties: (a) Construction: millwork and furniture drawings, small boat design; national and local building codes; descriptive geometry; (b) Metals-Mechanics, surface development; gearing; descriptive geometry. (c) Electricity-Electronics: Layout and representation of problems in electrical and electronic design.
Prerequisite: Industrial Education 253. (1-2; 1-2)

I E 455. (3) Problems in Electrical Equipment Production

Fabrication and assembly of electrical and electronic equipment; techniques applicable to the school situation; evaluation of design and manufacturing technique.

Prerequisite: Industrial Education 255, 256. (3-3; 3-3)

I E 456. (3) Electronics in Industrial Education III

Transducers; Processors; Transmission; Deprocessing; Transducers for Readout and Display.

Prerequisite: Industrial Education 256. (3-3; 3-3)

I E 457. (3) Technology of Synthetic Materials

Principles and practices of synthetic materials lay-up; forming and extrusion; design and production of moulds and plugs; die casting.

Prerequisite: Industrial Education 250, 251. (2-4; 2-4)

I E 458. (3) Automotive Theory and Practice II

Advanced automotive design and repair; diagnosis of mechanical and electrical faults; evaluation of modern servicing procedures.

Prerequisite: Industrial Education 358. (2-4; 2-4)

I E 459. (3) Technical Problems

This course gives the student the opportunity to conduct directed study in an area within his technical field of specialization. Study will culminate in a written paper.

Prerequisites: Completion of a technical specialty or equivalent. (1-5; 1-5)

GRADUATE COURSES

Students should consult the Graduate Advisor of 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.

Further information about programmes, courses, and prerequisites is given in a mimeographed bulletin *Graduate Studies in Education*.

EDUC 500. (1 ½) Learning Principles

Dr. Timmons.

EDUC 501 (1 ½) Theory of Measurement

Dr. Ayers.

EDUC 502. (1 ½) Seminar in Educational Evaluation

Dr. Taylor.

EDUC 503. (1 ½) Verbal Learning

Mr. Ruth.

EDUC 504. (1 ½) Psychology of Conceptual Learning

Dr. Downing.

EDUC 505. (1 ½) Basic Concepts in Human Development

Dr. Chabassol.

EDUC 506. (1 ½) Selected Topics in Human Development

Dr. Knowles.

EDUC 507. (1 ½) Psychology of Individual Differences

EDUC 508. (1 ½) Theories of Learning

Dr. Timmons.

- EDUC 509. (1 ½) **Psychology of Classroom Learning**
Dr. Timko.
- EDUC 510. (1 ½) **Psychology of Group Differences**
- EDUC 512. (1 ½) **Measurement in the Affective Domain**
Dr. Mason.
- EDUC 515. (1 ½) **Advanced Diagnosis of Learning Disabilities**
Prerequisite: Education 402, 415, 416; or consent of instructor.
Dr. Tinney.
- EDUC 516. (1 ½) **Advanced Remediation of Learning Disabilities**
Prerequisite: Education 515, or consent of instructor.
Dr. Tinney.
- EDUC 517. (3) **Practicum in Counselling**
Dr. Knowles.
- EDUC 518. (1 ½) **Seminar in Counselling Psychology**
Dr. McHugh.
- EDUC 519. (1 ½) **Advanced Seminar in Counselling Psychology**
Dr. Viesti.
- EDUC 520. (3) **Seminar in Philosophy of Education**
- EDUC 521. (3) **Educational Classics**
- EDUC 531. (1 ½) **Administration of Public Education in Canada**
Dr. Hodgkinson.
- EDUC 532. (1 ½) **Administration of the Educational Programme**
Dr. Hodgkinson.
- EDUC 533. (3) **Concepts in Administrative and Supervisory Behaviour in Education**
Dr. Hodgkinson.
- EDUC 540. (1 ½) **Research in Curriculum and Instruction in the Elementary Grades**
Section A Reading — September - December only. Dr. Armstrong.
Section B Language — January - April only. Dr. Armstrong.
Section C Social Studies
Section D Arithmetic
Section E Science
Section F Physical Education
- EDUC 541. (1 ½) **Research in Curriculum and Instruction in the Secondary Grades**
Section A English
Section B Geography
Section C History
Section D Mathematics
Section E Science
Section F Physical Education
- EDUC 556. (1 ½) **Basic Concepts of Curriculum Development**
Dr. Daus.
- EDUC 557. (1 ½) **Applied Concepts of Curriculum Development**
Dr. Burbank.

EDUC 558. (1 ½) **Development and Implementation of the Curriculum in a Specific Area**

EDUC 560. (1 ½) **Statistical Methods in Education**
Dr. Muir.

EDUC 561. (1 ½) **Methods In Educational Research**
Dr. Muir.

EDUC 562. (1 ½) **Advanced Statistical Methods in Education**
Dr. Muir.

EDUC 570. (3) **Motor Learning**

EDUC 572. (3) **Advanced Exercise Physiology**
Dr. Collis.

EDUC 590. **Special Problems** (credit to be determined)

EDUC 599. **Thesis** (credit to be determined)

EDUC 617. **Internship in Counselling Psychology** (credit to be determined)
Dr. McHugh.

EDUC 618. **Doctoral Seminars in Counselling Psychology** (credit to be determined)
Dr. McHugh.

EDUC 699. **Ph.D. Dissertation** (credit to be determined)

FACULTY OF FINE ARTS

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 with majors in Theatre and in the Visual Arts. Certain courses offered in the Faculty of Fine Arts have been approved for credit in the Faculty of Arts and Science and in the Faculty of Education.

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 39-42 inclusive of the calendar. See additional requirements under departmental entries for Music, Theatre, and Visual Arts.

General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 64-73), apply to all students registered in the Faculty of Fine Arts. Special regulations are set out under the Departmental offerings.

COURSE OFFERED JOINTLY BY ALL DEPARTMENTS

FA 404 (formerly 103). (3) **Language of the Arts**

An examination of the perceptions and the language of the arts; an exploration of the creative process. Open only to students registered in third or fourth year in the Faculty of Fine Arts. (3-0; 3-0)

DEPARTMENT OF HISTORY IN ART

Alan Gouws, M.A. (*Tor.*), M.F.A., Ph.D. (*Princeton*), Professor and Chairman of the Department.

Siri Gunasinghe, B.A. (*Ceylon*), Docteur de l'Université (*Paris*), Associate Professor.

John C. Freeman, B.A. (*Harpur*), M.A. (*Delaware*), Assistant Professor.

Partha Mitter, B.A. (*Calcutta*), B.A. (*London*), M.A. (*Cambridge*), Ph.D. (*London*), Assistant Professor.

Richard K. Morris, B.A. (*Cantab.*), Lecturer.

S. Anthony Welch, B.A. (*Swarthmore*), M.A. (*Harvard*), Visiting Lecturer.

MAJOR PROGRAMMES LEADING TO THE DEGREE OF B.A.

1. 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 to offer an entirely adequate background in all these areas, and students should understand that the B.A. degree in History in Art represents only a sound foundation for further growth toward fuller awareness and deeper understanding of history as revealed in art, towards that "wisdom" which, as T. S. Eliot once declared, "educational institutions cannot teach because it cannot be learnt in the time or wholly in such surroundings, but which they can teach us to desire, which they can teach us how to go about acquiring." Fortunately, because art and architecture in some form surround everyone everywhere, the learning process can and should proceed through life for graduates in this field as in no other, whether or not they go on to formal graduate 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 require 21 units (seven courses) in history in art, plus 39 units (13 courses) of free electives including 3 units at the 300 or 400 level. The department also requires students to pass a reading knowledge test in a language other than their own. This test will be administered by the department at any time, on the student's request. Should students take formal courses in a foreign language in order to pass this test, two of them (6 units) may count as free electives towards the degree.

In earlier calendars, a specific programme of required history in art courses and electives was set out for history in art majors. In the present period of rapid changes of courses and curricula in so many departments of the University, it has proved very difficult for students to follow such a specific programme, and in some cases impossible; often, too, changes in course content have eliminated the original reason for requiring them. Accordingly, from 1970-71 on these specific requirements are superseded by the general requirements set forth above. However, it is worth summarizing this programme below as an example, and to give an idea what sort of electives seem appropriate for the study of history in art. The Chairman or Department members will gladly assist with advice on request.

In their first two years, it is suggested that students begin learning the specialized language of history in art by which historical monuments can be read, first in general terms, and then in specific application to the art of primitive cultures, classical and other non-Western civilizations, and the medieval period of Western civilization; electives are suggested relevant to these areas. In the third year, history in art and elective

courses emphasize the Renaissance and Baroque periods (c. 1400-1750); in the fourth year, art and culture of the two centuries since 1750.

Beginning with the third year, two areas of emphasis are possible within the programme. Either students may elect to pursue broad history in art studies, with a view to possible graduate work in the discipline, or elect a narrower emphasis on North American culture with a view to work in museums, historical societies, national monuments, and the like. These programmes are not mutually exclusive, of course; both provide an adequate background for either graduate or museum work, but the knowledge of archaeological and museum display techniques provided by the one would obviously be more helpful in museum work than in the ordinary graduate school, and vice-versa for the introduction to scholarly research techniques provided by the other.

An integral part of the History in Art programme will be the John and Katharine Maltwood Memorial Museum at Royal Oak, 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.

2. 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 (recommended courses: Theatre 310, 311, 312, 370)
- 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.

TYPICAL HISTORY IN ART PROGRAMMES

		Years 1 and 2	
<i>Year 1</i>	<i>Units</i>	<i>Year 2</i>	<i>Units</i>
H A 120	3	H A 315 and 325	3
Eng. 110 or 120	3	Eng. 200 or 201	3
100 level language	3	200 level language	3
One of:		Two of:	
Clas. 100		Anth. 305, 306, 310	
Hist. 242, 230	3	Clas. 100, 330, 340	
One of:		Hist. 238	
Anth. 100		Ling. 100, 210	
Geog. 101, 303	3	Theatre 310	6
	—		—
	15		15

Years 3 and 4

<i>Year 3</i>	<i>Units</i>	<i>Year 4</i>	<i>Units</i>
H A 340		H A 360	
H A 441 or 481	6	H A 380	
One of:		H A 490	9
Geog. 307		One of:	
Anth. 441	3	Geog. 307	
One of:		Anth. 441	3
Hist. 210		One of:	
Hist. 240, 350		Econ. 100, 321	
Hist. 405		Eng. 203	
Hist. 401		Hist. 240, 210, 350, 405,	
Hist. 301	3	401, 301	
One of:		Pol. Sc. 300, 310	
Class. Latin lit. in transl. ,		Music 110 or 311	
Hist. 240		Theatre 311 or 312	3
Eng. 410 or 413 or 418			
or 424 or 425			
Music 110			
Theatre 310 or 311	3		
	—		—
	15		15

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 100. (3) **Survey of World Art**
(Summer Session only).

†*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.

(2-0-1; 2-0-1)

†*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.

(3-0; 3-0)

†*H A 315. (3) **Ancient History in Art**

An introduction to ideas and life-styles, from prehistoric times to c.300 A.D., through arts, artifacts, and architecture from all parts of the world.

(3-0; 3-0)

†*H A 325. (3) **Medieval History in Art**

A basic course introducing students to the principles and themes underlying the art and architecture of Europe from the Roman Empire to the 15th century. Study will also be made, when occasion permits, of the arts of other civilizations in this period.

(3-0; 3-0)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

†*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 360. (3) **Painting Since 1750**

An examination of the development in painting over the last 200 years with special emphasis on the changing concepts of what art is and what artists do in and for society. The parallel developments in sculpture will be considered.

(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.

(3-0; 3-0)

†*H A 390. (3) **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. Lectures will be comparable to those for HA 120. Not open to students with credit in HA 120. Students registered in this course will have special tutorial sections, with course assignments and examinations related to their particular major areas of study.

(2-0-1; 2-0-1)

†*H A 420 (formerly 320). (3) **Special Problems in the Area of Ancient & Medieval History in Art**

Members of the Department.

(3-0; 3-0)

†*H A 430. (3) **Special Problems in Asian Art History**

Selected areas of special study within the general area of art and architecture in Asia. Depending on instructor and material covered, and with departmental permission, this course may be taken more than once.

(3-0; 3-0)

†*H A 441. (3) **Special Studies in the Renaissance Tradition**

Specialized aspects of painting, sculpture and architecture in Europe from 1300-1500, or later manifestations of the tradition then established.

(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.

(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 environment; 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.

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

GRADUATE COURSES

HA 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. (3-0; 3-0)

HA 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. (3-0; 3-0)

HA 505. (3) **Directed Readings**

Studies of history in art through selected readings, supervised by the staff.

HA 599. (9-15) **Thesis**

DEPARTMENT OF MUSIC

- Phillip T. Young, B.A. (*Bowdoin*), Mus.M. (*Yale*), Associate Professor and Chairman of the Department.
- Howard B. Barnett, B.A., Mus.B. (*Tor.*), M.A., Ph.D. (*S. Calif.*), A.R.C.T. (*Tor.*), Associate Professor.
- George Corwin, B.S. (*Ithaca*), M.A., D.M.A. (*Rochester*), Associate Professor.
- Wilburn Newcomb, B.Mus. (*Cincinnati Cons. of Music*), M.A. (*Indiana*), D. Phil. (*Göttingen*), Associate Professor.
- Boyde W. Hood, B.M. (*Eastman Sch. of Music*), M.M. (*Ball St. U.*), Assistant Professor.
- Rudolf Komorous, Diploma, State Cons. of Music (*Prague*). Artist Diplomas, Academy of Musical Arts (*Prague*), Assistant Professor.
- Christine Mather, A.R.C.M., Ph.D. (*Michigan*), Assistant Professor.
- Brian Cherney, B.Mus., M.Mus. (*Tor.*), Lecturer.
- Donald DeRoche, B.S., M.M. (*Illinois*), Part-time Lecturer.
- Richard Ely, B.M. (*Montana*), M.M. (*Illinois*), Part-time Lecturer.

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 or from the faculty of the Victoria Conservatory of Music. See page 358.

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., Registrar, Victoria Conservatory; piano.
- Aurette Biggs, A.R.C.T., L.R.C.T., piano.
- Mary Ducker, G.R.S.M., L.R.A.M., piano.
- Kathryn Ely, B.Ed., B.M. (*Illinois*), harp.
- Ian Franklin, B.Mus. (*U. of Vic.*), oboe.
- John Gallienne, A.G.S.M., organ.
- Lorraine Gorrell, B.A. (*Hood*), M.F.A., M.M. (*Yale*).
- Donald Haig-Robinson, L.R.A.M., A.R.C.M., piano.
- Margaret Hendry, A.T.C.M., piano.
- Fergus Heywood, percussion.
- Boyde Hood, B.Mus. (*Eastman*), M.Mus. (*Ball St. U.*), trumpet.
- 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.
- Rudolf Komorous, Diploma, State Cons. of Music (*Prague*). Artist Diplomas, Academy of Musical Arts (*Prague*), bassoon.
- Zdenek Kriz, Diploma, University of Bratislava, viola.
- Else Menting, A.R.C.T., piano.
- Jan Menting, Instructor, Canadian Forces, flute.
- Dennis Miller, tuba.
- Charles Palmer, M.A., B.Mus. (*Oxon.*), A.R.C.M., A.R.C.O., piano.

Paul Palmer, Mus.B.honours (*Man.*), recorder.

Richard Proudman, M.A., Mus.B. (*Cantab.*), L.R.A.M., A.R.C.M., organ and piano.

Austin Scott, flute.

Noel Smith, A.R.C.M., piano.

Michael Strutt, classical guitar.

Marjorie Tebo, A.L.C.M., L.R.S.M., piano.

Beal Thomas, B.M. (*So. Methodist*), S.M.M. (*Union*), organ.

Barry Wells, A.R.C.T., piano.

Catherine Wendol, A.R.A.M., L.R.A.M., voice.

Jacqueline Wood, L.R.A.M., A.R.C.M., piano.

Howard Woodland, trombone.

Catherine Young, B.M., M.M. (*Eastman*), voice.

GENERAL REQUIREMENTS

In addition to fulfilling general requirements for the Faculty of Fine Arts, each student seeking admission to the Bachelor of Music programme must achieve satisfactory scores in the Department's aptitude test, audition on his major instrument and be interviewed. Each prospective student is urged to make an appointment to visit the Department before July 30 in order to fulfill these requirements. If such a visit is impossible, final acceptance must be delayed until the candidate arrives in September to complete these admission requirements and is then subject to space limitation.

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 History and Literature, General Programme, and Performance, leading to the degree of Bachelor of Music.

PROGRAMME OF COURSES

All B.Mus. students regardless of their choice of Major will take a common first-year programme. 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. As indicated below, all first year B.Mus. students are required to participate in the University Chorus (Music 180) as a supplement to Music 100's emphasis on sight-singing and ear training. 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.

	<i>Year 1</i>	
Music 100	3	
Music 110	3	
Music 140 or 145	1	or 3
Music 180	$\frac{1}{2}$	
*Music electives	$1\frac{1}{2}$	or 3
English 110 or non-music elective	3	
**Non-Music elective	3	
	—	—
	15	to 17

* Chosen from Orchestra, Concert Band, Wind Ensemble, String Ensemble, and Chamber Singers.

** To be chosen in consultation with the Department of Music.

Students in the General Programme who intend to teach music in the public school system should prepare themselves in a second teaching area. Before entering the fifth professional year in the Faculty of Education a student must have completed 15 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.

The following programmes are *typical* but can be modified in consultation with the departmental chairman.

Major in Composition and Theory

<i>*Year 2</i>		<i>*Year 3</i>		<i>*Year 4</i>	
200	3	300	3	400	3
205	3	305	3	405	3
Music History elective	3	Music History elective	3	440	1
Non-Music elective	3	Music elective	3	Non-Music elective	3
240	1	340	1	2 Music Electives	6
350	3	Non-Music elective	3		
	<hr/>		<hr/>		<hr/>
	16		16		16

Major in Music History and Literature

<i>*Year 2</i>		<i>*Year 3</i>		<i>*Year 4</i>	
2 Music History electives	6	2 Music History electives	6	2 Music History electives	6
200	3	300	3	499	3
240	1	340	1	440	1
2 non-music electives	6	390	3	Music elective	3
	<hr/>	Non-music elective	3	Non-music elective	3
	16		<hr/>		<hr/>
			16		16

Major in General Programme

<i>*Year 2</i>		<i>*Year 3</i>		<i>*Year 4</i>	
200	3	300	3	440	1
Music History elective	3	356	3	Music History elective	3
Two of 330-336 series	3	Music Ed. 305 or		Two non-music electives	6
240	1	two of Music Ed. 106, 107 or 108	3	Two Music electives	6
350	3	Two of 330-336 series	3		
Non-music elective	3	340	1		
	<hr/>	Non-music elective	3		<hr/>
	16		<hr/>		16
			16		16

Major in Performance

<i>*Year 2</i>		<i>*Year 3</i>		<i>*Year 4</i>	
245	3	345	3	Music History elective	3
200	3	300	3	445	3
Music History elective	3	390	3	446	3
350	3	Music History elective	3	447	3
Non-music elective	3	Non-music elective	3	Non-music elective	3
	<hr/>		<hr/>		<hr/>
	15		15		15

* Students in all years will normally take two music courses in the 180 series receiving 1 to 2 units of credit beyond the total limits shown above. Music 410 may substitute for one of these courses.

UNDERGRADUATE COURSES

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

LANGUAGE OF MUSIC

*†MUS 100. (3) **Language of Music I**

A course in basic principles of music as found in the period of tonality, dealing with contrapuntal and harmonic techniques, and including the development of individual skills and perception.

Prerequisite: Evidence of music training acceptable to the Department.

Members of the Department. (3-1; 3-1)

*†MUS 200. (3) **Language of Music II**

A survey of theory and practice from the Renaissance to the present day.

Prerequisite: Music 100. (2-2; 2-2)

*†MUS 300. (3) **Language of Music III**

Style and creativity. An analysis of structure and form; the experiencing of composition at the level of practice.

Prerequisite: Music 200. (3-2; 3-2)

*†MUS 400. (3) **Language of Music IV**

A study of music commencing c.1900, including the influence of jazz, rock and non-Western music upon contemporary idioms. (3-0; 3-0)

COMPOSITION

MUS 105. (2) **Music Composition I**

Introduction to Composition. (2-0; 2-0)

†MUS 205. (3) **Music Composition II**

Prerequisite: Permission of Instructor. (2-1; 2-1)

MUS 305. (3) **Music Composition III**

Prerequisite: Music 205. (2-1; 2-1)

MUS 405. (3) **Music Composition IV**

Prerequisite: Music 305. (2-1; 2-1)

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.

Text: Grout, *A History of Western Music*.

Essays will be assigned. (4-0; 4-0)

†MUS 115. (2) **The Elements of Music**

A study of the technical, historical, and aesthetic materials necessary to the critical evaluation of music.

(Not offered in 1972-73.) (2-0; 2-0)

*†MUS 311. (3) **Music of the Medieval Period and the Renaissance**

A study of music from the beginning of Christianity to c.1600.

Prerequisite: Music 110. (3-0; 3-0)

* Approved for credit in the Faculty of Arts and Science.

† Approved for credit in the Faculty of Education.

- *†MUS 312. (3) **Music of the Baroque Era**
A study of music from c.1600 - c.1750.
Prerequisite: Music 110. (3-0; 3-0)
- *†MUS 313. (3) **Music of the Classical Era**
A study of music from c.1730 - c.1830.
Prerequisite: Music 110. (3-0; 3-0)
- *†MUS 314. (3) **Music of the Romantic Era**
A study of styles and trends in nineteenth-century music.
Prerequisite: Music 110. (3-0; 3-0)
- *†MUS 315. (3) **Music of the Twentieth Century**
A study of music from c.1900 to the present day.
Prerequisite: Music 110. (3-0; 3-0)
- *†MUS 316. (3) **Text, Music and Drama**
A study of the relationship of text and music in songs, choral works, and dramatic music of all periods, with special reference to the historical context.
Prerequisite: Music 110.
No specified text. An extended essay will be required each term.
(Not offered 1972-73.) (3-0; 3-0)
- MUS 365. (3) **Music Theatre**
An introduction to Music Drama; a study (with practice) of dramatic music from liturgical drama to the present day.
(Not offered 1972-73.) (2-2; 2-2)
- 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. (3-0; 3-0)
- MUS 410. (1) **Collegium Musicum**
Investigation of chamber music with special emphasis given to preparing and producing music for voices and/or instruments. (2-0; 2-0)
- 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. (3-0; 3-0)
- MUS 499. (3) **Seminar in Musicology (formerly 426)**
For Music History majors only. Seminar will include the graduating essay. (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.
One term only. To be announced. (2-2)

* Approved for credit in the Faculty of Arts and Science.

† Approved for credit in the Faculty of Education,

- †MUS 332. (1½) **Woodwinds**
 Group instruction in playing all orchestral woodwind instruments.
 One term only. To be announced. (2-2)
- †MUS 333. (1½) **Percussion**
 Group instruction in playing all orchestral percussion.
 One term only. To be announced. (2-2)
- †MUS 334. (1½) **Voice**
 Group instruction in vocal production.
 One term only. To be announced. (2-2)
- †MUS. 336. (1½) **Keyboard**
 Group instruction in piano, harpsichord, and/or organ.
 One term only. To be announced. (2-2)
- †MUS 350. (3) **Orchestration (formerly MUS 335)**
 Study of instrumentation and orchestration.
 Prerequisite: Music 100. (3-0; 3-0)

†MUS 356. (3) **Introduction to Conducting**
 Fundamental conducting techniques as applied to instrumental and vocal music.
 Prerequisite: Permission of Instructor. (2-1; 2-1)

†MUS 360. (3) **Choral Techniques**
 The elements of vocal production, repertoire, analysis and rehearsal technique.
 Prerequisite: Music 110.
 (Not offered in 1972-73.) (2-1; 2-1)

MUS 456. (3) **Conducting**
 Prerequisite: Music 356 and the consent of the instructor. (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. (1) **Individual Tuition**
 Lessons in instrument or voice.
 Prerequisite: Evidence of marked musical ability demonstrated by audition.
 (0-1; 0-1)

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. (1½-1½; 1½-1½)

†MUS 240. (1) **Individual Tuition**
 Lessons in instruments or voice.
 Prerequisite: Music 140. (0-1; 0-1)

MUS 245. (3) **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. (1½-1½; 1½-1½)

† Approved for credit in the Faculty of Education.

- †MUS 340. (1) **Individual Tuition**
 Lessons in instruments or voice.
 Prerequisite: Music 240. (0-1; 0-1)
- MUS 345. (3) **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. (1½-1½; 1½-1½)
- †MUS 440. (1) **Individual Tuition**
 Lessons in instruments or voice.
 Prerequisite: Music 340. (0-1; 0-1)
- MUS 445. (3) **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. (1½-1½; 1½-1½)
- MUS 446. (3) **Special Techniques**
 Discussion of specific elements of performance such as style, ornamentation, etc.
 Prerequisite: Music 345.
 For Performance Majors only.
- MUS 447. (3) **Graduating Recital**
 Prerequisite: Music 345.
 For Performance Majors only.

PERFORMANCE GROUPS

†MUS 180 (formerly 150). (½)	University Chorus	(0-2; 0-2)
†MUS 181 (formerly 151). (1)	University Orchestra	(0-4; 0-4)
†MUS 182 (formerly 152). (1)	University Concert Band	(0-4; 0-4)
†MUS 183 (formerly 153). (½)	Wind Ensembles	(0-2; 0-2)
†MUS 184 (formerly 153). (½)	String and Piano Ensembles	(0-2; 0-2)
†MUS 185 (formerly 155). (1)	University Chamber Singers	(0-4; 0-4)
†MUS 280 (formerly 150). (½)	University Chorus	(0-2; 0-2)
†MUS 281 (formerly 151). (1)	University Orchestra	(0-4; 0-4)
†MUS 282 (formerly 152). (1)	University Concert Band	(0-4; 0-4)
†MUS 283 (formerly 153). (½)	Wind Ensembles	(0-2; 0-2)
†MUS 284 (formerly 153). (½)	String and Piano Ensembles	(0-2; 0-2)
†MUS 285 (formerly 155). (1)	University Chamber Singers	(0-4; 0-4)
†MUS 380 (formerly 150). (½)	University Chorus	(0-2; 0-2)
†MUS 381 (formerly 151). (1)	University Orchestra	(0-4; 0-4)
†MUS 382 (formerly 152). (1)	University Concert Band	(0-4; 0-4)
†MUS 383 (formerly 153). (½)	Wind Ensembles	(0-2; 0-2)

† Approved for credit in the Faculty of Education.

†MUS 384 (formerly 153). (½)	String and Piano Ensembles	(0-2; 0-2)
†MUS 385 (formerly 155). (1)	University Chamber Singers	(0-4; 0-4)
†MUS 480 (formerly 150). (½)	University Chorus	(0-2; 0-2)
†MUS 481 (formerly 151). (1)	University Orchestra	(0-4; 0-4)
†MUS 482 (formerly 152). (1)	University Concert Band	(0-4; 0-4)
†MUS 483 (formerly 153). (½)	Wind Ensembles	(0-2; 0-2)
†MUS 484 (formerly 153). (½)	String and Piano Ensembles	(0-2; 0-2)
†MUS 485 (formerly 155). (1)	University Chamber Singers	(0-4; 0-4)

These may all be taken in more than one year or in all four years, the year of an individual's participation to be designated by the first digit.

† Approved for credit in the Faculty of Education.

GRADUATE COURSES

Students should consult with the Department of Music concerning the courses offered in any particular year.

Methodology Courses and Practica

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 501. (1 ½ or 3)	Origins and Development of Western Musical Notation	(0-0; 3-0) or (3-0; 3-0)
MUS 502. (3)	Musical Aesthetics and the Theory of Criticism	(3-0; 0-0)
*MUS 503. (1 ½)	Bibliography	September-December only. (3-0; 0-0)
MUS 504. (1 ½ or 3)	Performance Practices	
MUS 505. (1 ½ or 3)	History of Musical Instruments	
MUS 506. (1 ½)	Musical Acoustics	
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)

Specialized Studies

†MUS 550. (3)	Studies in a particular Era of Music History
†MUS 551. (1 ½ or 3)	Studies in particular Forms or Genres in Music History

* All students in Musicology must register for this in their first term of graduate study.

† 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.

†MUS 552. (1 ½ or 3) **Studies in the music, life and times of individual composers in Music History**

Seminars and Advanced Independent Research

†MUS 560. (1 ½ or 3) **Seminar in Musicology

MUS 561. (3) **Seminar in Composition**

†MUS 580. (1 ½ or 3) **Directed Studies**

††MUS 581. (2) **Ensemble Coaching and Playing**

(0-4; 0-4)

§MUS 597. **M.Mus. Graduating Composition(s)**

MUS 598. (0) **M.Mus. Practicum**

Degree recital required for performance majors in final year.

§MUS 599. **M.A. Thesis**

§MUS 699. **Ph.D. Dissertation**

† May be taken more than once, in different fields, at the discretion of the Department.

** All students in Musicology must register for this each year they are in residence.

†† Performance majors must register for this in each year of study.

§ Credit to be determined.

DEPARTMENT OF THEATRE

- Barbara McIntyre, B.A., M.A. (*Minnesota*), Ph.D. (*Pittsburgh*), Professor.
Carl R. D. Hare, M.A. (*Alta.*), Dip. R.A.D.A., Associate Professor.
Wandalie Henshaw, B.A. (*Mich.*), M.F.A. (*Yale*), Ph.D. (*Pittsburgh*), Associate Professor.
Robert C. Field, B.A. (*Yankton College*), M.A. (*Miami*), Assistant Professor.
John F. Krich, A.B. (*Baldwin-Wallace*), M.F.A. (*Yale*), Assistant Professor.
Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (*Pittsburgh*), Assistant Professor.
Irene M. Pieper, B.A. (*Calif.*), M.A. (*San Fran. St. Coll.*), Assistant Professor.
E. Patricia Wainman-Wood, B.A. (*Queen's*), Lecturer.

BACHELOR OF FINE ARTS WITH A MAJOR IN THEATRE

The Bachelor of Fine Arts with a major in Theatre is an intensive programme intended for students who wish to continue their studies in graduate or professional schools or who wish to prepare for a career in community, educational or professional theatre. The programme is designed to provide not only a broad general education but also a theoretical, historical and practical knowledge of one or more areas of performance: acting, directing, design, or children's drama.

Students who wish to register in the Department of Theatre as theatre majors should apply to the Department of Theatre to arrange for an interview or, in some instances, an audition. This interview normally should take place during the months of March or April before permission to register in any theatre course can be granted. 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 in March or April 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.

PROGRAMME OF COURSES

General Programme

In the general programme B.F.A. students must complete sixty units of course work of which thirty normally will be in theatre. Each student is required to take English 110 or 120, Theatre 100 and Theatre 105 in his first year. In his second year each student will be assigned an advisor who will develop a programme of studies related to his needs and abilities. During his final three years a student normally will be required to take Theatre 310 and 311.

Special Programme

A student showing exceptional talent in acting, designing, directing or children's drama may be permitted to specialize in one of these areas. Such a student must offer at least 36 credits of theatre course work for graduation of which at least nine units must be in his specialty and three units in a related area as determined by his advisor. The 36 units of theatre must include the courses required for the general programme.

COURSES

INTRODUCTORY COURSES

†*THEA 100. (3) **The Language of the Theatre**

An introduction to theatrical form and to the principles of stage performance: analysis of selected plays; acting theory and other elements of play production.

Members of the Department.

(3-0; 3-0)

†THEA 105. (3) **An Introduction to Stage Design and Technical Practice**

Elementary principles of design and lighting; the techniques of scenery and costume construction.

Mr. Field.

(1-4; 1-4)

HISTORY OF THEATRE

†*THEA 310. (3) **The History of the Theatre to the Seventeenth Century**

An examination of the western theatre in relation to society from its beginnings in primitive ritual to the close of the English playhouses in 1642.

(3-0; 3-0)

†*THEA 311. (3) **The History of the Theatre from the Seventeenth Century to the Present**

An examination of western theatre in relation to society with particular emphasis on England, France, Italy and Germany.

(Not offered 1972-73.)

(3-0; 3-0)

†*THEA 312. (3) **Studies in Contemporary Theatre**

An intensive study of twentieth century theatrical styles.

(3-0; 3-0)

ACTING

†THEA 120. (3) **Acting I**

First steps in movement, voice, improvisation and scene study. Elementary phonetics.

Mr. Krich, Mrs. Wainman-Wood.

(0-6; 0-6)

†THEA 220. (3) **Acting II**

Advanced work in acting. Prerequisite: permission of the instructor.

Mr. 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 or permission of the instructor.

Mrs. Wainman-Wood.

(0-3; 0-3)

THEA 260. (1½) **Introduction to Dance**

Exploration of movement through contemporary dance techniques. Prerequisite: Theatre 250 and permission of the instructor.

(0-3; 0-3)

†THEA 320. (3) **Acting III**

Acting under performance conditions with particular reference to period styles. Prerequisite or corequisite: Theatre 250, 260 and permission of the instructor.

Mr. Hare, Mr. Krich.

(0-6; 0-6)

THEA 350. (1½) **Advanced Speech**

Advanced training in interpretation, vocal character studies, dialects, microphone techniques. Prerequisite: Theatre 250 and permission of the instructor.

Mrs. Wainman-Wood.

(0-3; 0-3)

† Approved for credit in the Faculty of Education.

* Approved for credit in the Faculty of Arts and Science.

THEA 360. (1½) Special Projects in Dance

Study of contemporary and traditional dance. Prerequisite: permission of the instructor. (0-3; 0-3)

†**THEA 420. (3) Special Problems in Acting**

Advanced work under performance conditions. Prerequisite or corequisite: Theatre 350, 360 and permission of the instructor. (0-6; 0-6)

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.

Dr. Henshaw. (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.

Dr. Henshaw. (1-4; 1-4)

†**THEA 435. (3) Advanced Directing**

Work under performance conditions. Prerequisite: permission of the instructor.

(Not offered 1972-73). (1-4; 1-4)

DESIGN AND TECHNICAL PRACTICE

THEA 340. (ART 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 or permission of the instructor. (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.

Miss 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.

Mr. Field. (2-2; 2-2)

CRITICISM

†**THEA 370. (3) Theatre Aesthetics**

Study in dramatic form; styles of theatrical presentation and acting; the relationship of the theatre to other dramatic media and to contemporary society, literature, and thought. Selected plays will be examined in depth. Prerequisite: Theatre 100 and permission of the instructor. (3-0; 3-0)

CHILDREN'S DRAMA

†**THEA 181. (3) An Introduction to Children's Drama**

Practical exploration of dramatic imagination, awareness and interaction by the student, both individually and in groups. Studio work will be required.

Dr. McIntyre. (1-4; 1-4)

† Approved for credit in the Faculty of Education.

* Approved for credit in the Faculty of Arts and Science.

†THEA 382. (3) **Youth Theatre**

Creative drama with some emphasis on movement and non-verbal methods. A survey of dramatic activity with children and youth. Both studio work and work with children will be required. Permission of the instructor is required.

Dr. 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.

Mr. Hare.

(1-4; 1-4)

†THEA 481. (3) **Theory of Dramatic Education**

The philosophic basis of dramatic work in education. Permission of the instructor is required.

(Not offered 1972-73.)

(3-0; 3-0)

DIRECTED STUDIES

THEA 299. (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.

(2-2; 2-2)

†**THEA 390. (3) **Directed Studies in Theatre History**

†**THEA 391. (3) **Directed Studies in Theatre Aesthetics**

†**THEA 392. (3) **Directed Studies in Theories of Acting**

†**THEA 393. (3) **Directed Studies in Theories of Direction**

†**THEA 394. (3) **Directed Studies in Children's Drama**

†THEA 395. (3) **Directed Studies in Design**

THEA 399. (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.

(2-2; 2-2)

THEA 490. (3) **Grading 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.

† Approved for credit in the Faculty of Education.

** Students in Arts and Sciences may elect for credit only one of the five directed studies courses.

GRADUATE COURSES

THEA 500. (3) **Methods and Materials of Theatre Research**

THEA 501. (3) **History and Criticism of Tragedy**

THEA 502. (3) **History and Criticism of Comedy**

THEA 503. (3) **Seminar in European Theatre History**

- THEA 504. (3) **Seminar in North American Theatre History**
- THEA 505. (3) **Contemporary Theatrical Styles**
- THEA 506. (3) **Seminar in Children's Drama**
- THEA 507. (3) **Seminar in Children's Theatre**
- THEA 508. (3) **Advanced Problems in Scene Design**
- THEA 509. (3) **Advanced Problems in Lighting Design**
- THEA 510. (3) **Advanced Problems in Costume Design**
- THEA 511. (3) **Advanced Problems in Production**
- THEA 512. (3) **Advanced Problems in Directing**
- THEA 513. (3) **Advanced Problems in Interpretation**
- THEA 590. (3) **Directed Studies**

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 598. (Credit to be determined) **MFA Practicum**
- THEA 599. (Credit to be determined) **MA Thesis**

DEPARTMENT OF VISUAL ARTS

Norman Toynton, Associate Professor and Chairman of Department.

John Philip Dobereiner, B.Ed. (*Brit. Col.*), M.F.A. (*Wash.*), Associate Professor (Drawing and Painting).

Donald Harvey, A.T.D. (*Brighton*), Associate Professor (Drawing and Painting).

Patricia Martin-Bates, Dip. Royale (*Academie des Beaux Arts, Belgium*), Assistant Professor.

PROGRAMMES LEADING TO THE DEGREE OF B.F.A.

This Department is in the process of development. It is hoped that new facilities will be added in the next year or two, with an M.F.A. programme in operation.

At present, the department offers courses leading to a B.F.A. degree. All students begin with a basic two years developing visual vocabulary. In the third year, they take twelve units of formal course work, numbered 300, in a specialized area. In the fourth year, they take twelve units of unstructured independent work to culminate in the presentation of a visual thesis. A written thesis of not less than two thousand words, or equivalent evidence of research in support of practical work, will also be required.

These courses have been evolved so that the individual can develop his capabilities in a creative way and do so without selfconscious preconceptions about art. The student is given a considerable amount of freedom and responsibility which is ultimately dependent on his own potential and capabilities. Individual programmes for each student are, as far as possible, planned within the course requirements of the degree.

While courses are listed in painting and sculpture (two and three dimensions), students will still be expected to move between these two areas, and may use combinations of techniques from either in the work they do.

The student is expected to show self-discipline and initiative in his studies. He is expected to invent the majority of his projects with faculty guidance. It is to the advantage of the student to make himself aware of the constantly changing visual phenomena of the twentieth century and of contemporary cultural disciplines in other areas of Fine Arts. The greatest opportunity for both specialization and self-motivated study will be in the projects of the student's final year.

NOTE FOR STUDENTS SEEKING ADMISSION TO THE DEPARTMENT FOR THE FIRST TIME

Because of limited facilities, the Department of Visual Arts of the Faculty of Fine Arts finds that this year it is again necessary to limit enrolment of students entering the Bachelor of Fine Arts programme.

So that the selection of those admitted can be as fair as possible, all B.F.A. candidates are requested to submit a folio of their recent work to be evaluated by a committee of the faculty. Folios may contain drawings, prints, paintings, or any flat material. Applicants whose speciality 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 196, MacLaurin Building,
University of Victoria.

(Appointments for a personal interview may be made at this office also.)

The deadline for the receipt of folios is 30 June, 1972. Candidates will be notified of the results of the evaluation soon thereafter.

Apart from this extra requirement for B.F.A. candidates, students should apply for entry to the programme in the usual way, by the due dates published elsewhere in this Calendar: New Students — by Application for Admission through the Admissions Office; University of Victoria students — by Application for Re-Registration through the Registrar's Office.

YEARS 1 AND 2

<i>Year 1</i>	<i>Units</i>	<i>Year 2</i>	<i>Units</i>
*Art 105	(6)	*Art 207	(9)
*Art 109	(3)	History in Art 360	(3)
either History in Art 100 or History in Art 120	(3)	*One of: History of Theatre 310, 311, 312	
*One of: Psychology 100 Philosophy 100 a modern language Music 110 Theatre 105 or equivalent, with advisor's approval	(3)	Theatre 340, 341, 342 a modern language or equivalent, with advisor's approval	(3)
	<hr style="width: 50px; margin: 0 auto;"/> (15)		<hr style="width: 50px; margin: 0 auto;"/> (15)

* Electives shall not be within the Department of Visual Arts.

YEAR 3

Twelve units to be chosen in consultation with the student's advisor from:

	<i>Units</i>		<i>Units</i>
Graphics Art 337	(9)	Painting Art 315	(3)
Theatre Design Art 340	(3)	Art 316	(6)
		Sculpture Art 375	(3)
		Art 376	(6)

plus one three unit course from outside the Department.

YEAR 4

Programme to include:

Free-Form-Giving Seminar Art 499 (12)

plus one three unit course from outside the Department.

COURSES

(For credit to students taking the B.F.A. Programme and for credit to Education Art majors where designated. These courses are open without credit to all students in the University with appropriate prerequisites, if space permits. Permission of Registrar and Department required. Lab fee of \$10.00 is required for all students using workshop facilities and having access to tools and machinery.)

ART 100. (3) **Introductory Course to Visual Arts**

Introductory course to Visual Arts, available as an elective for credit within the Faculty of Fine Arts to students from Departments other than Visual Arts. Limited to 15 students. (0-3; 0-3)

*†ART 105. (6) **Foundation Studies I**

An introduction to various technical and conceptual aspects of the visual arts including the use of tools and machinery, explorations of various media and colour. (1-5; 1-5)

*†ART 109. (3) **Drawing I**

An introduction to drawing. This course is designed to introduce the student to the various techniques and languages of visual form. i.e. the construction of linear elements, organic developments, mark making and its calligraphic nature. (0-3; 0-3)

* Foundation courses Art 105, Art 109 and Art 207 are under revision. Students should contact the Visual Arts Department concerning possible changes.

† Approved for credit in the Faculty of Education.

*†ART 207. (9) **Foundation Studies II**

Explorations in two and three dimensional form including some experience in all areas of specialization offered in the third year: light, sound and motion, photography, film and advanced workshop procedures. (Prerequisite 105/109 or equivalent.)
(0-11; 0-11)

†ART 337. (3-9) **Printmaking**

An investigation into traditional and modern printmaking processes:
i.e. *Itaglio* — etching, drypoint, engraving

Relief — linocut, woodcut, silkscreen

Planographic — lithography

Lectures on past and present prints. Demonstrations on techniques. Studio practice. Education art majors may take 3 units or 6 units.

(0-3; 0-3) or (0-6; 0-6) or (0-9; 0-9)

†ART 315. (3) **Painting**

An introduction to painting and related areas. This course will be as varied and flexible as possible and programmes and ideas would depend on the student and the advice of his instructor.

This course may be taken concurrently with Art 316.

(0-4; 0-4)

†ART 316. (6) **Painting**

This course will place primary emphasis on personal expression and experiment. The student will decide his programme in consultation with his instructor. This course may be taken concurrently with Art 315.

(0-6; 0-6)

†ART 365. (3) **Film & Photography**

Not offered for credit in 1971/72 but equipment is available to students wishing to utilize these media. Visual Art students only.

†ART 375. (3) **Sculpture**

Dual function of the course will be structured within a framework of perception and technology. A study of the nature of intermedia in the widest sense will be integrated within projects which allow for the free development of individual needs. This course may be taken concurrently with Art 376.

(0-3; 0-3)

ART 376. (6) **Sculpture**

This course is based on personal research encompassing where necessary a wide range of technical disciplines. Emphasis will be placed on personal perception where students can investigate their own philosophies related to their environment. No limitation will be placed on the course regarding fields of study within the scope of the school. All faculty within the school can be called upon for applicable assistance. This course may be taken concurrently with Art 375.

(0-6; 0-6)

†ART 340. (Theatre 340). (3) **Scenery for the Theatre**

This course is identical to Theatre 340.

It is recommended that Visual Arts students who take this course also take Theatre 105 as an elective.

(2-2; 2-2)

ART 390. (3) **Directed Studies in the Visual Arts**

ART 490. (3) **Directed Studies in the Visual Arts**

ART 499. (12) **Free Form-Giving Seminar**

This course will be taken under consultation with visiting and resident faculty.

* Foundation courses Art 105, Art 109 and Art 207 are under revision. Students should contact the Visual Arts Department concerning possible changes.

† Approved for credit in the Faculty of Education.

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 Science
- Doctor of Philosophy

Degrees may be taken in one Department or Faculty, or in a combination of them. Members of the Executive Committee of the Faculty of Graduate Studies are:

Dean of the Faculty of Graduate Studies, Chairman.
Associate Dean of the Faculty of Graduate Studies.

Representing Education

C. E. Hodgkinson, Faculty of Education

Representing the Humanities

R. H. Roy, Department of History

Representing the Sciences

A. Fischer, Department of Chemistry

Representing the Social Sciences

R. Shutler Jr., Department of Anthropology and Sociology

Representing Fine Arts

W. W. Newcomb, Department of Music

Secretary

Administrative Assistant (*ex-officio*)

R. G. Napier.

REGULATIONS

The regulations stated 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 requirement for admission to the Faculty of Graduate Studies is an academic standing acceptable to the Faculty of Graduate Studies and the Department or Faculty concerned. In general, this will be a baccalaureate degree from a recognized university, or its equivalent, with a B average (70%) in the work of the last two years.

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.

*The Degree of Master of Education is not offered at the present time.

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.

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 7 of the Special Regulations for the degree of Doctor of Philosophy.)

3. *Special Graduate Student.*

Special graduate students are students who are admitted to the Faculty of Graduate Studies to take graduate courses for credit at another university. Such students must prove that they have the qualifications for admission to the university at which they intend to apply their credits.

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: 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.

NOTE 6: Graduate courses (500 to 599) are not open to students outside the Faculty of Graduate Studies, except that an honours student in his fourth year may be allowed to take one course on the recommendation of a Department or Faculty.

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. All applications must be accompanied by an application fee of \$5.00.

Registration

All students admitted to the Faculty of Graduate Studies must normally register in person on the date specified for such registration and announced by the Office of the Registrar. All students admitted to the Faculty of Graduate Studies must thereafter maintain continuous registration during the period of their programmes by registering in person or by mail once a year on the annual registration date and paying the necessary fees.

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.

Permission to Withdraw

A student who wishes to withdraw from the Faculty of Graduate Studies, either temporarily or permanently, must request permission in writing from the Dean of the Faculty to do so.

Academic Standards

Students registered in the Faculty of Graduate Studies must maintain a cumulative average of at least "B" (5.0 GPA), computed yearly, on all graded courses taken for credit towards a graduate degree. Individual Departments or Faculties may set higher standards.

Students failing to meet these standards 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 registering 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 14 for graduation at Convocation in the Spring.

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 (eighty-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 study beyond the Master's level or three full Winter Sessions of study beyond the Bachelor's level, and satisfactory completion of the prescribed programme.

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.

4. *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.

5. *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.

6. *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 (or Faculty of Education) regulations.

7. *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.

8. *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.

9. *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.

10. *Date of Submission of Dissertation*

A dissertation must be submitted to the Department or Faculty concerned no later than April 14 for graduation at Convocation in the Spring.

DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY

The Department of Anthropology and Sociology offers separate courses of study leading to the degree of Master of Arts.

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.

ANTHROPOLOGY — 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 four core courses:

ANTHROPOLOGY 500, Seminar in Anthropological Theory, 3 units.

ANTHROPOLOGY 501, Seminar in Social and Cultural Theory, 3 units.

ANTHROPOLOGY 540, Seminar in Archaeology and Culture History, 1½ units.

ANTHROPOLOGY 550, Seminar in Physical 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 in 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*

Though most students require two years to complete a master's degree, it is possible for a student with a satisfactory background (i.e. the equivalent of a University of Victoria Honours degree in anthropology) to complete the degree in one year. 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 Linguistics 361 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.

The Graduate Anthropology Faculty and Current Areas of Interest

William H. Alkire (Illinois)

Ethnology, cultural ecology, Micronesia
and Southeast Asia

N. Ross Crumrine (Arizona)

Structural and symbolic anthropology,
mythology and religion, Latin America,
Southwestern North America

Leland H. Donald (Oregon)	Social organization, cultural ecology, statistical methods, sub-Saharan Africa
Roberta L. Hall (Oregon)	Human population biology, physical anthropology
Robert B. Lane (Washington)	Social anthropology, ethnology, social structure, Melanesia and the Pacific, Northwestern North America
Donald H. Mitchell (Oregon)	Archaeology, cultural ecology, Northwest west Coast, North American Indian
Richard Shutler Jr. (Arizona)	Archaeology, early man, ethnology, East and Southeast Asia, Oceania, North America

SOCIOLOGY — The programme leading to the Master's 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.

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.

The Graduate Sociology Faculty and Current Areas of Interest

Barry E. Askinas (Stanford)	Social stratification; small groups
Donald W. Ball (UCLA)	Interpersonal processes; sociology of sport
Elaine Cumming (Radcliffe-Harvard)	Medical sociology; the life cycle
Robert Hagedorn (Texas)	Formal organizations; industrial sociology
Alan Hedley (Oregon)	Methodology; formal organizations
T. Rennie Warburton (London)	Canadian society; religion
Roy E. L. Watson (Toronto)	Social welfare institutions; occupations

DEPARTMENT OF BACTERIOLOGY AND BIOCHEMISTRY

The Department of Bacteriology and Biochemistry offers courses of studies leading towards the degree of Master of Science and Doctor of Philosophy in the general area of Nutritional Biochemistry:

The general regulations governing the granting of advanced degrees as stated in Calendar pages 325-329 are applicable.

1. Examinations, oral or written, are mandatory for candidates entering the graduate programme in Biochemistry. These examinations are essential as an aid in the planning of the candidate's subsequent academic programme.
2. All graduate students are required to participate in Biochemistry 580 (Seminar) throughout the period of registration.
3. Every candidate for the M.Sc. will be required to demonstrate to the Department his capabilities in a language other than his native tongue. Ph.D. candidates must demonstrate this capability in two languages other than their own.
4. Thesis: The thesis topic is to be selected in consultation with the Department. The outcome of the thesis project will be deemed adequate if (1) it can be shown to be a new contribution to knowledge and (2) if it is acceptable for publication in a refereed Scientific Journal.

DEPARTMENT OF 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

George O. Mackie, D.Phil. (*Oxon.*)
Professor and Chairman of the
Department.

W. Gordon Fields, Ph.D. (*Stanford*)
Professor.

Arthur R. Fontaine, D.Phil. (*Oxon.*)
Professor.

F. Thomas Algard, Ph.D. (*Stanford*)
Associate Professor.

Michael J. Ashwood-Smith, Ph.D.
(*London*) Associate Professor.

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

David J. Ballantyne, Ph.D. (*Maryland*)
Associate Professor.

Marcus A. M. Bell, Ph.D. (*Brit. Col.*)
Associate Professor.

Derek V. Ellis, Ph.D. (*McGill*)
Associate Professor.

Edwin M. Hagmeier, Ph.D. (*Brit. Col.*)
Associate Professor.

John S. Hayward, Ph.D. (*Brit. Col.*)
Associate Professor.

Jack L. Littlepage, Ph.D. (*Stanford*)
Associate Professor.

John E. McInerney, Ph.D. (*Brit. Col.*)
Associate Professor.

John N. Owens, Ph.D. (*Ore. St.*)
Associate Professor.

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

E. Derek Styles, Ph.D. (*Wis.*)
Associate Professor.

Louis A. Hobson, Ph.D. (*Wash.*)
Assistant Professor.

John W. Paden, Ph.D. (*Idaho*)
Assistant Professor.

Richard A. Ring, Ph.D. (*Glasgow*)
Assistant Professor.

Areas of Research

Behavioural Physiology and
Ultrastructure of Marine Invertebrates:
Coelenterates.

Embryology and Natural History of
Marine Invertebrates;
Cephalopods.

Functional Morphology of Marine
Invertebrates: Echinoderms.

Developmental Biology; Growth &
Differentiation *in vitro*.

Cryobiology and Ultra-Violet
Photobiology.

Marine and Freshwater Phycology.

Plant Physiology: Extraction and Mode
of Action of Phytohormones.

Ecology: B.C. Vegetation; Urban and
Regional Landscape; Pollution.

Marine Ecology: Sediment Benthos.

Terrestrial and Freshwater Ecology.

Environmental Physiology: Temperature
Adaptation in Homeotherms;
Hyperbaric oxygenation.

Biological Oceanography:
Zooplankton Physiology and Ecology.

Behaviour and Physiology of Fishes.

Plant Anatomy and Morphogenesis.

Physiology of Marine Invertebrates.

Plant Genetics; Flavonoid biosynthesis:
Paramutation.

Biology Oceanography:
Phytoplankton Ecology and Physiology.

Mycology: Ascomycete Morphology and
Systematics; Soil Microbiology.

Physiology and Ecology of Insects.

Facilities

Facilities available include herbarium, greenhouses, constant environment rooms, equipment for radioisotope analysis, an electron microscope laboratory and a closed-circulation seawater system. Ships are available for oceanographic work. The campus computing centre has an IBM 360 Model 50, with 512 K 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 a 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.

DEPARTMENT OF CHEMISTRY

The Department offers programmes of study leading to the degrees of Master of Science and Doctor of Philosophy. Research areas include the following: Organometallic 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; carbohydrate 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 NMR facilities, infrared and ultraviolet spectrometers, high efficiency beta counting system, laser interferometers, signal averager, IBM 360/50-512K computer.

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. Normally one year will be allowed for the removal of such deficiencies. 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.

The faculty and their major fields of research are:

Walter J. Balfour, Ph.D. (<i>McMaster</i>)	Electronic spectroscopy.
Graham R. Branton, Ph.D. (<i>Southampton</i>)	Photoelectron spectroscopy and electron impact phenomena.
Gordon W. Bushnell, Ph.D. (<i>West Indies</i>)	Crystallography.
Thomas W. Dingle, Ph.D. (<i>Alta.</i>)	Theoretical chemistry.
Keith R. Dixon, Ph.D. (<i>Strathclyde</i>)	Transition metal and organometallic chemistry.
Alfred Fischer, Ph.D. (<i>N.Z.</i>)	Physical organic chemistry.
Sidney G. Gibbins, Ph.D. (<i>Wash.</i>)	Hydrides of silicon, boron and transition metals.
Martin B. Hocking, Ph.D. (<i>Southampton</i>)	Synthetic and physical organic chemistry; pollution control.
Alexander D. Kirk, Ph.D. (<i>Edinburgh</i>)	Photochemistry and luminescence of coordination compounds.
D. J. MacLaurin, Ph.D. (<i>Lawrence</i>)	Carbohydrates in alkaline systems; Reaction kinetics and mechanisms.
Kenneth C. Moss, Ph.D. (<i>London</i>)	Non-aqueous solvents and inorganic chemistry.
Robert N. O'Brien, Ph.D. (<i>Manchester</i>)	Electro and surface chemistry.
Gerald A. Poulton, Ph.D. (<i>Sask.</i>)	Natural products.
Frank P. Robinson, Ph.D. (<i>Alta.</i>)	Organic synthesis; Physical organic chemistry.
Stephen A. Ryce, Ph.D. (<i>Brit. Col.</i>)	Accommodation pumping; Fission theory.
Paul R. West, Ph.D. (<i>McMaster</i>)	Electron spin resonance; Organic free radical reaction mechanisms.

DEPARTMENT OF CLASSICS

The Department of Classics offers a programme of studies leading to the degree of Master of Arts, in the two areas:

Greek Literature

Latin Literature

Studies will concentrate variously on the playwrights, epic and lyric poets, historians, and on particular ages such as the Periclean and Augustan periods. A total of at least 15 units of work is required. Proficiency in reading either French or German or Italian must be demonstrated. For further information, please consult the Chairman of the Department and read the Department's entry in the undergraduate section of this calendar.

Faculty and Fields of Research:

- G. J. D. Archbold, B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Associate Professor: Roman Imperial History.
- D. A. Campbell, M.A. (*Glasgow*), M.A. (*Oxon.*), Professor: Greek and Latin Lyric and Elegiac Poetry.
- H. H. Huxley, M.A. (*Cambridge*), M.A. (*Dublin*), F.I.A.L., Professor: *The Greek Anthology*, Augustan and later Latin Poetry.
- S. E. Scully, B.A., M.Litt. (*Bristol*), Lecturer: Greek Tragedy, Greek Epic, Greek Moral and Political Thought.
- G. S. Shrimpton, B.A., M.A. (*Brit. Col.*), Ph.D. (*Stanford*), Assistant Professor: Greek History, Ancient Historiography.
- P. L. Smith, B.A. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Associate Professor: Roman Comedy, Augustan Latin Poetry.
- D. A. Tumber, B.A. (*Liverpool*), M.A. (*Alta.*), Lecturer: Roman Social Institutions.

DEPARTMENT OF ECONOMICS

The Department of Economics offers courses of studies 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.

DEPARTMENT OF ENGLISH

The aim of the Department is to prepare students thoroughly for scholarship, criticism, and teaching. It is our policy to avoid unnecessary duplication by a proliferation of courses or seminars at the graduate level. To that end, we shall accept good grades in senior courses from approved institutions as evidence of satisfactory achievement in periods, themes, figures, or genres of literary study.

Because of the varied backgrounds of students entering upon graduate work with the B.A. or M.A. degree, it is difficult to stipulate requirements which must be met on entry to the programme. We believe, therefore, that it is more profitable to specify what a candidate for an advanced degree shall have done before he is permitted to work entirely on his thesis or dissertation. He should possess the following:

1. A familiarity with the major figures, themes, movements, and genres of English literature from the seventh century to the present day.
2. A familiarity with the major features of the English language, and some knowledge of the outlines of the development of standard literary English.
3. A familiarity with research methods and problems.
4. A familiarity with the spectrum of literary criticism and with the major movements which have affected the criticism of English and American literature.
5. A detailed knowledge of the theme, movement, genre, or figure, with which a student's research is to be concerned.
6. An extensive knowledge of a field related to, or embracing, the subject of his specialization.
7. Normally a good reading knowledge of one language other than English for the M.A., and of two for the Ph.D.

Thus, before he is permitted to work entirely on his thesis or dissertation, a graduate student will have completed the following programme:

- (a) Courses, generally at the 400 level, to fulfill the requirements of 1 and 2 above.
- (b) A seminar, English 500 (except where the equivalent has been done elsewhere, or where a student has registered for the M.A. in Creative Writing), to provide for the requirements of 3 and 4 above.
- (c) One or more seminars in appropriate fields, to meet the requirements of 5 and 6 above.
- (d) Any studies entailed by 7 above.

Those offered places will receive provisional programmes of study, which will be subject to confirmation on their arrival and which may be modified later.

MASTER OF ARTS

The M.A. degree is offered in English, American, and Commonwealth Literature, and in Creative Writing. The basic programme consists of courses, seminars, and a thesis. A total of at least 15 units of work is required. However, since the thesis may be valued at from 3 to 15 units, and since the M.A. may be obtained in special circumstances by course work or by thesis only, allowance is made for considerable diversity in the nature of the work undertaken for the degree. In appropriate cases, a general examination, (which may be written or oral) may be required. Proficiency in reading a language other than English must be demonstrated.

Applicants for the M.A. in Creative Writing will submit examples of original work in their chosen genre. General requirements for the degree are the same as for the M.A. in English, with the following exceptions:

- (a) English 595, which includes some research skills and editorial work appropriate to a writer, replaces English 500.
- (b) There is no foreign language requirement.
- (c) Emphasis is placed upon contemporary literature.
- (d) There is no general examination.
- (e) The thesis will consist of a creative work of some length (e.g. a full length play, a novel, a group of short stories, or a volume of poems).

DOCTOR OF PHILOSOPHY

Full-time candidates for the Ph.D. entering with an M.A. degree may normally expect to complete the requirements for the degree (including the dissertation) in two years.

Full-time candidates entering with a B.A. degree must in the first place complete the course and seminar requirements for the M.A. degree. Upon the recommendation of the Graduate Committee, the M.A. thesis may be waived for outstanding candidates, who may be permitted to proceed to their Ph.D. seminars and dissertations.

Any doctoral candidate may request that previous graduate work be taken into consideration in the assessment of his course or seminar requirements, although the major part must be done at Victoria.

A full-time provisional doctoral student must have passed a candidacy examination by the end of his second year if he has entered with a B.A.. If he has entered with an M.A., he may take this examination at the end of his first year.

The candidacy examination will normally consist of the following:

- (a) A written examination on bibliography and methods of research and criticism, if such an examination has not already been sat;
- (b) Two written examinations of three hours each on the periods, areas of study, themes, figures, or genres concerning which he will write his dissertation;
- (c) A written examination of three hours on his minor field, which will often be a contiguous area of study.

Prior to the candidacy examination, a student must give evidence of proficiency in reading two languages other than English, both of which must normally relate to the field of study for his dissertation. A doctoral dissertation must be the result of original research of sufficient merit to meet the standards of scholarly publication. In exceptional circumstances, where the research justifies it, the degree of Doctor of Philosophy may be awarded for the dissertation alone.

DEPARTMENT OF GEOGRAPHY

The Department of Geography offers courses of study and research leading to an M.A. degree. Individual programmes may be arranged in economic, urban, resources, physical and regional geography with emphasis on Canada, especially Western Canada and the Pacific Basin.

Candidates may also be accepted for programmes of study leading to the degree of Ph.D.

DEPARTMENT OF HISTORY

The Department offers one- and two-year programmes leading to the M.A. degree. Facilities are available for graduate work in American, British, Canadian, and European history. The University's McPherson Library has holdings of over one-half million volumes, and graduate students may also be granted access to the resources of the Provincial Library and Archives, which include notable manuscript collections relating to western Canada and the northwestern United States.

For admission to a one-year programme for an M.A. in history, candidates should normally hold an undergraduate Honours degree in history or its equivalent. To be admitted to a two-year programme, candidates must have completed a Bachelor's degree with at least three full-year undergraduate courses (or their equivalent) in history, with an overall average of at least B+ (75%), or hold a Bachelor's degree with a First-Class average in the final year's work.

The M.A. degree is awarded upon successful defense of the thesis in an oral examination. All candidates must demonstrate a reading knowledge of French or some other language acceptable to the Department to qualify for graduation. Students are normally admitted for study in September and must complete their thesis by April 15 to graduate in May. Although there are no formal residence requirements, one year of residence is strongly recommended. Part-time study is permitted.

The faculty and major fields of interest:

- H. J. Bridgman, M.A. (*Queen's*), Pre-Confederation Canada.
- C. W. Cowan, B.A. (*Alta.*), Twentieth Century British Foreign Affairs.
- K. C. Dewar, M.A. (*Tor.*), Modern Canadian Social and Economic History.
- B. W. Dippie, Ph.D. (*Texas*), Intellectual-cultural; Nineteenth Century U.S.
- E. R. Forbes, M.A. (*Dalhousie*), Post-Confederation Canada. (Leave of absence 1972-73.)
- Charlotte S. M. Girard, Ph.D. (*Bryn Mawr*), Twentieth Century Diplomacy; Modern France.
- J. E. Hendrickson, Ph.D. (*Ore.*), American West.
- S. W. Jackman, Ph.D. (*Harvard*), Nineteenth Century Britain.
- J. Kupp, Ph.D. (*Man.*), New France.
- W. M. Leary, Ph.D. (*Princeton*), Twentieth Century U.S.
- A. E. Loft, B.A. (*Brit. Col.*), Canada.
- R. J. McCue, Ph.D. (*Brigham Young*), Sixteenth Century Europe.
- J. Money, Ph.D. (*Cantab.*), Eighteenth Century Britain.
- Patricia E. Roy, Ph.D. (*Brit. Col.*), Western Canada. (Leave of absence, 1972-73.)
- R. H. Roy, Ph.D. (*Wash.*), Military History; Canada.
- D. Senese, Ph.D. (*Harvard*), Nineteenth and Twentieth Century Russia.
- W. G. Shelton, Ph.D. (*Penn.*), Intellectual History.
- D. A. T. Stafford, Ph.D. (*London*), Twentieth Century Europe.
- E. Patricia Tsurumi, B.A. (*Brit. Col.*), A.M., Ph.D. (*Harvard*), Nineteenth Century Japan.
- W. T. Wooley, Ph.D. (*Chicago*), U.S. Diplomacy; Urban History.

DEPARTMENT OF HISTORY IN ART

The Department offers courses of study leading to the degree of Master of Arts.

DEPARTMENT OF LINGUISTICS

The Department of Linguistics offers programmes of study and research leading to the degree of Master of Arts in the following areas:

1. Canadian English Language.
2. Descriptive Linguistics, especially with application to indigenous languages of the Northwest. The special interests of the Department include theories of grammar, machine translation, lexicography, experimental phonetics and description of languages of the Pacific Rim. (For further details, see course descriptions).

DEPARTMENT OF MATHEMATICS

1. 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.
2. Potential graduate students who wish to obtain a Master's degree in Mathematics will be required to satisfy the following requirements.

The student should normally have the equivalent of an honours degree in Mathematics in one of the emphasis areas as listed in the University of Victoria Calendar. 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 (5.0) in each such make-up course, and an average of at least B+ (6.0) overall in his make-up courses.

3. Each graduate student must, in addition, complete a programme of study consisting of a minimum of fifteen units, made up of either
 - a) at least 12 units at the 500 level or higher, and the remainder at the 400 level or higher, or
 - b) 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.

4. 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.
5. A graduate student is governed by the Departmental regulations in force at the time of his initial graduate registration.
6. 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 a 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.
7. 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.

DEPARTMENT OF MUSIC

Apart from the regulations specified by the Faculty of Graduate Studies in the current Calendar, the Department of Music requires 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 honors papers or Master's thesis, which will be returned.

Language requirement

M.A. A *good* reading knowledge of German is required *before* admission. An examination will be given at the beginning of the academic year, whereby the student will be requested to translate fluently, with a dictionary, passages from such standard reference works as *Musik in Geschichte und Gegenwart* and *Riemanns Musik-Lexikon*. Applicants with a reading knowledge of another foreign language may be accepted provisionally, but must demonstrate their proficiency in German to the Department by December of their first year of graduate study at the University of Victoria. A reading knowledge of a second foreign language 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. The applicant may also be tested on common musical terminology in Italian, French, and German.

Ph.D. Same requirements as above upon entering, but student must also pass a proficiency examination in a second foreign language before December of his second year of residence.

Course requirements

The Master of Arts and Doctor of Philosophy degrees in musicology are liberal arts degrees implying that the holder has a broad background in disciplines other than his major area of specialization. Consequently, a number of graduate courses may be required in other fields, such as History, Art History, Literature, etc., along with the normal specialized courses in musicology. Average academic load is 12 units (= four 3-unit courses) per year. Students with assistantships may be required to take less; students with Honours baccalaureates who have passed language requirements may take more.

Seminars

All graduate students in musicology must take the main seminar (MUS 560) each year in residence. The seminar will consist of two extended papers, one each term, to be read to the class. Seminar topics will be in a different period of music history each term and will be announced the previous term or previous academic year.

Thesis, dissertation prospectus

A prospectus will be required for submission to the student's advisor or 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 roughly equivalent to two seminar papers, not necessarily in length but in quality of research. It does not have to be long (about the size of an extended article in a scholarly journal), but must represent an original contribution to musical research. Student must show skill in musicological method. The thesis should be completed during the last term of residence.

Ph.D. Dissertation

This should be a major contribution to original musical 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 of related areas, e.g. conducting, performance practices, composition, theory, music history, theatre, history in art, languages.

DEPARTMENT OF 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. A supplement of course work, fitted to individual needs and interests, may also be prescribed. Normally this would not exceed two courses. To qualify for admission, however, candidates should have a good Honours degree in Philosophy or its equivalent.

DEPARTMENT OF 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 under Faculty of Arts and Science, Department of Physics.

Close contact is maintained with the Defence Research Establishment Pacific, the Dominion Astrophysical Observatory, and the Victoria Magnetic Observatory.

Astronomy and Astrophysics

Theoretical and observational studies in co-operation with the Dominion Astrophysical Observatory.

Geophysics

Geomagnetism, plasma studies, space and upper atmosphere physics.

Nuclear Studies

Mesic x-rays, medium energy nuclear physics, participation in TRIUMF project, nuclear magnetic resonance.

Physics of Fluids

Gas kinetics and kinetic theory, shock waves and flow in shock tubes, under water acoustics.

Theoretical Physics

General relativity, nuclear physics.

DEPARTMENT OF POLITICAL SCIENCE

The Department of Political Science offers courses of study leading to the degree of Master of Arts.

There are two paths for the attainment of the degree:

Path A: Either (i) 12 units of course work (with a maximum of 6 units in courses at the 300 and 400 levels) with 3 units of thesis work plus an oral examination on the thesis.

Or (ii) 9 units of course work (with a maximum of 3 units in courses at the 300 and 400 levels) with 6 units of thesis work and an oral examination on the thesis.

Path B: 15 units of course work (with a maximum of 6 units at the 300 and 400 levels), with a general examination on all the materials studied in the courses plus an oral examination on the performance in the general examination.

Students will be required to prepare their respective curriculum in consultation with their Departmental Committee.

DEPARTMENT OF PSYCHOLOGY

The Department of Psychology offers programmes of study leading to the degrees of M.A. and M.Sc. Candidates may also be accepted for programmes of study leading to the degree of Ph.D.

The areas in which graduate training in psychology leading to the Ph.D. is offered include neuropsychology, experimental psychology, and social psychology. The department also offers training in clinical psychology, but the student must specialize in one of the above three areas and consider his clinical training as additional to his academic training.

An outline of the Departmental regulations regarding the suggested course of graduate studies and examinations is available from the Department secretary.

DEPARTMENT OF THEATRE

The Department of Theatre in the Faculty of Fine Arts offers programmes of study leading to the degrees of M.F.A., in Theatre, in the following areas: design, stage direction, and production; and M.A., in theatre history.

FACULTY OF EDUCATION

The Faculty of Education offers programmes of study leading to the degree of M.A. in the following areas:

Educational Psychology
Educational Administration
Curriculum and Instruction.

The Faculty also offers programmes leading to the Ph.D. degree in Educational Psychology.

DIVISION OF CONTINUING EDUCATION

Director: Laurence E. Devlin, B.Ed., M.A., Ph.D.

The Division offers non-degree programmes of continuing education for adults who seek intellectual growth and improved professional competence. A variety of educational formats are employed: courses, lecture series, workshops, conferences, symposia and educational travel. Programmes are developed in cooperation with Departments from all three Faculties of the University: Arts and Sciences, Education, and Fine Arts. Instructors are also appointed from the professional staff of University Departments such as the McPherson Library and the Systems Services and Computing Centre.

Certain programmes are designed for individuals seeking improved professional competence. Courses for nurses, teachers, engineers, accountants, social workers and bankers are included.

The following partial list of courses offered in the academic year 1971-72 illustrate adult learning opportunities available through the Division:

Liberal Arts: Art of India, Developing the Learning Capacity of Pre-School Children, Japan: A Cultural and Economic Perspective for Businessmen, Libraries: Resource Use and Research, The Life and Works of Bertolt Brecht, Plants and Man, Six Novels for a Winter's Night, Beginning Piano for Adults, Psychology Today, Plant Physiology.

Professional Development: Genetics for Nurses, the Initial Teaching Alphabet Workshop, Basic Social Work Methods, What's New in Nursing, Reading Improvement for Professional Engineers.

Business and Management: Business Administration in Canada, Economics, Principles of Accounting, Developing Managerial Communications Skills, Introduction to Computers, Introduction to Applications Programming.

In cooperation with the Department of French Language and Literature, the Division offers a French Language Diploma Programme for Adults. This programme consists of six integrated courses designed to develop a level of language competence functional throughout Canada. Students are placed at levels consistent with their initial ability and progress at their own rate. Expected completion time is 2-2½ years. The University will award a Diploma to successful candidates.

All courses sponsored by the Division are open to any adult. There are no prerequisites for courses unless stated. Special courses for groups or individuals can be arranged on request if academic resources permit.

For a calendar listing Fall and Spring programmes, or for further information about the Division, write to

The Director
Division of Continuing Education
University of Victoria

SUMMER SESSION 1972

Director: Dr. J. Beattie MacLean, M.A., Ph.D.

The announcement of the courses to be offered in the Summer Session (approximately seven weeks in length) will be issued in the Spring and will be available on request from the Director of Summer Session.

The regulations governing the Summer Session are as follows:

1. The maximum credit for Summer Session work in any one calendar year is 6 units. However, students are urged to register in not more than $4\frac{1}{2}$ units. Correspondence courses may not be taken concurrently.
2. Students are required to register by the due date published in the Summer Session Supplement to this Calendar. A late registration fee of \$25.00 will be charged when permission to register late is granted.
3. Students who obtained unsatisfactory standing in the last Winter Session attended may not enrol in Summer Session.
4. All new students desiring to obtain credit for courses completed in the Summer Session must submit with their Application for Admission official transcripts of their matriculation standing and any university work completed elsewhere. In the case of teachers, official transcripts of their professional training are also required.
5. Students are expected to attend regularly the classes in a course for which they register. A student who neglects his academic work, including assignments, may be debarred from final examinations in a course.
6. For statement of fees, see page 74.
7. Summer Session examinations are held at the close of Summer Session.
8. For regulations regarding standing and credit, see page 71.
9. Students are advised that some courses are offered only if there is sufficient enrolment and that they should indicate, at the time of registration, an alternative choice for which they would be prepared to register if the course of their first choice does not materialize.

NURSING

The Board of Governors and the Senate of the University authorized the establishment of a School of Nursing beginning in September 1967. Subsequently, however, the establishment of the School was postponed indefinitely.

SOCIAL WELFARE

In 1967, the Board of Governors and the Senate authorized the establishment of a School of Social Welfare beginning in September 1969. However, in 1968, the establishment of the School was postponed indefinitely.

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 — MacLaurin Building.

Advising Centre — Faculty of Education — MacLaurin Building.

The Dean's Office — Faculty of Fine Arts — 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 Department of Education, Victoria, which is solely responsible for teacher certification in this Province.

Session

Monday, September 11, 1972, to Saturday, April 28, 1973.

Auditing

Applicants who wish to audit a course may do so but are subject to full fees. Auditors are in the lowest priority in courses which have enrolment limits and are not entitled to credit if admitted to a course.

Application

Students who were registered in credit courses prior to September 1972 should apply for re-registration on or before June 30 using the required APPLICATION FOR RE-REGISTRATION form which is obtainable from the Registrar's Office.

Persons seeking admission to the University for the first time must obtain an APPLICATION FOR ADMISSION form from the Director of Admissions. This form, fully completed and accompanied by all official transcripts of academic records, should be submitted to the Director of Admissions on or before August 1.

Those students who apply by the appropriate due date, mentioned above, will be given priority over those who apply after the above dates. No student will be permitted to register for credit unless he has completed application and registration procedures and is in attendance before the end of the second week of classes.

Registration Procedures

Applicants whose registration is authorized by September 1 will receive registration booklets and will have the option of registering by mail or in class. Those who wish to register by mail must mail their registration booklets, together with a cheque to cover fees, in time to arrive in the Registrar's Office by September 8. Those who wish to register in class, including those who have not had their registration authorized by September 1, must complete the necessary forms and submit them, together with a cheque to cover fees, before the end of the second week of lectures. Registration

after the second week of lectures will be permitted only in exceptional cases and with the permission of the instructor, upon payment of the late registration fee of \$25.

Students will be allotted places in courses on a first-come, first-served basis and are therefore urged to complete application and registration procedures in time to register by mail by September 8.

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 September.

Fees (including auditors)

Regulations regarding payment of fees are contained on page 76 of the Calendar and are the same as those for other students in the Winter Session, with the exception that the full first 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, \$30 per unit.

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 \$20.00

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, 1973 are subject to a late payment fee, additional to all other fees.

Withdrawal

Students who withdraw from a course should notify the Registrar 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 77 of the 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 and the Registrar's 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 faculty is shown under the Department of Music. See page 308.

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 see the Director of the Counselling Centre, University of Victoria.

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 during their first year at the University of Victoria.

AGRICULTURE

Suggested courses:

Biology
Chemistry
English
Mathematics
An Arts elective

APPLIED SCIENCE

Suggested courses:

English
Mathematics
Chemistry
Physics
Non-Science elective

ARCHITECTURE

Suggested courses:

English
Mathematics
History in Art
Electives

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

DENTISTRY

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

HOME ECONOMICS

Suggested courses:

English
Chemistry
Physics
Mathematics
Biology or a Social Science

FORESTRY

Suggested courses:

Biology or Physics
Chemistry
English
Mathematics
One additional course

LAW

Suggested course:

First Three Years Arts and Science

MEDICINE

Completion of at least three years of study in Arts and Science including English, Mathematics, Chemistry, Biology, Physics

NURSING (BSN)

Suggested courses:

English
Chemistry
Mathematics
Biology
Approval elective

PHARMACY

Chemistry
English
Mathematics
Physics or Biology
A Non-Science elective

REHABILITATION MEDICINE

English
Mathematics
Chemistry
Biology
An 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.

SOCIAL WORK

Students interested in professional social work are advised to complete a degree in the Faculty of Arts and Science.

LABORATORY TECHNICIAN

English
Mathematics
Biology
Chemistry
An elective

VETERINARY MEDICINE

Completion of two years of study in Arts and Science including:

English
Physics
Biology and Zoology, including Genetics
Chemistry, including Organic Chemistry
Mathematics
Electives

AWARDS AND FINANCIAL AID

GENERAL REGULATIONS

All inquiries concerning material in this section except University of Victoria graduate fellowships and scholarships should be directed to the Financial Aid Officer, Admissions Office. Information regarding University of Victoria graduate awards may be obtained from the Faculty of Graduate Studies, Building "L".

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. See page 363.
- Section 2: Government of British Columbia awards. See page 377.
- Section 3: University bursaries requiring application. See page 379.
- Section 4: Undergraduate awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See page 380.
- Section 5: Undergraduate awards for which application must be made to the Senate Committee on Awards. See page 389.
- Section 6: Undergraduate awards administered by the University of British Columbia and other institutions and organizations. See page 392.
- Section 7: Awards for graduate study. See page 399.
- Section 8: Loan funds. See page 400.

SECTION 1

ENTRANCE AWARDS

The following scholarships are open to students who have completed University Entrance and are proceeding to the University of Victoria

ENTRANCE AWARDS ADMINISTERED BY THE UNIVERSITY OF VICTORIA

Application forms for the following awards may be obtained from the Financial Aid Officer, Admissions Office, University of Victoria, Victoria, B.C., and must be returned before June 30. 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 1972. Awards will be based upon high standing in the matriculation record of students in June 1972. Recipients will be selected by the Committee on Awards and awards will be announced shortly after the release of the examination results in the summer.

CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS — The C.U.P.E. will provide annual scholarships of \$100 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 standing or a good second class in the Departmental Examinations in the Grade 12 Academic-Technical Programme. All other things being equal, preference will be given to sons or daughters of members of the Canadian Union of Public Employees. 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 four hundred dollars (\$400) 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 Department of Education in June.

***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.

* Administered by the University of Victoria Foundation.

PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY — A bursary of \$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 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.

SEASPAN INTERNATIONAL LTD. SCHOLARSHIP — One hundred and fifty dollars (\$150) will be awarded to a deserving and qualified member of the Indian community of Vancouver Island, any of the Gulf Islands, the West Coast of the Mainland, or the Queen Charlotte Islands, who gained academic success in University Entrance examinations and enters First Year at the University of Victoria. Selection of the winner will be made by the Committee on Awards after consultation with the District Superintendent of Indian Schools.

UNIVERSITY OF VICTORIA ALUMNI SCHOLARSHIP — Contributions to the Alumni Annual Giving Campaign and other funds have made possible the institution of a \$500 annual scholarship by the Alumni Association of the University of Victoria. The award will be granted to students in British Columbia writing the required Department of Education scholarship examinations in June, who are proceeding from Grade XII (Graduation on the Academic-Technical Programme) to the University of Victoria. The award may be renewed annually for a total of four years provided the student continues to meet the specified criteria and attend the University of Victoria.

In this regard the student will be expected to meet with the executive of the Alumni Association at least once during the year to discuss his/her achievements and future plans.

Winners will be selected by a special Alumni Screening Committee representing the University of Victoria and the Alumni Association. The selection will be based on the following criteria: high academic standing, leadership qualities, and a demonstrated ability in some social, recreational, athletic, artistic or other worthwhile endeavour(s).

**ENTRANCE AWARDS, ADMINISTERED BY THE
SCHOLARSHIP AND BURSARY COMMITTEE, ROOM 207, BUCHANAN
BUILDING, UNIVERSITY OF BRITISH COLUMBIA, VANCOUVER 8, B.C.**

(1) Scholarships which must be applied for by May 15.

BRITISH COLUMBIA FOREST PRODUCTS LIMITED ENTRANCE SCHOLARSHIPS — Ten scholarships of four hundred dollars (\$400) each are offered by British Columbia Forest Products Limited to sons and daughters of employees who, by June 30 of the year in which the award is made, have or will have served 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 or the University of Victoria. Candidates for these scholarships must write the required scholarship examinations conducted in June by the Department of Education, B.C. The scholarships will be awarded to the ten candidates obtaining highest standing. No award will normally be made, however, to an applicant with an overall average of less than 70%. The grades obtained in other subjects taken during the year may also be considered. Applicants for these scholarships must complete the "General Application for Scholarship" form, which may be obtained from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of B.C., Vancouver 8, B.C. These applications must be received by the University of British Columbia not later than May 15 and must contain the necessary details of family service with the Company. Before June 1 they must also complete and submit through the school principal, the special form required by the Department of

Education from all those writing the scholarship examinations. Postponement of attendance at the University of B.C., 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 one year. Application for postponement must be made through the University of B.C. at the time the award is made.

THE FEDERATION OF TELEPHONE WORKERS OF BRITISH COLUMBIA, PLANT DIVISION, SCHOLARSHIP — The Federation of Telephone Workers of British Columbia, Plant Division, offers a scholarship of five hundred dollars (\$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 high school to a full programme of studies at the University of British Columbia, Simon Fraser University, the University of Victoria, Notre Dame University 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 in Grade XII will be considered on the basis either of standing received by recommendation or in the June Departmental 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. All candidates must apply to the University of British Columbia not later than May 15 by completing the "General Application for Scholarship" form. This form may be obtained from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. Applications should contain details of family service with the Federation and other pertinent information. The applicant must forward his official high school transcript (or an exact copy) to the University of B.C. as soon as it is received.

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 five hundred dollars (\$500) to sons and daughters of members (with the same service). It is open in competition to students proceeding in the fall from Grade XII in high 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 in Grade XII will be considered on the basis either of standing received by recommendation or in the June Departmental 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. All candidates must apply to the University of British Columbia not later than May 15 by completing the "General Application for Scholarship" form. This form may be obtained from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. Applications should contain details of family service with the Federation and other pertinent information. The applicant must forward his official high school transcript (or an exact copy) to the University of British Columbia as soon as it is received.

THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION ENTRANCE SCHOLARSHIPS — Four scholarships of \$400 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 written examinations conducted in June by the Department of Education, Victoria, B.C., and who are proceeding in the fall to a full programme of studies at Simon Fraser University, University of British Columbia, Notre Dame University, the University of Victoria, or any accredited Regional College in B.C. Students who wish to compete for these must apply on the "General Application for Scholarship" form, which may be obtained from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. The completed application must be received at the University of British Columbia by May 15. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high or to reaward scholarships if winners receive other scholarships of substantial value.

OCEAN CEMENT LIMITED ENTRANCE SCHOLARSHIPS — Ocean Cement

Limited annually offers scholarships to a total of \$1,000, open in competition to employees' sons and daughters who are proceeding in the fall from Grade XII to a full course of University studies. Three scholarships of approximately equal value are provided for attendance at the University of British Columbia, the University of Victoria, Simon Fraser University, the British Columbia Institute of Technology, or, as may be recommended. Candidates for these scholarships must (a) write the Government of British Columbia scholarship examinations conducted in June by the Department of Education, B.C., and (b) complete the General Application for Scholarship form, which may be obtained from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. The completed application must be returned to University of British Columbia not later than May 31. These scholarships will be awarded to the applicants who, in the opinion of the Selection Committee are best qualified in terms of academic merit combined with interest and participation in school or community affairs.

THE ROYAL ARCH BURSARIES — Four bursaries, in the amount of \$300 to \$500 each, have been established by the Royal Arch Masonic Order to give assistance to sons and daughters of members of Chapters in British Columbia or Yukon Territory in good standing, or of deceased members, who without assistance would be unable to continue through university. They will be awarded annually, on the basis of scholastic standing and need, to eligible students proceeding directly in the fall from Grade XII to a full programme of studies at the University of British Columbia, Simon Fraser University, University of Victoria, or Notre Dame University of Nelson. Candidates for these bursaries must (a) write the Government Scholarship examinations conducted in June by the Department of Education, B.C.; (b) complete the University Bursary form, which may be obtained from the Scholarship Office, Room 207, Buchanan Building, University of British Columbia. This application form, which is to be received by the University not later than July 15, must clearly indicate (i) the applicant's relationship to a member of the Royal Arch Masonic Chapter, the name of the member, and the name of the Royal Arch Chapter in British Columbia or Yukon with which he or she was connected; and (ii) the applicant's financial circumstances and those of his or her immediate family, including the net taxable income of parents for the past year. A letter from the Secretary of the Royal Arch Chapter confirming the details in (i) should be included. Candidates will be considered on the basis of the Scholarship Examinations and the grades obtained in the other courses taken during the year, and on their financial circumstances. If, in the opinion of the University, no applicant is suitably qualified, the award will be withheld.

STANDARD OIL COMPANY OF BRITISH COLUMBIA LIMITED ENTRANCE SCHOLARSHIP — Standard Oil Company of British Columbia Limited offers a scholarship worth \$2,000 to students who are resident of British Columbia and are proceeding in the fall to studies in the First Year at Simon Fraser University, 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 write the required scholarship examinations for High School Graduation on the Academic-Technical Programme conducted in June by the Department of Education, Victoria, B.C. The scholarship will normally be awarded to the eligible applicant obtaining highest standing in these examinations, but the marks obtained in other subjects taken during the year may also be considered. In the event of a tie the decision will rest with the Selection Committee. Should this applicant win another award, however, the scholarship may be given, at the discretion of the University of British Columbia, to the eligible candidate with next highest standing. No award will be made to a candidate with an overall average less than 75%. General regulations of the University of British Columbia for scholarships are also applicable to this scholarship. The winner of this award will receive \$500 during the first year of attendance at the University, and is eligible for renewals of \$500 a year for three further years. Each renewal is subject to maintenance of standing satisfactory to the University of British Columbia. The student must apply by not later than June 1 on the "General Application for Scholarship" form obtainable from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. In the letter he should give his full name, home address, name and address of the school he is attending, and the name of the university he will attend in the fall.

STANDARD OIL COMPANY OF BRITISH COLUMBIA LIMITED SPECIAL SCHOLARSHIP — Standard Oil Company of British Columbia Limited offers a scholarship worth \$2,000 to children or wards of employees or annuitants of the Standard Oil Company of British Columbia, or of deceased employees who die 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 the First Year at Simon Fraser University, 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 write the required scholastic examinations for High School Graduation on the Academic-Technical Programme conducted in June by the Department of Education, Victoria, B.C. The scholarship will normally be awarded to the eligible applicant obtaining highest standing in these examinations, but standing 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 University of British Columbia, to the eligible candidate with next highest standing. No award will be made to a candidate with an overall average of less than 70%. General regulations of the University of British Columbia are also applicable to this scholarship. The winner of this award will receive \$500 during the first year of attendance at the University, and is eligible for renewals of \$500 a year for three further years. Each renewal is subject to maintenance of standing satisfactory to the University of British Columbia. The student must apply by June 1 on the "General Application for Scholarship" form obtainable from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. He must give essential details of family employment with the Company.

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, University of British Columbia or the University of Victoria, in a full programme leading to a degree in any field. To be eligible applicants must have been carriers of the Vancouver Sun for at least two consecutive years. The scholarships will normally be awarded to the two applicants who rank highest on the basis of the marks obtained in the written examinations for High School Graduation on the Academic-Technical Programme conducted in June by the Department of Education, B.C., but standing obtained in other subjects taken during the year may also be considered. Applicants must write the required examinations in the scholarship subjects prescribed by regulations of the Department and the University. Winners who obtain and maintain First Class standing (or who, in successive years of their undergraduate course, rank in the top 10% of the Faculty and Year in which they are registered) will be eligible for renewals of \$500 a year until graduation, not exceeding a total of five payments in all. Selection of the winners will be made by the University of British Columbia. A student who wishes to be considered for one of these scholarships must apply by May 15 on the "General Application for Scholarship" form obtainable from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. The application must be accompanied by the service certificate of the Vancouver Sun. The winner of one of these scholarships, while not also permitted to hold the Vancouver Sun Special Scholarship for Carriers may, however, accept other awards offered to him.

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, or 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 take the written examinations for High School Graduation on the Academic-Technical Programme, conducted in June by the Department of Education, B.C. All applicants must write the required examinations in the scholarship subjects prescribed by the regulations of the Department and the University. An applicant will be considered only if he obtains an overall average of at least 75%. The scholarship will be awarded to the eligible applicant who, in the opinion of the University of British Columbia, 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. All candidates must complete the "General Application for Scholarship" form, obtainable from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. The completed application, accompanied by the service certificate of the Vancouver Sun must be received by the University of British Columbia not later than May 15. Candidates will be judged on the basis of their examination grades, their personal letters (see application form for details), 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 VANCOUVER SUN REGIONAL COLLEGE ENTRANCE SCHOLARSHIPS FOR SUN CARRIERS — The Vancouver Sun offers annually three scholarships of \$250 each to students proceeding in the fall from Grade XII to the first year at a public regional college in B.C., in a full programme of studies (comprising two consecutive semesters or the equivalent) in courses leading to a University degree. To be eligible an applicant must have been a carrier of The Vancouver Sun for at least two consecutive years and must write the Scholarship Examinations conducted in June by the Department of Education, B.C. The scholarships will normally be awarded to the three qualified applicants who rank highest in these examinations, but standing obtained in other subjects taken during the year may be considered, and always in case of a tie. A winner who ranks in the top 10% of the students in the College he has attended and who proceeds to the second year of the College in a full programme of studies leading to a University degree will be granted a renewal in the same amount. A winner who, after completion of one or two years of College, transfers to a full course of studies at a public University in B.C., and who ranks in the top 10%, at the time of transfer, among the students of his Year in the College, will qualify for a further scholarship of \$500. For continued attendance at this University he may then be eligible for up to two further renewals until he obtains his first undergraduate degree. Renewal each year is conditional upon his ranking in the top 10% of students in the Year and Faculty in which he is registered. A candidate for these awards must apply on the "General Application Form", which may be obtained from, and must be returned by May 15th to, the Scholarship Office, Room 207, Buchanan Building, University of B.C., Vancouver 8, B.C. The application must be accompanied by the service certificate of The Vancouver Sun.

THE ST. JOSEPH'S UNIT, LOCAL, 180, SCHOLARSHIP — A scholarship of \$250 is offered by the St. Joseph's Unit of the Hospital Employees' Union Local 180 to students proceeding in the fall from Grade XII of secondary school to a full programme of studies at the University of B.C., University of Victoria, Notre Dame University of Nelson, Vancouver City College, or Simon Fraser University in any field leading to a degree. To be eligible an applicant must (a) be the son or daughter of an active member of the Hospital Employees' Union Local 180 ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staffs as of January 1st of the year of the award but since super-annuated); (b) write the Government Examinations conducted in June by the Department of Education, B.C. and obtain clear standing with an overall average of not less than 70%; (c) obtain from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia Bursary Application Form after June 1, and file the completed form with the University of B.C. not later than July 15th. The information given in the form must clearly establish the applicant's family connection with Local 180 and one of the hospitals. Candidates should note that intention to write Government Scholarship Examinations must be filed with the Department of Education, Victoria, B.C., through the school principal, before June 1st. The scholarship will be awarded to the candidate who, in the opinion of the University (in consultation with the Union), is best qualified in terms of academic standing and financial need.

VANCOUVER GENERAL UNIT, LOCAL 180, SCHOLARSHIPS — Two scholarships of \$350 each are offered annually by the Vancouver General Unit of the Hospital Employees' Union Local 180 to students proceeding in the fall from Grade XII of secondary school to a full programme of studies at the University of B.C., Simon Fraser University, Notre Dame University of Nelson, Vancouver City College, or University of Victoria in any field leading to a degree. To be eligible an applicant must (a) be the son or daughter of an active member of the Hospital Employees' Union Local 180 ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1st of the year of the award but since superannuated); (b) write the Government Scholarship Examinations conducted in June by the Department of Education, B.C. and obtain clear standing with an overall average of not less than 70%; (c) obtain from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of B.C. Bursary Application Form after June 1st, and file the completed form with the University of B.C. not later than July 5th. The information given in the form must clearly establish the applicant's family connection with Local 180 and with one of the hospitals. Candidates should note that intention to write Government Scholarship Examinations must be filed with the Department of Education, Victoria, B.C., through the school principal, before June 1st. The scholarships will be awarded to the two candidates who, in the opinion of the University of B.C. (in consultation with the Union), are best qualified in terms of academic standing and financial need.

THE HOSPITAL EMPLOYEES' UNION LOCAL 180 SCHOLARSHIPS — Two scholarships of \$250 each are offered annually by the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade XII of secondary school to a full programme of studies at the University of B.C., Simon Fraser University, Notre Dame University of Nelson, Vancouver City College, or University of Victoria in any field leading to a degree. To be eligible an applicant must (a) be the son or daughter of an active member of the Union, ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff, as of January 1st of the year of award but since superannuated); (b) write the Government Scholarship Examinations conducted in June by the Department of Education, B.C. and obtain clear standing with an overall average of not less than 70%; (c) obtain from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of B.C. Bursary Application Form after June 1st, and file the completed form with the University of B.C. not later than July 15th. The information given in the form must clearly establish the applicant's family connection with Local 180 and with one of the hospitals. Candidates should note that intention to write Government Scholarships Examinations must be filed with the Department of Education, Victoria, B.C., through the school principal, before June 1st. The scholarships will be awarded to the two candidates who, in the opinion of the University of B.C. (in consultation with the Union), are best qualified in terms of academic standing and financial need.

THE RETAIL CLERKS UNION, LOCAL 1518, SCHOLARSHIPS — The Retail Clerks Union, Local 1518, offers two scholarships of \$350 each to students beginning or continuing studies in a full academic programme of studies at the University of B.C., University of Victoria, or Simon Fraser University. The awards will be made to the applicants with the highest standing in the final examinations. Students entering from Grade XII must write the scholarship examinations conducted in June by the Department 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. Application must be made on the appropriate Application Form for Scholarship, which may be obtained from, and must be returned to, the Scholarship and Bursary Office, Room 207, Buchanan Building, University of B.C. The last day for receiving applications is June 1st.

(2) Bursaries which must be applied for by July 15.

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 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 the University of Victoria. Awards will be made 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 C+ 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. All candidates must apply on the Special Bursary form, which may be obtained from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. This application must be received by the University of British Columbia not later than July 15 and must contain the necessary details of family service with the Company. The applicant must forward as soon as possible an official transcript of record at secondary school or university to the University of British Columbia Scholarship and Bursary Committee.

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 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. Selection of winners will be made by the University of British Columbia from applicants with satisfactory academic standing who are entering undergraduate studies in the first or second year at the University of British Columbia, the University of Victoria, Simon Fraser University, or the B.C. Institute of Technology, in a full programme leading to a degree in any field. In order to be considered, a candidate must obtain from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., a Special Bursary Application form. The completed application must be received at the University of British Columbia not later than July 15. If the applicant is the son, daughter, or legal ward of a member of the Lodge the application must be accompanied by a letter from the Secretary of the Lodge giving the name and address and details of the lodge with which the applicant's immediate family is or has been associated. Since a special committee considers these awards, a student applying for other bursaries must submit a separate application for them.

THE RETAIL WHOLESALE & DEPARTMENT STORE UNION LOCAL 580 BURSARY—Two bursaries of \$250 each is offered by the Retail Wholesale & Department Store Union Local 580 to 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 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 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. Those who wish to apply for this bursary must obtain the University Bursary Form from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. The completed application must be received by them not later than July 15. 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, and 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 or the University of Victoria 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. Application on the bursary form obtainable

from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., must be received at the University of British Columbia not later than July 15. 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.

WHITE SPOT LIMITED BURSARIES — Two bursaries, having a total value of \$1,000 each, are provided by White Spot Limited and its subsidiaries for their employees, and sons and daughters of their employees who have served with the firm for at least two years. These bursaries are paid in annual amounts of \$250 each and are 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 at least one year's part-time employment with the Company while attending secondary school, and 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 Scholarship Committee of the University of British Columbia on the basis of academic standing and need for financial assistance. To be considered, a candidate must (a) write the standard departmental examinations conducted in June by the Department of Education, B.C., and obtain an overall average of at least 65% in these examinations; (b) submit the special bursary form to the University of British Columbia not later than July 15. This form may be obtained after June 1st from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. Winners will be considered for renewals of these bursaries 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 B-, and need financial assistance.

(3) The Chris Spencer Foundation Special Scholarships.

THE CHRIS SPENCER FOUNDATION SPECIAL SCHOLARSHIPS

Special Note: A student should not apply for a Chris Spencer Foundation Special Scholarship unless he has an overall average of over 80% in his school work, ranks well in the top 10% of students in his grade, and if he is a Grade XII student, is likely to have an average of at least 90% in the Government of British Columbia Scholarship Examinations. This high standard of academic excellence must also be combined with distinct achievement in other activities in the school or community.

Three scholarships of \$500 each, with renewals subject to maintenance of academic standing, are offered in competition to students in Grade XII (Secondary School Graduation, Academic-Technical) who, in the session 1972-73, will attend the University of British Columbia, the University of Victoria, or Simon Fraser University for a full academic year in a full programme leading to a degree. For the purpose of these scholarships an academic year at the University of British Columbia or the University of Victoria is the period extending from September of one year to the following May, and at Simon Fraser it consists of two semesters between September of one year and the following September. Each scholarship will be paid in two instalments of \$250 each, the first when the winner begins attendance in the first half of the academic year and the second when he begins attendance in the second half.

Basis of Selection — Winners will be selected on the basis of high scholastic achievement combined with outstanding personal qualities and distinction as exemplified by service to others, interest and participation in the school and/or community in activities such as sports, student government, youth groups, fine arts, music. Special attention will be given to the qualities developed through these activities and of indication, during the period of attendance at secondary school, of moral force of character, and of instincts to lead and to take an interest in classmates. These scholarships are open only to students whose ordinary domicile, home, or residence is in British Columbia and who are attending school in British Columbia.

Method of Application — All candidates must apply on the Chris Spencer Foundation Scholarship Application Form, obtainable from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver

8, B.C. The completed form should be returned to the University of British Columbia by April 15, and will not be accepted after May 1. Applicants must be eligible in all respects to compete for Government of British Columbia Scholarships and must write the Government Scholarship Examinations conducted in June by the Department of Education, B.C. Candidates in Grade XII should not apply unless they are likely to obtain an average of 90% or better in these examinations and first class grade (80%) in the other subjects taken during the year.

Renewals—Winners who, in a full programme in an Academic Year, maintain First Class standing or rank in the upper 10% of all students in the year and faculty in which they are registered, will be awarded renewals in the amount of \$500 for the next academic year. Renewals will not be granted after graduation or more than four times after the initial award (whichever is the smaller number of academic years involved.) The renewals are also conditional upon full-time attendance at the University of British Columbia, University of Victoria, or Simon Fraser University. A student is permitted, if he wishes, to transfer from one of these institutions to another, but only once. Deferment of awards (original or renewal) will be considered only for certified medical reasons.

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,
60 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. Application to compete should be made to the high school principal.

THE B.C. INDIAN ARTS AND WELFARE SOCIETY MEMORIAL BURSARY—A bursary of \$100 will be awarded annually by the B.C. Indian Arts and Welfare Society in memory of those Indian Canadians who gave their lives in either World War. Native Indian applicants 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 and Welfare 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. Letters of application should be directed to: The Honorary Secretary, B.C. Indian Arts and Welfare Society, c/o The Provincial Museum, Victoria, B.C. The deadline date for applications is August 15.

COMINCO DIAMOND JUBILEE 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. By recognizing and rewarding scholastic attainment by children of Cominco employees, these awards shall also serve to mark the Diamond Jubilee of Cominco. 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 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, Education Awards Committee, Cominco Ltd., Trail, B.C.

IMPERIAL OIL HIGHER EDUCATION AWARDS — Imperial Oil Limited offers annually free tuition and other compulsory fees to all children or wards of employees and annuitants who proceed to higher education courses. The courses may be taken at any Canadian university or other approved institution of higher learning. Each award is tenable for a maximum of four years. To be eligible a student must attain an average mark of 70% in the appropriate secondary school examinations in the subjects required for admittance to the approved 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 7, Ontario.

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 the 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 on 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 Rd., Duncan, B.C. by a letter not later than June 21, 1972. 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, of which ten are awarded in British Columbia; one in each of School District 65 (Duncan-Cowichan), 67 (Ladysmith-Chemainus), 68 (Nanaimo), 69 (Qualicum), 70 (Alberni), 79 (Ucluelet-Tofino), 48 (Howe Sound), and 85 (Vancouver Island North); and two in School District 47 (Powell River), are offered by MacMillan Bloedel Limited. 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. The winner in each school will be chosen in June by a committee consisting of the Principal, the Vice-Principal, the Senior Girls' and Senior Boys' Counsellors, and a representative of MacMillan Bloedel Limited. Further information may be obtained from the Principal of the School.

MacMILLAN BLOEDEL LIMITED — SCHOLARSHIPS TO DEPENDENTS OF EMPLOYEES — Ten Scholarships of \$500 each awarded to dependents of employees of MacMillan Bloedel Limited and subsidiary Companies. These scholarships are open to students beginning their studies at any recognized University in Canada or the United States and who are legal dependents of employees of the

Company or its subsidiaries. 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. Winners will be selected by a committee of three, two from the Company and one from the British Columbia Department of Education. 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 5, B.C.

NAVAL OFFICERS' ASSOCIATION OF BRITISH COLUMBIA BURSARY LOANS — Several bursary loans not exceeding \$300 each are offered to students beginning or continuing studies at the University of British Columbia, Simon Fraser University, Notre Dame University, or the University of Victoria, with the intention either of following a permanent career in the Royal Canadian Navy or following a course of study which, coupled with such person's past associations, will qualify such person as potential personnel for the Royal Canadian Navy in times of national emergency. Preference will be given to present or former members of a cadet force, of a reserve force or of the permanent force, or the sons or daughters of any Commissioned Officer, Warrant Officer, Rating or man who has served or is now serving in the British Commonwealth naval forces or Merchant navies. Awards will be made on the basis of combined academic standing and need. These loans are repayable without interest within eighteen months after graduation. If by the due date the student has joined the permanent force, the loan may be cancelled in its entirety; if he has joined the reserve force 50% of it may be cancelled. Applications should be filed not later than October 15 with the Naval Officers' Association of British Columbia, Box 823, Station A, Vancouver, B.C.

NAVAL OFFICERS' ASSOCIATION OF BRITISH COLUMBIA SCHOLARSHIPS — Several scholarships of amounts up to \$250 each, provided by the Naval Officers' Association of British Columbia are offered to students beginning or continuing studies at the University of British Columbia, Simon Fraser University, Notre Dame University or the University of Victoria with the intention either of following a permanent career in the Royal Canadian Navy or following a course of study which, coupled with such person's past association, will qualify such person as potential personnel for the Royal Canadian Navy in times of national emergency. Preference will be given to present or former members of a cadet force, of a reserve force or of the permanent force, or the sons or daughters of any Commissioned Officer, Warrant Officer, Rating or man who has served or is now serving in the British Commonwealth naval forces or Merchant navies. Awards will be made on the basis of all-round proficiency in the combination of academic studies, need and present or former interest in or association with a cadet force, reserve force or permanent force. Applications should be filed not later than October 15 with the Naval Officers' Association of British Columbia, Box 823, Station A, Vancouver, B.C. Winners of these awards are not precluded from accepting other awards which they may be offered.

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, 1531 West Pender Street, Vancouver 5, B.C.

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 Tower, Bentall Centre, Vancouver 2, B.C.

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. H. McCaffery, Secretary Manager, B.C. Branch, Canadian Plumbing and Mechanical Contractors Association, 1128 West Georgia Street, Vancouver 5, B.C.

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 Departmental Examinations, held in June, 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 Scholarships shall then revert to the student having the next highest standing.

THE WESTMINSTER REGIMENT ASSOCIATION SCHOLARSHIP — This scholarship of \$500, the gift of the Westminster Regiment Association, will be awarded annually to a worthy and deserving student who is continuing his or her 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 Westminster Regiment Association, or a member of the Westminster Regiment CA(M) or one of those battalions which the Westminster Regiment perpetuates, i.e. the 47th, 104th or 131st. The applicant may be in his or her 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 Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for applications is June 30.

THE HON. W. C. WOODWARD UNIVERSITY MEMORIAL SCHOLARSHIPS — These scholarships, each of \$500 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 dependants of regular full-time staff, of retired staff (retired on Store pension), and of deceased staff (who died while a Woodward's regular full-time staff member). Two of these scholarships are available for attendance at the University of Alberta, University of Calgary, or the University of Lethbridge, and three are available for attendance at the University of British Columbia, the University of Victoria, Simon Fraser University, or Notre Dame University of Nelson. 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 for Provincial Scholarship examinations, conducted by the appropriate Provincial Department 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 issued by the Department of Education of the Province. 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, University of Alberta, Edmonton, by the Alberta applicants, or to the Chairman, Joint Faculty Committee on Prizes, Scholarships and Bursaries, University of British Columbia, Vancouver 8, by the B.C. applicants.

SECTION 2

GOVERNMENT OF BRITISH COLUMBIA AWARDS

NOTE: Both these awards are subject to change after the Calendar goes to press.

THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA SCHOLARSHIPS — These awards are available to students who are *residents of British Columbia* and who are *enrolled in Grade XII of a British Columbia secondary school, or in a designated post-secondary educational institution within this Province*, and who are beginning or continuing a programme of studies leading to the first degree or diploma awarded in a particular faculty or technology. Also eligible are students holding an acceptable undergraduate degree who are undertaking full teacher training in this Province, or students in dentistry, library science, law, medicine and social work at the University of British Columbia. These awards are not available to students who are enrolled in graduate studies, nor to those who are registered as “qualifying” or “unclassified”.

The *maximum number* of provincial scholarships granted in any year is determined by taking 17% of all *full-time Grade XII Academic-Technical* students in British Columbia Secondary Schools and 17% of the *full-time undergraduate enrolment* in the universities and public colleges of the Province and in the British Columbia Institute of Technology. Grade XII students compete on the basis of departmental scholarship examinations. Students attending post-secondary institutions compete in accordance with the requirements of the institutions concerned.

Scholarship values are based on the tuition fee for the next session of undergraduate study. Students attending institutions operating on a two-term academic year receive a percentage of the basic tuition fee for that year; students attending a semester-type institution receive a percentage of the basic tuition fee for a single semester, and have the opportunity to compete at the end of each semester.

The maximum number of awards is sub-divided as follows:

- (a) Scholarships of *three-quarters of the basic tuition fee* are awarded to the highest ranking eligible students up to *FIVE per cent* of the full-time enrolment in Grade XII and in each of the designated institutions
- (b) Scholarships of *one-half of the basic tuition fee* are made available to the next highest ranking *SIX per cent* of the full-time enrolment; and
- (c) *One Third basic tuition fee* scholarships are granted to the next following highest ranking *SIX per cent* of the full-time enrolment.

It must be noted that no scholarships are awarded to senior secondary school or undergraduate applicants with grade average of less than 70% or its equivalent.

Full details concerning the Government of British Columbia Scholarships, and the correct *application procedures* may be obtained from their schools by students currently registered in Grade XII, and from the Financial Aid Officer of the institution in the case of students currently registered in a designated post-secondary educational institution.

Students currently enrolled at the University of Victoria must submit forms of application for these awards before May 1, 1972. Late applications will not be considered.

PROVINCE OF BRITISH COLUMBIA BURSARIES — The Government of the Province of British Columbia annually provides funds to assist British Columbia students resident in the Province, to commence or to continue an acceptable full-time programme of post-secondary study at designated post-secondary educational institutions in the Province. Under special circumstances a bursary may be made available to a student from British Columbia who is pursuing a course of acceptable professional study at a designated institution in another Province of Canada when that course is one not provided within British Columbia.

To qualify for the grant of a bursary (money that does not have to be repaid) a student must have achieved an average of 65% (3.5 G.P.A.) or higher on a full course load in the last complete year of secondary or post-secondary undergraduate

study without a failure in any subject comprising the full course load. For a student entering the first year of post-secondary studies from Grade XII, the qualifying course load is not less than six subjects. For an undergraduate proceeding to a higher undergraduate year, the qualifying course load consists of 15 or 30 semester hours, in two consecutive terms or semesters. These bursaries are not granted to students in graduate studies, nor to those who are registered as "qualifying" or "unclassified".

Provincial Bursaries are available only to those students who demonstrate definite financial need and who are proceeding to an acceptable full programme of post-secondary study comprising two consecutive terms or semesters in a specified university, public college or the British Columbia Institute of Technology. Separate application for a bursary is not made. The grant of a bursary will be considered on the basis of information provided on the form entitled "APPLICATION FOR FINANCIAL ASSISTANCE FROM PUBLIC FUNDS" which will be submitted by every student seeking financial aid, whether by Provincial Bursary, or Canada Student Loan, or both.

Grade XII students may obtain the necessary application form and instructions from the Principal or Counsellor at their secondary schools. Post-Secondary students will obtain the form and instructions from the Financial Aid Officer of the institution they are attending. Applicants must take careful note of the submission dates stated on the application form. Late applications will not be considered for the grant of a bursary, but this does not affect the issue of a loan. Applications for financial assistance must be submitted to the Financial Aid Officer of the institution to be attended by the applicant.

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 full programme of courses 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 Officer, Admissions Office.

Completed application forms should be returned to:

Financial Aid Officer,
Admissions Office,
University of Victoria,
Victoria, B.C.

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.

UNDERGRADUATE AWARDS

***THE KATHLEEN AGNEW MEMORIAL SCHOLARSHIP** — Two hundred and fifty dollars (\$250) is granted for the purpose of stimulating the study of the History of Canada.

ALLIANCE FRANCAISE SCHOLARSHIP — One hundred dollars (\$100) awarded 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.

ASSOCIATION OF CHILDHOOD EDUCATION (VICTORIA BRANCH) — MARIAN D. JAMES MEMORIAL AWARD — Fifty dollars (\$50) to be presented annually by the Victoria Branch, Association of Childhood Education International, 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 her studies in this field.

***THE J. ALAN BAKER MEMORIAL SCHOLARSHIP** — Five hundred dollars (\$500) 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.

BAPCO PAINT LIMITED SCHOLARSHIP — One hundred dollars (\$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 scholarship, not including the government 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.

BETA SIGMA PHI SORORITY CITY COUNCIL BURSARY — One hundred dollars (\$100) 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.

*Administered by the University of Victoria Foundation.

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 — Five Hundred Dollars (\$500) 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.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY SCHOLARSHIPS — Four scholarships of \$250 each to be awarded for the 1972-73 session for general proficiency to students who have completed at least one year of studies at the University of Victoria. Winners must continue university studies in the following regular session.

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.

CAMOSUN GYRO CLUB BURSARY — The Camosun Gyro Club of Victoria will present a bursary in the amount of one hundred and fifty dollars (\$150) annually to a promising and deserving student of the first year going into second year.

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.

THE G. CLIFFORD CARL MEMORIAL BURSARY — Three hundred dollars (\$300) awarded annually to a deserving student entering third or fourth year in the Faculty of Education and specializing in the Biological Sciences. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

JOHN WESLEY AND EMILY E. CHURCH MEMORIAL SCHOLARSHIP — One hundred dollars (\$100) awarded annually by Mr. W. J. V. Church to the student winning highest standing in Latin (Latin 100, 140), or in Greek, or in Latin and Greek, in the first year, and continuing with the subject (or subjects) in the second year at University of Victoria.

*THE CLEARIHUE BURSARY — Three hundred dollars (\$300) awarded annually by Dr. and Mrs. J. B. Clearihue to a promising and deserving student in the Faculty of Education, who shows promise and who has at least a good second class average.

THE COMITAS CLUB SCHOLARSHIP — Fifty dollars (\$50) 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.

*MARY HANNAH COOPER SCHOLARSHIP FUND — An annual award of three hundred dollars (\$300) will be made to a worthy and deserving student. The selection will be made by the Senate Committee on Awards.

*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.

*MATTHEY COWAN ANNUAL SCHOLARSHIP — One hundred and fifty dollars (\$150) awarded annually to a promising student with high academic standing. The winner must continue at the University of Victoria.

*Administered by the University of Victoria Foundation.

*CRESTVIEW-CHELSEA THEATRE AWARD — An award of one hundred dollars (\$100) will be offered at the discretion of the Theatre Division to a promising and deserving student in Theatre who is continuing at the University of Victoria.

*THE ADELINE JULIENNE DELOUME 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 T. EATON COMPANY LIMITED SCHOLARSHIP — Four hundred dollars (\$400) awarded 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.

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 and, unless service in the Armed Forces intervenes, proceeding immediately towards a degree.

*THE H. O. ENGLISH SCHOLARSHIP — Two hundred and fifty (\$250) dollars 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.

FACULTY WOMEN'S CLUB PRIZE — One hundred dollars (\$100) to be awarded to a deserving woman student continuing studies either at winter or summer session.

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 the recommendation of the Department of Visual Arts.

THE GRAND POST OF THE NATIVE SONS OF B.C. — BRUCE McKELVIE SCHOLARSHIP — Two hundred and fifty dollars (\$250) to be awarded annually to a third-year Anthropology student with the highest standing in a course relating to Anthropology in B.C. The student must be a Canadian citizen and must return to the University of Victoria in the next regular session.

THE HARBORD SCHOLARSHIP IN MUSIC — An annual scholarship of five hundred dollars (\$500), donated by Mr. & 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 GEORGE HAMILTON HARMAN MEMORIAL SCHOLARSHIPS — Two scholarships of one hundred and fifty dollars (\$150) each, made available by Miss Emily A. Harman of Toronto in memory of her late brother, will be awarded for proficiency in studies in money and banking or in Economics.

*THE WILLIAM A. AND FRANCES E. HARPER SCHOLARSHIP — Seventy-five dollars (\$75) to be awarded annually to a deserving and promising student in the Faculty of Education.

*Administered by the University of Victoria Foundation.

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.

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.

***FREEMAN F. KING SCHOLARSHIP** — Two hundred and fifty dollars (\$250) 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 from candidates recommended by Biology Department staff members.

KIWANIS SCHOLARSHIP — Two hundred and fifty dollars (\$250) awarded to a man 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.

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.

THE LADY LAURIER CLUB SCHOLARSHIP — One hundred dollars (\$100) 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.

***MARTLET CHAPTER, I.O.D.E. PRIZE FOR SCHOLARSHIP IN HISTORY IN ART** — An annual award of \$75 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.

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 OAK BAY BUSINESS AND PROFESSIONAL WOMEN'S CLUB BURSARY — One hundred dollars (\$100) to be awarded annually to a woman student who attains honours standing in History 350 — History of the Canadian West.

OCEAN CEMENT 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** — Three scholarships of two hundred dollars (\$200) each will be awarded to the top third year student enrolled in an honours course in Biology, Chemistry and Physics.

CHAPTER N, P.E.O. MEMORIAL PRIZE — Fifty dollars (\$50) awarded annually by Chapter N, P.E.O. Sisterhood, to a woman student in first year for excellence in English.

*Administered by the University of Victoria Foundation.

*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.

THE PROFESSIONAL MEN'S GARDEN CLUB OF VICTORIA SCHOLARSHIP—One hundred dollars (\$100) 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.

RITHEH 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 ROTARY CLUB OF DOUGLAS (VICTORIA) SCHOLARSHIP—One hundred dollars (\$100) to be awarded annually to the full-time third year student who obtains the highest standing in two upper year Psychology courses and is continuing studies at the University of Victoria or at some other recognized university.

ROTARY CLUB OF VICTORIA SCHOLARSHIP—Two hundred and fifty dollars (\$250) to be awarded to the student taking the highest standing in first year English.

*ROYAL INSTITUTION AND FRANK EATON MEMORIAL SCHOLARSHIP—One hundred (\$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 of the second year.

*THE EDWARD J. SAVANNAH MEMORIAL SCHOLARSHIP—Two hundred dollars (\$200), 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.

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 NORA LUGRIN SHAW MEMORIAL SCHOLARSHIP—Sixty dollars (\$60) 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 on the recommendation of the Department of History.

THE ANDREW SHERET, LTD. SCHOLARSHIP—One hundred and fifty dollars (\$150) to be awarded annually to a student achieving high academic standing and who is continuing studies at the University of Victoria.

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.

*Administered by the University of Victoria Foundation.

*THE TAYLOR EDUCATION BURSARY — An annual award will be made to a fourth year student showing outstanding ability and interest in Education and needing financial assistance. If no qualifying student is enrolled in the fourth year, the bursary may be awarded the next year or be presented to a qualified student 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 TAYLOR SCHOLARSHIP IN MUSIC — An annual scholarship of \$150 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.

UNIVERSITY EXTENSION ASSOCIATION OF VICTORIA SCHOLARSHIP — One hundred and fifty dollars (\$150) to be awarded to a worthy and promising student who is returning to the University in the following year.

THE UNIVERSITY OF VICTORIA FACULTY ASSOCIATION SCHOLARSHIP — 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.

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 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.

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 GYRO CLUB OF VICTORIA SCHOLARSHIP — Two hundred dollars (\$200) awarded annually to a male student completing his first year at the University of Victoria. The recipient is to be selected annually by a committee of the Gyro Club, upon the recommendation of the President of the University, on the basis of qualities of leadership, distinction of mind, and merit in games.

VICTORIA MUNICIPAL CHAPTER, I.O.D.E. SCHOLARSHIP — One hundred dollars (\$100) awarded to an outstanding student in Canadian History in any year.

VICTORIA NATURAL HISTORY SOCIETY SCHOLARSHIP — One hundred dollars (\$100) awarded to the most deserving student completing first or second year and specializing in Biology.

*THE R. T. WALLACE SCHOLARSHIP — Six hundred dollars (\$600) awarded annually to a deserving and promising student entering the third and fourth year at the University of Victoria and taking an Honours Programme in the Humanities, Sciences or Social Sciences.

*Administered by the University of Victoria Foundation.

*THE WEBER MEMORIAL BURSARY—One hundred dollars (\$100) 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 two hundred and fifty dollars (\$250) 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 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 two hundred and fifty dollars (\$250) each.

THE WOODWARD STORES, LIMITED, SCHOLARSHIP—Two hundred and fifty dollars (\$250) to be awarded annually to an outstanding student completing first or second year and continuing University studies.

THE MAY E. WOOTTON MEMORIAL SCHOLARSHIP—One hundred dollars (\$100) to be awarded annually to the student who writes the best term essay in English 200. Selection is to be made by the Senate Committee on Awards on the recommendation of the Department of English.

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.

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.Com. degree.

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.

*Administered by the University of Victoria Foundation.

PRIZES

The following prizes are awarded annually to students for distinguished accomplishment.

ADELPHI BOOK SHOP PRIZE — Donated to a first class student who has completed two years in the Faculty of Education.

AUSTRIAN GOVERNMENT BOOK PRIZES — The Austrian Consulate awards book prizes to students in each undergraduate year showing proficiency in German Studies.

***THE DR. NORMAN BETHUNE MEMORIAL AWARD** — An annual award of fifty dollars (\$50) 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 464. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

THE BEAVER BOOKS SHOP PRIZE — Donated to the student who stands first in the final examination in English 120.

BIRKS GOLD WATCH — Offered by Henry Birks & Sons (B.C.) Ltd., of Victoria, and awarded annually to a first-class student who has made a valuable contribution to student life.

B.C. HISTORICAL ASSOCIATION BOOK PRIZE — Two prizes awarded to students attaining the highest marks in History 350 (History of the Canadian West).

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.

CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (Victoria Branch) BOOK PRIZE — An annual prize of twenty-five dollars (\$25) 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 200.

***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.

***GWEN DOWNES MEMORIAL BOOK PRIZE** — Awarded to the student who gives the best performance in a university play.

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 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.

GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY BOOK PRIZES — These book prizes, the gift of the Federal Republic of Germany through the Consulate in Vancouver, are available for students in each undergraduate year showing proficiency in German studies.

THE GROLIER LIMITED AWARD — A set of the New Book of Knowledge will be given to the outstanding graduating student in the Faculty of Education. Selection will be made by the Senate Committee on Awards in June.

*Administered by the University of Victoria Foundation.

*MARTLET CHAPTER, I.O.D.E., CUTHBERT HOLMES ENGLISH HONOURS ESSAY PRIZE — A book prize to the value of seventy five dollars (\$75) will be awarded annually to the student who has written the best English Honours Graduating Essay. The winner will be selected by the Department of English.

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.

ROSE'S LIMITED JEWELERS WATCH — To be awarded annually to the leading student in the Faculty of Education at the University of Victoria.

THE SPANISH GOVERNMENT BOOK PRIZE — Awarded to the best student in a senior Spanish course. Selection to be made by the Spanish Department.

*THE ROBERT LORNE STANFIELD BOOK PRIZES IN POLITICAL SCIENCE — To be awarded annually to the top two students in each of Political Science 200 (Introduction to Political Science) and Political Science 318 (The Government of Canada).

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 VICTORIA BRANCH 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 Department of Anthropology and Sociology.

*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 Department of Slavonic and Oriental Studies.

*Administered by the University of Victoria Foundation.

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 available to students recommended by the University for any course leading to a degree in Dentistry, Law, Library Science, Medicine, or Social Work, as well as any undergraduate course. The Bursaries may be renewed annually to a successful student until graduation. The number and amount of such awards may vary annually, depending upon the funds available for the purpose from The Foundation.

Candidates for the Bursaries must apply to the University on the University's General Application Form not later than April 30. Names of recipients will be announced in September.

The University will make the award of the Bursaries in consultation with The Foundation.

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 in 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 September 25 in each academic year.

THE CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS — C.U.P.E. will make available the sum of five hundred dollars (\$500) 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 the sons or daughters of members of the C.U.P.E. In each case, the student must make application for these scholarships.

THE ARTHUR S. DENNY SCHOLARSHIP — One hundred dollars (\$100) awarded annually by the Standard Furniture Co. to a deserving student in any year with a good academic record who is continuing studies at the University of Victoria. Preference will be given to students who indicate an interest in interior design, industrial design, or commerce as a career. Apply before April 30th to the Committee on Awards.

THE IBM-THOMAS J. WATSON MEMORIAL BURSARY PROGRAMME — IBM makes available \$1,000 annually to the University of Victoria and to other universities to provide undergraduate bursaries known as the IBM-THOMAS J. Watson Memorial Bursary Programme. The objective of the programme is to provide financial assistance to needy undergraduates in any year of any faculty who have good academic standing. 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.

ROBERT H. B. KER SCHOLARSHIP—Two hundred dollars (\$200) awarded to a student in the first year who is proceeding to the second year either at the University of Victoria or a Canadian university. The applicant must have been a cadet (Sea, Army or Air) for at least two years during his last three years of high school. If there be no such applicant, the Committee on Awards may recommend for the award a student who has satisfactorily completed first or second year at the University of Victoria and is enrolled for service in one of the University training units. Application must be accompanied by a certificate from the Cadet unit concerned. Selection of the winner is to be made by the Senate Committee on Awards in consultation with the donor, Mr. R. H. B. Ker.

THE LADIES PHARMACEUTICAL AUXILIARY (VICTORIA) BURSARY—A Bursary of fifty dollars (\$50), available annually to a first year Vancouver Island Science student continuing studies at the University of Victoria, or the University of British Columbia. Preference will be given to a student planning to take Pharmacy as a profession. The award is to be made by the Committee on Awards of the University of Victoria.

***THE DR. DOUGLAS H. TAYLOR LEE MEMORIAL BURSARY**—Three hundred dollars (\$300) 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.

THE BENNY NICHOLAS MEMORIAL AWARD—One hundred dollars (\$100) presented annually by the *Victoria Daily Times* to the student who submits the best piece of original writing, such as an essay, poem, play, article or other entry, to a selection committee appointed by the Committee on Awards. Entries may be submitted after January 1, but no later than March 31, to the Financial Aid Officer, Admissions Office.

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. 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. 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—DOUGLAS ROTARY SCHOLARSHIP**—One hundred and fifty dollars (\$150) 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 articled to a chartered accountant, or C.G.A. Selection of the student is to be made by the Committee on Awards of the University of Victoria. Applications must be submitted before April 30.

THE ROYAL CANADIAN LEGION (VICTORIA, B.C.) SIR PERCY LAKE MEMORIAL SCHOLARSHIP—Three hundred dollars (\$300) to be awarded annually to a worthy student on the recommendation of the Faculty. To be eligible a student must be a veteran of World War II or the Korean War, or a son or daughter of a veteran of World War II or World War I or the Korean War, or the wife or widow of a veteran of World War II or the Korean War, and must continue his or her studies.

UNITED NATIONS ASSOCIATION (VICTORIA BRANCH) SCHOLARSHIP—Two hundred and fifty dollars (\$250) awarded annually to a student entering third or fourth year with a high academic standing and demonstrated interest in the work of the United Nations or its agencies or in international relations.

*Administered by the University of Victoria Foundation.

***THE UNIVERSITY CHALLENGE SCHOLARSHIPS** — One or more scholarships to a total of \$300 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 in June by a committee consisting of representatives from 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 June. The award will be forfeited if the candidate has not entered medical school by January 1973, at the latest. Application forms are available from the Financial Aid Office and must be returned to the Financial Aid Officer 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 BURSARY — Two hundred and fifty dollars (\$250) awarded annually to a student registered at the University of Victoria who is the son or daughter of any Agent or member of the Salesmen's Division of the Victoria Real Estate Board. Selection of the recipient will be made by the Senate Committee on Awards.

*Administered by the University of Victoria Foundation.

SECTION 6

UNDERGRADUATE AWARDS ADMINISTERED BY THE SCHOLARSHIP AND BURSARY COMMITTEE, ROOM 207, BUCHANAN BUILDING, UNIVERSITY OF BRITISH COLUMBIA, VANCOUVER 8, B.C.

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 May 15.

THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION UNDERGRADUATE SCHOLARSHIPS — Four scholarships of \$250 each are offered to members, sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They are open to students in attendance at the University of British Columbia, the University of Victoria, 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 Scholarship and Bursary Committee, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. 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 \$150 has been established by the B.C. Association of District Superintendents and Inspectors of Schools 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 Department 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** in the Faculty of Education, University of Victoria or University of British Columbia. 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. Applications, on forms obtainable from the Scholarship and Bursary Committee, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., must be submitted to the University not later than May 15.

2. Bursaries which must be applied for by July 15.

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 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 the University of British Columbia or the University of Victoria. Awards will be made 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 C+ 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. All candidates must apply on the Special Bursary form, which may be obtained from the

Scholarship and Bursary Committee, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. This application must be received by the University of British Columbia not later than July 15 and must contain the necessary details of family service with the Company. An official transcript of academic record at the institution most recently attended must be forwarded as soon as possible.

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. Selection of winners will be made by the University of British Columbia from applicants with satisfactory academic standing who are entering the first or second year of undergraduate studies at the University of British Columbia or the University of Victoria in a full programme leading to a degree in any field. First preference will be given to applicants entering university from Grade XII. In order to be considered, a candidate must obtain from the office of the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., a Special Bursary Application form. The completed application must be received at the University of British Columbia not later than July 15. If the applicant is the son, daughter, or legal ward of a member of the Lodge the application must be accompanied by a letter from the Secretary of the Lodge giving the name and address and details of the lodge with which the applicant's immediate family is or has been associated. Since a special committee considers these awards, a student applying for other bursaries must submit a separate application for them.

THE GLADYS LEDINGHAM AWARD — A cash award of \$75, gift of the Victoria and District Parent-Teacher Council, is offered to students who have graduated from 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, University of British Columbia, who has been accepted for the Bachelor of Library Science degree. The winner will be selected on the basis of need and scholastic ability. Applications, on forms obtainable from the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., should be made on the University Bursary Form by July 15.

THE VICTORIA HOME ECONOMICS AND DIETETIC ASSOCIATION BURSARY — This bursary of \$200, the gift of the Victoria Home Economics and Dietetic Association, will be awarded annually to a woman student whose home is in Victoria or some other 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

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 or 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 Street, Vancouver 3, B.C.

THE BAY SERVICE AWARD—A two-year Service Award offered by the Bay (Victoria) is open in competition to students completing Second Year Arts and proceeding to a higher year. Preference will be given to students interested in Department Store Careers. To be eligible for this award applicants must qualify in respect to academic standing, ability, aptitude, and personality, and should be considering possible employment with the Bay on graduation. Under the terms of the award whereby tuition fees will be paid and employment with the Bay guaranteed during Christmas and Summer vacations and at other times such as Saturdays, one of these plans will be followed: (a) For a Second Year Arts student tuition will be paid for third and fourth years toward successful completion of the B.A. degree at the University of Victoria; (b) For a student completing first year Commerce, tuition fees will be paid for second and third year Commerce at U.B.C., with a possible continuation, or renewal of award for final year Commerce studies toward successful completion of Bachelor of Commerce degree. Subject to satisfactory performance, a winner will, on graduation, be given an opportunity 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.

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 and further information may be secured from Dr. W. H. Hickman, University of Victoria. These forms 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 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, MBE., LL.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 15, B.C., before July 31.

NAVAL OFFICERS' ASSOCIATION OF BRITISH COLUMBIA BURSARY LOANS—Several bursary loans not exceeding \$300 each are offered to students beginning or continuing studies at the University of British Columbia, or the University of Victoria, with the intention either of following a permanent career in the Royal Canadian Navy or following a course of study which, coupled with such person's past associations, will qualify such person as potential personnel for the Royal Canadian Navy in times of national emergency. Preference will be given to present or former members of a cadet force, of a reserve force or of the permanent force, or the sons or daughters of any Commissioned Officer, Warrant Officer, Rating or man who has served or is now serving in the British Commonwealth naval forces or Merchant navies. Awards will be made on the basis of combined academic standing and need. These loans are repayable without interest within eighteen months after graduation. If by the due date the student has joined the permanent force, the loan may be cancelled in its entirety; if he has joined the reserve force 50% of it may be cancelled. Applications should be filed not later than October 1 with the Naval Officers' Association of British Columbia, Box 823, Station A, Vancouver, B.C.

NAVAL OFFICERS' ASSOCIATION OF BRITISH COLUMBIA SCHOLARSHIPS—Several scholarships in amounts up to \$250 each, provided by the Naval Officers' Association of British Columbia, are offered to students beginning or continuing studies at the University of British Columbia or the University of Victoria with the intention either of following a permanent career in the Royal Canadian Navy or following a course of study which, coupled with such person's past association, will qualify such person as potential personnel for the Royal Canadian Navy in times of national emergency. Preference will be given to present or former member of a cadet force, of a reserve force or of the permanent force, or the sons or daughters of any Commissioned Officer, Warrant Officer, Rating or man who has served or is now serving in the British Commonwealth naval forces or Merchant navies. Awards will be made on the basis of all-round proficiency in the combination of academic studies and present or former interest in or association with a cadet force, reserve force or permanent force. Application should be filed not later than October 15 with the Naval Officers' Association of British Columbia, Box 823, Station A, Vancouver, B.C. Winners of these awards are not precluded from accepting other awards which they may be offered.

NORTHERN ELECTRIC EMPLOYEE BURSARIES—The Northern Electric Company Limited has provided for a number of bursaries to an annual maximum value of \$500 each to assist employees of the Company and their dependents to obtain a university education. The recipients must have completed previously one year of undergraduate studies at a recognized university. Application forms obtainable from the Company should be submitted directly to the Northern Electric Bursary Award Committee, Dept. 107, P.O. Box 6123, Montreal, P.Q. before June 30.

THE RHODES SCHOLARSHIPS—The Rhodes Trustees offer annually for award in the Province of British Columbia one Rhodes Scholarship of the value of approximately £1100 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 £720 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 cost of the voyage to and from England must be borne by the Scholar.

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 male Canadian citizen or British subject and have been ordinarily resident in Canada for at least five years by October 1, 1972. 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 his stipend if he is able to give appropriate assurance of support and accommodation for his wife.

A candidate must be at least 19 but under 25 years of age on October 1, 1973.

He must have completed two years of university study by October 1, 1973.

A candidate may compete in a province in which he is eligible under either (a) or (b) below:

- (a) The province in which he is ordinarily resident. If he is ordinarily resident in the Northwest Territories he may compete in a province in which he is eligible under (b) or, if there is no such province, in Nova Scotia or New Brunswick.
- (b) The province in which his university study has taken place, provided that if he is ordinarily resident outside Newfoundland he may not compete in Newfoundland.

In that section of the will in which he defined the general type of scholar he desired, Mr. Rhodes mentioned four groups of qualities, the first two of which he considered most important:

1. Literary and scholastic attainments;
2. Qualities of manhood, truth, courage, devotion to duty, sympathy, kindness, unselfishness, and fellowship;
3. Exhibition of moral force of character and of instincts to lead and to take an interest in his fellows;
4. Physical vigour, as shown by fondness for and success in outdoor sports.

Some definite quality of distinction, whether in intellect or character, or both, is the most important requirement for a Rhodes Scholarship, and it is upon this that Committees will insist. Success in being elected to office in student organizations may or may not be evidence of leadership in the true sense of the word. Mr. Rhodes evidently regarded leadership as consisting in 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, 1972, and if elected, to go to Oxford in October 1973. Further information concerning the Scholarship and the opportunities for study at Oxford University may be obtained from Michael J. Brown, 801-470 Granville Street, Vancouver 2, 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 1973-74 Scholarship must be: unmarried; between the ages of 18 and 24 inclusive as of July 1, 1972; 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, 1972.

THE SONS OF NORWAY SCHOLARSHIPS — District Lodge No. 7 — Sons of Norway offer three scholarships of \$300 each to students attending a university in British Columbia and proceeding to the second final or the final year of a full programme leading to a degree. To be eligible a candidate must be a member of a British Columbia Sons of Norway Lodge. Application must be by letter, addressed to the Sons of Norway Scholarship Committee, c/o: The Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C. The letter of application must (1) indicate the applicant's eligibility with respect to membership above, together with a receipt from the secretary of the Lodge concerned; (2) give details of the applicant's course of study, reason for applying, and future plans for a career; (3) be accompanied by official transcripts of the applicant's high school and university records. The applicant must also arrange for one or more confidential testimonials to be forwarded preferably from faculty members acquainted with the applicant's character and personal qualities, interest, and ability as a student. Applications must be submitted by August 1. Successful applicants will be chosen by a special Committee.

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 or the Institute of Adult Studies. 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 not later than August 20 with the Financial Aid Officer, 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 writing to the Executive Director, Vancouver Foundation, Suite 2211-A, 1177 West Hastings Street, Vancouver 1, B.C. Inquiries must be made before March 31.

THE WESTMINSTER REGIMENT ASSOCIATION SCHOLARSHIP — This scholarship of \$500, the gift of the Westminster Regiment Association, will be awarded annually to a worthy and deserving student who is continuing his or her 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 Westminster Regiment Association, or a member of the Westminster Regiment CA(M) or one of those battalions which the Westminster Regiment perpetuates, i.e., the 47th, 104th or 131st. The applicant may be in his or her 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 Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for applications is June 30.

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 \$2,500, September through April, may be awarded by the Faculty of Graduate Studies to students of high academic standing registered full time as candidates or provisional candidates for a degree in the Faculty. Upon recommendation of the Department concerned, these Fellowships will be accompanied by a Summer Supplement of \$1,000, May through August, inclusive, for students working full time on their studies during that period. No duties are attached to these Fellowships and Supplements, which will be paid in equal instalments. Application should be made at the time of application for admission. (The deadline for Fellowship and Scholarship applications is February 18. Successful candidates will be notified by March 31.)

NOTE 1: Fellowship holders may not normally hold another major award, i.e. more than \$600.

NOTE 2: Fellowship holders, at their discretion, may accept paid employment within the University, provided that this does not exceed 100 hours in the September to April session.

UNIVERSITY OF VICTORIA GRADUATE SCHOLARSHIPS:

University of Victoria Graduate Scholarships of \$1,000, September through April, may be awarded by the Faculty of Graduate Studies to students of good academic standing registered full time as candidates or provisional candidates for a degree in the Faculty of Graduate Studies. Application should be made at the time of application for admission. No duties are attached to these Scholarships. Scholarship holders may accept paid employment of not more than 300 hours, September through April.

ASSISTANTSHIPS:

Graduate students may make application through the Department or Faculty 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.

AWARDS ADMINISTERED BY OTHER ORGANIZATIONS— There are many other Graduate Awards, not administered by the University of Victoria. Notices of these are posted in the Financial Aid Office and 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 HA743 81-541. Since these awards are subject to constant change, prospective applicants are advised to obtain further details from the Financial Aid Office.

SECTION 8

LOAN FUNDS

Inquiries relating to the following loan funds, and all applications for loans, should be addressed to the Financial Aid Officer, Admissions 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 Officer 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 Officer, Admissions Office, for further information.

The Government of Canada Student Loans Plan — This plan introduced by the Federal Government is 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 \$1,400. Total loans to any student cannot exceed \$9,800. A loan of up to \$700 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. 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 it is applied in all cases where the student has not established financial independence by having married, or having completed successfully four full years of post-secondary education, or having reached the age of 21 years and having had at least twelve consecutive months' full time employment. Students are expected to save a substantial amount of any income from summer or other employment. Lack of funds due to unessential spending may not be considered as unavoidable need for loan assistance. 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 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 parent that all information provided is correct. When the application is completed it must be submitted to the Financial Aid Officer of the British Columbia educational institution to be attended. Students planning to attend institutions outside of British Columbia will send applications directly to: Student Awards Branch, Division of Post-Secondary Services, Department of Education, Parliament Buildings, Victoria, B.C.

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 \$1800. 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 \$1800 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 of \$500 may be granted 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. J. M. Drummond, 2655 Dewdney Street, Victoria, B.C.

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 are 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	3,000
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 consult the Financial Aid Officer, Admissions Office.

SCHOLARSHIPS AND OTHER AWARDS 1970-71

*Throughout this list, an asterisk indicates that the award or scholarship is administered by the University of Victoria Foundation.

Adelphi Book Shop Prize	Patrick William Colbert
*Kathleen Agnew Memorial Scholarship of \$250	Brent Gerald Mullin
Alcan Scholarship of \$500	Steven Joseph Gergel
Aldyen Hamber I.O.D.E. Entrance Scholarship of \$250	Lynn Maureen Rathgaber
Alliance Française Scholarship of \$100	Denise Laurine Mooney
Association of Childhood Education (Victoria Branch)	
Marian D. James Memorial Award of \$50	Shirley Mae Collis
Austrian Government Book Prizes	Arlene Rose Alexandrovich Patricia Catherine Barron Ester Miceaela Cryderman Judith Lila Hill
*The J. Alan Baker Memorial Scholarship of \$500	Terrance Arthur Slater
Bapco Paint Limited Scholarship of \$100	Gordon McDairmid Stewart
The Beaver Books Shop Prize	Roger Martin Leeming
Beta Sigma Phi Sorority City Council Scholarship of \$100	Pamela Jane Trythall
Birks Gold Watch	Kathleen Rose Stringer
Birks Family Foundation Bursaries, \$100 each	Lorna Esther Bratvold Susan Joan Collins David Glen Fredericksen Kenneth Duncan Jaques Sharon Lynn McCoubrey David Allan Pepper
Blaney's Travel Service Limited Award of \$200	Lothar Hermann Redlin (by reversion from Gerhard Walter Brauer)
*The British Columbia	
1958 Centennial Scholarship of \$500	Kathleen Rose Stringer
British Columbia Historical Association Book Prizes	David Arnold Harvey Roy Wilfred Kendall
British Columbia Hydro and Power Authority	
Scholarships of \$250 each	Ranald Ross Donaldson Leona Joan Jickling Jean Mallory Miller David Edward Ponsford
The British Columbia Psychological	
Association Gold Medal	Patrick Terence Hugh O'Neill
The British Columbia Telephone Company	
Scholarship of \$100	Kenneth George Davis
Dr. Maxwell Cameron Memorial Medals and Prizes	Kathrine Antonia Golobie Trudy-Anne Richardson
Canosun Gyro Club Bursary of \$150	Margaret Karen Roe
CANADA COUNCIL AWARDS — This year four students at the University of Victoria received new awards totalling over \$15,000. These awards were for students proceeding to a Doctoral degree.	
Canadian Association of Health, Physical Education and Recreation, Inc. (Greater Victoria Branch) of \$100	Richard Edward Dunsdon
Canadian Daughters' League Assembly No. 5 —	
Gertrude M. Ralston Memorial Bursary of \$100	Linda Mae Dial
Canadian Institute of International Affairs Book Prize	Cynthia Wilma Brand
Canadian Union of Public Employees Entrance	
Scholarships of \$100 each	Evelyn Ruth Anderson Munjeet Kour Bhalla Kelvin Chan Stephen Foster Janice Leah Newman

Canadian Union of Public Employees Scholarships of \$250 each	Patrick Alexander Dunae (by reversion from Alice Molyneaux Morris) Richard Bruce Paterson
John Wesley and Emily E. Church Memorial Scholarship of \$100	David Joseph Mercer Newberry
*The Clearihue Bursary of \$300	Mary Dianne Cains
Comitas Club Scholarship of \$50	Judy Rae Robbins
*Mary Hannah Cooper Scholarship of \$300	Ulrike Theodore Anneliese Longworth
*The Edgar Ferrar Corbet Scholarship of \$250	Geoffrey Walter Cragg
*Matthew Cowan Annual Scholarship of \$150	Arlene Rose Alexandrovich
*The Adeline Julienne Deloune Memorial Scholarships	
\$300	Denise Laurine Mooney
\$250	Richard George Hodgson
\$150	Leona Joan Jickling Ulrike Theodore A. Longworth Andrea Schuyler Nelles
\$100	Arlene Rose Alexandrovich Ian Driscoll Armour Brenda Joan Cunningham David Scott Hooper Joseph Jean-Leo A. Legault Daphne Lynne Mayfield David Joseph Newberry Margaret Karen Roe Marguerite Marie Wauthy
The Arthur S. Denny Scholarship of \$100	Susan Joan Collins
*The Denton Memorial Book Prize	Alice Molyneaux Morris
*Gwen Downes Memorial Book Prize	William David Murdoch
T. Eaton Company (Canada) Limited Scholarship of \$200	Bruce Edward Turkington
Percy H. Elliott Memorial Scholarship of \$130	Leslie Anne Wallace
*The H. O. English Scholarship of \$250	Janis Mae Yuen
Faculty Women's Club Prize of \$100	Daphne Lynne Mayfield
Francis Gold Wrist Watch	Steven Joseph Gergel
The French Government Book Prizes	Leona Joan Jickling Ralph William Sarkonak
The French Government Medal	Richard George Hodgson
Government of the Federal Republic of Germany Book Prizes	Arlene Rose Alexandrovich Patricia Catherine Barron Ester Miccaela Cryderman Rodney Leonard Hayley Judith Lila Hill Jaroslav Joseph Hrasky
The Governor-General's Medal	Ralph William Sarkonak
Grand Post of the Native Sons of B.C. — Bruce McKelvie Scholarship of \$250	Sheelah Jean Dunn
Grolier Limited Award	Trudy-Anne Richardson
The Gyro Club of Victoria Scholarship	David Joseph Mercer Newberry
The Harbord Insurance Ltd. Scholarship of \$500	Thomas Niemann
*The Harbord Scholarship in Music of \$500	Henry George Selby-Hele
*The George Hamilton Harman Memorial Scholarships of \$150 each	Leonard Robert Roueche David Rodney Smelser
*The William A. and Frances E. Harper Scholarship of \$75	Michael Gerard Fait
*The Cuthbert Holmes Book Prize	David John Kelley

The IBM Thomas J. Watson Memorial Bursaries of \$100 each	Kathryn Louise Cass Michael David Donison George Westly Christian Hall Randal Norman Johnston Janet Kathleen Lawrence Bennett Lee Gertrude Friedericke Rey Lois Elaine Stahnke Richard Thomas Taylor Richard Allan Wodyga
The Don Ingham Memorial Scholarship of \$200	Russell Ormond Redman
The Italian Assistance Centre Bursary of \$250	Albina Clara Rocca
Robert H. B. Ker Scholarship of \$200	Peter Gerald Ludemann
*Freeman F. King Scholarship of \$250	Andrew Paul Harcombe
Kiwanis Scholarship of \$250	William Allan Squires (by reversion from Kenneth William Maclure)
Labatt Breweries of British Columbia Limited Scholarship of \$400	Francis Steven Marcus Barnett
Ladies Pharmaceutical Auxiliary (Victoria) Bursary of \$50	Eway Wai Gin Lum
Leon J. Ladner B.C. History Scholarships \$300	Carol Mavis Frawley
\$100	Nancy Elizabeth Dickson Roy Wilfred Kendall
Lady Laurier Club Scholarship of \$100	James Alan Titerle
*Sara and Jean MacDonald Bursary Fund	Margaret Jean Haug Rosanna Lozupone Frances Petretta Leona Joanne Vos
*Martlet Chapter I.O.D.E. Prize for Scholarship in History in Art of \$75	Barbara Joan Wade
NATIONAL RESEARCH COUNCIL AWARDS — This year 22 students at the University of Victoria received new awards totalling more than \$80,000. These awards were for studies leading to either a Master's degree or a Doctoral degree in the Sciences.	
Benny Nicholas Memorial Award of \$100	Sean Patrick White
Angelina Norris Bursary of \$50	Werner Erich Arendt
Oak Bay Business and Professional Women's Club Bursary of \$100	Susanne Louise Jeune
Ocean Cement Limited Scholarship of \$100	Michael Eric Moore
Open Door Society Book Prize	No Award this year
Chapter N, P.E.O. Memorial Prize of \$50	Linda Jean Foubister
Pacific Coast Fishermen's Mutual Marine Insurance Company Bursary of \$450	Edith Laukkanen
The Honourable and Mrs. G. R. Pearkes Prize of \$50	Ian Philip McMillin
*The B. W. Pearse Science Scholarships \$200 (Biology)	Willa Jane Noble
(Chemistry)	Bruce Edward Turkington
(Physics)	Kenneth George Davis
*The Alan Pratt Memorial Scholarship of \$100	Steven Joseph Gergel (by reversion from James Maxwell Yates)
*The Oliver Prentice Memorial — Douglas Rotary Scholarship of \$150	James Cameron McKechnie
The President's Entrance Scholarships of \$500 each	Robert Edgar Barlow James Alan Brander Martin John Cavin Ann Margaret Fischer Douglas Gordon Rhodes Fiona Margaret St. Clair

The President's Scholarships

\$250 each James Robert Alexander
 David Wilton Batstone
 Patrick Michael Campbell
 Patrick William Colbert (relinquished)
 Charles John David Duder
 Michael Gerard Fait
 Robert Ross Fraser
 Richard George Hodgson
 Barbara Ann Horton
 Daphne Marguerite Pedersen
 Kurt Josef Sarnier (relinquished)
 Timothy Charles Seward
 Thoma Jean Wendt
 Garry Patrick Woods

\$200 each James Harry Alexander
 Janet Ilene Arnold
 Mark Edward Bailey
 Linda Janice Ball
 Richard Winslow Battles
 Robert Edward Botten
 Gerhard Walter Brauer (relinquished)
 James Frederick Bugslag
 Shirley Mae Collis
 Robert William Coombs
 Brenda Joan Cunningham
 Avis June Dalsin (relinquished)
 Robert Paul Duncan
 Kevin John Gillett
 Heather Bernice Hackett
 Dianne Lynne Haines
 Lydia Louise Hamm (relinquished)
 Judith Lila Hill
 Allan Charles Howatson
 Mary Joan Jackson
 Jack Wilfred Kenny
 Caroline Lois Lander (relinquished)
 David Geoffrey Lander (relinquished)
 Agnes Susan Le Page
 David John Letchford
 Ingrid Maier (relinquished)
 Robin Juuan John Martin
 Frank Frederick Mayhood
 Bernice Margaret McGowan
 Alynn Shari McKivett
 David Robert Morris
 Alastair James Murdoch
 Robert Alan Oakley
 Glen Alexander Paruk
 Jean Wynne Paynter (relinquished)
 Maureen Elizabeth Pinkney
 Deirdre Irene Potter (relinquished)
 Russell Ormond Redman
 Thomas Lloyd Ripley
 Helen Catherine Rodney
 Anthony Harald Senyk
 Christopher Stanley-Jones
 Richard Alan Steffin
 Susan Diane Strilchuk
 Dorothy Mae Sullivan
 Ann Marita Tamboline
 Ian William Thorpe
 James Alan Titerle
 Suzanne Maria Rose (nee Velay)
 Lorraine Patricia Vesey

	Leslie Anne Wallace
	Berlyn Jean Walters (relinquished)
	Margaret Elizabeth Weismiller (relinquished)
	Mary Elizabeth Williams
\$150 each	Arlene Rose Alexandrovich
	Werner Erich Arendt
	Kathryn Louise Cass
	Gerald Benjamin Doersam
	Michael David Donison
	Linda Jean Foubister
	Linda Jean Hughes
	Ulrike Theodore Longworth
Eway Wai Gin Lum (relinquished)	
	Manfred John Maier
	Daphne Lynne Mayfield
	Eric Michael Moore
John David Potts (relinquished)	
	Gertrude Friedericke Rey
	Judy Rae Robbins
	Margaret Karen Roe
	Pamela Jane Trythall
	Richard Alan Wodyca
James Maxwell Yates (relinquished)	
\$100 each	Kenneth Edward Anderson
	Irene Teresa Barber
Robert Munro Battles (relinquished)	
	David Laurie Bawtinheimer
	Alan Jack Boyden
	Lorna Esther Bratvold
	Valerie Gail Brennan
	Mary Dianne Cains
	John William Clerkson
Susan Marie Krehbiel (nee Cowie) (relinquished)	
	Marni Elizabeth Davis
	Christopher Ivan Doman
	George Fraser
Gail Susan Freeman (relinquished)	
	Michael Wallace Frey
	John Gordon Gibson
	Robert Edward Gore-Langton
	George Westly Christian Hall
	Andrew Paul Harcombe
	Ardis Elizabeth Rose Hart
Robin Dale Heppenstall (relinquished)	
	Rachel Karen Jacobs
	Leona Jmaiff
	Randal Norman Johnston
	Janet Kathleen Lawrence
	Bennett Lee
	Sharon Lauraine Lee
	Glynis Mable Leyshon
Peter Samuel William Lower	
	Nestor Hnat Makuch
	Deborah Joan Mason
	Edith Matous
Patricia Ann McDonald (relinquished)	
Susan Mary McFadden (relinquished)	
	James Cameron McKechnie
	Willa Jane Noble
	Beverley Grace Noton
Hilda Agnes Oscienny (relinquished)	
	Andrew Montague Penn
	David Frederick Rahal
	Michael George Richardson
	Claire Margaret Robertson

	Mary Kathleen Speller (relinquished)
	William Allan Squires
	Lois Elaine Stahnke
	Kathryn Susan Tattie
	Richard Thomas Taylor (relinquished)
	Charles Ian Waters
\$50 each	Heather Elizabeth Butler
	Doreen Helen Dembiske
	Ranald Ross Donaldson
	Robert Nagor Eberts
	Dorothy Fernandez
	Kathryn Ellen Fowler
	Patricia Flora Hluchy
	Leona Joan Jickling
	Margaret Ann Larsen
	Susan Jean Lyons
	Margaret Jean Mathews
	Ian Philip McMillin
	Jean Mallory Miller
	David Edward Ponsford
	Lothar Hermann Redlin
	Leonard Robert Roueche
	David Rodney Smelser
	Sandra Winnifred Stacey
	Donna Mae Stelmock
The Professional Men's Garden Club of Victoria Scholarship of \$100	Thomas Lloyd Ripley
Read Jones Christoffersen Limited, Consulting Engineers Scholarship of \$200	Kenneth Douglas Wilson
Rithet Consolidated Limited Bursary of \$100	Terrance Arthur Slater (by reversion from John David Potts)
Rose's Limited Jewelers Watch	Phyllis Lynn Shipton
The Rotary Club of Douglas Scholarship of \$100	Margaret Ann Larsen
The Rotary Club of Victoria Scholarship of \$250	Ian Driscoll Armour
The Royal Canadian Legion (Victoria) Sir Percy Lake Memorial Scholarship of \$400	William Allan Squires
*Royal Institution and Frank Eaton Memorial Scholarship of \$100	Nigel Hutton Banks
The Madame Sanderson Memorial Scholarship of \$50	John James Sherlock
*The Edward J. Savannah Memorial Scholarship of \$200	John Gordon Gibson
Seaforth Highlanders of Canada Scholarship of \$200	Hugh Alexander McMillan
Seaspan International Limited Indian Scholarship of \$150	April Anne Frank
Seaspan International Limited Scholarship of \$150	Kenneth George Davis
*The Nora Lugin Shaw Memorial Scholarship of \$60	Jean Marie Clemenger
The Andrew Sheret Limited Scholarship of \$150	Lothar Hermann Redlin
The A. W. Sheret Scholarship of \$150	Manfred John Maier
The Spanish Government Book Prize	Kenneth Ernest Alexander
*The Robert Lorne Stanfield Book Prizes in Political Science	
Political Science 200	Brent Gerald Mullin Richard Bruce Paterson
Political Science 318	Daphne Marguerite Pederson James Allan Titerle
The Prizes of the Ambassador of Switzerland to Canada	
French	Marguerite Marie Wauthy
German	Antonina Kairez
Italian	Carolina Bianco
*The Taylor Education Bursaries of \$300 each	Dennis Allen Branson Peter Mark Cumberbirch
*The Taylor Scholarship in Music of \$50	Mary Joan Jackson

The United Nations Association (Victoria Branch)	
Scholarship of \$250	Mary Thompson Bigelow
The University Extension Association of Victoria	
Scholarships of \$100 each	Gerald Benjamin Doersam Linda Jean Hughes
University of Victoria Faculty Association	
Scholarship of \$200	David John Letchford
University Women's Club Scholarship of \$200	Heather Elizabeth Butler
University of Victoria Alumni Scholarship of \$500	David Ross Burdge Cynthia Wilma Brand
University of Victoria Graduate Studies Awards	
Fellowships — \$2,500 and \$3,500 each	Barrow Windley Baldwin Gerard Bentryn Sheila Gay Boehm Marilyn Ruthe Bowering Adolf Ceska Christine Mary Derbyshire Elisabeth Ann Dixon John Nicholas Dorner Diana Maria Easton Alan James Enderle Sandra Finkelstein Paul Joseph Folse Geoffrey Hargreaves Jennifer Joan Hilditch Ruth Edith Lebens Ralph Johannes Maddess Koichi Nakano Yuko Ohara Michael Pirot Jesse Andrew Read James Robert Reid Harley Allan Schwartz Stephen Smith Robert Merrill Spencler Seiichi Tanaka Johannes Pieter Van Netten Somyong Visaisouk Judith Dana Wallach Maria Alexandra Wozniak
R. M. Petrie Memorial Fellowship	Paul Laskarides
Scholarships — \$1,000 each	Nadhim Al-Qazzaz Mandayam Nayaka Anandaram Clifford Gordon Bancroft Hugh John Barclay Isabel Blackmore Elizabeth Bristowe Cynthia Carcy John Alexander Carmichael Peter Charles Nicholas Clark Thomas Cockburn Neil Douglas Crosby Peter Francis Davies Sven Donaldson Alfred Roy Elmes Andrew Imrc Felier Donald Anthony Fernandez Michael George Foreman Donald Joseph Frenette Gordon John Glova Barbara Pritchard Harris Shane Price Haydon Kenneth Alan Jones

Masood Khan
 Doreen Kilpatrick
 Donald Edward Lange
 Stephen David Lustig
 John James McFarland
 David Ronald Mesher
 Donald Bruce Middleton
 Peter Murphy
 Brian Malcolm Oliver
 Peter Roger Oliver
 John Wilson Owen
 Lanny Robin Pollett
 Carol Winifred Porteous
 John Neilson Ramsay
 Alexander David Rattray
 Donald Brian John Roberts
 Bernice May Seyfort
 Charles Graham Shorthill
 Chaman Lal Singla
 Robert Smith
 Barry Alan Swackhamer
 Derek Thompson
 Marilyn Santina Vassallo
 Paul Jeffrey Viel
 Gordon Bruce Waldie
 David Keith Walker
 Ian Paul Whitehouse
 David Bernard Zelinsky

*The Victoria Branch of National Council of Jewish Women Book Prize	No Award this year
Victoria Central Lions Club — Dr. G. C. Carl Award of \$100	Heather Elizabeth Butler
Victoria Central Lions Club — Millard H. Mooney Fine Arts Bursary of \$100	Monica Jane Linnell
The Victoria Council, United Commercial Travellers of America Scholarship of \$100	Richard George Hodgson
The Victoria Medical Society Scholarship of \$500	Heather Louise Heppenstall
The Victoria Medical Society Bursary of \$500	David Bryant Singleton
Victoria Municipal Chapter, I.O.D.E. Scholarship For General Proficiency of \$100	Brent Gerald Mullin (by reversion from Kenneth Malcolm Maclure)
Victoria Municipal Chapter, I.O.D.E. Scholarship in Canadian History of \$100	Roderick Stephen Donaldson
Victoria Natural History Society Scholarship of \$100	Willa Jane Noble
Victoria Real Estate Board Bursary of \$250	Tejinder Kaur Sidhu
*The Weber Memorial Bursary of \$100	Richard George Hodgson
*The Westad Scholarship of \$250	James Harry Alexander
The Weston Bakeries, Limited, Scholarship of \$250	Susan Jean Lyons
*The J. B. Wook Book Prize in Russian	Richard George Hodgson
The Woods Trust Scholarships of \$250 each	Doreen Helen Dembiske Robert Magor Eberts Dorothy Ferndandez Kathryn Ellen Fowler Frederick Earl Hansford Patricia Flora Hluchy Margaret Jean Mathews Sandra Winnifred Stacey
The Woodward Stores, Limited, Scholarship of \$250	Christopher Ivan Doman

May E. Wootton Memorial Scholarship of \$100 Brent Gerald Mullin
 The Xi Nu Chapter, Beta Sigma Phi Sorority,
 Annual Bursary of \$25 Leslie Anne Wallace
 The Yorkshire Trust Company Scholarship of \$175 Ian Philip McMillin
 The Rosalind W. Young Scholarship of \$200 Donna Mae Stelmock
 The University honours 1,030 students presently enrolled who have received a govern-
 ment scholarship.

DEGREES CONFERRED MAY 1971

B.A. — 307; B.Sc. — 171; B.Ed. — 156; B.F.A. — 25; B.Mus. — 4; M.A. — 34;
 M.Sc. — 22; Ph.D. — 3: TOTAL — 722.

STUDENTS OF NON-B.C. ORIGIN

Determined by location of previous educational institution attended.

	1970-	1971-
	71	72
Alberta	80	77
Saskatchewan	49	48
Manitoba	33	36
Ontario	91	145
Quebec	23	33
New Brunswick	4	5
Nova Scotia	16	20
Prince Edward Island	3	3
Newfoundland	1	1
Yukon	—	—
Northwest Territories	—	—
Other Countries	250	249
	<hr/>	<hr/>
	550	617

ENROLMENT 1966-67 TO 1971-72

	1966- 67	1967- 68	1968- 69*	1969- 70*	1970- 71*	1971- 72*
Arts and Science:						
First Year	1063	1160	1311	1280	1189	1024
Second Year	694	783	782	906	894	893
Third Year	336	431	429	493	601	578
Fourth Year	296	391	425	463	418	513
Unclassified as to year	21	—	—	49	48	42
Total in Faculty	2410	2765	2947	3191	3150	3050
Faculty of Education						
Elementary Field:						
First Year	216	247	331	355	260	134
Second Year	151	208	239	302	355	223
Third Year	124	146	153	209	240	274
Fourth Year	44	49	56	72	77	52
Fifth Year	—	2	6	10	11	19
Partial and Irregular (2nd Year)	3	—	—	—	—	—
Diploma Programme	—	24	45	37	25	24
Post B.Ed. Degree (Elem) 5th Year Programme	—	2	—	—	1	1
Transfer Programme	159	121	142	133	**	**
Unclassified as to year	—	—	—	—	—	8
Secondary Field:						
First Year	80	106	172	163	127	158
Second Year	48	85	103	143	122	111
Third Year	35	45	69	72	114	83
Fourth Year	22	23	28	38	66	88
Fifth Year	16	23	20	44	40	58
Diploma Programme	25	48	50	72	60	81
Unclassified as to year	4	1	2	13	23	1
Total in Faculty	927	1130	1416	1663	1520	1315
Faculty of Fine Arts:						
First Year	33	53	90	93	93	90
Second Year	3	27	40	72	75	80
Third Year	1	5	16	28	55	52
Fourth Year	—	3	9	21	32	31
Unclassified	—	—	—	2	11	6
Total in Faculty	37	88	155	216	266	259
TOTAL FULL-TIME UNDERGRADUATES	3386	3983	4518	5070	4936	4624
Faculty of Graduate Studies:						
Total in Faculty (Full-time & part-time)	49	92	191	246	285	295
GRAND TOTAL	3423	4075	4709	5316	5221	4919

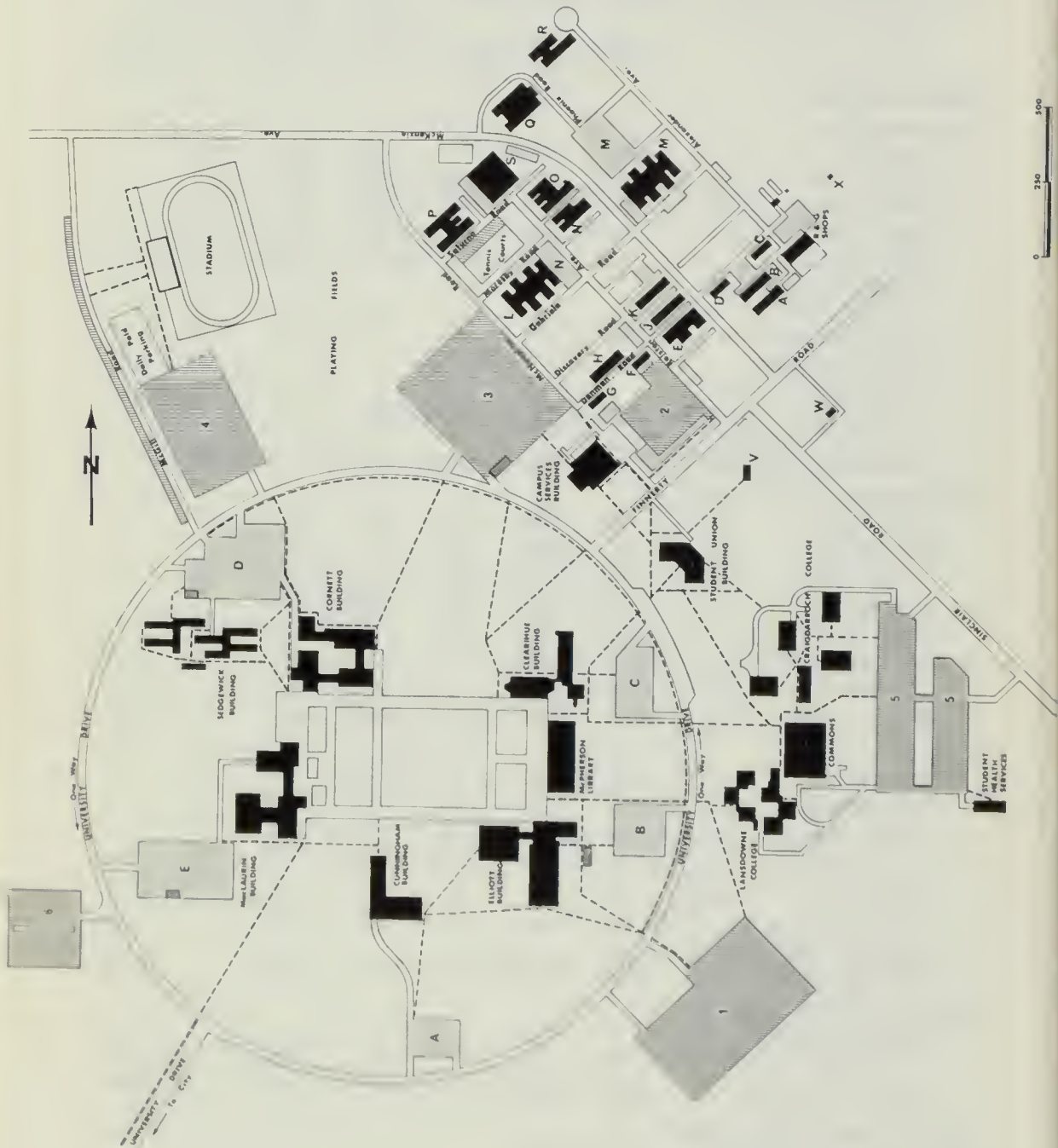
*Figures compiled December 1.

1967-68 figures compiled September 29, 1967.

**Now included within appropriate year.






Note: Part-time undergraduates are not included (1971-72: total 827).

Full-time graduates, 1971-72 — 176.



UNIVERSITY OF VICTORIA

LEGEND

-  BUILDINGS
-  RESERVED PARKING
-  STUDENT AND STAFF PARKING
-  MOTORCYCLE PARKING
-  SIDEWALKS

* VISITOR METER PARKING AVAILABLE IN LOTS A, B, C, D, E, 2, and 5.

* PARKING FOR VISITORS AND OTHERS AVAILABLE ADJACENT TO LOT 4

KEY TO BUILDINGS

ELLIOTT
- PHYSICS
- CHEMISTRY

MCPHERSON - CENTRAL LIBRARY

CLEARIHUE
- CLASSROOMS, COUNSELLING
- MATHEMATICS, LINGUISTICS,
- GERMANIC LANGUAGES & LITERATURE
- COMPUTER SERVICES

CORNETT
- ANTHROPOLOGY & SOCIOLOGY
- ECONOMICS, GEOGRAPHY
- PSYCHOLOGY, HISTORY
- POLITICAL SCIENCE

SEEDGEWICK - CLASSES, ENGLISH, PHILOSOPHY
- HISPANIC AND ITALIAN STUDIES
- SLAVONIC AND ORIENTAL STUDIES
- OFFICE OF THE PRESIDENT

MacLAURIN - EDUCATION, ARTS & SCIENCES, FINE ARTS
- FRENCH LANGUAGE & LITERATURE
- MUSIC, STUDIO VISUAL ARTS

CUNNINGHAM
- BIOLOGY

CRAIGDARROCH COLLEGE
- STUDENT RESIDENCES

LANSDOWNE COLLEGE
- STUDENT RESIDENCES

COMMONS - DINING ROOM
- COFFEE SHOPS, LOUNGES

STUDENT UNION
- CLUBS, LOUNGES
- CAFETERIA
- HOUSING SERVICES

CAMPUS SERVICES
- BANK, BOOKSTORE, BARBER
- BEAUTY SHOP, COFFEE SHOP
- DRUG STORE

KEY TO BUILDINGS

- A. CARPENTERS SHOP
- B. TRAFFIC AND SECURITY OFFICE PAINT SHOP
- C. BUILDINGS AND GROUNDS OFFICES
- D. CAMPUS PLANNING OFFICES
- E. FACULTY LOUNGE
- F. UNIVERSITY RELATIONS CEREMONIES ALUMNI OFFICES
- G. OFFICES
- H. CLASSROOMS
- J. OFFICES, MALAMAT REVIEW
- K. PURCHASING SERVICES
- L. CLASSROOMS, GRAD STUDIES, PERSONNEL MAIL SERVICE
- M. REGISTER ACCOUNTING ADMISSIONS
- N. HISTORY IN ART BACTERIOLOGY R. BIOCHEMIA SOCIAL SCIENCES RESEARCH CENTRE
- O. BACTERIOLOGY AND BIOCHEMISTRY
- P. ATHLETICS, PHYSICAL EDUCATION
- Q. PHOENIX THEATRE
- R. ADMIN STORES AUDIO VISUAL
- S. GYMNASIUM
- V. STUDENT PLACEMENT OFFICE
- W. DEVELOPMENT OFFICE
- X. BUILDINGS AND GROUNDS OFFICES

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UNIVERSITY OF VICTORIA

Calendar Supplement
for September 1973

NEW PROGRAMMES AND
CURRICULUM CHANGES



UNIVERSITY
OF VICTORIA
LIBRARY

CALENDAR 1973-74

ERRATA

- Page 7 — Under Deans and other Senior Administrative Officers, Gooch, Bryan N. S. — I.C.T.L. should be L.C.T.L. See also pages 16 and 142.
- Page 9 — Under Professors Emeriti, *add*: Lewis J. Clark, B.A., M.Sc., Ph.D., Professor Emeritus of Chemistry.
- Page 13 — Cabañas, Pablo — Filosofía should be Filosofía.
- Page 14 — Doyle, Charles D. — (*Well.*) should be (*N.Z.*). See also page 142.
- Page 156 — Moreau, Gérald — Assistant Professor should be Associate Professor.
- Page 301 — MUS 480 — ($\frac{1}{2}$) should be (1).

DEPARTMENT OF CREATIVE WRITING

Robin Skelton, B.A., M.A. (*Leeds*), F.R.S.L., Professor and Head of the Department.
Derk Wynand, B.A., M.A. (*Brit. Col.*), Assistant Professor.
Edward R. Zietlow, B.A. (*Dakota Wesleyan*), M.A. (*Boston*), Ph.D. (*Wash.*), Assistant Professor.
Lawrence W. Russell, B.A. (*U. of Vic.*), M.A. (*Calif.*), Lecturer.
Peter Russell, Writer in Residence.

Although the programme offered by the Creative Writing Department is intended, in the main, to serve those students who have shown some ability as writers, it also includes a number of lecture courses which may be of interest and value to non-writing students. Entrance to these courses (marked * in the Calendar) is unrestricted. All other courses can only be taken by students who have secured the permission of the Department. Students wishing to take these restricted courses should, when applying for entrance to them, provide some examples of their written work.

In normal circumstances, Creative Writing 100 is prerequisite to all Creative Writing Seminars. 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 credit for Creative Writing 100 and enter the Programme at the second year level. Only in extremely exceptional cases, will students taking a major programme in Creative Writing be freed from the obligation to take Creative Writing 200.

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.

Students wishing to take a General Programme in Creative Writing will be required to take Creative Writing 100, English 120 or 110, Creative Writing 200, 3 units from English 200 or 201/3/4/5 and 3 units chosen from Creative Writing 201/2/3, and not less than 9 units of Creative Writing numbered 300 or above, including at least one workshop course.

Students wishing to take a Major Programme in Creative Writing will be required to take Creative Writing 100, English 120 or 110, Creative Writing 200, 3 units from English 200 or 201/3/4/5 and 3 units chosen from Creative Writing 201/2/3, and not less than 15 units of Creative Writing numbered 300 or above. The courses taken must include at least one workshop in each of the final two years.

No student will be permitted to take more than two workshops in any given year.

Subject to the regulations relating to prerequisites, entrance to courses in the Creative Writing Programme is 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

CW 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.

Co-requisite: English 120 (or English 110 by permission of the Department).

Texts: Paul Engle: *On Creative Writing* and the instructor's choice.

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.

Texts: Brewster Ghiselin: *The Creative Process*; Anthony Ostroff: *The Contemporary Poet as Artist and Critic*; Rosemary Harding: *The Anatomy of Inspiration*; Joseph Langland: *Poets' Choice*.

Robin Skelton.

(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.

Co-requisites: Creative Writing 200, one of English 201/3/4/5, 200.

Prerequisite: Creative Writing 100 or permission.

Text: Robin Skelton: *The Practice of Poetry*.

Peter Russell.

(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.

Co-requisites: Creative Writing 200 and one of English 200, 201/3/4/5.

Prerequisite: Creative Writing 100 or permission.

Edward R. Zietlow.

(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.

Co-requisites: Creative Writing 200 and one of English 200, 201/3/4/5.

Prerequisite: Creative Writing 100 or permission.

Lawrence Russell.

(0-2; 0-2)

*C W 204 (3) **Recurrent Themes in Literature**

A lecture course surveying recurrent themes in English Literature and in other Literatures in Translation.

Peter Russell.

(3-0; 3-0)

THIRD YEAR

*C W 300 (3) **Structure in English Poetry**

A lecture course surveying the structural composition of key poems of the English Language, taking its material from the 17th to the 20th centuries. The aspects of structure discussed will include Prosody, Diction, Imagery, Abstract Form, and Sound Patterns.

Text: Oscar Williams: *Master Poems of the English Language*.

Robin Skelton.

(3-0; 3-0)

*C W 301 (3) **Structure in English Fiction**

A lecture course surveying the structural composition of key works of fiction writing written in the English language, taking its material from the 17th to the 20th centuries.

Edward R. Zietlow.

(3-0; 3-0)

*C W 302 (3) **Structure in English Drama**

A lecture course surveying the structural characteristics of drama written in English, taking its material from the 16th to the 20th centuries.

Lawrence Russell.

(3-0; 3-0)

CW 303 (formerly ENGL 401) (3) **Poetry Workshop**
Co-requisite: Creative Writing 300.
Prerequisite: Creative Writing 201 or permission.
Peter Russell. (0-3; 0-3)

CW 304 (formerly ENGL 402) (3) **Fiction Workshop**
Co-requisite: Creative Writing 301.
Prerequisite: Creative Writing 202 or permission.
Edward R. Zietlow. (0-3; 0-3)

CW 305 (formerly ENGL 403) (3) **Drama Workshop**
Co-requisite: Creative Writing 302.
Prerequisite: Creative Writing 203 or permission.
Lawrence Russell. (0-3; 0-3)

CW 306 (3) **Seminar in Literary Procedures**
This workshop-seminar will instruct students in various skills which may be of use to them in pursuing either an academic or non-academic career. Matters dealt with will include descriptive bibliography, textual editing, collation of texts, indexing, reviewing, copy-editing, article writing, compiling and anthologizing, the preparation of screen and TV treatments, writing for radio, and interviewing. Copyright law and publishing practices will also be discussed.
Enrolment will be limited.
Robin Skelton. (1-2; 1-2)

FOURTH YEAR

*CW 400 (3) **Innovations in Twentieth Century Literature**
A lecture course surveying key works in twentieth century literature and discussing experimental writing. The material discussed will be taken from the literature of a number of countries.
Derk Wynand. (3-0; 3-0)

CW 401 (formerly ENGL 404) (3) **Advanced Poetry Workshop**
Prerequisite: Creative Writing 303.
Peter Russell. (0-3; 0-3)

CW 402 (formerly ENGL 405) (3) **Advanced Fiction Workshop**
Prerequisite: Creative Writing 304.
Edward R. Zietlow. (0-3; 0-3)

CW 403 (formerly ENGL 406) (3) **Advanced Drama Workshop**
Prerequisite: Creative Writing 305.
Lawrence Russell. (0-3; 0-3)

CW 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 interested in Journalism. It will be taught on a tutorial basis.
Members of the Department and others.
Permission of the Department. (0-3; 0-3)

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.

BACHELOR OF ARTS, WITH AN EMPHASIS IN CHILD CARE

The Bachelor of Arts with emphasis in Child Care requires an academic programme integrated with practical experience in selected centres employing Child Care Workers. Students have considerable freedom in choosing courses towards the degree while satisfying the basic programme requirements. The practica, normally taken during the summer at Child Care Centres throughout the Province, do not carry credit towards the degree, but satisfactory performance is recognized by a Statement of Achievement at each level. On successful completion of the Programme, a Child Care Diploma will normally be granted in addition to the B.A. degree, based on both academic achievement and satisfactory performance in the practica.

Several areas of specialization are offered, as follows: the diagnosis and treatment of children who are (1) mentally retarded, (2) emotionally disturbed, (3) neurologically impaired, or suffering from (4) child psychosis, or (5) learning disorders; the care of children (6) in residences of the Department of Indian Affairs or (7) in family care units such as foster homes and day care centres. Students must select a concentration of courses from at least two of these areas during their senior years.

Interested students should consult the Director of the Child Care Programme — an interview will normally be required. Students are selected on the basis of personal suitability as well as academic achievement. Enrolment may be limited.

NOTE: Formal acceptance by the University is required:

New students: Submit an Application for Admission to the Director of Admissions (due date is August 1)

Returning students: Submit an Application for Re-registration to the Registrar (due date is June 30).

The following academic programme is designed to provide a basic liberal arts education together with specialized practical training in Child Care. There is considerable flexibility for electives.

BASIC PROGRAMME

First and Second Years: English 110 or 120;
Psychology 100 and 220,
Psychology 335 or Education 305;
Sociology 100; and 15 units chosen in consultation with the Director.

First and Second Year electives may be chosen from the following courses offered by the Faculties of Arts and Science, Education, and Fine Arts.

Arts and Science	Anthropology 100 or 200 level course Biology 150, or any 200 level course English — a 200 level course Linguistics 100 or 250 Mathematics 151 and 102 Philosophy — a 100 or 200 level course Psychology 200, 230, or 240
Education	Art Education 100 Music Education — a 100 or 200 level course Physical Education — a 100 or 200 level course
Fine Arts	Music 100 or 200 Theatre 100 or 200 level course Visual Arts 100 or 200 level course

Third and Fourth Years:

- (1) Social Work 400; Seminar in Child Care Problems (Child Care 490).
- (2) 12 or more units chosen so as to include the courses specified for at least two of the following areas of specialization: *
- (i) Diagnosis and treatment of Mentally Retarded Children.
Required: Education 409C (The Mentally Retarded) 1½ units
Education 496 (Practicum in Teaching the Mentally Retarded) 1½ units
Psychology 450 (Mental Deficiency) 3 units
 - (ii) Diagnosis and treatment of Emotionally Disturbed Children.
Required: Education 409E (The Emotionally Disturbed) 1½ units
Psychology 415 (Human Neuropsychology) 3 units
Psychology 430 (Abnormal Psychology) 3 units
 - * (iii) Diagnosis and treatment of Neurologically Impaired Children.
Required: Education 415 (Diagnosis of Learning Difficulties) 1½ units
Education 416 (Remediation of Learning Difficulties) 1½ units
Psychology 415 (Human Neuropsychology) 3 units
 - (iv) Diagnosis and treatment of Psychotic Children.
Required: Psychology 230 (Introduction to Psychobiology) or
Psychology 415 (Human Neuropsychology) 3 units
Psychology 430 (Abnormal Psychology) 3 units
 - * (v) Diagnosis and treatment of Children with Learning Disorders.
Required: Education 415 (Diagnosis of Learning Difficulties) 1½ units
Education 416 (Remediation of Learning Difficulties) 1½ units
Psychology 415 (Human Neuropsychology) 3 units
 - (vi) Care of Indian Children in Residence.
The specific programme is to be developed by the Director in consultation with Representatives of Status and Non-Status Indians, the Department of Indian Affairs and the Department of Anthropology and Sociology, to include six units of course work presently offered in the University.
 - (vii) Family Care.
Required: Physical Education 345 (Physical Education in Early Childhood) 1½ units
Physical Education 445 (Development and Adaptive Physical Education) 1½ units
Sociology 305 (Family and Social Development) 3 units
- (3) 12 units (or the balance required to total 30 units) of electives chosen in consultation with the Director.

*Areas (iii) and (v) require the same basic courses and students choosing both of these areas of specialization would require an additional 6 units of course work selected in consultation with the Director.

PRACTICUM

Practical experience is an essential part of the training in Child Care, and normally involves a period of full-time employment during each year of the Programme at one or more of the approved Child Care Centres. The academic courses carry credit towards a Bachelor's degree, while the practica count towards a Diploma. It is possible for a student to obtain the B.A. and fail to gain the Diploma, but not the reverse.

PROFESSIONAL CLASSIFICATION

1. Child Care Worker, Grade 1.

- (a) Training: The completion of the University first year or its equivalent, plus a minimum of 4 months of successful full-time experience in an agency or agencies on the University's list of approved Child Care Centres.
- (b) Recognition: On the student's successful completion of the above training, a Statement of Achievement as Child Care Worker, Grade 1, will normally be issued by the Registrar on the recommendation of the Director.

2. Child Care Worker, Grade 2.

- (a) Training: The completion of the first and second years of University training or its equivalent, plus a minimum of 8 months of successful full-time experience in agencies on the University's list of approved Child Care Centres.
- (b) Recognition: On the student's successful completion of the above training, a Statement of Achievement as Child Care Worker, Grade 2, will normally be issued by the Registrar on the recommendation of the Director.

Mature students with a Bachelor's degree can obtain Grade 2 status by completing at least one course in Child Development (Psychology 335 or Education 305), Social Work 400 and Child Care 490 (Seminar in Child Care Problems), and at least 8 months of successful practical experience in recognized agencies.

3. Child Care Worker, Grade 3.

- (a) Training: The completion of the four-year Bachelor's programme in Child Care plus a minimum of 16 months of successful full-time practical experience in agencies on the University's list of approved Child Care Centres. The practica should include work in at least 4 agencies selected to provide a variety of professional experience.
- (b) Diploma: On the student's completion of the above training, the Director and an examining 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.

Mature students with a B.A. and Grade 2 status can obtain the Diploma in Child Care after an additional 8 months of successful practical experience and completion of such courses as may be recommended by the Director.

CURRICULUM CHANGES

- Page 104 — BIOC 300 — *delete* "S. A. Berry" and *add* "K. A. Skov".
- Page 146 — ENGL 200 — *Delete* "or who choose English as one of their fields of concentration in the General Programme".
ENGL 202 — *Cancel* — see Department of Creative Writing.
- Page 147 — ENGL 204 — *Add* "Dr. M. Best, Dr. T. Sherwood."
ENGL 205 — *Add* "Dr. V. Neufeldt, Dr. R. Terry."
- Page 148 — ENGL 300 — *Delete* "Dr. C. Lambertson, Miss S. Slade"
and *add* "Dr. V. Gouch, Dr. V. Neufeldt."
ENGL 360 — *Add* "September-December only".
ENGL 361 — *Add* "January-April only".
ENGL 362 — *Add* "September-December only".
ENGL 363 — *Add* "January-April only".
- Page 149 — ENGL 370 — *Add* "January-April only".
ENGL 371 — *Add* "January-April only".
ENGL 385 — *Add* "September-December only".
ENGL 386 — *Add* "January-April only".
ENGL 387 — *Add* "September-December only".
- Page 150 — ENGL 391 — *Add* "January-April only".
ENGL 392 — *Add* "January-April only".
ENGL 394 — *Add* "September-December only".
ENGL 400 — *Delete* "Dr. M. Faber, Mrs. V. Gooch, Dr. V. Neufeldt"
and *add* "Dr. W. Benzie, Dr. C. Lambertson".
ENGL 401, 402, 403 — *Courses cancelled* — see Department of Creative Writing.
- Page 151 — ENGL 404, 405, 406 — *Courses cancelled* — see Department of Creative Writing.
- Page 154 — ENGL 440 — *Change* "(1½-0; 0-0)" to "(3-0)".
ENGL 449 — *Change* "(2-0; 2-0)" to "(0-0-2; 0-0-2)".
- Page 189 — HIST 372 — *delete* "(Not offered in 1973-74)."
HIST 390 — *delete* "(Not offered in 1973-74)" and *add* "Dr. R. H. Roy".
- Page 192 — LIBERAL ARTS — *Add* "For information contact Arts and Science Advising Centre."
- Page 232 — POLI 310 — *Add* after "Dr. Efrat", "and other members of the Department."
- Page 234 — POLI 421 — *Substitute* "Dr. Gow" for "Mr. Cheffins."
- Page 239 — New Course:
"HA 362. (3) **Western Art in the 20th Century**
A survey of painting, sculpture, architecture, and allied arts from the turn of the century to the present day. The course will cover Expressionism, Cubism, Surrealism, and other major movements and will include a study of contemporary Canadian developments. (3-0; 3-0)"
- Page 273 — middle of page, after Theatre Section, add paragraph: "Other Teaching Areas: Students who have obtained approval from the Education Advising Centre may also specialize in Russian or Spanish."

Page 282 — *Delete* EDUC 495 and *add* the following:

EDUC 494. (1 ½) **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:

- A: Art Education
- B: Helping Professions
- C: Drama in Education
- D: Early Childhood Education
- E: Educational Administration
- F: Educational Foundations
- G: Educational Media
- H: Educational Psychology
- J: Human Development
- K: Language Arts — Corrections & Remediation
- L: Language Arts — Language
- M: Language Arts — Literature
- N: Language Arts — Reading
- P: Learning
- Q: Library Education
- R: Mathematics Education
- S: Measurement
- T: Music Education
- U: Outdoor Education
- V: Physical Education
- W: Remedial
- X: Science Education
- Y: Social Studies
- Z: Special Classes

September-December only. (3-0)

EDUC. 495. (1 ½) **Directed Studies**
(Description as for Education 494)

January-April only. (3-0)

Page 287 — Revised Course:

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 conduction, indirect calorimetry, and cardiopulmonary function.

Page 339 — LINGUISTICS — *add*:

The Department of Linguistics offers programmes of study leading to the Ph.D. degree in the areas of Theoretical Linguistics, and Applied Linguistics.

Page 340 — *add*:

LING. 699. (Credit to be determined) **Ph.D. Dissertation**

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LE3
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UVIC ARCHIVES

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1972/73

The Arms of the University

Extracts from the official description authorized by the College of Heraldry, London: "Azure an open Book proper edged, bound and clasped Or; on a Chief Argent three Martlet Gules; And for the Crest on a Wreath of the Colours: dexter Cubit Arm proper in the hand a Torch erect Or enflamed also proper irradiated Gold and ensigned with a Scroll Argent thereon in Hebrew characters 'Let there be Light' Azure."