



With the Compliments of
THE REGISTRAR

UNIVERSITY OF VICTORIA
VICTORIA, B.C., CANADA



UNIVERSITY OF VICTORIA

VICTORIA, BRITISH COLUMBIA, CANADA

Calendar

1971 - 72

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.

Errata and Addenda

Page 20, add "Dr. Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (Pittsburgh), Assistant Professor, Theatre".

Page 46, Visual Arts: substitute the following:

Art 101 & 102 Art 109 (3)
Art 105 & 106 and
151 & 152, and
181 & 182 Art 105 (6)

Page 69, paragraph 5, line 7: "Counselling"

FACULTY OF ARTS AND SCIENCE

Page 84, paragraph 8, line 3, page reference is "83".

Page 86, line 16, to the list of German courses add "295".

Delete last two paragraphs and substitute the following:

Recognized Courses Offered by Other Faculties

The following First Year courses in the Faculty of Fine Arts are accepted 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, 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.

Page 91, ANTH 405, offered September-December only.

Page 115, BIOL 490 (formerly 448)

Page 118, Math prerequisite, First Year, is Math 130 (not 100 and 101).

Math prerequisite, Second Year, delete Math 110, 200, 201, 210.
NOTE 3, line 6: delete "in Chemistry".

Page 139, paragraph 5, delete ", or to take English as a field of concentration in the General programme,".

Page 140, under MAJOR, line 3, add after "above": "including at least one course in each of the following areas:
(a) one of Chaucer, Shakespeare, or Milton;
(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".

Page 143, ENGL 301, last paragraph, should read "1971-72".

Page 152, under NOTE, "Linguistics 100 section B" should read "Linguistics 100 section C".

Page 153, under French 180, the dictionary should be "Dictionnaire moderne (Larousse)".

Page 154, New Course: French 310 (3) - French Literature in Translation
This course will cover one major aspect of French Literature and will vary in content each year. For 1971-72 will consist of a study of Contemporary French Theatre and its background.

Prerequisites: English 100 or 120. 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. (3-0;3-0)

Page 157, New Requirements for the B.Sc. in Geography:
Major - 24 units: 101, 203; 3 units chosen from 201, 204, and 205; 300;
12 units of courses chosen from 302, 306, 312, 320, 350, 351, 353, 401, 402, 403, 441, 450, and 451. 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

/OVERLEAF...

in consultation with the Department:
Astronomy 120, 200
Bacteriology 200
Biology 150, 200, 203, 204, 206, 207
Chemistry 111, 120, 121, 124, 221, 224, 230, 231,
233, 300
Geology 200
Mathematics 200, 201, 210, 212, 230, 231, 232, 235,
240, 271, 272
Physics 101, 103, 121, 211, 212, 213

Page 168, between German 100 and German 140 insert "N.B.: Credit cannot be granted for both German 100 and German 140."

Page 169, German 402, change of textbook: replace *Gruppe 47, Ein Querschnitt* with Redo (ed), *begegnungen von a bis z* (Heinemann)

Page 203, Philosophy 242, Prerequisite: History in Art 120

Page 218, the following courses will be offered: POLI 301, 325, 331, 342, 343, 416, 417, 454.

POLI 427 will not be offered.

Page 225, add to Faculty list: Loren E. Acker, Ph.D. (U. of Cal., Los Angeles),
Assistant Professor

Lorne K. Rosenblood, B.S., (Case Western Reserve),
M.A., Ph.D. (Ohio State), Assistant Professor.

Page 227-228, J. Bavelas replaces Beavin as instructor in PSYC 220, 300 and 330;
A. Bavelas will instruct in PSYC 331, 334, 402; add Acker to PSYC 335.

Page 231, PSYC 527 (1½) omitted in error.

Page 232 under NOTE, "Linguistics 100 (Section E)" should read "Linguistics 100^o
(Section E or F).

Page 234, add at the bottom of the page: "*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."

Page 235, New Course: Chinese 200 (3) Second Year Chinese
Reading of standard and simplified Chinese characters,
as well as conversational practice.

Prerequisite: Chinese 100 or equivalent (4-1; 4-1)

FACULTY OF EDUCATION

Page 278, under PE 341, delete Dr. Eckerson.

Page 279, under PE 344, delete "September - December"; add Dr. Bell
under PE 442, substitute "September - December only" for "January - April".
replace Dr. Collis with Dr. Bell

FACULTY OF FINE ARTS

Page 291, H A 485, delete the asterisk. This course is not approved for credit in the Faculty of Arts and Science.

Page 295, Music 115 has a unit value of 2, not 3: MUS 115. (2) The elements of Music.

Page 300, omitted in error: Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (Pittsburgh), Assistant Professor, Theatre.

FACULTY OF GRADUATE STUDIES

Page 311, under Categories of Students, NOTE 3, line 2, "moreover". Line 3, "manner" should be "summer".

Registrar's Office
15 July 1971

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ACADEMIC YEAR 1971-72

<i>Day</i>	<i>Date</i>	<i>Item</i>	<i>1971</i>
Monday	28 June through	Summer Session 1971.	
Friday	13 Aug.		
Wednesday	30 June	Last day for submission of applications for re-registration in undergraduate Faculties in the session 1971-72 by students registered earlier.	
Wednesday	30 June	Last day for submission of applications for admission by students transferring from B.C. public and private colleges.	
Thursday	1 July	Academic Year 1971-72 begins.	
Thursday	1 July	Dominion Day. University closed.	
Friday	2 July	Fee for late submission of applications for students mentioned in 30 June entry becomes effective at 12:00 noon.	
Monday	2 Aug. through	Supplemental examinations for session 1970-71.	
Friday	6 Aug.		
Monday	2 Aug.	Last day for submission of applications by all students not mentioned above under 30 June entry who are seeking admission to undergraduate Faculties in Winter Session 1971-72.	
Tuesday	3 Aug.	Fee for late submission of applications for admission for students mentioned in 2 August entry becomes effective at 12:00 noon.	
Tuesday	7 Sept. through	Registration in person in all Faculties for the session 1971-72. Details of place and time are mailed to all students receiving notice of admission or authorization to re-register.	
Saturday	11 Sept.		
Monday	13 Sept.	First term classes begin. Fee for late registration becomes effective.	
Monday	13 Sept.	First day of two-week period for changing courses which begin in the first term.	
Wednesday	15 Sept.	Senate meets.	
Friday	17 Sept.	Last day of five-day period for late registration.	
Monday	20 Sept.	Board of Governors meets.	
Friday	24 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	11 Oct.	Thanksgiving Day. University closed.	
Wednesday	13 Oct.	Senate meets.	
Monday	18 Oct.	Board of Governors meets.	
Friday	29 Oct.	Academic Assembly.	
Friday	29 Oct.	Last day for dropping courses in the first term.	
Wednesday	10 Nov.	Senate meets.	
Thursday	11 Nov.	Remembrance Day. University closed.	
Friday	12 Nov.	Reading break. Classes cancelled. Library open.	
Monday	15 Nov.	Last day for submission of applications from third and fourth year students seeking to register in second term courses.	
Monday	15 Nov.	Board of Governors meets.	
Wednesday	8 Dec.	Senate meets.	

<i>Day</i>	<i>Date</i>	<i>Item</i>
Thursday	9 Dec.	Last day of classes in the first term.
Monday	13 Dec.	First term examinations begin.
Monday	20 Dec.	Board of Governors meets.
Tuesday	21 Dec.	First Term examinations end.
Friday	24 Dec.	Christmas holidays. University closed.
Monday	27 Dec.	
Friday	31 Dec.	University closed.

1972

Saturday	1 Jan.	New Year's Day. University closed.
Monday	10 Jan.	Second term classes begin.
Monday	10 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	14 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	17 Jan.	Board of Governors meets.
Wednesday	19 Jan.	Senate meets.
Wednesday	9 Feb.	Senate meets.
Monday	21 Feb.	Board of Governors meets.
Thursday	24 Feb.	Reading break. Classes cancelled. Library open.
Friday	25 Feb.	
Tuesday	29 Feb.	Last day for dropping courses in the second term.
Wednesday	8 Mar.	Senate meets.
Monday	20 Mar.	Board of Governors meets.
Friday	31 Mar.	Good Friday to Easter Monday. University closed.
Monday	3 Apr.	
Friday	7 Apr.	Last day of classes in the second term.
Wednesday	12 Apr.	Examinations begin.
Wednesday	12 Apr.	Senate meets.
Monday	17 Apr.	Board of Governors meets.
Friday	28 Apr.	Examinations end.
Monday	15 May	Board of Governors meets.
Wednesday	17 May	Senate meets (tentative).
Monday	22 May	Victoria Day. University closed.
Saturday	27 May	Convocation.
Monday	19 June	Board of Governors meets.
Friday	30 June	Academic year 1971-72 ends.

UNIVERSITY OF VICTORIA

BOARD OF GOVERNORS

Ex Officio:

The Chancellor.
The President.

Appointed by the Lieutenant-Governor in Council:

Willard E. Ireland, M.A. (Chairman). Term expires June 30, 1971.
Lloyd G. McKenzie, Q.C., B.A., LL.B. (Vice-Chairman). Term expires October 31, 1972.
David Angus. Term expires October 30, 1973.
Justin V. Harbord. Term expires October 31, 1972.
Hershell A. Smith. Term expires October 31, 1972.
Gilbert F. Auchinleck, B.A.Sc. Term expires June 30, 1971.

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:

Bryan H. Farrell, B.A., Ph.D. (Arts and Science). Term expires June 30, 1972.
Fred L. Martens, B.A., B.Ed., M.S. in P.E., Ph.D. (Education). Term expires June 30, 1972.
Alan Gowans, M.A., M.F.A., Ph.D. (Fine Arts). Term expires June 30, 1972.
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:

Leo I. Bakony, B.A., Ph.D. Term expires June 30, 1973.
Walter M. Barss, B.A., M.A., Ph.D. Term expires June 30, 1973.
Donald Harvey, A.T.D. Term expires June 30, 1973.
James E. Hendrickson, B.A., B.Ed., M.A., Ph.D. Term expires June 30, 1973.
Alexander D. Kirk, B.Sc., Ph.D. Term expires June 30, 1973.
Roger J. Bishop, B.A., B.L.S., M.A. 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.
W. Gordon Fields, A.M., Ph.D. Term expires June 30, 1971.
J. Beattie MacLean, B.A., M.A., Ph.D. Term expires June 30, 1971.

Geoffrey P. Mason, M.A., Ph.D. Term expires June 30, 1971.
Richard J. Powers, B.A., M.A., Ph.D. Term expires June 30, 1971.
Roy E. L. Watson, M.A., Ph.D. Term expires June 30, 1971.

Elected by the Alma Mater Society:

A. Paul Esposito. Term expires September 30, 1971.
David W. E. Harris. Term expires September 30, 1971.

Elected by the Graduate Students' Society:

David H. Dunsmuir, B.A. Term expires September 30, 1971.

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

Bruce J. Partridge, A.B., LL.B., J.D.

OFFICERS OF CONVOCATION

The Chancellor (Chairman).

The Registrar (Secretary).

VICE-PRESIDENTS

Vice-President for Academic Affairs, to be appointed.

Jack T. Kyle, B.Sc., M.Sc., Vice-President for Administration (and Dean of Administration).

DEANS AND OTHER SENIOR ADMINISTRATIVE OFFICERS

John L. Climenhaga, M.A., Ph.D., Dean, Faculty of Arts and Science.

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

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

Arthur R. Fontaine, B.Sc., D.Phil., Dean, pro tem, Associate Dean, Faculty of Graduate Studies.

Peter Garvie, M.A., Dean, Faculty of Fine Arts.

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 to the Board of Governors, Assistant to the President.

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

Peter L. Smith, B.A., M.A., Ph.D., Associate 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.

Ralph G. Allen, B.A., D.F.A., Chairman, Department of Theatre.

Geoffrey J. D. Archbold, B.A., M.A., Acting Chairman, Department of Classics.

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.

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

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.

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.

G. Alexander Milton, B.A., M.S., Ph.D., Chairman, Department of Psychology.
 Donald H. Mitchell, B.A., B.Com., M.A., Ph.D., Acting Chairman, Department of Anthropology and Sociology.
 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.
 Theodore J. Sawchuk, B.Ed., M.Sc., M.Ed., Assistant to the Dean of Education for Administrative and Supportive Services.
 Neil A. Swainson, B.A., B.Ed., M.A., Chairman, Department of Political Science.
 Norman Toynton, Chairman, Department of Visual Arts.
 Jean-Paul Vinay, L. ès L., D.E.S., M.A., Agrégé de l'Université de France, officier d'Académie F.R.S.C., Head, Department of Linguistics.
 Alex. J. Wood, B.S.A., M.S.A., Ph.D., Head, Department of Bacteriology and Biochemistry.
 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

James E. Hoard. Term expires November 1971.
 Rodney T. K. Symington. Term expires November 1972.

Science

T. David D. Groves. Term expires November 1971.
 Keith R. Dixon. Term expires November 1972.

Education

Lloyd O. Ollila. Term expires November 1971.
 R. Vance Peavy. Term expires November 1972.

Fine Arts

N. Wandalie Henshaw. Term expires November 1971.

UNIVERSITY OF VICTORIA FOUNDATION

Justin V. Harbord (Chairman).
 William H. Armstrong.
 Roland O. Bull.
 S. J. Cunliffe, B.Sc., P.Eng.
 Thomas G. Denny.
 James R. Genge, M.A.
 R. L. Haig-Brown, LL.D.
 C. B. Jameson, B.Sc., D.M.D.
 Bruce J. Partridge, A.B., LL.B., J.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

George A. Brand, B.A., M.Ed., Professor Emeritus of Education.
C. Vyner Brooke, B.A., A.M., Ph.D., Professor Emeritus of Spanish.
Jeffree A. Cunningham, B.A., LL.D., Professor Emeritus of Zoology.
G. Reid Elliott, B.A., Ph.D., Professor Emeritus of Economics.

HONORARY DEGREE RECIPIENTS

*Charles Johnstone Armstrong, May 1961.
*Rosalind W. Young, May 1961.
Jeffree 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.

SENATE REPRESENTATIVES TO THE PROVINCIAL ACADEMIC BOARD

Fred. T. Tyler, B.Sc., M.A., M.Ed., Ph.D. Term expires November 30, 1972.
Roy E. L. Watson, M.A., Ph.D. Term expires November 30, 1972.

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: Dr. Geoffrey P. Mason. Term expires August 31, 1973.

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

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.
- Adam, Jeanne, L. ès L. (*Toulouse*), Assistant Professor, French Language and Literature.
- Adey, Lionel, B.A., M.A. (*Birmingham*), Ph.D. (*Leicester*), Assistant Professor, English.
- Alexander, Ann M., B.A. (*Radcliffe*), M.A. (*Calif.*), Lecturer, English.
- Alexander, Douglas A., B.Sc. (*U. of Vic.*), M.Sc. (*U. of North Carolina*), Senior Programmer Analyst.
- Alford, Norman W., B.A. (*London*), Ph.D. (*Texas*), Assistant Professor, English.
- 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, Ralph G., B.A. (*Amherst*), D.F.A. (*Yale*), Professor and Chairman of the Department of Theatre.
- Allen, Robert C., B.Sc. (*U. of Vic.*), Systems Development Supervisor (Senior Programmer/Analyst).
- Apps, George E., B.A.Sc. (*Brit. Col.*), P.Eng., Superintendent of Buildings and Grounds.
- Archbold, Geoffrey J. D., B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Associate Professor and Acting Chairman of the Department of 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.
- Askinas, Barry E., B.A. (*Brandeis*), M.A., Ph.D. (*Stanford*), Assistant Professor, Anthropology and Sociology.
- Atchley, Dana W., B.A. (*Dartmouth*), B.F.A., M.F.A. (*Yale*), Assistant Professor, Visual Arts.
- Austin, Alan P., B.Sc., Ph.D. (*Wales*), Associate Professor, Biology.
- Ayers, J. Douglas, B.A., B.Ed. (*Brit. Col.*), Ph.D. (*Tor.*), Associate Professor, Education.
- Baartz, Arne P., M.A., Ph.D. (*Ore.*), Assistant Professor, Mathematics.
- Baartz, Flora, B.Sc., M.Sc. (*Ore.*), Part-time Lecturer, Mathematics.
- Baker, Shirley, B.Sc. (*Sask.*), Co-ordinator of Women's Activities.
- Bakony, Leo I., B.A. (*Brit. Col.*), Ph.D. (*Wash.*), Professor and Chairman of the Department of Economics.
- Baldner, R. W., A.B. (*Miami U., Ohio*), M.A. (*Vanderbilt*), Ph.D. (*Calif.*), Associate Professor, French Language and Literature.
- Balfour, Walter J., B.Sc. (*Aberdeen*), Ph.D. (*McMaster*), Assistant Professor, Chemistry.
- Ball, Donald W., B.A. (*Calif., Santa Barbara*), M.A. (*Calif., Los Angeles*), M.S. (*Ore.*), Ph.D. (*Calif., Los Angeles*), Associate Professor, Anthropology & Sociology.

- Ballantyne, David J., B.Com. (*Brit. Col.*), M.S. (*Wash. St.*), Ph.D. (*Maryland*), Associate Professor, Biology.
- Barnett, Howard B., A.R.C.T., B.A., Mus. Bac. (*Tor.*), M.A., Ph.D. (*Calif.*), Associate Professor, Music.
- Barrodale, Ian, B.Sc. (*Wales*), M.A. (*Brit. Col.*), Ph.D. (*Liverpool*), Associate Professor, Mathematics. (Leave of absence 1971-72).
- Barss, Walter M., B.A., M.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor, Physics. (Leave of absence 1971-72).
- Bavelas, Alex, B.S. (*Springfield*), M.A. (*Iowa*), Ph.D. (*M.I.T.*), Professor, Psychology.
- Bavelas, Janet H., A.B., M.A., Ph.D. (*Stanford*), Assistant Professor, Psychology.
- Bayley, Sydney H., M.A. (*Edin.*), A.L.A., General Librarian, Collections.
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- 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. (Leave of absence 1971-72).
- 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.
- Young, Phillip T., B.A. (*Bowdoin*), Mus.M. (*Yale*), Visiting Associate Professor, and Chairman of the Department of Music.
- Yore, Larry D., B.S., M.A. (*Minn.*), Visiting Assistant Professor, Education.
- Yoxall, Clive, Supervisor of Janitors.
- Zietlow, Edward R., B.A. (*Dakota Wesleyan*), M.A. (*Boston*), Ph.D. (*Wash.*), Assistant Professor, English. (Leave of absence 1971-72).

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. 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)
Clearihue Building (1962)
Elliott Building (1963)
Elliott Building: Lecture Wing (1964)
Emily Carr Hall (1964)
Margaret Newton Hall (1964)
McPherson Library (1964)
Campus Services Building (1965)
MacLaurin Building (1966)

Cornett Building (1966)
Sir Arthur Currie Hall (1967)
David Thompson Hall (1967)
Sedgewick Building (1968)
 addition (1969)
Lansdowne College Buildings (1969)
Biological Sciences Building (1971)
Clearihue Classroom-Office Extension
 (under construction)

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.

Academic Affairs

Academic Services

Medical, Housing and Food Services

Student Affairs

ACADEMIC AFFAIRS

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 1971-72 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 the Sciences Specialty 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 345. **Pre-Professional Education.**

LIMITATION OF ATTENDANCE

1. The University reserves the right to limit attendance, 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 1971-72

It is expected that, for the session 1971-72, the greatest demands upon the University's facilities will be in the First and Second Years; for that reason a priority system has been established for the admission and re-registration of students in those two years. It may also be necessary to institute priorities for entry to the Third Year. The priority system overrides all other statements in the Calendar dealing 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 II) 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 1971), 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 1971-72.

*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 judgement of the Director of Admissions and/or the Senate Committee on Admission and Re-registration.

Please Note:

Applicants may assume that if they are granted priorities 1-4 it is highly probable a place will be found for them. Applicants in other priorities cannot be notified whether a place exists for them until the University knows the total number applying in higher priorities. In consequence, it may not be possible, because of the time

involved in processing large numbers of applications, to inform applicants in priorities 5-10 that they can be accommodated until some time after August 20. Please be assured that the University will do whatever it can to give notice as soon as possible to those in the lower priorities.

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 judgement 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 judgement of the Director of Admissions and/or the Senate Committee on Admission and Re-registration.

Please Note:

Applicants may assume that if they are granted priorities 1-3 it is highly probable a place will be found for them. Applicants in other priorities cannot be notified whether a place exists for them until the University knows the total number applying in higher priorities. In consequence, it may not be possible, because of the time involved in processing large numbers of applications, to inform applicants in priorities 4 and 5 that they can be accommodated until some time after August 20. Please be assured that the University will do whatever it can to give notice as soon as possible to those in the lower priorities.

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 1971:
May 3: for all students.
Winter Session 1971-72:
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 7, page 54).
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 64.
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. This regulation also applies to students who have been granted permission by the Registrar to undertake a formal course of study through Grade XIII British Columbia.
6. A student who has unsatisfactory standing at the University and subsequently undertakes Grade XIII courses will be eligible for re-registration if he attains satisfactory standing as defined on page 60. However, he will not be eligible for credit in Grade XIII courses taken after he has acquired 15 units of course credit granted on admission or through completion of University courses or through a combination of these.

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 1971:

May 3: for all applicants.

Winter Session 1971-72:

- 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 2:* 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 7 under *Registration*, page 54).

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 64.
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 1971 Summer Session who plan to attend the Winter Session 1971-72 must also submit an Application for Re-registration to the Registrar on or before June 30. See page 35.
6. Persons seeking admission to the Faculty of Graduate Studies should consult page 310.
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 request that a "Transfer of Credit Statement" be sent to the Director of Admissions by the Registrar of the Department of Education, Douglas Building, Victoria, B.C. 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 64.

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. 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 1971, 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, 1971*.
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:**

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. An applicant must have fulfilled these requirements **by the June** of the year in which he is seeking admission; 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, undertake Grade XIII courses and write and pass 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) **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 2 for the Winter Session 1971-72.
- b. November 15 for First Year courses given in the second term of the Winter Session.
- c. May 3 for Summer Session 1971.

(iii) The University will accept applicants who have met the above criteria and will register them as "special students" in no more than 6 units of work in any given academic session.

(iv) Credit towards a degree will be granted by the University for courses successfully completed when the student is authorized to register in a degree programme.

(c) **Admission from 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 60. **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 60. **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. Departmental examinations are administered by the Board of Examiners of the Province on which are representatives of both the University and the Department of Education. 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, providing 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, New Brunswick — Grade 13.
- 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 60. **Satisfactory Standing.**
- (ii) Credit for courses passed at colleges will be granted on the same basis as for students attending the University. See page 60. **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. 41 to 53.
- (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 outlining 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.

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.

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 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. This list was correct as of February 1971. Since the colleges are still adding to their offerings, the list will change during any academic year.

1. Camosun College (Victoria)

Camosun College is due to open in September, 1971. Transfer credit will be negotiated with that college once their curriculum is established.

2. Capilano College (West Vancouver)

Department	College Course	University Equivalent	Notes
Anthropology & Sociology	Anthro 120 & Soc 101	A/S 100 (3)	69-70 course
	Soc 100	Soc (unassigned) (1½)	
	Soc 100 & 101 or 101 & 122	Soc 100 (3)	formerly Soc 200
	Soc 122	Soc (unassigned) (1½)	
Biology	Biol 100 & 101 (no longer offered)	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. part of Bot 205

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Chemistry	Chem 100 & 101 (no longer offered)	Chem 120 & 111 (4)	if student obtains at least B
	Chem 104 & 105	Chem 120 & 111 (4)	
	Chem 110 & 111 Chem 200 & 201	Chem 124 & 121 (4) Chem 233 & 231 (3)	
Economics	Two of: Econ 100, 120, 121 Econ 200 & 201	Econ 100 (3) Econ 200 (3)	
English	Engl 100 & one of: 104, 105, 106, 108	Engl 120 (3)	
	Engl 102 & one of: 104, 105, 106, 108	Engl 120 (3)	
	Engl 200 & 201	Engl 200 (3)	
	Engl 204 & 205 Engl 212 & 213	Engl 203 (3) Engl (unassigned) (3)	
French	Fren 100 & 101	Fren 160 (3)	formerly Fren 140
	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	Geog 101 (3)	
	Geog 110 & 111	Geog 101 (3)	
	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)	
History	Hist 100 & 101	Hist (unassigned) (3)	
	Hist 200 & 201	Hist (unassigned) (3)	
	Hist 202	Hist (unassigned) (1½)	
History in Art	Fine Arts 100 & 101	Hist in Art 100 (3)	
Mathematics	Math 030	Math 012 (0)	
	Math 100 & 101	Math (unassigned) (3)	
	Math 120	Math 170 (1½)	student should do 170 & 171 concurrently with 272
	Math 121	Math 271 (1½)	
	Math 130, 131 & 132	Math 130 (3)	
	Math 140	Math 110 (1½)	
Math 230 & 231	Math 230 (3)		
Philosophy	Phil 100 & 101 (no longer offered)	Phil 100 (3)	
	Phil 101 & 102	Phil 100 (3)	
	Phil 200	Phil 232 (1½)	
	Phil 201	Phil 326 (1½)	
Physics	Phys 100 & 101	Phys 101 (3)	not advised for students continuing in sciences
	Phys 104 & 105	Phys 101 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Phys 110 & 111 Phys 200 & 201	Phys 101 (3) Phys (unassigned) (3)	
Political Science	Poli 100 & 101 Poli 200	Poli 200 (3) Poli (unassigned) (1½)	students must take our 200 if continuing in discipline
	Poli 201	Poli (unassigned) (1½)	conditional: consult Dept.
Psychology	Psyc 100 Psyc 100 & 101 Psyc 100 & 200 Psyc 100 & 204 Psyc 100, 101 & 200	Psyc (unassigned) (1½) Psyc 100 (3) Psyc 100 (3) Psyc 100 (3) Psyc 100 (3) &	
	Psyc 100, 101 & 204	Psyc (unassigned) (1½) Psyc 100 (3) &	
	Psyc 100, 200 & 204	Psyc (unassigned) (1½) Psyc 100 (3) &	
	Psyc 100, 101, 200 & 204	Psyc 100 (3) & Psyc (unassigned) (3)	
	Psyc 201	Psyc (unassigned) (1½)	2nd yr.
	Psyc 204	Psyc (unassigned) (1½)	2nd yr.
	Psyc 205	Psyc (unassigned) (1½)	2nd yr.
Spanish	Span 100 & 101 Span 200 & 201	Span 100 (3) Span 260 (3)	grade of C+ required; oral test required if continuing in Spanish

3. Cariboo College (Kamloops)

Anthropology &	Anth 111 & 121	Anth 100 (3)	formerly 200
Sociology	Soc 111 & 121	Soc 100 (3)	formerly 200
Biology	Biol 110 & 120 <i>or</i> Biol 111 & 121	Biol 150 (3)	
Chemistry	Chem 110 & 120	Chem 120 & 111 (4) <i>or</i> Chem 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)	
Economics	Econ 111 & 121	Econ (unassigned) (3)	
English	Engl 111 & 121 Engl 211 & 221		
French	Fren 110 & 120 Fren 111 & 121	Fren 160 (3) Fren 180 <i>or</i> 260 (3)	
Geography	Geog 111 & 121 Geol 111 & 121	Geog 101 (3) Geol 200 (3)	
History	Hist 111 & 121 Hist 112 & 122	Hist 242 (3) Hist 230 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Mathematics	Math 110	Math (unassigned) (1½)	
	Math 120	Math (unassigned) (1½)	
	Math 110 & 120	Math 160 (3) in the Faculty of Education, or Mathematics (unassigned) (3) in Arts and Science (provided the student is not continuing in Mathematics)	
	Math 111	Math 100 (1½)	
	Math 121	Math 101 (1½)	
	Math 122	Math (unassigned) (1) (accepted for entry to courses for which our Math 110 is pre-requisite)	
Physics	Phys 110 & 120	Phys 101 (3)	
	Phys 111 & 121	Phys 121 (3)	
	Phys 123 and 110 or 113	Phys 103 (3)	
Psychology	Psyc 111 & 121	Psyc 100 (3)	
4. Columbia Junior College (Vancouver)			
Anthropology & Sociology	Anth 210 & 220	Anth 100 (3)	formerly 200
	Soc 210 & 220	Soc 100 (3)	formerly 200
Biology	Biol 110 & 120	Biol 150 (3)	
	Zool 110 & 120	Zool 202 (3)	
Chemistry	Chem 103 & 104	Chem 120 & 111 (4)	
	Chem 110 & 120	Chem 124 & 121 (4)	
	Chem 210 & 220	Chem 230 & 231 (3)	
Economics	Econ 110 & 120	Econ 100 (3)	
	Econ 210 & 220	Econ (unassigned) (3)	
English	Engl 110 & 120	Engl 120 (3)	
	Engl 210 & 220	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 160 (3) (formerly 140)	if Fr 11 or 91 already taken
	Fren 210 & 220	Fren 240 (3)	
Geography	Geog 110 & 120	Geog 101 (3)	students wishing major or honours in Geog must consult Dept.
	Geog 210 & 220	Geog 203 (3)	
German	Germ 101 & 102	Germ 100 (3)	student must complete gen. survey of Germ grammar
	Germ 110 & 120	Germ 240 (3)	
	Germ 201 & 202	Germ (unassigned) (3)	placement according to grade, ability
History	Hist 110 & 120	Hist 230 (3)	formerly 102
	Hist 210 & 220	Hist (unassigned) (3)	
	Hist 223 & 224	Hist 210 (3)	formerly 212

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Mathematics	Math 110 & 125 Math 120 Math 210 Math 220	Math 130 (3) Math 110 (1½) Math 200 (1½) Math 210 (1½)	
Philosophy	Phil 110 & 120	Phil 100 (3)	
Physics	Phys 110 & 120 Phys 210 & 220	Phys 101 (3) Phys (unassigned) (3)	
Psychology	Psyc 110 & 120 Psyc 210 & 220	Psyc 100 (3) Psyc 200 (3)	
Russian	Russ 101 & 102	Russ 100 (3)	
Spanish	Span 101 & 102 Span 210 & 220	Span 100 (3) Span 240 (3)	

5. Douglas College (New Westminster)

At the time this Calendar went to press, negotiations were still in progress concerning transfer credit.

6. Malaspina College (Nanaimo)

Anthropology & Sociology	Anth 111 & 112 Anth 211 & 212 Soc 220 Soc 230 Soc 240	Anth 100 (3) (formerly 200) Anth 200 (3) Soc (unassigned) (1½) Soc (unassigned) (1½) Soc (unassigned) (1½)	students continuing in Anth must consult Dept. for placement & course planning 2nd yr. 2nd yr. 2nd yr.
Biology	Biol 111 & 112 Bot 221 & 222 Zool 221 & 222	Biol 150 (3) Bot 205 (3) Zool 202 (3)	
Chemistry	Chem 121 & 122 Chem 201 & 202 Chem 211 & 212 Chem 221 & 222	Chem 124 & 121 (4) Chem 221 (1) Chem 224 (2) Chem 224 & 221 (3) <i>or</i> Chem 233 & 231 (3)	students continuing in Chem should consult the Dept.
Economics	Econ 100 & 101 <i>or</i> Econ 111 & 112 Econ 221 & 222 Econ 231 & 232	Econ 100 (3) Econ 200 (3) no equivalent	no credit
English	Engl 100 & 101 Engl 111 & 112 Engl 200 & 201 Engl 211 & 212 (new) Engl 222 & 223	Engl 110 (3) Engl 120 (3) Engl 200 (3) Engl 203 (3) Engl 202 (3)	to enter senior writing courses, student must consult Dept.
French	Fren 111 & 112 Fren 121 & 122 Fren 221 & 222	Fren 160 (3) Fren 180 (3) Fren 280 (3)	formerly 140
Geography	Geog 111 & 112 Geog 210 & 220 Geog 230 & 231 Geog 231 & 232 Geog 232 & 233 Geol 111 & 112	Geog 101 (3) Geog 203 (3) Geog 205 (3) Geog 204 (3) Geog 201 (3) Geol 200 (3)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
German	Germ 111 & 112	Germ 100 (3)	grade of C+ or better required
History	Hist 111 & 112 Hist 211 & 212 Hist 221 & 222	Hist 242 (3) Hist 230 (3) Hist 240 (3)	formerly 101 formerly 102 formerly 200
History in Art	Art 111 & 112	Hist in Art 100 (3) or Hist in Art (unassigned) (3)	for credit in Fac. of Educ. for credit in Arts & Science or Fine Arts
Linguistics	Ling 111 & 112	Ling 100 (3) or Ling 360 (3)	
Mathematics	Math 111 & 112 (revised 1970-71) Math 111 & 121 Math 121 & 122 Math 131 & 132 Math 160 Math 161 Math 170 Math 211 Math 212 Math 221 Math 222 Math 241 Math 242	Math 180 (3) (formerly 150) or Math 151 (1½) and (unassigned) (1½) Math 151 & 102 (3) or Math 151 & 100 (3) Math 130 (3) Math 160 (3) Math 170 (1½) Math 171 (1½) Math (unassigned) (1) Math 151 (1½) Math (unassigned) (1½) Math 200 (1½) Math 201 (1½) Math 110 (1½) Math 210 (1½)	if Math 11 or 91 already taken if Math 12 already taken (if Math 12 (already taken
Music	Music 111 & 112 Music 121 & 122	Music 110 (3) Music 100 (3)	only outstanding candidates will be considered for transfer to B.Mus. prog.
Philosophy	Phil 111 & 112	Phil 100 (3)	
Physics	Phys 111 & 112 Phys 121 & 122 Phys 221 & 222 Phys 231 & 232	Phys 103 (3) Phys 101 (3) Phys 211 (3) Phys 212 (3)	
Political Science	Poli 111 & 112	Poli 200 (3)	if taken in 2nd yr.
Psychology	Psyc 111 & 112 Psyc 203 Psyc 203 & 204 Psyc 213 Psyc 214 Psyc 223 Psyc 223 & 213 Psyc 223 & 224	Psyc 100 (3) Psyc (unassigned) (1½) Psyc 200 (3) Psyc (unassigned) (1½) Psyc (unassigned) (1½) Psyc (unassigned) (1½) Psyc 220 (3) Psyc 220 (3)	2nd yr. 2nd yr. 2nd yr. 2nd yr.
Spanish	Span 111 & 112 Span 121 & 122 or Span 211 & 212	Span 100 (3) Span 240 (3)	students continuing in Span. must consult the Dept.
Theatre	Theatre 111 & 112 Theatre 201 & 202	Theatre 100 (3) Theatre 120 (3)	
Visual Arts	Art 101 & 102 and Art 105 & 106 and Art 151 & 152 Art 181 & 182	Art 105 (6) Art 109 (3)	candidates for B.F.A. in Dept. must present folios & be interviewed

7. College of New Caledonia (Prince George)

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Anthropology & Sociology	Anth 111 or 211	Anth 100 (3) (formerly 200)	Students continuing in Anth must consult Dept. for placement & course planning
	Anth 212	Anth 200 (3)	
	Anth 220	Anth (unassigned) (3)	
	Soc 111	Soc 100 (3)	
Biology	Biol 110 or 111	Biol 150 (3)	
	Biol 201 & 202	Biol 200 (3)	
	Biol 111	Biol 306 (1½) & (unassigned) (1½)	
	Bot 111	Bot 205 (3)	
Chemistry	Zool 211	Zool 202 (3)	
	Chem 110	Chem 120 & 111 (4)	
	Chem 111	Chem 124 & 121 (4)	
	Chem 112	Chem 124 & 121 (4)	
	Chem 211	Chem (unassigned) (3)	
Economics	Chem 212	Chem 230 & 231 (3)	must be taken in 2nd yr.
	Accounting 111	Comm 151 (3)	
	Econ 110 & 112	Econ (unassigned) (3)	
	Econ 111	Econ (unassigned) (3)	
	Econ 150	Econ 200 (3)	
	Econ 210	Econ 200 (3)	
	Econ 211	Econ (unassigned) (3)	
English	Engl 111	Engl 120 (3)	
	Engl 202	Engl 202 (3)	
	Engl 211	Engl 200 (3)	
	Engl 212	Engl (unassigned) (3)	
French	Fren 110	Fren 160 (3)	formerly 140
	Fren 111	Fren 180 (3)	
	Fren 211	Fren 280 (3)	
	Fren 212	Fren 290 (3)	
Geography	Geog 111	Geog 101 (3)	
	Geog 141	Geog (unassigned) (3)	
	Geog 211	Geog 203 (3)	
	Geog 221	Geog 201 (3)	
	Geol 111	Geol 200 (3)	
German	Germ 110	Germ 100 or 140 (3)	C or better required
	Germ 111	Germ 240 or 260 (3)	
History	Hist 111	Hist 238 (3)	if 2 terms
	Hist 112	Hist 230 (3)	
	Hist 211 or 212	Hist 240 (3)	
	Hist 215	Hist 210 (3) or Hist (unassigned American) (1½)	
History in Art	Art 112	Hist in Art 100 (3)	if 1 term only
Mathematics			elective
	Math 111	Math 130 (3)	grade of B or better permits student to enrol in 240 with 151 concurrently
	Math 116	Math (unassigned) (1½)	
	Math 117	Math (unassigned) (1½)	
	Math 120	Astro 120 (3)	
	Math 121	Math 101 (1½)	
Math 131	Math (unassigned) (1½)		

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 211	Math 230 (3)	
	Math 213	Math (unassigned) (1½)	2nd yr.
	Math 214	Math 110 (1½)	
	Math 232	Math (unassigned) (1½)	
Music	Music 110 or 111	Music 110 (3)	
Philosophy	Phil 111	Phil 100 (3)	
Physics	Phys 111 or 121	Phys 101 (3)	
	Phys 211 & 212	Phys (unassigned) (3)	
	Phys 213	Phys 211 (3)	
Political Science	Poli 111	Poli (unassigned) (3)	elective only
Psychology	Psyc 111	Psyc 100 (3)	
	Psyc 211	Psyc 200 (3)	
	Psyc 221	Psyc 220 (3)	
Theatre	Thea 111	Thea 100 (3)	
	Thea 120	Thea 120 (3)	subject to audition
	Thea 211	Thea 312 (3)	
Visual Arts	Art 111	no equivalent	no credit

8. Okanagan College (Kelowna, Salmon Arm, Vernon)

Anthropology & Sociology	Soc 111 & 121	Soc 100 (3)	
Biology	Biol 111 & 121	Biol 150 (3)	
	Biol 211 & 221	Biol (unassigned) (3)	
	Biol 212	Biol 306 (1½)	
Chemistry	Chem 111 & 121	Chem 124 (3)	
	Chem 112 & 122	Chem 120 (3)	
	Chem 116	Chem 111 (1)	
	Chem 116 & 126	Chem 121 (1)	
	Chem 211 & 221	Chem (unassigned) (3)	
	Chem 212, 222 & 226	Chem 230 & 231 (3)	
Economics	Bus 111 & 121	Comm 151 (3)	
	Econ 111 & 121	Econ 100 (3)	
	Econ 211 & 221	Econ 200 (3)	
English	Engl 111 & 121	Engl 120 (3)	
	Engl 112 & 122	Engl 120 (3)	
	Engl 211 & 221	Engl 200 (3)	
French	Fren 111 & 121	Fren 160 (3)	formerly 140
	Fren 112 & 122	Fren 180 (3)	
	Fren 211 & 221	Fren 280 (3)	
Geography	Geog 111 & 121	Geog 101 (3)	
	Geog 211 & 221	Geog 205 (3)	
	Geol 111 & 121	Geol 200 (3)	
German	Germ 111 & 121	Germ 100 (3)	
	Germ 211 & 221	Germ 240 (3)	
History	Hist 111 & 121	Hist 242 (3)	formerly 101
	Hist 112 & 122	Hist 230 (3)	formerly 102
	Hist 211 & 221	Hist 210 (3)	formerly 212
Mathematics	Math 110 & 120	no credit	= Math 12
	Math 111 & 121	Math (unassigned) (1½ each)	acceptable substitute for Math 160

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 112 & 122	Math 100 & 101 (1½ each) <i>or</i> Math 130 (3)	
	Math 211 & 221 Math 212 & 223	Math 110 & 210 (3) Math 230 (3)	
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)	
9. Selkirk College (Castlegar)			
Anthropology & Sociology	Soc 110 Soc 111 Soc 120 & 121 Soc 211 Soc 220 Soc 221	Soc 100 (3) Soc 201 (3) Soc 100 (3) Soc (unassigned) (3) Soc (unassigned) (3) Soc (unassigned) (3)	69-70 course no credit toward Major in Dept. no credit toward Major in Dept.
Biology	Biol 110 <i>or</i> 111 Biol 213 Biol 218 Biol 230 Biol 231 & 241 Biol 232 & 242 Biol 240	Biol 150 (3) Biol 306 (1½) Biol 312 (1½) Biol (unassigned) (1½) Bot 205 (3) Zool 202 (3) Biol (unassigned) (1½)	
Chemistry	Chem 104 <i>or</i> 110 Chem 111 Chem 211 & 240 Chem 212	Chem 120 & 111 (4) Chem 124 & 121 (4) Chem 224 (3) Chem 230 & 231 (3)	
Economics	Comm 230 & 240 Econ 111 Econ 211	Comm 151 (3) Econ (unassigned) (3) Econ 200 (3)	
English	Engl 111 Engl 210 Engl 211 Engl 230 & 240	Engl 120 (3) Engl (unassigned) (3) Engl 200 (3) Engl (unassigned) (3)	2nd yr., subject (accepted by Fac. of Ed. to review in lieu of Ling 100)
French	Fren 111 Fren 112 Fren 212	Fren 160 (3) Fren 180 (3) Fren 280 (3)	formerly 140
Geography	Geog 130 & 131 Geog 130 & 140 Geog 140 & 141 Geog 141 & 230 <i>or</i> 144 & 230 Geog 230 & 240 Geol 132 & 142	Geog 101 (3) Geog 101 (3) Geog 205 (3) Geog 201 (3) Geog (unassigned) (3) Geol 200 (3)	
German	Germ 100	Germ 100 <i>or</i> 140	grade of C or better required to enter 2nd yr. courses
History	Hist 100 Hist 101 Hist 111 Hist 112	Hist (unassigned) (1½) Hist (unassigned) (1½) Hist 240 (3) Hist 242 (3)	formerly 200 formerly 101

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Hist 200	Hist (unassigned) (1½)	
	Hist 201	Hist (unassigned) (1½)	
	Hist 203	Hist (unassigned) (1½)	
	Hist 211	Hist 230 (3)	formerly 102
	Hist 212	Hist 210 (3)	formerly 212
	Hist 216	Hist (unassigned) (1½)	
	Hist 217	Hist (unassigned) (1½)	
Hispanic & Italian Studies	Italian 100	Italian 100 (3)	grade of C+ or better
	Italian 200	Italian 200 (3)	(or oral test) required to go into higher Ital courses
Mathematics	Math 110	Math (unassigned) (3)	credit granted only if Ma 11 or 91 already taken
	Math 111	Math 130 (3)	
	Math 211	Math 230 (3)	
	Math 212	Math 232 (3)	
	Math 213	Math (unassigned) (2)	Math 213 & 110 must be followed at UVic by Math 100 & credit for Math 140 will be given
	Comp Sc 211	Math 170 & 171 (3)	
Physical Education	P.E. 201 or 202	Gymnastic activities	no credit
	P.E. 218	Volley Ball	no credit
Physics	Phys 110	Phys 103 (3)	
	Phys 111 & 112	Phys 101 (3)	
	Phys 200	lab for Phys 211	no separate credit
	Phys 230	lab for Phys 213	no separate credit
	Phys 231 & 241	Phys 211 (3)	
	Phys 240	Phys (unassigned) (1½)	
Psychology	Psyc 111 or 100 & 101	Psyc 100 (3)	
	Psyc 211 or 200 & 201	Psyc 200 (3)	
	Psyc 212 or 206 & 207	Psyc 220 (3)	
	Psyc 216 & 217	Psyc (unassigned) (3)	
	Psyc 220 & 221	Psyc (unassigned) (3)	
Slavonic & Oriental Studies	Russ 111	Russ 100 (3)	
	Russ 112	no equivalent	no credit
	Russ 120	Russ 200 (3)	
	Russ 211	Russ 200 (3)	
	Russ 212	Russ (unassigned) (3)	
	Russ 220	Russ 201 (3)	
	Arts 1	Humanities (unassigned) (9)	
		Lab Science (3)	
		Language (3)	
10. Trinity Junior College (Langley)			
Anthropology & Sociology	Anth 101 & Soc 201	A/S 100 (3)	69-70 course
	Soc 212	Soc (unassigned) (1½)	
	Soc 221	Soc (unassigned) (1½)	
Biology	Biol 105 & 106	Biol 150 (3)	
	Zool 105 & 106	Biol 150 (3)	
	(no longer offered)		
	Zool 205 (new)	Biol 207 (1½)	
	Zool 206 (new)	Biol (unassigned) (1½)	
Chemistry	Chem 101 & 102	Chem 111 & 120 (4)	
	Chem 111 & 112	Chem 121 & 124 (4)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Chem 205 & 206	under consideration	
	Chem 211 & 212	under consideration	
Economics	Econ 201 & 202	Econ 200 (3)	
English	Engl 101 & 102	Engl 120 (3)	
	Engl 205 & 206	Engl 200 (3)	
	Engl 260	any 2:	2nd yr.
	Engl 261	Engl (unassigned) (3)	
	Engl 262	all 3: Engl 201 (3)	
French	Fren 111 & 112	Fren 160 (3) (formerly 140)	no credit if Fr 12 already taken
	Fren 121 & 122	Fren 180 (3)	
	Fren 211 & 212	Fren 240 (3)	
	Fren 221 & 222	Fren 280 (3)	
Geography	Geog 101 & 102	Geog 101 (3)	
	Geol 201 & 202	Geol 200 (3)	
German	Germ 101 & 102	Germ 100 <i>or</i> 140 (3)	with grade of C or better
	Germ 211 & 212	Germ 240 <i>or</i> 260 (3)	with grade of C or better
History	Hist 105 & 106	Hist 240 (3)	formerly 200
	Hist 111 & 112	Hist (unassigned) (3)	
	Hist 201 & 202	Hist 230 (3)	formerly 102
	Hist 205 & 206	Hist 210 (3)	formerly 212
History in Art	Art 125 & 126	Hist in Art 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 <i>or</i> 230 (3)	
Music	Music 105 & 106	under consideration	
	Music 111 & 112 (no longer offered)	Music 110 (3)	
	Music 121 & 122	Music 100 (3)	
	Music 135 & 136 <i>or</i>		
	Music 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	Handball
	P.E. 185	P.E. 100 (0)	Soccer
	P.E. 187	no equivalent	Cross Country
	P.E. 190	P.E. 100 (0)	Basketball
Physics	Phys 121 & 122	Phys 101 (3)	
	Phys 201 & 202	Phys (unassigned) (3)	
Psychology	Psyc 105 & 106	Psyc 100 (3)	if one only taken, 1½ unassigned
	Psyc 205 & 206	Psyc 220 (3)	
	Psyc 211 & 212	Psyc (unassigned) (3)	2nd yr.
	Psyc 294	Psyc (unassigned) (1½)	2nd yr.
Spanish	Span 101 & 102	Span 100 (3)	grade of C+ required
	Span 121 & 122	Span 240 (3)	in all cases
	Span 211 & 212	Span 260 (3)	
Visual Arts	Art 227 & 228	no credit.	
	Humanities 121 & 122	Humanities (unassigned) (3)	

11. Vancouver City College (Vancouver)

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
Anthropology & Sociology	Anth 20 & 21	Anth 100 (3)	formerly 200
	Soc 20 & 21	Soc 100 (3)	
Biology	Biol 16 a & b	Biol 150 (3)	no credit
	Biol 18		
	Biol 23	Biol 300 (1½)	
	Biol 24	Biol 306 (1½)	
	Biol 26	Biol (unassigned) (1½)	
	Zool 21 & Biol 25	Zool 202 (3)	
Chemistry	Chem 15 a & b	Chem (unassigned) (3)	C+ or better required to enter Chem 230
	Chem 15 a & b (honours)	Chem (unassigned) (3)	C+ or better required to enter Chem 224 and/or 233
	Chem 21 & 22	Chem (unassigned) (3)	terminal course
Economics	Acct 15 a & b	Comm 151 (3)	credit granted only if student not continuing in Economics
	Econ 15 & 16	Econ 100 (3)	
	Econ 17 & 18	Econ (unassigned) (3)	
	Econ 21 a & b	Econ 200 (3)	
	Econ 22	Econ (unassigned) (1½)	
English	Engl 17 a or 17 aa & b	Engl 120 (3)	
	Engl 18 a & b	Engl (unassigned) (3)	
	Engl 23 & 24	Engl 200 (3)	
	Engl 25 & 27	Engl (unassigned) (3)	
French	Fren 15 a & b	no equivalent	beginners' course; no credit
	Fren 17 a & b	Fren 160 (3)	formerly 140
	Fren 19 a & b	Fren 180 (3)	
	Fren 27 a & b	Fren 240 (3)	
	Fren 29 a & b	Fren 280 (3)	
Geography	Geog 15 & 16	Geog (unassigned) (3)	cannot substitute for 101 in Geog Major or in Faculty of Educ.
	Geog 17 a & b	Geog 101 (3)	
	Geog 18 & 19	Geog 203 (3)	
	Geog 17 a plus 18 or 19	Geog 101 (3)	
German	Germ 15 a & b	Germ (unassigned) (3)	*where grade of C or better attained where grade of C or better attained
	Germ 17 a & b	Germ 100 (3) or *140 (3)	
	Germ 19 a & b	Germ 240 (3)	
	Germ 29 a & b	Germ (unassigned) (3)	
History	Hist 13 & 14	Hist 240 (3)	formerly 200
	Hist 15 & 16	Hist (unassigned) (3)	
	Hist 22 & 23	Hist 242 (3)	formerly 101
	Hist 24 & 25	Hist 230 (3)	formerly 102
	Hist 26 & 27	Hist 210 (3)	formerly 212
Mathematics	Math 15 a & b	Math (unassigned) (3)	credit granted only if Ma 11 or 91 already taken
	Math 16 a & b	Math 160 (3)	
	Math 17 a & b	Math 130 (3) or Math 100 & 101 (3)	
	Math 17 c	Math (unassigned) (1)	
	Math 17 d	Math (unassigned) (1)	

<i>Department</i>	<i>College Course</i>	<i>University Equivalent</i>	<i>Notes</i>
	Math 20 & 21	Math 249 (3) <i>or</i> Math 170 & 171 (3)	
	Math 27 a & b	Math 230 (3)	
	Math 29 a & b	Math 232 (3) <i>or</i> Math 110 & 210 (3)	
Philosophy	Phil 20 & 21	Phil (unassigned) (3)	
Physical Education	Recr 32	P.Ed 140 (0)	
	P.Ed 36	P.Ed 440 (0)	wrestling
	P.Ed 40	P.Ed 240 (0)	track & field
	P.Ed 43	P.Ed 440 (0)	rugby
	P.Ed 44	P.Ed 240 (0)	badminton
	P.Ed 45	P.Ed 240 (0)	basketball
	P.Ed 46	P.Ed 440 (0)	basketball
	P.Ed 47	P.Ed 340 (0)	volleyball
	P.Ed 49	P.Ed 140 (0)	gymnastics
	P.Ed 50	P.Ed 340 (0)	gymnastics
	P.Ed 51	P.Ed 440 (0)	gymnastics
	P.Ed 56	P.Ed 140 (0)	swimming
	P.Ed 60	P.Ed 141 (1½)	
	Recr 60	P.Ed 340 (1½)	
Physics	Phys 15 a & b	Phys 101 (3)	
	Phys 25 a & b	Phys 121 (3) <i>or</i> 211 (3)	
Political Science	Poli 17 & 19	Poli 200 (3)	
Psychology	Psyc 15 a & b	Psyc 100 (3)	} provisional credit
	Psyc 22 & 23	Psyc 220 (3)	
	Psyc 24 a & b	Psyc 335 (3)	
Spanish	Span 17 a & b	Span 100 (3)	
Theatre	Thea 15 a & b	Thea 120 (3)	
	Thea 21 a & b	Thea 220 (3)	

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, 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.

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. No registration will be complete until such fees have been paid.

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.

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 2) 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 64.

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 (application due by June 30 or August 2 (see pages 35-36).
- (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.
- (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. 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 63. Auditors may participate in the work of the course if they wish but will not receive credit.

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. 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 Examination:** In exceptional instances, the experience of a student may have prepared him to obtain credit by special examination for a given course, subject to the following conditions:

- (a) Credit by special examination is open only to undergraduate students who are formally registered at the University.
- (b) Students wishing to gain credit by special examination must make application to the Registrar.
- (c) Credit by special examination is limited to 15 units of credit counted towards a degree.
- (d) Credit by special examination is available only in undergraduate courses.

- (e) A student may not apply for a special examination in a course in any of the following circumstances:
 - i. the course is the equivalent of one for which he has received transfer credit,
 - ii. the course is the equivalent of one which appears on his secondary school transcript,
 - iii. the course is the equivalent of one which appears on his transcript from another college or university,
 - iv. the course is more elementary than courses for which he has already received credit,
 - v. the course is at the 100 or 200 level in his native language* (other than English),
 - vi. the student is recorded as having previously registered in the course or its equivalent.
- (f) Special examinations may be taken at the time or times specified by the department concerned.
- (g) The grade obtained in a special examination will be entered into the academic record of the student but will not be reflected in his sessional grade point average.
- (h) Each application for a special examination must be accompanied by the payment of a fee in keeping with the schedule shown on page 67. The fee will be refunded if the department concerned refuses to give a special examination.

14. **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. Candidate for a degree
 - 2. Candidate for a diploma
 - 3. Special student
- } Regular 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.

Students registered in the Faculty of Graduate Studies should refer to categories of students given on page 311.

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.

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*.)

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 lectures and 3 hours laboratory, tutorial or discussion per week, both terms. (2-3; 2-3)
- 1 lecture and 2 hours laboratory, tutorial or discussion per week, first term only. (1-2; 0-0)
- 1 lecture and 2 hours laboratory, tutorial or discussion per week, second term only. (0-0; 1-2)
- 2 lectures, 3 hours laboratory, tutorial or discussion per week, either term, to be announced. (2-3)

EVALUATION OF STUDENT ACHIEVEMENT

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. 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

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 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. Instructors are permitted to release final grades to students in their classes who request them as soon as the grade sheets have been forwarded by the department to the Registrar, 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.)
COM	—	Completed (where no grade is awarded.)
INC	—	Incomplete (where graduate work continues through two or more sessions.)

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 of 3.5 or higher;
- Pass**, a grade point average of 1.0 or higher.

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 report first to the Director of the Advising Centre of his Faculty or the Director of the Counselling Centre 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.

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 \$7.50; at a regular outside centre, \$12.50. 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 67 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, with a maximum total fee of \$428.00 for the session
Summer Session:	\$30.00 per unit
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:

Master's programme:	First year — \$450.00 Second year — \$150.00
Doctoral programme:	First year — \$450.00 Second year — \$450.00
Part-time and special students:	\$30.00 per unit
Qualifying student:	\$30.00 per unit (not applicable to above degree fees.)

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. 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 students registered in the Winter Session in the final year of a programme leading to a Bachelor's degree. 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 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 regulation 1 on page 54 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 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 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 15, 1971	Full tuition fees for courses which finish in the first term, plus one-half of tuition fees for courses taken in both terms, <i>less</i> the prepayment above. All applicable student organization fees. All late application and late registration fees assessed.
On or before January 14, 1972	The remainder of tuition fees for courses taken in both terms, plus full tuition fees for courses taken in the second term only.
4. The schedule of payments required from 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 14, 1972	Full tuition fees, <i>less</i> the prepayment above. All applicable student organization fees. All late application and late registration fees assessed.
5. The schedule of payments required from students registered in the Internship and Education Administration Programmes will be issued at the time of registration. All other fee regulations apply to these programmes.
6. 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 15, 1971, and January 14, 1972). 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.
7. Fees should be paid, in person or by mail, to the Accounting Office.
8. 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.
9. Registration must be validated by payment of fee instalments as they become due. If a student fails to validate his registration by October 29, 1971, and January 28, 1972 (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.
10. 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. However, 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.
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, except that refunds will not be made to students who do not reduce their programme below 12 units. No refunds of tuition fees will be made to students who withdraw after October 15, 1971, in the first term and after February 4, 1972, in the second term.

Tuition fees charged in event of withdrawal on or before:

September 24, 1971	— \$10.00 per course (maximum \$50.00)
October 1, 1971	— 40% of first term fees
October 8, 1971	— 60% " " " "
October 15, 1971	— 80% " " " "
January 7, 1972	— 100% " " " "
January 14, 1972	— 100% of first term fees, plus \$10.00 per course (maximum \$50.00)
January 21, 1972	— 100% of first term fees, plus 40% of second term fees.
January 28, 1972	— 100% of first term fees, plus 60% of second term fees
February 4, 1972	— 100% of first term fees, plus 80% of second term fees
after February 4, 1972	— 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 4, 1972.

Tuition fees charged in event of withdrawal on or before:

January 14, 1972	— \$10.00 per course (maximum \$50.00)
January 21, 1972	— 40% of second term fees
January 28, 1972	— 60% " " " "
February 4, 1972	— 80% " " " "
after February 4, 1972	— 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 15, 1971. Amounts charged in event of withdrawal on or before:

October 1, 1971	— \$3.00
October 8, 1971	— 4.00
October 15, 1971	— 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 Head 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\$ 7.50
Supplemental examination at regular centres, per paper 12.50
Supplemental examination at centres outside of British Columbia 12.50
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 examination (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, 1971.

	<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 will have a collection of over 500,000 volumes before the end of the 1971/72 session, in addition to microfilm holdings of well over 600,000 items, subscriptions to over 5,000 periodicals, and a collection of over 8,000 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 the Clearihue Building, until the Fall of 1971. During the first term the centre will re-locate 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 Programme. 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 12 senior secondary school students to provide information about University life, courses or career possibilities. The Counselling Centre will also assist students enrolled in the Faculty of Arts

and Science or the Faculty of Fine Arts and who are new to the University to get in touch with faculty advisors. Faculty advisors are available in all departments to assist students on any matter for which they would like advice or information. 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 Study Skills Programme

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, was established for the convenience of students, and has effected a considerable saving to them in time and money. It is prepared to supply all the textbooks required for the various courses offered, and to accept special orders for books other than texts.

The Bookstore houses a collection of some 4,000 carefully selected titles in paperback editions which provide informative supplementary reading and valuable reference material for essay writing.

Also available are lab. coats, slide rules, briefcases, and art supplies as well as all general supplies such as notebooks, looseleaf refills, ballpoint pens, etc.

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 44 computer.

Computer Services hardware includes:

- Computer:* main storage — 64,000 words (256K bytes)
4 tape drives — transferring data at 60,000 characters/second
5 disk drives — transferring data at 312,000 characters/second
2 printers (one at 1100 lines/minute, the other at 600 cards/minute)
2 card readers (one at 1100 cards/minute, the other at 500 cards/minute)
1 card punch (300 cards/minute)
- Plotter:* off-line Calcomp 563
- Optical Mark Scoring System:* IBM 1230, 534

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, 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 (introduced January 1970) provides rapid turnaround and high throughput (more than 20,000 student jobs/month) necessary to support teaching.

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 and others.

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, IBM Canada, several senior secondary schools teaching introductory courses in computing, some municipal offices and a few groups of consulting engineers.

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 centre.

Those who are planning a career in computing may be eligible for further training by summer employment in the computing centre, by part-time employment in the centre during winter session, or 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 the Housing Office (Office of the Co-ordinator of Women's Activities). 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 a caution money deposit of \$25.00. 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 available date must notify the Housing Office in writing before that date. Assignments will 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; however, these rates may be revised prior to the 1971-72 Winter Session due to increased costs.
Double room: First term \$326.00; Second term \$402.00; Total \$728.00
Single room: First term \$354.00; Second term \$436.00; Total \$790.00
8. Payments for first and second term are due at the Accounting Office not later than September 15, 1971 and January 15, 1972, respectively. See below for late payment penalties. Assignments are subject to cancellation where fees are not paid by the due dates.
9. The caution money deposit of \$25.00 may be forfeited for any of the following reasons:
 - (a) failure to take up assigned accommodation (unless fourteen days' notice in writing has been given);
 - (b) late arrival without written notice;
 - (c) failure to pay fees by the due dates;
 - (d) withdrawal during either term;
 - (e) damage to buildings or furnishings above normal wear and tear.

Where the student forfeits a caution money deposit (other than at the end of the Session or on withdrawal) a further sum of \$25.00 must be deposited with the University against future contingencies.

OFF-CAMPUS ACCOMMODATION

A file of private homes where students may obtain full board and room, or light housekeeping accommodation, is maintained by the Housing Office (Office of the Co-ordinator of Women's Activities). While the Housing Office 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.

Cafeteria

The University maintains a cafeteria, a coffee shop, and a central Commons Block where meals may be obtained at reasonable prices.

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 41 members elected half in February and half in October of each year. Members of the Assembly proper are elected by year. Members of the 18-member Executive Council, which directs the day-to-day activity of the Alma Mater Society, are elected half directly by general election of each year, and half indirectly from and by the Representative Assembly.

There are 10 administrative officers on the Executive Council. 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 Alma Mater Society receives the \$32 activities fee levied by the University. Of this amount, \$6 per student goes directly to the Athletics Directorate, and \$10 directly into the Student Union Building Expansion Fund (or Dr. Ewing Memorial Fund). The remaining \$16 per student goes towards the maintenance of the Student Union Building and of the programmes of the Society.

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 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

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.

President 1970-71 — Mr. Murray J. King
1969-70 — Mr. William F. Hyslop
1968-69 — Mr. Fred P. Dieken
1967-68 — Mr. Michael G. Roberts
1966-67 — Mr. Pdraig 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 \$193.00 per month for personal and living expenses. 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 \$339.00 in academic years and \$689.00 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 \$193.00 in 1st year, \$389.00 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
545 Seymour Street
Vancouver 2, B.C.

or University Liaison Officer
Canadian Forces Base Chilliwack
4050 West 4th Avenue
Vancouver 8, B.C.

for ROUTP

Commanding Officer
Canadian Armed Forces Reserve
Hangar 5, North Jericho
4050 West 4th Avenue
Vancouver 8, 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 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 1970-71 was as follows:

Fellows Dr. L. Adey (Department of English)
Mrs. S. Baker (Women's Activities & Housing)
Dr. D. C. Y. Lai (Department of Geography)
Dr. Elaine Limbrick (Department of French)
Mr. M. S. Power (Department of Political Science)
Prof. Herbert H. Huxley (Department of Classics — On leave)

Students Kerry Brown (elected from Men's Residence)
Art Chinn (Elected from Men's Residence)
Carol Cormier (elected from Women's Residence)
Ann Guillaume (elected from Women's Residence)
Marni McPherson (elected from Women's Residence)
Gerry Mandoli (elected from Men's Residence)
Chris Considine (elected from non-residents)
Michael Martin (elected from non-residents)
Brian Neal (elected from non-residents)
Rick Paterson (elected from non-residents)
Janice Perry (elected from non-residents)
Steven Strong (elected from non-residents)

Master Prof. G. Grant McOrmond (Department of English)

LANSDOWNE COLLEGE COUNCIL

The composition of the Lansdowne College Council for 1970-71 was as follows:

- Fellows* Mr. C. W. Cowan (Department of History)
Dr. C. D. Doyle (Department of English)
Dr. Esme Foord (Counselling)
Dr. R. V. Peavy (Faculty of Education)
Dr. N. C. Smith (Department of English)
- Students* Bob Barlow (elected from non-residents)
Melody Harrop (elected from Women's Residence)
Larry Joneson (elected from Men's Residence)
Fil Mauro (elected from Men's Residence)
Ken Stubbs (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 72.

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 24, 1971. Those who have been accepted for membership will be notified by letter and a membership card will be mailed to them. 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 Founders 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

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 will be located in the Clearihue Building until the Fall of 1971. 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 86.

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 not later than 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 a transfer to a medical school after his third year and may wish to receive credit toward a Bachelor's degree, he should consult with the department concerned about choice of undergraduate courses as early as possible.

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 53 and para. 6, page 82). 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. No other requirements as to courses completed are prescribed except those established as prerequisites and corequisites by each 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 88-235 and must be satisfied along with general University regulations on pages 53-56 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 83 and the remaining units in conformity with general University regulations on pages 53-56 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 83 and in conformity with general University regulations given on pages 53-56 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 departments 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 83 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.

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

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

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 83 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. 184 for Liberal Arts 305; p. 121 for Chemistry 300).

Pacific Studies Programme:

In February 1969, the Senate approved the introduction of a Pacific Studies programme. Details of the programme had not been prepared at the time of publication of this Calendar.

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 111, 120, 121, 124	Linguistics 100
Chinese 100	Mathematics 100, 101, 102, 110, 130, 151, 160, 170, 171, 180
Classical Studies 100	Philosophy 100, 202, 211, 212, 221, 223, 232, 233, 242
Economics 100	Physics 101, 103, 121
English 110, 120	Political Science 200
French 160, 180	Portuguese 100
Geography 101	Psychology 100
German 100, 140, 240, 260, 290, 295	Russian 100
Greek 100	Sociology 100
History 205, 210, 220, 230, 238, 240, 242, 250, 252	Spanish 100, 240

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, 485, 490
- Music 200, 300, 311, 312, 313, 314, 315, 316, 400
- Theatre 310, 311, 312, 390-394 (one only)

COURSES IN ARTS AND SCIENCE

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DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY

- 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.
Robert B. Hagedorn, B.A. (*San Fran. St.*), M.A. (*Wash.*), Ph.D. (*Texas*), Associate Professor.
Robert B. Lane, A.B., Ph.D. (*Wash.*), Associate Professor.
Donald H. Mitchell, B.A., B.Com., M.A. (*Brit. Col.*), Ph.D. (*Ore.*), Associate Professor.
Richard Shutler Jr., A.B., M.A. (*Calif., Berkeley*), Ph.D. (*Arizona*), Associate Professor.
T. Rennie Warburton, B.A. (*Leeds*), Ph.D. (*London*), Associate Professor.
Roy E. L. Watson, M.A., Ph.D. (*Tor.*), Associate Professor.
Barry E. Askinas, B.A. (*Brandeis*), M.A., Ph.D. (*Stanford*), Assistant Professor.
N. Ross Crumrine, B.A. (*Northwestern*), M.A., Ph.D. (*Arizona*), Assistant Professor.
Leland H. Donald, B.A. (*Emory*), Ph.D. (*Ore.*), Assistant Professor.
Roberta L. Hall, B.A. (*Ind.*), M.A., Ph.D. (*Ore.*), Assistant Professor.
R. Alan Hedley, B.A., M.A. (*Brit. Col.*), Lecturer.
Mary Lee Stearns, B.A., M.A. (*Calif., Los Angeles*), Lecturer.
David Stevenson, B.Sc., M.A. (*Brit. Col.*), Lecturer.

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 — 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: While Sociology 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. In addition, Sociology 209 is strongly recommended for all students contemplating advanced work in Sociology.

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

Major — Second Year: Sociology 200 and/or 209; Third and Fourth Years: a total of 15 units of Sociology consisting of 400, 430 and nine additional units chosen from courses numbered 300 and above.

Honours — 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 offer at least 34 units of which 22 must be in Sociology and include Sociology 370, 399, 400, 430, 499.

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 or corequisite and completion of other prerequisites or corequisites 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: 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**

The nature, forms and functions of basic social institutions with primary emphasis upon the family, kinship and kinship-based groupings. (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.

(Not offered 1971-72; intend to offer 1972-73.)

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.

(Not offered 1971-72; intend to offer 1972-73.)

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.

(Not offered 1971-72; intend to offer 1972-73.)

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 1/2) **Ethnology of Southeast Asia**

An integrated description and analysis of the peoples and cultures of the major culture areas of Mainland and Island Southeast Asia, and India.

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

ANTH 334. (1 1/2) **Ethnology of Sub-Saharan Africa**

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

(Not offered 1971-72; intend to offer 1972-73.)

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 1971-72.)

(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 1/2) **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 1/2) **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**

A survey of theory in Anthropology, of principal concepts utilized in the field, and of major contributors to the development of the field. Open only to students registered in the Fourth Year. (3-0; 3-0)

ANTH 401. (1 1/2) **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 1/2) **Economic Anthropology**

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

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 indiosyncratic behaviour.

(Not offered 1971-72; intend to offer 1972-73.)

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, and 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 archaeological materials, research design and preparation of reports; the historical and anthropological contexts of archaeological research. Prerequisite: Anthropology 240 (effective 1972-73).

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 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. (Not offered 1971-72.) (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 as a prerequisite.
- (b) Completion of Sociology 200 as a prerequisite.
- (c) The student has at least Third Year standing and the permission of the course Instructor.

NOTE: Either Sociology 100 or Sociology 200 is recommended for the general student as well as for those intending to Major in Sociology. Sociology 100 is open only to students registered in First Year; students in other years should choose Sociology 200. Students who have taken Sociology 100 as a First Year elective may also enrol in Sociology 200 and/or 209 as electives in their Second or later years. 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. For First Year students only. (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. Prerequisites: Sociology 100 or 200. Sociology 200 may be taken concurrently. (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.

Papers and examinations. Outside reading at student's discretion.

Texts: To be announced. (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.

Papers and examinations. Outside reading at student's discretion.

Texts: To be announced. (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.

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)

SOCI 315. (3) Social Stratification

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

SOCI 320. (3) Sociology of Occupations

Attitudes to work, similarities and differences between occupations; the nature of professions; the contrast between jobs and careers.

Prerequisite may be waived in exceptional cases.

Term papers to be presented in Seminar. Examinations.

Detailed reading list available at time of registration. (3-0; 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)

(Not offered 1971-72.) (3-0; 3-0)

SOCI 340. (1½) Demography

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

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

SOCI 341. (1½) 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. (3) Sociology of Health and Medicine

The study of those aspects of social life that bear on human health and the institutions and occupations devoted to diagnosing and managing problems of illness.

(Not offered 1971-72.) (3-0; 3-0)

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. (3) Sociology of Communication

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

(Not offered 1971-72.)

(3-0; 3-0)

SOCI 370. (3) Quantitative Methods in Sociology

Techniques for analyzing sociological data in quantitative form; probability theory and sampling; hypothesis testing; selected parametric and nonparametric methods; bivariate and multivariate analysis; analysis of variance.

Prerequisite: Mathematics 102 and 151; 130; 100 and 101; or their equivalents or by permission of the Instructor.

(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.

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.

Text: P. S. Cohen, *Modern Social Theory*, Heinemann, London, 1968.

(3-0; 3-0)

SOCI 418. (Anthropology 418) (1½) Social Change

General theory of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. September-December only.

(3-0; 0-0)

SOCI 419. (Anthropology 419) (1½) 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 organization 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. Prerequisite: Fourth Year standing or permission of the Department.

Students will design and carry out a survey in Victoria. Final examination.

Text: To be announced.

(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 519. (1 ½) **Field Problems and Methods in Social and Cultural Anthropology**
One term only, to be announced.
- ANTH 520. (1 ½) **Ethnology of Middle America**
September-December only.
- ANTH 521. (1 ½) **Ethnology of South America**
September-December only.
- ANTH 522. (1 ½) **Ethnology of Northwest North America**
One term only, to be announced.
- ANTH 523. (1 ½) **Ethnology of the Circum-Polar Region**
One term only, to be announced.
- ANTH 541. (1 ½) **Seminar in Archaeology and Culture History**
One term only, to be announced.
- ANTH 542. (1 ½) **Archaeology of a Selected Area**
One term only, to be announced.
- ANTH 550. (1 ½) **Selected Problems in Physical Anthropology**
One term only, to be announced.
- ANTH 590. (1 ½-3) **Directed Studies**
- ANTH 599. (3) **Thesis**
- SOCI 500. (3) **Seminar in Sociological Theory**
- SOCI 510. (3) **Advanced Research Methods**
- SOCI 520. (3) **Selected Problems in the Sociology of Religion**
- SOCI 521. (3) **Selected Problems in Social Stratification**
- SOCI 522. (3) **Selected Problems in Medical Sociology**
- SOCI 523. (3) **Selected Problems in the Sociology of Occupations**
- SOCI 524. (3) **Selected Problems in Interaction and Socialization**
- SOCI 525. (3) **Selected Problems in Deviance and Social Control**
- SOCI 590. (3) **Directed Studies**
- SOCI 599. (3) **Thesis**

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.

T. David D. Groves, B.S.A., M.S.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor.

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

Herta M. Vickrey, B.A. (*San Jose St. Coll.*), M.A., Ph.D. (*Calif., Berkeley*), 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	121	221	344	—
	Chemistry	124	224	—	—
	Chemistry	—	231	—	—
	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		16	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. Co-requisites: Mathematics 130, Chemistry 121 and 124.

Texts: Frobisher, *Fundamentals of Microbiology*.

A. J. Wood, T. J. Trust, Herta M. Vickrey. (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*. Vols. 1 & 2, 19 Ed.

T. J. Trust, A. J. Wood, Herta M. Vickrey. (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*.

Herta M. Vickrey and T. J. Trust

(2-2; 2-2)

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

T. J. Trust, T. D. D. Groves, Herta M. Vickrey, A. J. Wood.

BACT 480. (0) Seminar

Attendance and participation is desirable 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	121	221	336	333
	Chemistry	124	224	344	—
	Chemistry	—	231	—	—
	Chemistry	—	233	—	—
	Physics	101	—	—	—
	Biology	150	200	303	437
Bacteriology and Biochemistry	Bacteriology	—	200	—	300
	Biochemistry	—	—	300	400
	Biochemistry	—	—	—	405
	Biochemistry	—	—	—	499
	Biochemistry	—	—	480	480
Total Units		16	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: Neal, *Chemistry and Biochemistry*.

A. J. Wood.

(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. Corequisite: Chemistry 344.

Text: H. R. Mahler and E. H. Cordes, *Basic Biological Chemistry*; I. H. Segel, *Biochemical Calculations*.

T. D. D. Groves.

(3-0; 3-0)

- BIOC 405. (1) **Laboratory Methods in Biochemistry**
Corequisite: Chemistry 344.
Text: J. M. Clark, *Experimental Biochemistry*.
T. D. D. Groves and A. J. Wood. (0-2; 0-2)
- BIOC 470. (1-3) **Directed Studies in Biochemistry**
T. D. D. Groves, A. J. Wood and T. J. Trust.
- BIOC 480. (0) **Seminar**
Attendance and participation is desirable 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

- 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.
- George O. Mackie, B.A., M.A., 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.S. (*Wash. St.*), Ph.D. (*Maryland*), Associate Professor.
- Marcus A. M. Bell, B.S.F. (*Brit. Col.*), M.F. (*Yale*), Ph.D. (*Brit. Col.*), Associate Professor.
- Derek V. Ellis, B.Sc. (*Edin.*), M.Sc., Ph.D. (*McGill*), Associate Professor.
- Edwin H. Hagmeier, B.A. (*Queen's*), M.A., Ph.D. (*Brit. Col.*), Associate Professor.
- John S. Hayward, B.Sc., Ph.D. (*Brit. Col.*), 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.
- Arthur T. Bergerud, B.Sc. (*Ore. St.*), M.Sc. (*Wis.*), Ph.D. (*Brit. Col.*), Assistant Professor.
- John E. Carr, A.S. (*St. Joseph Jr. Coll.*), B.S., M.A. (*Missouri*), Ph.D. (*Ore. St.*), Visiting Assistant Professor.
- Louis A. Hobson, B.S. (*Humboldt St. Coll.*), M.S., Ph.D. (*Wash.*), Assistant Professor.
- Jack L. Littlepage, B.A. (*San Diego*), Ph.D. (*Stanford*), 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.
- E. Derek Styles, B.S.A. (*Brit. Col.*), Ph.D. (*Wis.*), Assistant Professor.
- Hans (Jack) F. Dietrich, Senior Scientific Assistant.

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 102. Recommended programmes for the options may be found on page 103.

B.Sc. General and *B.A. General* programmes should be chosen to meet the requirements as set out in the Programme outline on page 102.

NOTES: (These refer to the chart on page 102).

1) Biology 150 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 credit for Biology 11, or 11 and 12, or the equivalent, may elect to write a placement examination in general biology to be given during the week preceding registration. Advanced placement or exemption from a required course carries no unit credit; however, those passing this examination will be permitted to enrol directly in any of the courses for which Biology 150 is prerequisite. Students passing the placement examination and intending to proceed towards a degree programme in Biology must, in place of Biology 150, substitute three units of acceptable course work in consultation with the Department (see Note 1 following Options on page 105.)

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 and 121 as prerequisites for Chemistry 224 and 221.

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

BIOLOGY PROGRAMMES

HONOURS	MAJORS	B.Sc. GENERAL	B.A. GENERAL
Core	Core	Biol. 150 (1)	Biol. 150 (1)
Biol. 150 (1)	Biol. 150 (1)	Minimum of 6 units of 200 level Biology courses	Minimum of 6 units of 200 level Biology courses
Biol. 200	Biol. 200	Minimum of 9 units of acceptable Biology courses numbered 300 and above	Minimum of 9 units of acceptable Biology courses numbered 300 and above
Biol. 203/204	Biol. 203/204	Minimum No. of Biol. units	Minimum No. of Biol. units
Biol. 206/207	Biol. 206/207	Co-requisites Phys. 101 or 103 (2) Chem. 120/111 or 124/121 (3)	Co-requisites Chem. 120/111 or 124/121 (3)
Biol. 300/306	Biol. 300/306	Math. 102/151 or 130, or equivalent (4)	
One of Biol. 303, 305 or 331	One of Biol. 303, 305, or 331	3	3
Biol. 304	Minimum of 9 Biology units chosen to complete option	—	18
Biol. 460	Minimum No. of Biology units	27	3
Biol. 499	Co-requisites Phys. 101 or 103(2) Chem. 120/111 or 124/121 (3)	4	4
Minimum of 12 Biology units chosen to complete option	Minimum No. of Biology units	3	3
Minimum No. of Biology units	Co-requisites Phys. 101 or 103(2) Chem. 120/111 or 124/121 (3) Math. 102/151 or 130 or equivalent (4)	3	3
Co-requisites Phys. 101 or 103 (2) Chem. 120/111 or 124/121 (3) Math. 102/151 or 130 or equivalent (4)	Phys. 101 or 103(2) Chem. 120/111 or 124/121 (3) Math. 102/151 or 130 or equivalent (4) Chem. 230/231 or 233/231 Electives	3 4 3 20	3 3 3 20
Chem. 230/231 or 233/231 Electives	TOTAL UNITS	60	60
TOTAL UNITS		62	62

- 1 See note 1) page 101.
- 2 See note 2) page 101.
- 3 See note 3) page 101.
- 4 See note 4) page 101.

consulted regarding areas for which computer training or extra Mathematics courses are advisable.

The provision exists (see page 82 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 82 can be met.

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	Second Year	Third Year	Fourth Year
Biol. 150 ¹ 3	Biol. 200 3	Biol. 300/306 3	Biol. 318/418 3
Chem. 120/111 or 124/121 4	Biol. 203/204 3	Biol. 331 3	Biology Group I Electives 3
Phys. 101 or 103 3	Biol. 206/207 3	Biol. 342 3	
Math. 102/151 or 130 or equivalent 3	Chem. 230/231 or 233/231 3		
Electives ² 3	Electives ² 3	Electives ³ 6	Electives ³ 9
16	15	15	15

Biology Group I Electives

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

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

Ecology Option

First Year	Second Year	Third Year	Fourth Year
Biol. 150 ¹ 3	Biol. 200 3	Biol. 300/306 3	Biol. 427 1½
Chem. 120/111 or 124/111 4	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. 230/231 or 233/231 3		
Electives ² 3	Electives ² 3	Electives ³ 6	Electives ³ 9
16	15	15	15

¹ See Note 1, page 105.

² See Note 2, page 105.

³ See Note 3, page 105.

Biology Group II Electives:

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

* with Departmental permission.

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

Functional Biology Option

First Year	Second Year	Third Year	Fourth Year
Biol. 150 ¹ 3	Biol. 200 3	Biol. 300/306 3	Biology Group III Electives 6
Chem. 120/111 or 124/111 3	Biol. 203/204 3	Biol. 303* or 305 or 331 3	
Phys. 101 or 103 3	Biol. 206/207 3	Biology Group III Electives 3	
Math. 102/151 or 130 or equivalent 3	Chem 230/231 or 233/231 3		
Electives ² 3	Electives ² 3	Electives ³ 6	Electives ³ 9
16	15	15	15

Biology Group III Electives:

Biol. 302* (3), 342 (3), 401 (3), 403 (3), 405 (3), 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), Styles (Genetics).

Marine Biology Option

First Year	Second Year	Third Year	Fourth Year
Biol. 150 ¹ 3	Biol. 200 3	Biol. 300/306 3	Biol. 301 or 311 3
Chem. 120/111 or 124/111 4	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 230/231 or 233/231 3		
Electives ² 3	Electives ² 3	Electives ³ 6	Electives ³ 9
16	15	15	15

¹ See Note 1, page 105.

² See Note 2, page 105.

³ See Note 3, page 105.

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

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

Zoology Option

First Year	3	Second Year	3	Third Year	3	Fourth Year	6
Biol. 150 ¹		Biol. 200		Biol. 300/306		Biology Group V B Electives	
Chem. 120/111 or 124/111	4	Biol. 203/204	3	Biol. 303* or 305	3		
Phys. 101 or 103	3	Biol. 206/207	3	Biology Group V A Electives	3		
Math. 102/151 or 130 or equivalent		Chem 230/231 or 233/231	3				
Electives ²	3	Electives ²	3	Electives ³	6	Electives	9
	16		15		15		15

¹ See Note 1, below.

² See Note 2, below.

³ See Note 3, below.

Biology Group VA Electives: Biol. 301 (3), 302* (3), 312/313 (3), 314 (3).

Biology Group VB Electives: Biol. 403 (3), 412 (3), 417/419 (3), 425 (3), 427/428 (3), 431 (3), 444/445 (3).

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

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

NOTES: (These refer to Opinion charts on pages 103-105).

1) Students who have passed the Placement Examination should take three units selected from Biol. 203, 204, 206, and 207 in their first year and Biol. 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 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. Students who have credit for Biology 11 or Biology 11 & 12 or equivalent may elect to write a placement examination in general biology to be given during the week preceding registration. Those passing the examination may register in courses for which Biology 150 is prerequisite. See also Note 1 on page 101.

BIOL 150. (3) **Principles of Modern Biology**

A broad introduction to biology emphasizing the principles of cell biology, bioenergetics, genetics, evolution and ecology. The major plant and animal groups are surveyed, stressing the unity of life processes and diversity of organisms. Recent advances in the field are discussed, particularly those relevant to the biology of man.

Text: Keeton, *Biological Science*.

Dr. Ring 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 230/231 or 233/231.

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 ½) **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 ½) **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 ½) **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.

Members of the Department. September-December only. (3-3; 0-0)

BIOL 207. (1½) **Chordate Zoology**

A study of the structural and functional adaptations of chordates in relation to their evolutionary history. Laboratory reports are required. Not open to students with credit for Zoology 202.

Text: To be announced.

Dr. McInerney.

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

BIOL 300. (1½) **Genetics**

A discussion of the gene concept in the light of present knowledge concerning the nature and function of the genetic material. Consideration will be given to the application of genetic principles to related sciences and to problems directly or indirectly concerning man. Demonstration and discussion sections 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, *Facets of Genetics*; Crow, *Genetics Notes*.

Dr. Styles.

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

BIOL 301 (formerly ZOO 301). (3) **Invertebrate Functional Morphology**

A course for the student who wants an in-depth treatment of invertebrates. Emphasis is placed on concepts and principles of functional morphology; supplementary reading, including recent journals is encouraged. Pre- or co-requisite: Biology 303 or 305. (Zoology 303 or 305). Biology 206 will become a pre-requisite for this course in 1972-73.

Texts: To be announced.

Dr. Fontaine.

(2-3; 2-3)

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

A course designed to lead to an understanding of the microscopic structure of the cells, tissues, and organs of higher vertebrates. Functions of specialized cells will be discussed and also those changes in structure and function which occur during reproduction and development. Emphasis is placed on the human. Reading is normally limited to suitable textbook material, however, opportunities exist for outside reading. Essays, reports, papers or drawings are not required. Criteria for entry: Third or fourth year honours, majors, and pre-professional students or written permission of the instructor. Pre- or co-requisites: Zoology 202 or Biology 207. Biology 303 (Zoology 303) is desirable.

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

Dr. Algard.

(2-3; 2-3)

BIOL 303 (formerly ZOO 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. Pre-requisites: Biology 200 or Biology 402 (Cell Biology requirement waived in 1971-72 for upper year Biology majors and honours students); 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.

Dr. Bergerud.

(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 Biology 402 (Cell Biology requirement waived in 1971-72 for upper year Biology majors and honours students).

Texts: To be announced.

Dr. Reid.

(2-3; 2-3)

BIOL 306. (1½) Ecology

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

Texts: To be announced.

Dr. Bergerud.

September-December only. (3-0; 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

Physical, chemical, geological and biological oceanography. Designed for biology programmes, this course will provide a broad, comprehensive study of the open ocean. Lectures and laboratory work will be supplemented by active participation in research cruises. Restricted to 3rd and 4th year students only. Not open to students with credit for Biology 407. Prerequisites: Physics 101 or 103; Mathematics 151/102 or 130; Chemistry 120/111 or 124/121; Biology 203 or Botany 205; and Biology 206 or Zoology 301.

Texts: To be announced.

Dr. Littlepage.

(2-3; 2-3)

BIOL 312 (formerly ZOO 312). (1½) Introductory Entomology

An introduction to the morphology, physiology, taxonomy and biology of insects, and some consideration of their economic importance. A term essay and a laboratory report will be required. Field collecting trips will be arranged. 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. (1½) Economic Entomology

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

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

Dr. Fields.

(2-3; 2-3)

BIOL 316. (1 ½) 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 and a course in ecology is encouraged, but not required. Normally, not for credit towards degree programs in Biology. Restricted to 3rd and 4th year students from any department.

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

Dr. Bell. (evenings).

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

BIOL 318 (formerly BOTA 318). (1 ½) 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.

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 ½) Genetics and Evolution

Concepts of evolution and genetics that are of particular interest to present day society. Lectures will be concerned with theoretical concepts and factual information; discussion and demonstration sessions will be arranged at which the implications may be considered. 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 ½) 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.

Dr. Bergerud.

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

and one seminar will be given by each student. Prerequisites: Botany 205, or Biology 203 and 204, or written permission of the instructor. Biology 200 will become a prerequisite for this course in 1972-73.

Texts: Salisbury and Ross, *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. Field trips and demonstrations will be arranged. Open to all students in 2nd, 3rd, and 4th years. Biology 150 is not required for this course. Normally credit for this course will not be counted toward degree programmes in Biology, but Biology students may take this course as a free elective.

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

Drs. Ballantyne, Owens, Paden, and Styles.

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

BIOL 342 (formerly BOTA 342). (3) Vascular Plant Anatomy and Microtechnique

A study of the development and organization of tissues and organs in vascular plants with special emphasis given to seed plants. Second term is devoted to techniques used in the preparation of microscope slides for anatomical study. Techniques covered include paraffin methods, wood sectioning, chromosome preparations, photomicrography and certain histochemical techniques. Prerequisite: Botany 205 or Biology 204.

Texts: Esau, *Anatomy of Seed Plants*; Johansen, *Plant Microtechnique*.

Dr. Owens.

(2-3; 2-3)

BIOL 400. (1 1/2) History of Biology and its Modern Consequences

Readings in the history of biology, and readings, seminars and discussions dealing with recent advances and their social and economic consequences. Those registered will be expected to do considerable outside reading, and to present the results in seminar form. Prerequisites: 3rd or 4th year students with Biology 150 or written permission of instructor.

Texts: Taylor, *The Science of Life*; Dampier, *A Shorter History of Science*; other readings as assigned.

Dr. Hagmeier.

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

BIOL 401. (3) Current Topics in Genetics

A discussion of theories concerning the origin of life and the genetic code; the genetic control of development and behaviour; population genetics and evolutionary mechanisms, recent advances in medical genetics, and other topics. Laboratory assignments will be in part experimental and in part literature reviews and seminar presentations. Prerequisites: Biology 300 or written permission of instructor.

Texts: Watson, *Molecular Biology of the Gene*, 2nd Edition; 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.

Dr. Fields.

(2-3; 2-3)

BIOL 405. (3) Cellular Physiology

Structure and function of cells with particular emphasis on the synthesis, functions, and interactions of their various molecular components. Prerequisites: Biology 200 (Cell Biology) or equivalent, or 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: Tait, *Elements of Marine Ecology*. Original and review literature.

Dr. Ellis.

(2-3; 2-3)

BIOL 408. (1 1/2) 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 only. (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). (3) Advanced Entomology

A study of recent advances in the field of entomology with special emphasis on insect physiology. Students will be expected to set up and conduct many of their own experiments, and 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).

Text: Wigglesworth, *Principles of Insect Physiology*.

Dr. Ring.

(2-3; 2-3)

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. Practical work stresses individual research projects. Two week-end field trips, one to the west coast and one to San Juan Island are a requirement. Prerequisite: Biology 206 or Zoology 301. Co-requisite: 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 research project is required. Prerequisite: Botany 205 or Biology 203 or written permission of instructor.

Text: Alexopolous, *Introductory Mycology*.

Dr. Paden.

(2-3; 2-3)

BIOL 417 (formerly ZOOL 417). (1 1/2) **Zoological Microtechnique**

Lectures and laboratories in the principles and practice of zoological microtechnique, including treatment of histo- and cytochemistry, advanced microscopic techniques and photomicrography. Students will prepare microscope slides and photomicrographs for evaluation. Prerequisite: Biology 200 (Cell Biology). Co-requisite: Biology 302 (Zoology 302) or equivalent.

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 ZOOL 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. A term paper or project is required. Pre- or co-requisites: 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.

Text: Wilkins, *Physiology of Plant Growth and Development*.

Dr. Ballantyne.

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

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

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

Text: Price, *Molecular Approaches to Plant Physiology*.

Dr. Ballantyne.

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

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

Structure of living organisms as revealed by electron microscopy and interpreted in functional terms. In addition to regular lectures by the instructor, the course will involve special reading assignments and seminar presentations by the students, at least one each. Electron micrographs will be studied. Prerequisites: Biology 200 (Cell Biology); Biology 342 (Botany 342) or Biology 302 (Zoology 302).

Texts: Assigned readings.

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.

Dr. McInerney.

(2-3; 2-3)

BIOL 426. (1 1/2) **Limnology**

Physical, chemical and biological characteristics of lakes; qualitative and quantitative methods for the measurement of production at various trophic levels. Written reports on field projects and seminar presentation of topics from outside reading are expected. Prerequisites: Biology 306.

Texts: To be announced.

Dr. Hagmeier.

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

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.

Dr. Bergerud.

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*.

Dr. Bergerud.

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). (3) **Parasitology**

Study of the biology and taxonomy of parasitic organisms. Prerequisite: Zoology 301 or Biology 206.

Texts: To be announced.

(2-3; 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 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 ½) 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*.

(Offered 1972-73; Not offered 1971-72.)

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

BIOL 451. (1 ½) 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.

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

(Offered in 1972-73; not offered in 1971-72.)

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

BIOL 452. (1½) 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 Biology Honours students. Participation in Departmental seminars and presentation of thesis results.

BIOL 490 (1-3) (formerly ZOO 488). Directed Studies in Biology

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

BIOL 499 (formerly ZOO 499). (3) Thesis or Tutorial

GRADUATE COURSES

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

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 Invertebrate Zoology

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. (1 ½) **Topics in Biological Ultrastructure**
Dr. Mackie.
- BIOL 527. (1 ½) **Advanced Topics in Cell Physiology**
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. (1 ½) **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**

All graduate students are expected to register for Biology 560 — Seminar.

DEPARTMENT OF CHEMISTRY

- Stephen A. Ryce, B.A., Ph.D. (*Brit. Col.*), Professor and Head of the Department.
Lewis J. Clark, B.A. (*Brit. Col.*), M.Sc. (*Wash.*), Ph.D. (*Ore. St.*), Professor (On leave).
Alfred Fischer, B.Sc., M.Sc., Ph.D. (*N.Z.*), 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.
A. Rae Patton, B.S. (*Montana*), M.S., Ph.D. (*Minn.*), Visiting 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 (Sabbatical leave 1971/72).
Alexander D. Kirk, B.Sc., Ph.D. (*Edinburgh*), 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, B.Sc., M.A. (*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.
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 35 units of chemistry courses from the total 62 units for the degree. The Major programme requires 25 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 319 of this Calendar.

COURSE REQUIREMENTS OF CHEMISTRY UNDERGRADUATE PROGRAMMES

GENERAL	MAJOR	HONOURS
First Year		
Chem 121 and 124 (4)	Chem 121 and 124 (4)	Chem 121 and 124 (4)
Math 100 and 101, or 130 (3)	Math 100 and 101, or 130 (3)	Math 100 and 101, or 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 221 and 224 (3)	Chem 221 and 224 (3)	Chem 221 and 224 (3)
Chem 231 and 233 (3)	Chem 231 and 233 (3)	Chem 231 and 233 (3)
Either Math 231 (3) or Math 230 and 232 (6) or Math 110, 200, 201, 210 (6)	Either Math 231 (3) or Math 230 and 232 (6) or Math 110, 200, 201, 210 (6)	Either Math 231 (3) or Math 230 and 232 (6) or Math 110, 200, 201, 210 (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 314 (3)
	Chem 326 (3)	Chem 326 (3)
	Chem 333 (3)	Chem 333 (3)
	Chem 344 (3)	Chem 344 (3)
		Chem 399 (1) Other courses (3)
		Fourth Year
Nine units in a second area of concentration (9)	Any two of Chem 422, 423, 433, 434, 444, 446 (3)	Chem 422 and 423 (3) Chem 433 and 434 (3) Chem 444 and 446 (3)
Other courses (12)	Other courses (15)	Chem 499 (3) Other courses (3)

- 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 426 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. Permission of the Department is required for admission into each of the Third and Fourth Years of the 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 requirements for admission to the Third Year of the Honours Programme in Chemistry are specified on pages 83 and 84 of this Calendar. 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 addi-

tional mathematics course among their electives. Suitable courses are Mathematics 170, 171, 303, 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 221 and Chemistry 224 or Chemistry 231 and 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 62).
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.

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 300/400 ("Chemistry for Poets"). None of these courses require laboratory work. The laboratory course Chemistry 111 is required for those students who take Chemistry 120 as a prerequisite to Chemistry 230.

CHEM 111. (1) **General Chemistry Laboratory**

A general laboratory course illustrating the properties of chemical systems.

Credit will not be given for both Chemistry 111 and 121.

Pre- or corequisite: Chemistry 120.

Text: Chemistry 111 Laboratory Manual.

Dr. Dingle and members of the Department.

(0-3*; 0-3*)

CHEM 120. (3) **General Chemistry**

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, and states of matter. Basic physical chemistry. Periodic, organic, surface and nuclear chemistry.

Credit will not be given for both Chemistry 120 and 124.

Prerequisites: Mathematics 12, and Chemistry 11 or their equivalents. 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.

Text: To be announced.

Dr. Dingle and members of the Department.

(3-0; 3-0)

NOTES: 1. Chemistry 120 provides a comprehensive lecture course in General Chemistry at the First Year University level, and is suitable for all fields and

* Laboratories on alternate weeks.

programmes at this University, except those which include either Chemistry 224 or 233. Certain pre-professional programmes require Chemistry 124 (see pages 346-47).

2. Chemistry 111 may be a necessary course to accompany Chemistry 120, depending upon a student's interests and academic plans. Chemistry 111 is prerequisite to Chemistry 230.

CHEM 121. (1) Introductory Physical and Inorganic Chemistry Laboratory — Part I

A laboratory course illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation.

Co-requisite: Chemistry 124.

Text: Chemistry 121 Laboratory Manual.

Dr. Dingle and members of the Department. (0-3; 0-3)

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.

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.

Corequisite: Chemistry 121.

Text: To be announced.

Dr. MacLaurin and members of the Department. (3-0; 3-0)

NOTE: 1. 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 119 are exempted from Chemistry 124 (and corequisite Chemistry 121) requirement.

CHEM 221. (1) Introductory Physical and Inorganic Chemistry Laboratory — Part II

Experimental application of solution equilibria, acid-base and redox theory in chemical analysis.

Corequisite: Chemistry 224.

Text: Skoog and West, *Fundamentals of Analytical Chemistry*.

Dr. Dixon. (0-4; 0-4)

CHEM 224. (2) 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.

Prerequisites: Chemistry 121 and 124, (or 111 and 120 with permission of the Department). See also Note 4, page 119.

Corequisite: Chemistry 221.

Text: To be announced.

Drs. Dingle and Dixon. (3-0; 3-0)

CHEM 230. (2) General Organic Chemistry

Fundamental principles of organic chemistry and descriptive chemistry of the main classes of organic compounds.

This course is designed for students preparing to enter professional schools such as Medicine, Pharmacy, Dentistry, Forestry, and Nursing (see pages 346-47). Credit will not be given for both Chemistry 230 and 233.

Prerequisites: Chemistry 111 and 120, or 121 and 124.

Corequisite: Chemistry 231.

Text: To be announced.

Drs. Elias, Poulton, West.

(3-0; 3-0)

CHEM 231. (1) General Organic Chemistry Laboratory

Basic operations and representative reactions and preparations of organic chemistry.

Corequisite: Chemistry 230 or 233.

Text: Roberts, Gilbert, Rodewald and Wingrove, *An Introduction to Modern Experimental Organic Chemistry*.

Dr. West.

(0-3; 0-3)

CHEM 233. (2) Organic Chemistry — Part 1

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 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 121 and 124 or 111 and 120 (See also Note 4, page 119).

Corequisite: Chemistry 231.

Text: Morrison and Boyd, *Organic Chemistry*.

Dr. Fischer.

(3-0; 3-0)

CHEM 300.(3) The Science of Chemistry

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, but study in this area may be continued through Chemistry 400. The course is not open to students majoring in science. Such students may take Chemistry 400.

Prerequisites: Successful completion of fifteen units of study at University level.

Text: To be announced.

Dr. Patton.

(3-0; 3-0)

CHEM 301. (3) Industrial Processes and the Chemistry of Pollution

Chemical principles used in the mining, smelting and petroleum refining industries and in the manufacture of pulp and paper, polymers, soaps, detergents, etc. An examination of the problems and methods for controlling waste product 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: To be announced.

(3-0; 3-0)

CHEM 314. (3) Instrumental Analysis and Molecular Structure Determination

Modern techniques of chemical analysis and molecular structure determination including chromatography, spectroscopy, mass spectroscopy, radiochemical-, electrochemical- and diffraction methods.

Prerequisites: Chemistry 221 and 224.

Text: Ewing, *Instrumental Methods of Chemical Analysis*; Banwell, *Fundamentals of Molecular Spectroscopy*.

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 221 and 224, Physics 212, Mathematics 231 or 230 and 232, or Mathematics 110, 200, 201 and 210.

Texts: Cotton and Wilkinson, *Advanced Inorganic Chemistry*; Orgel, *Introduction to Transition Metal Chemistry*.

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.

Prerequisites: Chemistry 231 and 233 (or 230 and 231 with permission of the Department).

Text: Roberts and Caserio, *Basic Principles of Organic Chemistry*.

Drs. Fischer and 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 221 and 224, Physics 212, Mathematics 231 or 230 and 232, or Mathematics 110, 200, 201 and 210.

Text: To be announced.

Laboratory Manual: 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. Ryce and members of the Department.

(0-0-2; 0-0-2)

CHEM 400. (3) **Chemistry and the Sciences**

A continuation of the study begun in Chemistry 300 of the examination of the nature and behaviour of matter from the experimental, historical and philosophical backgrounds of chemistry, through a study in depth of selected topics from an interdisciplinary point of view.

Prerequisite: Chemistry 300 or with permission of the Department.

Text: To be announced.

Dr. Patton.

(3-0; 3-0)

CHEM 422. (1½) **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.

Text: Evans, *An Introduction to Crystal Chemistry*.

Drs. Bushnell and Moss.

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

CHEM 423. (1½) **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.

Text: Coates, Green, Powell and Wade, *Principles of Organometallic Chemistry*.

Drs. Dixon and Moss.

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

- CHEM 433. (1½) **Organic Structure Determination. The Chemistry of Natural Products**
 Elucidation of the structures of organic compounds from spectral information. The chemistry of several classes of natural products; including examples demonstrating structural elucidation, synthesis, and biogenesis.
 Prerequisite: Chemistry 333.
 Text: To be announced.
 Dr. Poulton. January-April only. (0-0; 3-3)
- CHEM 434. (1½) **Physical Organic Chemistry**
 Stereochemistry. Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity.
 Prerequisite: Chemistry 333.
 Text: To be announced.
 Dr. Robinson. September-December only. (3-3; 0-0)
- CHEM 444. (1½) **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, heterogenous catalysis. Colloidal systems.
 Prerequisite: Chemistry 344.
 Text: To be announced.
 Drs. Kirk and O'Brien. January-April only. (0-0; 3-3)
- CHEM 446. (1½) **Quantum Chemistry**
 The basic principles of quantum mechanics and their application to simple physical models and to chemical systems, including the use of semi-empirical methods. Molecular spectroscopy and symmetry.
 Prerequisites: Chemistry 326 and 344; Mathematics 110 and Mathematics 170 or 210 strongly recommended.
 Text: Hanna, *Quantum Mechanics in Chemistry* (2nd ed.).
 Dr. Balfour. September-December only. (3-3; 0-0)
- CHEM 490. (1-3) **Directed Studies**
 Dr. Ryce.
- CHEM 499. (3) **Thesis**
 Experimental research under the direction of faculty. For Chemistry Honours students only.
 Dr. MacLaurin 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. (1-2) **Current Topics in Inorganic Chemistry**
- CHEM 523. (2) **Organometallic Chemistry**
- CHEM 525. (2) **Theoretical Inorganic Chemistry**
- CHEM 526. (1-2) **Topics in Advanced Inorganic Chemistry**
- CHEM 533. (2) **Organic Synthesis**
- CHEM 536. (2) **Carbohydrate Chemistry**

- CHEM 538. (2) **Biogenesis of Natural Products**
- CHEM 545. (1) **Reaction Kinetics and Reaction Rate Theory**
- CHEM 546. (1) **Spectroscopy and the Chemistry of Excited States**
- CHEM 550. (1) **Elementary Applications of Group Theory**
- CHEM 554. (1) **Applied Quantum Mechanics**
- CHEM 555. (1) **Statistical Mechanics**
- CHEM 556. (1-2) **Topics in Advanced Physical Chemistry**
- CHEM 565. (2) **Theory and Application of Nuclear Magnetic Resonance Spectroscopy**
- CHEM 566. (2) **Chemical Crystallography**
- CHEM 577. (2) **Nuclear and Radio Chemistry**
- CHEM 590. (1-3) **Directed Studies**
- CHEM 599. **M.Sc. Thesis** (Credit to be determined but normally 7 units in this Department).
- CHEM 630. (1-2) **Current Topics in Organic Chemistry**
- CHEM 633. (1-2) **Topics in Advanced Organic Chemistry**
- CHEM 634. (2) **Advanced Physical Organic Chemistry**
- CHEM 636. (2) **Chemistry of Heterocyclic Compounds**
- CHEM 638. (2) **Chemistry of Natural Products**
- CHEM 645. (1) **Advanced Electrochemistry**
- CHEM 699. **Ph.D. Dissertation** (Credit to be determined).

DEPARTMENT OF CLASSICS

Geoffrey J. D. Archbold, B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Associate Professor and Acting Chairman of the Department.
David A. Campbell, M.A. (*Oxon.*), Visiting Professor.
Herbert H. Huxley, M.A. (*Cantab.*), F.I.A.L., Professor.
Peter L. Smith, B.A. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Associate Professor.
Gordon S. Slrimpton, 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 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. (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, *Alcestis*; Thucydides, *History of the Peloponnesian War*, Book I, Chapters 89-118; Lysias, *Against Diogeiton*; 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. (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*. (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 1971-72.) (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 1971-72.) 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.)

(Greek 490 C, D, E, G, H, J, K not offered 1971-72.)

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*.

Members of the Department. (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*. (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*. (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*. (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 XI; Horace, selected *Odes*. (3-0; 3-0)

LATI 301. (formerly 310) (1 ½) **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. September-December only. (3-0; 0-0)

LATI 302. (formerly 310) (1 ½) **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. January-April only. (0-0; 3-0)

LATI 303. (formerly 320) (1 ½) **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: R. A. B. Mynors, *Vergil*, Oxford Classical Text.

(Not offered 1971-72.)

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

LATI 304. (formerly 320) (1 ½) **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: R. A. B. Mynors, *Vergil*, Oxford Classical Text.

(Not offered 1971-72.)

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

LATI 305. (1 ½) **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*.

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

LATI 306. (1 ½) **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.

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 1971-72.)

(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. (3-0; 3-0)

LATI 480. (1 ½) **Composition, Stylistics, and Metre**

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

LATI 490. (1 ½) **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.

(490A was formerly 360; 490B was formerly 370; 490C was formerly 330; 490D was formerly 340.)

(Latin 490 A, B, C, D, E, G, H not offered 1971-72.)

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 either take a course in either language or take some 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* and other representative Greek dramas, *Symposium*, *Apology*, *Crito* of Plato, a few books of Livy, and Vergil's *Aeneid*.

Essays will be required, and there will be an examination.

Members of the Department.

(3-0; 3-0)

CLAS 300. (formerly 310) (1 ½) **Classical Epic**

A study of the Greco-Roman epic tradition. Poets studied in translation will be Homer and Vergil.

(Not offered 1971-72.)

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

CLAS 301. (1 ½) **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*.

(Not offered 1971-72.)

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

CLAS 320. (formerly 315) (1 ½) **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.

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

CLAS 321. (1 ½) **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.

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*.

(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*.

(Not offered 1971-72.)

(3-0; 3-0)

CLAS 370. (1 ½) **Greek and Roman Thought**

A study of the Greek and Roman ideas about society, morality and the state as they are evidenced in the works of literature, history, and oratory.

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.

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.

(Not offered 1971-72.)

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.

(Not offered 1971-72.)

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

GRADUATE COURSES

CLAS 510. (3) **Classical Epic**

CLAS 520. (3) **Classical Drama**

CLAS 530. (3) **Ancient Historiography**

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 he expects for his work.

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.

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.

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.

Lawrence J. Brainard, B.A. (*Northwestern*), Assistant 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.

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

(Consult Department for graduate course offerings planned for 1971-72 leading to the M.A. degree in economics.)

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, 310, 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 318 (formerly 410).

- (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. (1 ½) 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.

Dr. Jones.

(3-0; 3-0)

ECON 315. (3) Labour Economics and Institutions

An examination of labour as a factor of production; the development of national labour markets and their contemporary structure; functions and performance. Amongst other areas, consideration will be given to the following: industrial relations systems, labour history, the nature of organized labour, the collective bargaining process, contemporary labour problems and public policy.

Text: To be announced. Supplementary reading.

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.

Dr. Bertram.

(3-0; 3-0)

ECON 323. (3) Comparative Economic Systems

A study of the economic systems of societies at all levels of economic and social development. The first term concentrates on the economic systems of tribal and peasant societies, and the emergence of the market as a form of social and economic organization. The second term is devoted to the analysis of modern economic systems. The roles of the market and economic planning as forms of economic organization and control are examined in detail for several representative countries, e.g. Canada, U.S.S.R., France, China.

Text: To be announced. Supplementary reading.

Mr. Brainard.

(3-0; 3-0)

ECON 325. (1 ½) 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; 0-0)

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. Lassen. 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.

Dr. Carter. 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.

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

ECON 401. (3) **History of Economic Thought**

An analysis of classical and neo-classical thought to the present; contributions of eclectics; socialists and institutionalists.

Text: To be announced.

Members of the Department. (3-0; 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.

Dr. Jones.

(3-0; 3-0)

ECON 412. (1½) Urban Economics

Application of economic theory to the form and structure of urban areas. External effects and public policy in the urban context. Topics include: intraurban location, systems of cities, economic function and the specialization within the city, the economics of urban transport, housing and public services.

Text: To be announced. Term paper.

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.

Dr. Bertram.

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.

Dr. Bertram.

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)

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.
- 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.*), Associate Professor.
- Miss 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.*), 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.
- Frederick Mayne, B.A., Ph.D. (*Witwatersrand*), Associate Professor.
- G. Grant McOrmond, C.D., M.A. (*Sask.*), Associate Professor (Director of Freshman English).
- Herbert F. Smith, A.B., A.M. (*Boston*), Ph.D. (*Rutgers*), Associate Professor.
- Lionel Adey, B.A., M.A. (*Birmingham*), Ph.D. (*Leicester*), Assistant Professor.
- Norman W. Alford, B.A. (*London*), Ph.D. (*Texas*), Assistant Professor.
- William Benzie, M.A., M.Ed., Ph.D. (*Aberdeen*), Assistant Professor.
- Michael R. Best, B.A., Ph.D. (*Adelaide*), Assistant Professor.
- Thomas R. Cleary, B.A. (*Queens Coll.*), M.A., Ph.D. (*Princeton*), Assistant Professor.
- Miss Joan Coldwell, B.A., M.A. (*London*), Ph.D. (*Harvard*), Assistant Professor. (Leave of absence 1971-72.)
- Anthony B. England, B.A., M.A. (*Manchester*), Ph.D. (*Yale*), Assistant Professor.
- Miss 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.
- Patrick Grant, B.A. (*Queen's, Belfast*), D.Phil. (*Sussex*), Assistant Professor.
- Mrs. 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.
- Victor A. Neufeldt, B.A. (*Brit. Col.*), Ph.D. (*Ill.*), Assistant Professor.
- Colin J. Partridge, B.A., Ph.D. (*Nottingham*), Assistant Professor.
- Miss Florence K. Riddle, B.A. (*Reed Coll.*), M.A. (*Yale*), Ph.D. (*Wash.*), 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.
- Reginald C. Terry, B.A. (*Leicester*), M.A. (*Bristol*), Ph.D. (*London*), Assistant Professor.
- 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. (Leave of absence 1971-72.)

George H. Forbes, B.A. (*Brit. Col.*), Lecturer.
 Mrs. Velina L. Gooch, B.Ed., M.A. (*Alta.*), Senior Lecturer.
 Miss Ann M. Alexander, B.A. (*Radcliffe*), M.A. (*Calif.*), Lecturer.
 Dennis E. Brown, B.A., M.A. (*London*), Lecturer.
 Alan F. Dilnot, B.A., B.Phil. (*Oxon.*), Lecturer. (Leave of absence 1971-72).
 Anthony S. G. Edwards, B.A. (*Reading*), M.A. (*McMaster*), Lecturer.
 Mrs. Sheila M. Hogg, B.A. (*U. of Vic.*), M.A. (*Wash.*), Lecturer.
 Alexander N. Hutchison, M.A. (*Aberdeen*), Lecturer.
 Mrs. Marjorie Menhenett, B.A. (*Wellesley*), M.A. (*Calif., Berkeley*), Lecturer.
 Mrs. Hanne Quillévéré, B.A., M.A. (*Brit. Col.*), Lecturer.
 Mrs. Constance M. Rooke, B.A. (*Smith Coll.*), M.A. (*Tulane*), Lecturer.
 Miss Norma Rowen, B.A. (*Oxon.*), Lecturer. (Leave of absence 1971-72).
 Lawrence W. Russell, B.A. (*U. of Vic.*), M.A. (*Calif.*), Lecturer.
 Mrs. Ingrid Shecter, B.A. (*Oxon.*), Lecturer.
 Miss Stella Slade, B.A. (*London*), Dip. Ed. (*Oxon.*), M.A. (*Dalhousie*), Lecturer.
 Gordon A. J. Watt, M.A. (*Aberdeen*), Lecturer.
 Miss 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 1971-72).
 Robert S. Sward, B.A. (*Illinois*), M.A. (*Iowa St.*), Visiting 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. 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, may nevertheless take English 110 as an elective, if they are not taking English 120.

English 200, 201, or 203 is prerequisite for all English courses numbered 390 or above, except where otherwise indicated. English 201 or 203 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. They may also be taken for additional credit by students who must enrol in English 200.

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, 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.

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.

All students wishing to honour or major in English, ~~or to take English as a field of concentration in the General programme~~, 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, 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 at least 12 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, such as Liberal Arts 305 (see page 184).

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 Second Year: English 200 (or successfully challenge this course); Third and Fourth Years: a total of 15 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.

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 Second Year: English 200 (or successfully challenge this course); 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 intro-

¹ In approved cases, students who are required to take English 110 may be permitted to take English 200 in the following year.

ductory 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 either English 110 or English 120, but those who plan to specialize in English should take English 120.

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 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*; Heller, *Catch 22*; James, *The Turn of the Screw*; Lawrence, *Sons and Lovers*; McCullers, *The Member of the Wedding*; Richler, *The Apprenticeship of Duddy Kravitz*;

(b) *Plays*

Shakespeare, *Othello* or *Antony and Cleopatra*; Pinter, *The Caretaker*, *A Slight Ache* and *Other Plays*; Albee, *The Zoo Story*, *Who's Afraid of Virginia Woolf?*; Beckett, *Waiting for Godot*; Bolt, *A Man for all Seasons*; Ibsen, *Hedda Gabler*; Miller, *The Crucible*; Osborne, *Look Back in Anger*; Shaw, *Arms and the Man*; Williams, *The Glass Menagerie*; Brecht, *Galileo*;

- (c) *Short Stories*
Mizener, *Modern Short Stories* or Taylor, *The Short Story*;
- (d) *Poetry*
Mack, *Modern Poetry* or Geddes, *Twentieth Century Poetry and Poetics*;
- (e) *Expository Prose*
Hoopes, *Edge of Awareness*;
- (f) *Composition*
Birk and Birk, *Using English Effectively*.

Approved editions of the above texts will be available in the University Bookstore.
Members of the Department. (3-0; 3-0)

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, *The Mayor of Casterbridge*; 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. I*; Brecht, *The Caucasian Chalk Circle*; Conrad, *Heart of Darkness*.

In addition to the above materials, another selection of poems and one background volume will be chosen by the instructor in each section of the course. 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.

Members of the Department. (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.

The supplementary reading list for each instructor may be obtained from the English Department office.

Text: *The American Tradition in Literature*, eds. Bradley, Beatty and Long, (Norton), 3rd ed., shorter.

Dr. Leonore Ewert, Dr. C. Partridge, Dr. N. C. Smith. (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. England, Dr. B. Kurth, Dr. C. Lambertson. (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. C. Lambertson, Mrs. I. Sheeter, Mr. G. Watt. (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 1970-71 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.

Mrs. V. Gooch, Mrs. H. Quillévé. (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.

(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.

(3-0; 3-0)

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, with particular reference to important background authors such as Boethius, Dante, Jean de Meun, Chrétien de Troyes, Petrarch and Boccaccio. The English 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.

Texts: *Beowulf* (Trans. B. Raffel); Ackerman, *Backgrounds to Mediaeval English Literature; The Battle of Maldon and Other Old English Poems*, eds. Crossley-Holland & Mitchell; *The Romance of the Rose*, eds. de Lorris & de Meun; *Mediaeval English Verse*, (Trans. B. Stone); *Sir Gawain and the Green Knight* (Trans. B. Stone); Sir Thomas Malory, *The Morte Darthur*, eds. Sanders & Ward.

Miss A. Alexander.

(3-0; 3-0)

ENGL 408. (3) **Renaissance Poetry and Prose**

Non-dramatic literature from Skelton to Donne, with major emphasis upon More, Wyatt, Sidney, Spenser, Shakespeare, Donne.

Texts: To be announced.

Dr. T. Sherwood.

(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.

(Not offered 1971-72, but see Liberal Arts 305).

ENGL 411. (3) **The Development of English Drama to 1642**

Main emphasis is upon the major Elizabethan and Jacobean dramatists.

Texts: *Everyman and Medieval Miracle Plays*, ed. A. C. Cawley, (Everyman); *Elizabethan and Stuart Plays*, ed. C. R. Baskerville, etc.

Dr. M. Best. (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. (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.

Texts: To be announced.

Dr. B. Kurth. (3-0; 3-0)

ENGL 418. (3) **Poetry and Prose of the 17th Century excluding Milton**

A study of the major trends in poetry and prose. Some attention will be given to the social, artistic, religious and philosophical background of the period.

Essays and some outside reading will be required.

Texts: A. M. Witherspoon & F. L. Warnke, eds., *Seventeenth Century Prose and Poetry*, 2nd ed.; Francis Bacon: *A Selection of His Works*, ed. S. Warhaft; John Bunyan, *Pilgrim's Progress* (Rinehart).

(Not offered this year but intend to offer in 1972-73). (3-0; 3-0)

ENGL 419. (3) **Milton**

An intensive study of Milton's poetry, with most emphasis on *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*. Some attention will be given to the prose.

Attention will be paid to the relationship of Milton's work to the classical and biblical tradition. Students will be expected to read at least one of the major classical epics (*The Iliad*, *The Odyssey*, or *The Aeneid*) and selected parts of the Bible. Seventeenth century trends in literary, artistic, political and religious thought and style will be alluded to from time to time; but the emphasis will be on the enjoyment of Milton's poetry, not on background studies.

At least one seminar report and one research paper will be required.

Text: *Milton, Complete Poetry and Major Prose*, ed. M. Y. Hughes.

Dr. P. Grant. (3-0; 3-0)

ENGL 420. (3) **Literature of the Restoration and the Augustan Periods**

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. An anthology of eighteenth-century literature will also be used.

Dr. S. Macey. (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.

(Not offered this year but will be offered in 1972-73). (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.

Dr. B. Wallis.

(Offered this year but will not be offered in 1972-73).

(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. J. Hayman.

(3-0; 3-0)

ENGL 424. (3) **The British Novel in the 19th Century**

Texts: *Three Gothic Novels* (Penguin); Jane Austen, *Emma*, ed. Trilling (Riverside); Scott, *The Heart of Midlothian*, ed. Raleigh (Riverside); Charlotte Bronte, *Villette*, eds. Tillotson & Howes (Riverside); Emily Bronte, *Wuthering Heights*, ed. Pritchett (Riverside); Disraeli, *Coningsby* (Signet); Collins, *The Moonstone* (Penguin); Dickens, *Bleak House*, ed. Zabel (Riverside), *Our Mutual Friend* (Signet); Thackeray, *Vanity Fair*, eds. G. & K. Tillotson (Riverside); Eliot, *Middlemarch*, ed. Haight (Riverside); Trollope, *Barchester Towers*, ed. Hatcher (Mod. Lib.); Meredith, *The Egoist*, ed. Stevenson (Riverside); Hardy, *The Return of the Native*, ed. Guerdard (Holt, Rinehart & Winston); Butler, *The Way of All Flesh* (Penguin); *Minor Classics of Nineteenth Century Fiction*, Vol. II, ed. Buckler (Riverside).

Dr. R. Terry.

(3-0; 3-0)

ENGL 426. (3) **Problems in American Literature**

Two alternative seminar courses are offered in 1971-72:

(a) **The Literature of the South and West**

(i) First Term: A study of Southern Literature from the Colonial Period to the present.

(ii) Second Term: Western Literature from 1850 to the present.

Each study will concentrate on the elements of each literature which tend to define its unique qualities, without disregarding universal values. For the South, this means the problem of the Negro and slavery, agrarianism, and the concept of culture, — for the West, the frontier, economic determinism, and the concept of innocence.

Texts: *The Literature of the South*, eds. Young, Watkins, Beaty (Scott, Foresman); *Native American Humor*, ed. Walter Blair (Chandler); Twain, *Life on the Mississippi* (Signet), *Huckleberry Finn*; Parkman, *The Oregon Trail* (Washington Square Press); Cooper, *The Prairie* (Washington Square Press); *Mark Twain's Frontier*, eds. Camp, Kennedy (Holt, Rinehart, Winston); Steinbeck, *The Grapes of Wrath* (Compass); Berger, *Little Big Man* (Fawcett, Crest); Faulkner, *Three Famous Short Novels* (Vintage, Random); *As I Lay Dying* (Vintage, Random).

Dr. H. F. Smith.

(3-0; 3-0)

(b) **"A Present World": Imagination and Experience in Recent American Poetry**

Lectures and discussion will centre on a close reading of selected poems — work in the first term will involve an analysis of two long continuing poems — as well as a study of the development of individual writers.

Texts: John Berryman, *The Dream Songs*; Robert Lowell, *Notebook* (Doubleday) (3rd edition, revised and expanded); Theodore Roethke, *Collected Poems* (Doubleday). Additional texts and readings will be assigned.

Mr. A. Hutclison.

(3-0; 3-0)

ENGL 427. (3) **American Prose and Poetry to the Early Twentieth Century**

Prose: Detailed study of Jonathan Edwards, the American transcendentalists (particularly Emerson and Thoreau), Poe's criticism. Some consideration of Irving, Parkman, Holmes, Lowell, Henry Adams.

Poetry: Detailed study of Whitman, Emily Dickinson, Frost, E. A. Robinson. Consideration of Tuckerman, Whittier and others.

Texts: *American Poetry*, ed. Karl Shapiro (Crowell, American Literary Forms Series); *Literary Criticism in America*, ed. Van Nostrand (Bobbs-Merrill, American Heritage Series); *Selections from Ralph Waldo Emerson*, ed. Whicher (Riverside); *Walden and Civil Disobedience*, ed. Paul (Riverside); *Introduction to Poe*, ed. Carlson (Scott, Foresman Key ed.); Whitman, *Leaves of Grass and Selected Prose* (MLCE); *Final Harvest: Emily Dickinson's Poems*, ed. Johnson (Little Brown).

Dr. H. F. Smith.

(3-0; 3-0)

ENGL 428. (3) **American Fiction to 1900**

A study of the development of the novel and the short story in the nineteenth century, from the beginnings (Brockden Brown & Cooper), through the Romantics (Poe, Hawthorne, Melville) to the realists (James, Stephen Crane, Norris). Particular attention will be paid to the major figures: Poe, Hawthorne, Melville, Twain and James.

Texts: Poe, selected stories; Hawthorne, selected stories; Melville, *Moby-Dick*; Twain, *Huckleberry Finn*; James, *The Portrait of a Lady*. Additional texts to be announced.

Dr. N. C. Smith.

(3-0; 3-0)

ENGL 429. (3) **Twentieth Century American Fiction**

Intensive study of the work of twentieth-century American writers, to evaluate the technical achievement in particular works and to discuss them in relation to cultural problems in American society. Two alternative sections will be offered in 1971-72. Emphasis in one section will be cultural-sociological, and in the other, critical-historical. Both sections will study the following:

Text: Sherwood Anderson, *Winesburg, Ohio*; Ernest Hemingway, *The Sun Also Rises*; F. Scott Fitzgerald, *Tender is the Night*; Ralph Ellison, *Invisible Man*; William Styron, *Lie Down in Darkness*; Bernard Malamud, *The Assistant*.

Section (a) will study, along with the major American works, the novels of four minority groups that have achieved significant expression in modern American literature: Southern, Black American, Catholic and Jewish. Representative of these groups are Faulkner, James Baldwin, Flannery O'Connor and Saul Bellow, examples of whose work will be studied in detail.

Dr. C. Doyle.

Section (b) will study the development of American prose fiction from 1900 to the present. The social and intellectual background will be considered and also changing ideas and attitudes as reflected in particular works of fiction. Detailed attention will be given to the work of Fitzgerald, Hemingway and Faulkner. The following writers will also be studied: Edith Wharton, John Steinbeck, Nathanael West, Theodore Dreiser and John Updike.

Dr. C. Partridge.

NOTE: Students will enrol *either* for Section (a) *or* for Section (b). (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.

Mr. G. McOrmond.

(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*.

Dr. V. Neufeldt.

(3-0; 3-0)

ENGL 433. (3) **Modern Period, English and Irish Literature, 1890-1914**

This course is based primarily on the works of Hardy, Housman, Butler, Wells, Galsworthy, Shaw, Wilde, Yeats, Synge and Conrad. The background of ideas and social forces as revealed through the literature and related arts of the period will receive close attention.

Texts: Butler, *Erewhon and Erewhon Revisited*; Hardy, *Jude the Obscure*; Housman, *Collected Poems*; Shaw, *Major Barbara, Man and Superman, Mrs. Warren's Profession* and *John Bull's Other Island* (in *Genius of the Irish Theatre*); Synge, *Four Plays and The Aran Islands*; Wells, *Tono-Bungay*; Wilde, *Plays, Prose Writings and Poems*; Yeats, *Collected Poems*; Galsworthy, *The Man of Property*; Conrad, *The Secret Agent*.

Dr. N. Alford.

(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**

(a) Detailed study of the poetry of Stevens, Pound, Hart Crane, the Fugitives, Berryman, Robert Lowell, as well as a reading of examples of the work of such poets as Roethke, Marianne Moore, Elizabeth Bishop and Sylvia Plath.

Texts: Wallace Stevens, *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).

Dr. Carol Johnson.

(3-0; 3-0)

(b) Close study of the work of Pound, William Carlos Williams, Wallace Stevens, leading to consideration of (i) the Whitman tradition as exemplified in Gary Snyder, Ginsberg, Ferlinghetti, Frank O'Hara; (ii) development of "open form" via Imagism, Objectivism and Objectism, in the work of e.e. cummings, H.D., Louis Zukofsky, Charles Olson, Robert Creeley, Robert Duncan.

Text: *The Voice That is Great Within Us*, ed. Hayden Carruth (Bantam).

Dr. C. Doyle.

(3-0; 3-0)

NOTE: Course (b) will run only if a sufficient number of students enrol for both courses.

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 and the development in the 20th century of the musical. 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 and will include the review of one theatre production. 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*; Bolt, *A Man for All Seasons*; Mortimer, *Lunch Hour*; 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*; Hellman, *The Little Foxes*; Miller, *A View from the Bridge*; Albee, *Who's Afraid of Virginia Woolf?*; Baldwin, *Blues for Mister Charlie*; Lerner & Loewe, *My Fair Lady*.

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); *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 in each term.

Dr. R. Lawrence.

(3-0; 3-0)

ENGL 439. (3) **Commonwealth Literature**

Three regions are designated for detailed study—New Zealand, Australia and the British West Indies. The course will concentrate on twentieth-century novels, short stories and poetry; it will attempt to discuss two factors—the essential value of the particular literary works, and cultural problems of identity and self-expression confronting both creative artists and people in the new-world 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. A brief survey of some African writing in English may be included.

NOTE: Enrolment will be limited.

Texts: The following authors will be among those studied: Katherine Mansfield, Randolph Stow, Ian Cross, Patrick White, John Mulgan, Christopher Brennan, V. S. Naipaul, Derek Walcott, Judith Wright, Wilson Harris, Kenneth Slessor, Louise Bennett, Edward Brathwaite.

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: Robert D. Stevick, *English and Its History—The Evolution of a Language*; G. L. Brook, *History of the English Language* (Norton) .

Mrs. I. Sheeter. (1-0; 1-0)

ENGL 441. (3) Old English Literature

A study of the language and major literary texts of the Anglo-Saxons.

Texts: G. L. Brook, *An Introduction to Old English*; Sweet's *Anglo-Saxon Reader in Prose and Verse* (Revised by Dorothy Whitelock); *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. T. Cleary, Dr. P. Köster. (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 thirty 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. (1½) 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. (1½) Honours Tutorial: Renaissance, minus Shakespeare**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Mrs. M. Menhenett. (3-0)

***ENGL 453. (1½) Honours Tutorial: Seventeenth Century to Milton**

Prerequisite: Honour standing in Third and Fourth years, or by permission of the Head of the Department.

Dr. B. Gooch. (3-0)

*To be offered in the first or second term, or in both terms, in accordance with the demand, as determined at Registration.

*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.

Mr. H. Summerfield. (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. F. Riddle, Dr. L. Adey. (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. C. Doyle. (3-0)

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. (1 ½) **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 or Fourth years.

Prerequisite: Honour standing in Fourth year. (2-0; 2-0)

*To be offered in the first or second term, or in both terms, in accordance with the demand, as determined at Registration.

GRADUATE COURSES AND SEMINARS

ENGL 500. (3) **Bibliography and Methods of Research and Criticism**

Dr. H. F. Smith, 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. R. 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.
- Miss 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. (Leave of absence, 1971-72.)
- Ronald R. Jeffels, C.D., B.A., B.Ed. (*Alta.*), M.A. (*Cantab.*), Associate Professor.
- Mrs. Bérangeère B. Steel, L. ès L. (*Paris*), Associate Professor.
- Mrs. 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.
- Mrs. 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.
- Miss Jennifer R. Walters, B.A. (*London*), L. ès L. (*Lille*), Ph.D. (*London*), Assistant Professor.
- Kenneth R. Prior, B.A. (*London*), Lecturer.
- Neil V. J. Thompson, B.A. (*London*), M. ès L. (*Strasbourg*), 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 B (or Linguistics 360). For those on the General Programme, Linguistics 100 section B 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: Albert Camus, *L'Étranger*; Larousse, *French-English, English-French Dictionary*; and a grammar book and 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: Jean Anouilh, *Antigone*; 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*; F. Mauriac, *Le Mystère Frontenac*, Edition de poche; a modern play to be announced; A. Lévêque, *Histoire de la Civilisation Française*.

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).

Mrs. Steel and members of the Department.

(2-2; 2-2)

**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 may 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**

(Prerequisite: French 280 (terminal), mark of C or better, or French 240 — mark of B- or better — or consent of Head of Department.)

Consists of regular short compositions based on general texts dealing with French and French-Canadian civilization, and of discussion and some major compositions based on individual texts on French and French-Canadian institutions, personalities and social problems. Four main areas will be drawn upon: French history, the arts in France, contemporary French society and French-Canadian society. The course is designed to develop, in a broad cultural context, the student's oral and written expression in French.

Texts: Brodin and Ernst, *La France et les Français*; Kenan, *Galerie de Portraits contemporains*; La Pierre, *Québec, Hier et aujourd'hui*; Langevin, *Poussière sur la Ville*.

Dr. Greene and Dr. Moreau.

(3-0; 3-0)

NOTE: A terminal course which is not open to students concentrating in French.

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)

* As many as possible of the courses marked with an asterisk will be offered in 1971-72. Before registering, students of French should consult the Head of the Department.

***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, Laclos. (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.

Texts: Lagarde et Michard, *XIX^e Siècle*; Hugo, *Hernani* (ed. Bordas); Hugo, *Ruy Blas* (ed. Bordas); Vigny, *Chatterton*; Chateaubriand, *René*; Balzac, *Eugénie Grandet*; Stendhal, *Le Rouge et le Noir*; and others to be announced.

There will be frequent written assignments. (3-0; 3-0)

FREN 412. (3) Nineteenth Century Part II

Realism, naturalism and idealism in the novel and in poetry.

(Not offered in 1971-72.) (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

(Not offered in 1971-72.) (3-0; 3-0)

FREN 416. (3) Modern French Novel

A study of the evaluation of the narrative technique from Marcel Proust to the *nouveau roman*. Representative works by Gide, Proust, Malraux, Camus, Sartre, etc.

Texts: To be announced. (3-0; 3-0)

***FREN 418. (3) French-Canadian Literature**

A survey of French literature in Canada before 1900; a study of French-Canadian literature in the twentieth century with emphasis on the novel, theatre and poetry since 1945.

Texts: Bessette, Geslin, Parent, *Histoire de la littérature canadienne-française*; Hamelin, *Le Théâtre au Canada français*; Moreau, *Anthologie du roman canadien-français*; Sylvestre, *Anthologie de la poésie canadienne-française*; selected works by Bessette, Blais, Gelin, Hébert, Hémon, Langevin, Lemelin, Roy, Thériault and others.

Monthly essays and classroom *exposés*. (3-0; 3-0)

FREN 421. (1½) Renaissance Literature

An introduction to the history of ideas in the Sixteenth Century and French Literature of the period.

Texts: Rabelais, *Gargantua*; Montaigne, *Essais*; and selected works of the Pléiade poets. (3-0; 0-0)
September-December only.

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: To be announced. 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.

Texts: von Wartburg, *Evolution et structure de la langue française*.

* As many as possible of the courses marked with an asterisk will be offered in 1971-72. Before registering, students of French should consult the Head of the Department.

Students will be expected to do some parallel reading and would be well advised to buy Kukenheim, L. *Grammaire historique de la langue française*, Vols. I and II (1967-68.)

Prof. J.-P. Vinay.

(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.

(Not offered in 1971-72.)

(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.

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 Wikramatileke, B.A. (*Ceylon*), M.A. (*Clark*), Ph.D. (*London*), Professor.
- Charles H. Howatson, B.A., M.A. (*Brit. Col.*), Associate 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.
- 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.
- Colin K. Campbell, M.A. (*Aberdeen*), M.A. (*Brit. Col.*), Lecturer.
- Stanton E. Tuller, B.A. (*Ore.*), M.A. (*Calif., Los Angeles*), Lecturer.
- 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 300 in their second year, if they so wish. Moderate fees will be charged students in Geography 300, 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 (marked R).

Major — 24 units: 101; 203; 3 units chosen from 201, 204 and 205; 300; and 12 units of courses numbered above 300, 3 units of which selection must be a regional course (marked R).

Honours — 33 units minimum: 101; 203; 3 units chosen from 201, 204 and 205; 300; 499; and 18 other units in Geography courses numbered above 300 or in fields approved by 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. These requirements are under review and may be altered before registration for 1971-72.

General — 15 units: 101; 203; and 9 units of courses chosen from 300, 302, 306, 312, 320, 350, 351, 352, 353, 354, 401, 402, 403, 441, 450 and 451.

Major — 24 units: 101, 203; 3 units chosen from 201, 204 and 205; 300; 12 units of courses chosen from 302, 306, 312, 320, 350, 351, 352, 353, 354, 401, 402, 403, 441, 450 and 451.

Honours — 33 units minimum: 101; 203; 3 units chosen from 201, 204 and 205; 300; 499; and 18 other units in Geography courses numbered above 300 or in fields approved by 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 and 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.

Mr. Tuller, Dr. Foster

(2-2; 2-2)

GEOG 204. (3) (R) **Geography of Canada**

The course deals with the geography of Canada both systematically and regionally. Among the topics treated systematically are physiography, climate, vegetation, soils, population characteristics, transportation networks, economic development and metropolitan dominance. The character of regions is emphasized according to the following classification: Atlantic region, southern Quebec, southern Ontario, Prairie region, Canadian Cordillera, Subarctic and Arctic.

Dr. Forward.

(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. Porteous, Dr. Farrell, Dr. Wikkramatileke.

(3-0; 3-0)

DEPARTMENT OF GEOGRAPHY — UNDERGRADUATE COURSE STRUCTURE

First Year	101 (Introduction to Geography)
Second Year	203 (Physical) and 201 (Economic) or 204 (Canada) or 205 (Cultural)
Third and Fourth Years	Techniques & Methods 300 (Research Methods)
Economic and Cultural	Resources 350 (Introduction to Resources)
307 (Historical)	Physical *302 (Climatology)
311 (Economic & Cultural Change)	*306 (Biogeography) *312 (Geomorphology — formerly 412) *320 (Hydrology)
	*351 (Applied Climatology)
	*352 (Biospheric Resources)
	*353 (Hydrologic Resources)
	*354 (Lithospheric Resources)
	450 (Decision-Making Res. Man.)
	451 (Water Resources)
	442 (Legal & Admin. Aspects of Resources)
	401 (Advanced Cartography)
	402 (Quantitative Methods)
	*403 (Automated Cartography)
	445 (History & Nature of Geog.)
	490 (Directed Studies)
	499 (Honours Seminar & Essay)
	440 (Seminar Urban Geog. Canada)
	*444 (Urban Trans. & Land Use)
	*446 (Regional Dev. & Planning)
	*447 (Urbanization of Dev. Countries)
	448 (Urban Social)
	408 (Europe)
	410 (W. Canada)
	461 (W. United States)
	462 (Soviet Union)
	463 (S.E. Asia — formerly 308)
	464 (China)
	465 (Japan)
	466 (Australia)
	467 (South Pacific)
	441 (Seminar in Physical Geog.)

NOTE: All courses are 3 units except those marked with an asterisk, which are 1½ units.

GEOG 300. (3) Research Methods in Geography

The collection, analysis, and presentation of geographic data. Topics included are: field data, collection methods, documentary data services, elementary photo interpretation, descriptive and simple inductive statistics, and cartography. Field trips and field work will be an integral part of the course.

(2-2; 2-2)

GEOG 302. (1 ½) 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.

Prerequisite: Geography 203 or permission.

Mr. Tuller.

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

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 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 biogeographic methodology will be presented. Prerequisite: Geography 203 or permission.

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

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 312 (formerly 412). (1 ½) Geomorphology

An analysis of the distribution and genesis of landforms. Aspects of landscape evolution such as fluvial processes and mass movement will be emphasized.

Prerequisite: Geography 203 or permission. (Not open to students who have taken Geography 412.)

Dr. Foster.

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

GEOG 320. (1 ½) 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 353.

Dr. Foster.

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

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; 0-0)

GEOG 341. (1 ½) 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; 0-0)

GEOG 342. (1 ½) 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. (1 ½) 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 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 351. (1 1/2) Applied Climatology

A study of the application of physical principles to practical problems in micro-climatology and the reciprocal interaction between climate and man's activities. Discussion topics will include; effects of different surface types on the micro-climate, bioclimatology and agricultural climatology, climatic change, urban climatology and man's intentional and unintentional modification of the climate on both large and small scales. Prerequisite: Geography 302 or permission. (Not open to students who have taken Geography 302 before 1970-71).

Mr. Tuller.

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

GEOG 352. (1 1/2) 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. Prerequisite: Geography 306 or Biology 306. (Not open to students who have taken Geography 306 before 1970-71).

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

GEOG 353. (1 1/2) Hydrologic Resources

Attention will be paid in this course to the impact of various cultural activities, such as vegetation modification and water transfer projects, upon the hydrology of the areas influenced. The influence of hydrology on cultures will be reviewed, with examples such as flooding and water quality being emphasized. (Not open to students who have taken Geography 320 before 1970-71).

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

GEOG 354. (1 1/2) Lithospheric Resources

A detailed analysis of the resource aspects of the lithosphere, including mineral genesis and distribution, fluvial and marine processes, accelerated soil erosion and mass movement phenomena. Special emphasis is placed upon the modification by man of such physical subcycles.

Prerequisite: Geography 312 (412 in 1970-71) or permission. (Not open to students who have taken Geography 412 before 1970-71).

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

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 geographic 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.

(3-0; 3-0)

GEOG 401. (1 1/2) Advanced Cartography

This course is intended to add to the cartographic skills and knowledge taught in Geography 300. 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 300.

Dr. Micklewright.

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

GEOG 402. (3) Quantitative Methods In Geography

Selected quantitative techniques and their application to areal analysis and specific geographic problems.

Dr. Murphy and Dr. Wood.

(1-2; 1-2)

GEOG 403. (1 ½) Automated Cartography

This course is intended to acquaint the student with possible graphic applications of computers to the field of geography. It includes an investigation of existing hardware-software combinations, the use of existing packaged programmes, and the writing of new programmes. Special emphasis is placed upon the construction of maps and diagrams using the two media available at the Computing Centre: the system printer and an ink-line plotter. Prerequisite: Mathematics 170 or equivalent. (not open to students who have taken Geography 401 before 1970-71).

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

GEOG 408. (3) (R) 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) (R) 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 440. (1 ½) 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 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 302 and 351 or permission.

Mr. 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 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 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 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)

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) Geography of Water Resources

A study of man's influence on hydrologic systems and the influence of such systems upon areal aspects of human activities. Topics will be drawn from the following problems: irrigation, urban water supply, floods, water quality, recreation, weather and climate modification, large scale water transfers and storage, and the contribution of water development to economic and social change. Prerequisites: Geography 350, 311 or permission.

Dr. Sewell. (3-0; 3-0)

GEOG 461. (3) (R) Geography of the Western United States

An introduction to the regional character of the American West. Discussions of such matters as mining, irrigation and urban development will be focussed on the mutual relations of the region's resources, its economic and cultural development and the vital role of transportation. Special attention will be given to changing perceptions of the region's nature, especially as shown in fictional and autobiographical accounts.

(3-0; 3-0)

GEOG 462. (3) (R) 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) (R) 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) (R) 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) (R) 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) (R) 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) (R) **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)

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.

(0-0; 0-0)

GEOG 499. (3) **Honours Seminar and Essay**

Honours students attend the seminar during Third and Fourth years and submit the essay at the end of the Fourth year.

GEOLOGY

GEOG 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.

(2-2; 2-2)

GRADUATE COURSES

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

GEOG 500 (1 ½) **Graduate Colloquium in Geography**

GEOG 501. (3) **Graduate Seminar in Physical Geography**

GEOG 502. (3) **Graduate Seminar in Human Geography**

GEOG 503. (3) **Graduate Seminar in Regional Geography**

GEOG 504. (3) **Graduate Seminar in the History and Nature of Geography**

GEOG 505. (1-6) **Directed Studies in Geography**

GEOG 506. (1 ½) **Field Course in Geography**

GEOG 507. (3) **Graduate Seminar in Quantitative Methods In Geography**

GEOG 540. (3) **Graduate Seminar in Urban Problems**

GEOG 550. (3) **Graduate Seminar in Resources**

GEOG 561. (3) **Graduate Seminar in Research Problems in the Geography of British Columbia**

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*), Associate 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. Hainberger, 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 1971-72.)

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 260 and 290 (or equivalent); nine units of German courses chosen from 302 and those numbered 400 or above.

Major—German 100 or 140 (or equivalent); German 260 and 290 (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 260 and 290 (or equivalent); German 302, 410 and at least fifteen units of courses numbered 400 or above. German 404 is strongly recommended.

COURSES

Students from secondary schools with credit from German IX, X, XI (Beginners), will register for German 140; from German XI (third year, with a grade of "B" or better), German XII, or German 90, will register for German 240, or 260/290; from German 110/120 (with a grade of "B" or better) for 300-400 courses.

First Year students fluent in German who wish to enrol in a German course will be required to register for German 240, 260, 290 or 302; or for a course numbered

400 or above dependent upon ability; those in Second Year will register for a course numbered 400 or above.

GERM 100. [3] Beginners' German

Essential grammar, spoken and written drill; elementary readings in German prose; selected poetry. (For students who have had no German studies.)

Texts: Kurtz and Politzer, *German* (rev. ed.); Hagboldt, *Allerlei*.

Members of the Department.

NB Credit cannot be granted for both German 100 and German 140. (3-1; 3-1)

GERM 140. [3] Elementary German

Survey of grammar; readings in German literature; spoken and written drill. (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*.

Members of the Department.

(3-1; 3-1)

GERM 240. [3] Intermediate German

Grammar, composition, and literary readings selected from a broad survey of German literature.

Texts: MacLean, Kriegel, Hartmanshenn, *2000 Jahre deutsches Leben*; Fleissner & Fleissner, *Deutsches Literaturlesebuch*; Russon, *Complete German Course*.

Members of the Department.

(3-1; 3-1)

N.B.: Credit cannot be granted for both German 240 and German 260.

GERM 260. [3] Introduction to German Literature

Short review of grammar; composition; literary readings (emphasis on modern period). (Open to students with a high standing in German 100 or 140, or equivalent).

Texts: Richinond & Kirby, *Auslese*; Röseler, *German in Review* (4th edn.); Frisch, *Biedermann und die Brandstifter*; Dürrenmatt, *Der Besuch der alten Dame*.

Dr. Riedel.

(3-1; 3-1)

GERM 290. [3] Intermediate written and spoken German

(Open to students with a high standing in German 100 or 140, or equivalent.)

Texts: Müller, *Deutsch (Erstes Buch, Zweiter Teil)*. Reader to be announced.

Dr. Picozzi.

(3-1; 3-1)

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 training in oral and written composition, style analysis and discussions.

Texts: Sutcliffe, *German Translation and Composition*; Steinhauer, *Stilvolles Deutsch*.

Dr. Hartmanshenn.

(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*; Hessc, *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: Greenfield, *German Grammar*; 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**

(Emphasis on the Drama.)

Representative works of Kleist, Grabbe, Büchner, Grillparzer, Nestroy, Hebbel, Hauptmann, Fontane and Raabe.

(Not offered in 1971-72).

(3-0; 3-0)

GERM 401. (3) **Modern German Literature (1880-1945)**

Representative works of Hauptmann, Schnitzler, Hofmannsthal, George, Rilke, Hesse, Wedckind, Kaiser, Toller, Werfel, T. Mann, Bergengruen, Kafka, Brecht.

(Not offered in 1971-72).

(3-0; 3-0)

GERM 402. (3) **Contemporary German Literature (1945 to the present)**

Texts: Brecht, *Der gute Mensch von Sezuan*; Borchert, *Draussen vor der Tür*; Frisch, *Andorra*; Dürrenmatt, *Die Physiker*; Hochhuth, *Der Stellvertreter*; Hochwälder, *Das heilige Experiment*; Weiss, *Marat/Sade*; Dorst, *Toller*; Elizabeth W. Trahan, (ed.), *Gruppe 47. Ein Querschnitt*; and others to be announced.

Dr. Riedel.

(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.

Dr. Hartmanshenn.

(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*. Supplementary reading *Penguin Book of German Verse*; *Twentieth-Century German Verse* (Penguin Edn.).

Dr. MacLean.

(3-0; 3-0)

GERM 410. (3) **The Classical Period**

Literature of the eighteenth and early nineteenth century with emphasis on the drama 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*; Goethe, *Aus meinem Leben*; Friedenthal, *Goethe, sein Leben und seine Zeit*.

Dr. Hadley.

(3-0; 3-0)

GERM 412. (3) **Baroque to Sturm und Drang**

Readings from works of the Baroque period, the Era of Enlightenment and the pre-romantic Storm and Stress movement.

Texts: H. Cysarz (ed.), *Deutsche Barocklyrik*; Gryphius, *Catharina von Georgien*; Lohenstein, *Cleopatra*; Grimmelshausen, *Der abenteuerliche Simplicissimus* (Auswahl); Lessing, *Kritik und Dramaturgie*; Lessing, *Emilia Galotti*; Lenz, *Der Hofmeister*; Doerksen, *Sturm und Drang*.

(Not offered in 1971-72).

(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. Picozzi.

(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.

Jerrold L. Mordaunt, B.A., M.A. (*Utah*), Ph.D. (*Stanford*), Assistant Professor (Spanish).

Miss Gillian M. Briggs, B.A. (*London*), Lecturer (Spanish).

Ross E. Butler, Jr., B.A., M.A. (*Ore.*), Lecturer (Spanish and Portuguese).

Miss María Esformes, B.A. (*Portland St.*), M.A. (*Wash.*), 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).

Miss Caroline Monahan, B.A., M.A. (*Brit. Col.*), Lecturer (Spanish). (Leave of absence 1971-72).

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. Crow and Dudley (eds.), *El cuento*.

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: García Lorca, *Bodas de Sangre*; Azuela, *Los de abajo*; Blecua, *Floresta de lírica española*; Sender, *Réquiem por un campesino español*.

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: Tarr and Centeno, *Shorter Spanish — Review Grammar and Composition*; Other text to be announced.

Mr. McDougall.

(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.

Miss Esformes.

(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.

(Not offered in 1971-72).

(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 in 1971-72).

(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).

Mr. Butler. (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.

(Not offered in 1971-72). (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*.

Mr. Flores. (3-0; 3-0)

SPAN 406. (3) **Medieval Literature**

Study of Spanish language and literature from 1140 to 1500.

Texts: To be announced.

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*; Zorilla, *Don Juan Tenorio*; Galdós, *Fortunata y Jacinta*.

Dr. Cabañas. (3-0; 3-0)

SPAN 412. (3) **Twentieth Century Spanish Literature**

A study of the main trends in 20th century Poetry, Drama and Prose with particular reference to texts detailed below.

Students will be required to write essays on the prescribed texts.

(Not offered in 1971-72). (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*.

Mr. McDougall. (3-0; 3-0)

SPAN 430. (3) **Directed Reading Course**

For honours and major students. Emphasis on fifteenth and sixteenth century poetry. Required reading: the Romancero and the main works of Santillana, Manrique, Mena, Garcilaso, Fray Luis de León, Fernando de Herrera, etc.

(Not offered in 1971-72). (3-0; 3-0)

SPAN 490. (3) **Honours Seminar, or Graduating Essay**

(Not offered in 1971-72). (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*.

Mr. 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. (Leave of absence, 1971-72.)
- Sydney W. Jackinan, B.S., M.A. (*Wash.*), A.M., Ph.D. (*Harvard*), F.S.A., F.R.Hist.S., Professor and Acting Head of the Department.
- Sydney G. Pettit, M.A. (*Brit. Col.*), Professor.
- Reginald H. Roy, B.A., M.A. (*Brit. Col.*), Ph.D. (*Wash.*), F.R.Hist.S., Professor of Military History and Strategic Studies.
- Alfred E. Loft, B.A. (*Brit. Col.*), Associate Professor.
- W. George Shelton, B.A., M.A. (*Man.*), Ph.D. (*Pa.*), Associate Professor.
- Brian W. Dippie, B.A. (*Alta.*), M.A. (*Wyoming*), Ph.D. (*Texas*), Assistant Professor.
- Miss Charlotte S. M. Girard, B.A. (*Brit. Col.*), M.A., Ph.D. (*Bryn Mawr*), Assistant Professor. (Leave of absence, 1971-72.)
- Jan Kupp, B.A., M.A., Ph.D. (*Man.*), Assistant Professor.
- William M. Leary, B.A. (*Wayne St.*), M.A., Ph.D. (*Princeton*), 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.
- Miss Patricia E. Roy, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*Brit. Col.*), Assistant Professor.
- Donald L. Senese, A.B., Ph.D. (*Harvard*), Assistant Professor.
- David A. T. Stafford, B.A., M.A. (*Cantab.*), Ph.D. (*London*), Assistant Professor.
- Wesley T. Wooley, A.B. (*Ill.*), A.M., (*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.
- Christopher M. Rowe, B.A. (*Liverpool*), Lecturer.
- Mrs. Stella Higgins, B.A. (*U. of Vic.*), Part-time 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 with-

out 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 departmental 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

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 1971-72, the course will consist of a series of lectures and tutorials by Professors Leary, Rowe, Senese, Stafford, and Wooley, and will feature a comparative approach to the intellectual, social, and political alternatives open to modern man in North America, Europe, the Soviet Union, and the Third World.

(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. Leary. (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. (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. Bridgmen, Mr. Dewar, Mr. Forbes, Dr. Kupp, Dr. P. E. Roy, Mr. Loft.

(3-0; 3-0)

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.

Mr. Loft, Dr. Senese, Dr. Shelton, Dr. Stafford. (3-0; 3-0)

HIST 242 (formerly 101). (3) **Main Currents in Twentieth Century History**

This course offers a background for contemporary world problems. Topics include the genesis of the First World War, 1871-1914; the War, 1914-1918; the Settlement, 1919-1929; the breakdown of the Settlement, 1929-1939; the Second World War, 1939-1945; and the Cold War.

Mrs. Higgins, Mr. Loft, Mr. Pettit. (3-0; 3-0)

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.

Mr. Rowe. (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, with particular emphasis on China and Japan. (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.

(To be offered 1972-73.)

(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 1/2) **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.

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

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.

Dr. Dippie.

(3-0; 3-0)

HIST 315 (formerly 430). (3) **American Diplomatic History**

A study of American foreign relations with emphasis on the twentieth century and the history of American diplomatic thought.

Dr. Wooley.

(3-0; 3-0)

HIST 319. (1 1/2 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. For 1971-72, the seminar will examine the social, intellectual, and economic origins of the reform tradition in American politics from the Populist movement to the Great Society.

Dr. Leary.

1971-72: 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 will 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. (1½ 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. For 1971-72, the seminar will involve a comparative investigation of the developments of society, politics, and republican ideas in Britain and the thirteen colonies from about 1640 to 1800.

Dr. Money. 1971-72: January-April only. (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.

Mr. Forbes. (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 1971-72.) (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.

Dr. P. E. Roy. (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. (1½ 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 1971-72, 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. (1½ 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. For 1971-72, the following topics are proposed:

HIST 359A. (1½) A research seminar in the history of British Columbia, with particular emphasis on the post-Confederation period.

Dr. P. E. Roy. September-December only. (3-0; 0-0)

HIST 359B. (1½) A study of selected events in the formative years of New France and their relationship to the present situation of French Canada.

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

HIST 359C. (1½) A seminar devoted to the study of Canadian historiography.

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

NOTE: History 494 may also be counted as a course in Canadian history.

European

HIST 360. (1½) **The Renaissance**

A study of the conditions, ideas, and men involved in the intellectual quickening that ushered in the early modern period of European history.

(To be offered 1972-73.) September-December only. (3-0; 0-0)

HIST 361. (1½) **The Reformation**

A history of the men, and the political and religious factors involved in the upheavals of the Protestant and Roman Catholic reformations.

(To be offered 1972-73.) 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.

Dr. McCue. (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.

Dr. Shelton. (3-0; 3-0)

HIST 366. (3) **Europe in the Twentieth Century**

An examination of the changing nature of the relations between the 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.

(To be offered 1972-73.) (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.

(To be offered 1972-73.) (3-0; 3-0)

HIST 372. (3) **Modern Germany from 1789**

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 1971-72, the seminar will examine topics in the social, political, and economic thought of Europe in the eighteenth and nineteenth centuries.

Dr. Shelton. 1971-72: September-December only. (3-0) or (3-0; 3-0)

HIST 390 (formerly 339). (3) **War in the Modern World, 1755 to the Present**

A survey of European military history from the Seven Years' War to the present day. It covers the change from the limited warfare of the early eighteenth century to the unlimited warfare of the twentieth century. Emphasis is placed on the causes of war, the impact of new inventions on tactics and strategy, and the social, political, and economic results of wars on society up to and including the atomic age.

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. Lectures and reading assignments are closely integrated. Students are required to sit examinations at Christmas and April. May be taken by students in their second year by permission of instructor.

Mr. Pettit. (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.
(To be offered 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.
(May not be offered 1971-72.) (3-0; 3-0)
- HIST 404. (1½) **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.
Mr. Rowe. September-December only. (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.
(To be offered 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.
Mr. Rowe. (3-0; 3-0)
- HIST 409. (1½) **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.
Mr. Rowe. January-April only. (0-0; 3-0)
- HIST 413. (3) **Modern China**
An intensive study of developments in China during the nineteenth and twentieth centuries. (3-0; 3-0)
- HIST 414. (3) **Modern Japan**
An intensive study of development in Japan since the Meiji Restoration. (3-0; 3-0)
- HIST 416. (1½ 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.
(May not be offered 1971-72.) (3-0) or (3-0; 3-0)

Specialized Courses

- HIST 490. (1½ or 3) **Directed Reading**
Students must obtain the consent of the Department before registering.

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.

(Not offered 1971-72.)

(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.

(To be offered 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) **Seminar in American History**

HIST 520 (formerly 501). (1 ½) **Seminar in British History**

HIST 530 (formerly 526). (1 ½) **Seminar in Canadian History**

HIST 531 (formerly 503). (1 ½) **Seminar in Western Canadian History**

HIST 532 (formerly 539). (1 ½ or 3) **Seminar in Canadian Defence Policy**

HIST 540 (formerly 505). (1 ½) **Seminar in European History**

HIST 580. (1 ½) **Seminar in Specialized Topics**

HIST 582. (1 ½) **Seminar in Historiography**

HIST 584. (1 ½) **Seminar in Intellectual History**

HIST 585. (1 ½) **Seminar in Diplomatic History**

HIST 590. (1 ½ or 3) **Directed Reading**

HIST 599. (Credit to be determined, but normally 6 units) **M.A. Thesis**

All candidates who have completed most of their research and are ready to write a thesis are required to submit a portion of their work in a seminar for thesis writers in which their supervisor and other participants in the seminar will have an opportunity to comment upon their work.

LIBERAL ARTS

Course Chairman, 1971-72: 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 critically some of man's greatest writings and to explore from varying points of view the reasons why these works are considered significant. Faculty members from at least five different departments serve on the course committee and lead discussion groups. Representatives from other disciplines contribute individual lectures during the year.

Liberal Arts 305 carries elective credit in any degree programme. Certain departments accept the course towards a major; students should consult their own departments for advice.

Prerequisite: Completion of at least first year with a grade point average of 3.5, or permission of the course chairman.

(1½-1½; 1½-1½)

DEPARTMENT OF LINGUISTICS

Jean-Paul Vinay, L. ès L. (*Paris*), D.E.S. (*Paris*), M.A. (*London*), Agrégé de l'Université de France, Officier d'Académie, F.R.S.C., Professor, and Head of the Department.

M. H. Scargill, B.A., Ph.D. (*Leeds*), 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.

James E. Hoard, M.A., Ph.D. (*Wash.*), 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 the sounds of language in general, 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
<p><i>Year</i></p> <p>I. Linguistics 100 English 110 or 120 A language Elective (Philosophy 202 recommended) Elective (A Science course recommended)</p> <p>II. Linguistics 250 English 200 The language begun in the first year Elective (If Linguistics 100 has not been taken, it must be taken here.)</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>IV. Linguistics 392 or elective Linguistics 430 A Senior Linguistics Course English 440 A senior English course</p>	<p>Linguistics 100 Mathematics 100 and 101, or 102 and 151 English Philosophy 202 A language</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>Linguistics 370 recommended; an- other senior linguistics course allowed. Linguistics 380 recommended; an- other 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>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 and B (English), C (Romance), D (Germanic), E (Slavonic), F (Far Eastern).

The final grade will be based on a substantial number of assignments completed in class and outside.

Texts: To be announced.

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*.

Drs. O'Grady and Hoard. (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: Ling. 100 or equivalent or permission of the Department.

Texts: Jacobs and Rosenbaum, *English Transformational Grammar*; Bach and Harms (Ed.), *Universals in Linguistic Theory*.

Dr. Hoard. (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*.

(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.

(Not offered 1971-72). (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*.

(Not offered 1971-72). (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.

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.

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.

Texts for Section 1: (Reibel and Schane) *Modern Studies in English*; 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*.

Dr. Hess. (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.

(Not offered 1971-72).

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*.

Dr. Warkentyne. 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: Nyanguinarda.
 Prerequisites: Linguistics 100 and 250.
 Texts will be distributed in class.
 Dr. O'Grady. September-December only. (3-0; 0-0)
- LING 451 (formerly 350). (1 ½) **Seminar in Languages**
 An elementary analysis of a language. Second term: Slovenian.
 Prerequisites: Linguistics 100 and 250.
 Text: Jozе Toporisc, *Zakaj ne po Slovensko*.
 Dr. Kess. 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 Department.
 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.
 Text: To be announced. 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.
 (Offered alternate years. Not offered 1971-72).
 January-April only. (0-0; 3-0)
- LING 499. (3) **Honours Essay**
 An essay required of honours students in the fourth year.
- NOTE: Education 490, *Principles of Teaching Second Languages*, is open to students in the Faculty of Arts and Science. It is suggested that advanced linguistics students might consider taking Education 754, *Curriculum and Instruction — Second Language*.

GRADUATE COURSES

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

- LING 501. (3) **Seminar in Canadian English** (3-0; 3-0)
- LING 502. (3) **Seminar in Descriptive Linguistics** (3-0; 3-0)
- LING 503. (3) **Seminar in Grammatical Theory** (3-0; 3-0)
- LING 504. (3) **Seminar in Machine Translation** (3-0; 3-0)
- LING 570. (Psychology 570) (1-3) **Psycholinguistics** (3-0; 3-0)
- LING 599. (Credit to be determined) **Thesis**

DEPARTMENT OF MATHEMATICS

- O. Phoebe Noble, B.A. (*Brit. Col.*), Associate Professor, Acting Head of Department.
Sudhish G. Ghurye, B.Sc., M.Sc. (*Bombay*), Ph.D. (*N. Carolina*), Professor.
Stephen A. Jennings, B.A., M.A., Ph.D. (*Tor.*), Professor.
Ian Barrodale, B.Sc. (*Wales*), M.A. (*Brit. Col.*), Ph.D. (*Liverpool*), Associate Professor. (On leave 1971-72).
Fernand E. Deloume, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*U.S.C.*), P.Eng. (*Brit. Col.*), Associate Professor.
William R. Gordon, B.A., M.A. (*Brit. Col.*), Ph.D. (*Calif., Santa Barbara*), Associate Professor.
Lowell A. Hinrichs, M.A., Ph.D. (*Ore.*), Associate Professor.
Mrs. D. Elizabeth Kennedy, M.A. (*Brit. Col.*), Associate Professor.
Walter P. Kotorynski, B.A. (*West. Ont.*), M.A., Ph.D. (*Tor.*), Associate Professor.
Robert E. Odeh, M.S., Ph.D. (*Carnegie Inst. of Tech.*), 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.*), D.Phil. (*London*), Assistant Professor.
Stanley R. Clark, B.A.Sc. (*Brit. Col.*), M.Sc. (*Aberdeen*), Ph.D. (*Manchester*), Assistant Professor.
Ernest J. Cockayne, M.A. (*Oxon.*), M.Sc. (*McGill*), Ph.D. (*Brit. Col.*), Assistant Professor.
Roger R. Davidson, B.Sc. (*Queen's*), M.A. (*Tor.*), Ph.D. (*Florida*), Assistant Professor. (On leave 1971-72).
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.
David J. Leeming, B.Sc. (*Brit. Col. - Vic. Coll.*), M.A. (*Ore.*), Ph.D. (*Alta.*), Assistant Professor.
Robert A. MacLeod, B.Sc. (*Alta.*), M.S. (*Cal. Tech.*), Ph.D. (*Alta.*), 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. (*Colo.*), M.S., Ph.D. (*Wash.*), 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.*), Assistant Professor.
Pauline van den Driessche, B.Sc., M.Sc., (*Imp. Coll.*), D.I.C., Ph.D. (*Wales*), Assistant Professor.
Mrs. Flora Baartz, B.Sc., M.Sc. (*Ore.*), Part-time Lecturer.
Mrs. Zulette Gordon, B.A. (*Brit. Col.*), M.A., C.Phil. (*Calif.*), Part-time Lecturer.
Mrs. Jean Sargent, B.A. (*Brit. Col.*), Ph.D. (*Tor.*), Part-time Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

Under the requirements of either the B.A. or B.Sc. degrees, students may proceed to Honours or a Major in Mathematics or may take a concentration in the General course.

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 chosen in consultation with the Department.

Students wishing to emphasize computing science in their major must, in addition to the above, take Mathematics 170, 171, 271 and 272 together with 349 and three units chosen from 370, 371, 372, 448, 449, 470, 471, 472.

Honours — (a) Mathematics 100 and 101 (or 130); (b) Mathematics 110 and 210 (or 232); (c) Mathematics 200 and 201 (or 230); (d) Mathematics 315, 325, 331, 333, 335 and must complete at least one of the following emphases.

- (i) Pure Mathematics emphasis — Mathematics 433, 435, 441 and 465.
- (ii) Applied Mathematics emphasis — Mathematics 435, 445 and 6 additional units of Mathematics chosen in consultation with the Department.
- (iii) Probability and Statistics emphasis — Mathematics 435, 441, 443 and 3 additional units of Mathematics chosen in consultation with the Department.
- (iv) Computing Science emphasis — Mathematics 349, 449; 3 units chosen from Mathematics 448, 470, 471, 472; 3 additional units of Mathematics chosen in consultation with the Department.
- (v) Twelve units of Mathematics chosen in consultation with the Department. At least 9 of the 12 units must be chosen from courses numbered 400 or higher.

In general, students will be admitted into the third year of the Honours Programme only if they have clear standing, a second class average or higher in at least 15 units in second year and have obtained a grade of B or higher in each of the Mathematics courses taken in first and second year. Students will be permitted to enrol in the third year of the Honours Programme only if they have the consent of the Department.

NOTE 1. All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.

NOTE 2: Any student who demonstrates to the Department that he has mastered the material of a course may be granted advance placement.

NOTE 3: Students wishing to enrol in Mathematics 100, 102, 110 or 130 who have no credit for Mathematics 12 (or its equivalent) must enrol in Mathematics 012 during the fall term.

NOTE 4: (a) Students who have obtained credit for Mathematics 113 or 120 (taken in Grade 13, at the University of British Columbia or at this university) should consult the Department for placement and may be required to take Mathematics 101.

- (b) Students from outside British Columbia must consult the Department for placement before enrolling for any Mathematics course.
- (c) Transfer students from Junior Colleges will be given appropriate credit and should consult the Department before enrolling for any Mathematics course.

NOTE 5. Third or fourth year students with clear standing and a second class average or higher in at least 15 units in Second Year and who have B+ or higher in each of Mathematics 201 (or 230) and 210 (or 232) may, with the permission of the Department and of the instructors concerned, register for one or more of Mathematics 331, 333 and 335. Second year students who have obtained high standing in Mathematics 101 (or 130) and 210 (or 232) may be permitted to enrol in Mathematics 315 and 333 with the consent of the Department.

NOTE 6. Students who do not possess the listed prerequisites for a course may, with the permission of the instructor and of the Department, be permitted to enrol for the course. In particular, second year students with a grade of D in the prerequisite first year course will normally be permitted to enrol for second year Mathematics courses only if they have a grade point average of 2.0 or higher.

NOTE 7. Students who have completed each of Mathematics 101 and 210 with a grade of C+ or better in their first year may, with permission of the Department, enrol for any of the following courses in their second year: Mathematics 310, 332, 337, 339 (provided their grade in Mathematics 210 is B- or higher), 340, 343.

REQUIREMENTS IN THE DEPARTMENT OF MATHEMATICS

GENERAL

- (a) Mathematics 100, 101 (or 130)
- (b) Mathematics 110, 210 (or 232)
- (c) Mathematics 200, 201 (or 230)
- (d) 9 units of Mathematics in courses numbered 300 or higher

MAJOR

- (a) Mathematics 100, 101 (or 130)
- (b) Mathematics 110, 210 (or 232)
- (c) Mathematics 200, 201 (or 230)
- (d) Mathematics 330 or 331
Mathematics 332 or 333
- (e) 9 additional units of Mathematics in courses numbered 300 or higher

NOTE: Students wishing to take a major in Mathematics with an emphasis in Computing Science must take

- (a) Mathematics 100, 101 (or 130)
- (b) Mathematics 110, 210 (or 232)
- (c) Mathematics 170 and 171
- (d) Mathematics 200, 201 (or 230)
- (e) Mathematics 271 and 272
- (f) Mathematics 330 or 331
Mathematics 332 or 333
- (g) Mathematics 349
- (h) 3 units chosen from 370, 371, 372, 448, 449, 470 471, 472
- (i) 3 additional units of Mathematics in courses numbered 300 or higher

HONOURS

- (a) Mathematics 100, 101 (or 130)
- (b) Mathematics 110, 210 (or 232)
- (c) Mathematics 200, 201 (or 230)
- (d) Mathematics 315
Mathematics 325
Mathematics 331
Mathematics 333
Mathematics 335
- (e) 12 additional units of Mathematics chosen to complete at least one of the following emphases
 - (i) Pure Mathematics
 - (ii) Applied Mathematics
 - (iii) Probability and Statistics
 - (iv) Computing Science
 - (v) Department approved option

COURSES

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

MATH 012. (no credit) **Pre-Calculus Mathematics**

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. (1 ½) **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. (1 ½) **Calculus II**

Techniques of integration, applications of integration, Taylor's formula; infinite series.

Prerequisite: Mathematics 100 or Mathematics 113 (B.C.).

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

MATH 102 (formerly one-half of 140). (1 ½) **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. (1 ½) **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). (1 ½) **Finite Mathematics for Social Science Students**

Sets, logic, combinatorics, 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.

(3-0; 3-0)

MATH 170. (1 ½) **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 360/44.

Prerequisite: Mathematics 12 or its equivalent.

Text: *Fortran IV with Watfor and Watfiv* by Cress, Dirksen and Graham Prentice-Hall (1970).

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.

Text: *Elementary Computer Applications* by Barrodale, Ehle and Roberts. John Wiley (1971).

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

MATH 180 (formerly 150). (3) General Mathematics

An intuitive introduction to calculus, elementary matrix algebra and probability. Primarily for Social Science students.

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 I, II

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), or see Notes 2, 4, 6 above.

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

MATH 201. (1½) Calculus III

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 212. (1½) Introductory Algebra

This course is designed to acquaint the student with some notions which are fundamental to further work in Mathematics. Topics covered will include: Mathematical induction; elementary set theory; relations and functions; cardinality; permutations; convex sets; linear functions and linear programming; elementary inequalities; divisibility theory of the integers and of polynomials; the solution of polynomial equations.

Prerequisite: Mathematics 110.

(Not offered in 1971-72).

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). See notes 2, 4, 6 above.

Corequisite: Mathematics 232. (3-0; 3-0)

MATH 231. (3) Second Year Calculus

Calculus of functions of several variables with applications to the physical sciences, infinite series, introduction to differential equations, vectors.

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 235. (1½) Introduction to real analysis

Primarily for honours students.

An introduction to the topology of the real line. Properties of real functions, continuity, Riemann integrability. Differential and integral operators. Introduction to measure.

Prerequisite: Mathematics 101 and 110 or Mathematics 200. If credit for Mathematics 200 has not been obtained. Mathematics 235 and Mathematics 200 must be taken concurrently.

(Not offered in 1971-72).

MATH 240. (3) Mathematics for Social Science Students II

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 271. (1½) Computer Fundamentals

This is the final course of the introductory sequence in Computing Science (M. 170, M. 171, M. 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 360/44.

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. See notes 2, 4, 6 above.

- Texts: 1. *Computers* by Phillips and Taylor, Barnes and Noble Inc. (1969).
2. *UVIC-70* Mimeographed notes.

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 360/44 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.

Text: *Assembler Language Programming: The IBM System/360* by Struble, Addison-Wesley (1969).

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 general, major or honours degrees. (3-0; 3-0)

MATH 310. (1½) Further topics in Linear Algebra

Topics in linear algebra including eigenvalues, eigenvectors and inner product spaces.

Prerequisite: Mathematics 210.

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

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 (see note 5 above).

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

MATH 323. (3) Differential equations and their Applications to the Physical Sciences

Ordinary and partial differential equations.

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) 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 (see note 5 above).

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

MATH 330. (3) Third Year Calculus

Partial differentiation, vectors and vector fields, curves and surfaces, line and surface integrals including Green's, Stokes' and the divergence theorems. Introduction to complex variable.

Prerequisites: Mathematics 201 and 210 (or 230 and 232).

NOTE: Students with high standing in Mathematics 231 may, with the permission of the Department, be permitted to enrol for Mathematics 330. (3-0; 3-0)

MATH 331. (3) Advanced Calculus

Differentiation and integration of functions of several variables, vector field theory. An introduction to complex variables.

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. (see note 5 above). (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 (see Note 5 above). (3-0; 3-0)

MATH 335. (3) Real Analysis I

Informal logic; real numbers; elements of metric topology; sequences and series; functions, limits, continuity; Riemann-Stieltjes integration.

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 (see note 5 above). (3-0; 3-0)

MATH 337. (3) Modern Geometry

Topics chosen from Euclidean, projective, differential and non-Euclidean geometries.

NOTE: Students proposing to teach Mathematics in secondary school are urged to take this course.

Prerequisites: Mathematics 201 and 210 (or 230 and 232). (3-0; 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 333 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.

Prerequisites: Mathematics 201 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 or 331, 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 330 (or 331) which may be taken concurrently. (3-1; 3-1)

MATH 360. (3) Topics in Mathematics

This course is designed for students whose primary interest is not Mathematics. It may not be included as part of the Mathematics Department's requirement for the Major or Honours programme.

The purpose of the course is to give insight into the art of Mathematics. Several topics will be selected from diverse fields of Mathematics. Students will be expected to participate in the solution of mathematical problems.

Prerequisites: A cumulative grade-point average of at least 3.5 or consent of the Department. No previous mathematics courses are required. (3-0; 3-0)

MATH 370. (1½) Programming Languages

This course involves a survey of the significant features of existing programming languages, with particular emphasis on the underlying concepts abstracted from these languages. The relationship between source programs and their run-time representation during evaluation is considered, but the actual writing of compilers is taught in Mathematics 471. The concepts discussed are illustrated by programming assignments in PL/I, which is used as the example language.

Prerequisites: Mathematics 201 and 272.

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

MATH 371. (1½) 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 programs 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 372 (formerly 213). (1½) Discrete Structures

Mapping and relations. Algebraic structures including groups and semi-groups. Elements of the theory of directed and undirected graphs. Boolean algebra and propositional logic. Applications to computing science.

Prerequisite: Mathematics 171, 201.

Will not be offered in 1971-72. Interested students should take Mathematics 332 or 333. (0-0; 3-0)

MATH 410. (1½) 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 32I (which may be taken concurrently).

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

MATH 412. (1½) 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. (1½) Introduction to analysis

Topics selected from: metric and normed spaces, the classical function spaces and the operators on them.

NOTE: This course is primarily for students taking a major in Mathematics.

Prerequisites: Mathematics 330 and 332.

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 331 and 335 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.

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 or 331, Mathematics 332 or 333 or the consent of the Department.

(3-0; 3-0)

MATH 445. (3) Theory of Ordinary Differential Equations

Existence and uniqueness theorems; systems of ordinary differential equations and stability of their solutions; Green's functions; introduction to the calculus of variations.

Prerequisite: Mathematics 325 or 345 or the consent of the Department.

(3-0; 3-0)

MATH 448 (formerly 481). (3) Introduction 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, queuing 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 335 (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 332 or 333, and Mathematics 335, or the consent of the Department.

((3-0; 3-0)

MATH 470. (3) Computing Science Seminar

The topics covered in this two-semester course depend primarily on the interests of the instructor(s). For example, the course may comprise two or three of the following topics: graph theory, combinatorics, artificial intelligence, switching theory, Turing machines and information retrieval.

Prerequisite: Mathematics 272.

(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.

Prerequisite: 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 (or 333).

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

A detailed study of basic algebraic systems.

Prerequisite: Mathematics 433 or equivalent.

(3-0-1)

MATH 511. (4) Topics in Matrix Theory and Linear Algebra

Prerequisite: Mathematics 333 or equivalent.

(3-0-1)

MATH 520. (4) Number Theory

Advanced topics in Number Theory.

Prerequisite: Mathematics 339, 441 or equivalent.

(3-0-1)

MATH 530. (4) Analysis

Selected topics from real and complex analysis.

Prerequisite: Mathematics 441, 435 or equivalent.

(3-0-1)

MATH 531. (4) Functional Analysis

Prerequisite: Mathematics 435, 411 or equivalent.

(3-0-1)

MATH 540. (4) Topology

Advanced topics in point-set topology, introduction to algebraic topology.

Prerequisite: Mathematics 411, 433 or equivalent.

(3-0-1)

MATH 550. (4) Topics in Applied Mathematics

Boundary value problems with selected applications.

Prerequisite: Consent of the instructor.

(3-0-1)

MATH 551. (4) Differential and integral equations

Prerequisite: Mathematics 435 or equivalent.

(3-0-1)

MATH 560. (4) Probability and Stochastic processes

Advanced probability and distribution theory, sequences of random variables, Markov processes, Poisson processes, Weiner processes and applications.

Prerequisite: Mathematics 443, 435 or equivalent.

(3-0-1)

MATH 561. (4) Decision theory and statistical inference

The general statistical decision problem; game theory; theory of estimation and tests of hypotheses; sequential analysis.

Prerequisite: Mathematics 443, 435 (corequisite). (3-0-1)

MATH 562. (4) Distribution-free and rank-order statistics

Distribution theory of order statistics; a detailed discussion of selected rank tests, optimality and efficiency of rank tests.

Prerequisite: Mathematics 443. (3-0-1)

MATH 563. (4) Analysis of Variance

Models in experimental design, estimation of parameters, multiple comparisons, partitioning a sum of squares, analysis of covariance, robustness of tests.

Prerequisite: Mathematics 443, 333, 511 (corequisite). (3-0-1)

MATH 570. (4) Topics in numerical analysis

Prerequisite: Mathematics 449 or equivalent. (2-2-0)

MATH 571. (4) Topics in Computing Science

Topics selected from: programming languages; information organization and retrieval; simulation; combinatorics; machine learning and game playing; multi-programming and real time data processing.

Prerequisite: Mathematics 481 or equivalent. (2-2-0)

MATH 580. (no credit) Applications of Computers in Research

This course provides the introduction to computing that is necessary for some thesis projects. It is not open to students registered in a graduate program in the Department of Mathematics. (2-2-0)

MATH 581. (4) Directed Studies

(3-0-1)

MATH 585. (4) Seminar

(3-0-1)

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.

DEPARTMENT OF PHILOSOPHY

Kenneth W. Rankin, M.A., Ph.D. (*Edin.*), Professor and Head of the Department.
Howard J. N. Horsburgh, M.A. (*Glasgow*), B.Litt. (*Oxon.*), Professor.
John H. Woods, B.A., M.A. (*Tor.*), Ph.D. (*Mich.*), Associate Professor.
Ronald V. Kirkby, B.A. (*Brit. Col.*), M.A., Ph.D. (*Calif., Berkeley*), Assistant Professor.
John M. Michelsen, B.A., M.A., Ph.D. (*Wash.*), Assistant Professor.
Alan R. Drengson, B.A., M.A. (*Wash.*), Lecturer.

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 or 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. Another section will have a slant towards existentialism and questions of political philosophy. 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) **Elementary Logic**

A development of the logical techniques for handling arguments drawn from every day 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 problems in the philosophy of religion: The nature of religion and the relation between religions. Religious experience. Arguments for the existence of God. The nature of religious faith. Problems of religious language — its cognitive or non-cognitive character, the language-game theory, verification and falsification. Science and religion. Religion and ethics. The problem of evil. (3-0; 3-0)

PHIL 221. (1 ½) **Philosophy of Natural Science**

An introductory survey of the subject matter, objectives, methods, and pre-suppositions 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. (1 ½) **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.

Prerequisite: Philosophy 221, or permission of the Instructor.

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

PHIL 232. (1 ½) **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. (1 ½) **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.

Prerequisite: Philosophy 100 or Art 120, or permission of the Instructor.

(May not be offered 1971-72). (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 judgements. 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)

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.

(Offered every second year, not in 1971-72). (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, Niebhuhr. 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. (3-0; 0-0)

September-December only.

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.

(May not be offered 1971-72). (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 399. (3) Seminar in Philosophy

Topic(s) to be selected at the initiative of instructor or students. (3-0; 3-0)

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) **Advanced Logic**

Structure and properties of formal deductive systems. Axiomatic development of propositional and predicate calculi. Theory of classes. Problems of completeness, consistency, decidability, and independence.

Prerequisite: Philosophy 202 or Mathematics 332 or 333, or permission of the Instructor.

(Offered in 1971-72 and every second year). (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 406. (3) **Wittgenstein**

Intensive study of the earlier and later writings of Wittgenstein, particularly the *Tractatus Logico-Philosophicus*, the *Blue and Brown Books*, and the *Philosophical Investigations*.

Prerequisites: Philosophy 100, 306, and an additional 3 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 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.
(May not be offered 1971-72.) (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. (3) **Honours Seminar**

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.
- Walter M. Barss, B.A., M.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor. (Leave of absence 1971-72).
- John M. Dewey, B.Sc., Ph.D. (*London*), Associate Professor. (Leave of absence 1971-72).
- 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.
- Lyle P. Robertson, B.A., M.A., Ph.D. (*Brit. Col.*), Associate Professor.
- 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.
- Harbhajan S. Sandhu, B.A., B.Sc., M.Sc. (*Panjab*), Ph.D. (*Brit. Col.*), Assistant Professor.
- Colin D. Scarfe, B.Sc., M.Sc. (*Brit. Col.*), Ph.D. (*Cantab.*), Assistant Professor (Astronomy). (Leave of absence 1971-72).
- 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.
- Clarence C. Cook, B.A. (*Tor.*), M.Sc. (*Mich.*), LL.D. (*R.M.C.*), Part-time Lecturer.
- Kenneth C. Maclure, M.Sc., Ph.D. (*McGill*), Part-time Lecturer.
- Thomas R. Witten, B.S., Ph.D. (*Virginia Poly. Inst.*), Part-time Lecturer.
- 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.

The Department offers opportunities for study leading to the M.Sc. and Ph.D. degrees. For information on the requirements for these, 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 in Physics, students may take the General, the Major or the Honours Physics programme. For a B.A. degree, students may choose the General programme in Physics for one of their fields of concentration. For the selection of Physics courses for the B.Ed. degree, consult the calendar under *Faculty of Education*.

Students who have not decided between the Major and Honours programme are advised to select their first and second year courses to satisfy the Honours course requirements, which are somewhat more closely specified than for the Major.

Admission to the third and fourth years of the Honours programme requires the permission of the Department. Students considering the Honours programme will be expected to have, and maintain, at least second class standing. They should consult the Department about the Honours programme as soon as possible, preferably before entering their second year.

Students who plan to take only one course in Physics, either to meet a calendar requirement or to acquire a wider understanding of the physical world, are advised to take Physics 103. All who propose to take further courses in Physics should take Physics 101 or 121, according to their qualifications.

Students in Physics or Astronomy programmes for the B.Sc. degree are encouraged to choose electives in non-science subjects. In particular, students contemplating graduate studies should note that many graduate schools require a reading knowledge of a language other than English.

The Physics Department requirements are listed below, according to year and programme. To take account of the varied qualifications with which students enter the Physics programmes, some of the early courses in each programme are provided in alternative sets: thus, some students will include Physics 101, 211 and 313 in their programmes, while others will include Physics 121 and 213. The latter set permits 3 units of more advanced courses to be included in the General and Major programmes without increasing their length. It also permits the third year of the Honours programme to include 3 units of electives within the limit of 18 units. Courses selected in addition to those specified in these programme lists must satisfy general calendar regulations for the degree desired.

FIRST YEAR

General	Major	Honours
Physics 101 or 121	Physics 101 or 121	Physics 101 or 121
Mathematics 130	Mathematics 130	Mathematics 130
		Chemistry 120 or 124

Physics 101 is required by students who have not obtained at least Second Class standing in B.C. Secondary School Physics 12 and Mathematics 12. In subsequent years they will normally take Physics 211 and 313. Those who have not obtained credit for B.C. Secondary School Physics 11, or equivalent, must register in Section 1 (5 lectures per week).

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, which may be obtained for this course during Registration in person.

Students entering with matriculation standing from outside B.C. should consult the Department of Physics before registering.

SECOND YEAR

General	Major	Honours
Physics 211 or 213	Physics 211 or 213	Physics 211 or 213
Physics 212	Physics 212	Physics 212
Mathematics 231	Mathematics 231	Mathematics 230
(or Mathematics 230 and Mathematics 232)	(or Mathematics 230 and Mathematics 232)	Mathematics 232

Physics 211 is required by students who have not obtained credit for Physics 121. They will normally omit Physics 213 and take Physics 313 in the third year.

Physics 213 should normally be taken in the second year by students who have obtained credit for Physics 121; however, it may be omitted in the second year (preferably not in the Honours Programme) and be replaced by Physics 313 taken in the third year.

In the General Programme only, students limited by their other programmes to taking no more than one Physics course in the second year may take Physics 211 in the second year and defer Physics 212 to the third year; however, Physics 212 should not be deferred if credit has been obtained for Physics 121.

The alternative Mathematics courses should be selected in consultation with the Physics Department. Students who may want to keep open the possibility of transferring to the Honours Programme or doing postgraduate study should note the advantage of taking Mathematics 230, 232 and 330, instead of Mathematics 231, and 303, in the second and third years.

Students who have credit for B.C. Senior Matriculation or for first year at another university should consult the Department before registering.

THIRD YEAR

General	Major	Honours
(Physics 313)	(Physics 313)	(Physics 313)
Physics 322	Physics 322	Physics 321
Mathematics 303 or 330 or 331	Mathematics 303 or 330 or 331	Physics 322 Physics 413
Mathematics 323 or 345	Mathematics 323 or 345	Mathematics 330 or 331 Mathematics 323 or 345

Physics 313 is required unless credit has been obtained for Physics 213.

In the General Programme, Physics 322 may be deferred to the fourth year, and must be so deferred if Physics 212 is being taken in the third year. Mathematics 323 or 345 may be deferred to the fourth year.

In the Major Programme, students who have received credit for Physics 213 may be permitted to take, in the third year, 3 units of Physics courses normally taken in the fourth year of this programme.

The alternative Mathematics courses should be selected in consultation with the Physics Department.

Third-year Honours students are invited to attend Physics 460, Physics Seminar.

FOURTH YEAR

General	Major	Honours
Physics 412†	Physics 412†	Physics 410† and 420†
Physics 413	Physics 413	Physics 412† and 421†
Physics elective	Physics electives	Physics 422† Physics 423† Physics 429 Physics electives Mathematics 410†

† 1½ units.

The Physics electives may, with the consent of the Department, include courses in Astronomy or in related fields outside the Department.

In the General Programme, students who have obtained credit for Physics 313 require only Physics 413, whereas those with credit for Physics 213 require Physics 413 and 3 additional units, normally the first-term course Physics 412† and any second-term elective for which they qualify, e.g. Physics 425†, 426† or 427†.

In the Major Programme, specified Physics courses and acceptable electives must comprise at least 15 units of third- and fourth-year courses. The electives are normally chosen from Physics 321, 410†, 425†, 426†, 427† and Astronomy courses (Physics 321 is recommended for qualified students who may contemplate further studies).

In the Honours Programme, the Physics electives comprise 4½ units. They normally include three second-term courses chosen from Physics 424†, 425†, 426†, 427†, Mathematics 412† and either Astronomy 400† or 401†.

Fourth-year Honours students are required to participate in Physics 460, Physics seminar, and are invited to attend Physics 560, Physics graduate seminar.

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.

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. Students who have not obtained credit for B.C. Secondary School Physics 11 or equivalent must register in Section 1, which has 5 lecture hours per week.

Prerequisite: Mathematics 130 (may be taken concurrently).

Text: To be announced.

Drs. Beer, Cook, Cooperstock, Friedmann, Maclure, Mason and Picciotto.

(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. Pearce and Sullivan.

(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.

Dr. Weaver.

(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: Alonso and Finn, *Fundamental University Physics*, Volume 1; Bondi, *Relativity and Common Sense*.

Drs. Elliott and Lobb.

(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*)

*Laboratories on alternate weeks.

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).

Text: Webb, *Elementary Wave Optics*.

(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*; Lee 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 or 331 (any may be taken concurrently), Mathematics 323 or 345 (either may be taken concurrently), and consent of the Department.

Text: Symon, *Mechanics*.

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 or 331 (any may be taken concurrently), Mathematics 323 or 345 (either may be taken concurrently) or consent of the Department.

Text: To be announced.

Dr. Lobb.

(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 or 331, and Mathematics 323 or 345.

Text: Butkov, *Mathematical Physics* (which will also serve for Physics 420), or selected paperbacks, to be announced.

Dr. Weaver.

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

PHYS 412. (1½) **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 or 331 (any may be taken concurrently), Mathematics 323 or 345 (either may be taken concurrently).

Text: To be announced.

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 con-

*Laboratories on alternate weeks.

currently); Mathematics 303 or 330 or 331 (any may be taken concurrently); Mathematics 323 or 345 (either may be taken concurrently).

Text: Weidner and Sells, *Elementary Modern Physics*, 2nd Ed.

Dr. Robertson.

(3-3; 3-3)

PHYS 420. (1 ½) **Topics in Mathematical Physics II**

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 and consent of the Department.

Text: Butkov, *Mathematical Physics*, or selected paperbacks, to be announced.

Dr. Weaver.

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

PHYS 421. (1 ½) **Statistical Mechanics**

Boltzmann, Bose-Einstein and Fermi Dirac statistics.

Prerequisites: Physics 213 or 313, Physics 321, Mathematics 330 or 331, Mathematics 323 or 345, and consent of the Department.

Text: Knuth, *Statistical Thermodynamics*.

Dr. Picciotto.

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

PHYS 422. (1 ½) **Electromagnetic Theory**

Potential theory, Maxwell's equations, electromagnetic waves.

Prerequisites: Physics 322, Mathematics 303 or 330 or 331, Mathematics 323 or 345, 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 ½) **Introductory Quantum Mechanics**

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin.

Prerequisites: Physics 321 and 413, Mathematics 330 or 331, Mathematics 323 or 345, Mathematics 410 (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 ½) **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 ½) **Electronics**

Electronic circuit theory with applications.

Prerequisites: Physics 322, Mathematics 303 or 330 or 331.

Text: Brophy, *Basic Electronics for Scientists*.

Dr. Clements.

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

PHYS 426. (1 ½) **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 or 331 (any may be taken concurrently) and Mathematics 323 or 345 (either may be taken concurrently).

Text: To be announced.

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

PHYS 427. (1 ½) **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 or 331 (any may be taken concurrently), and Mathematics 323 or 345 (either may be taken concurrently).

Text: Howell, *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 513. (3) **Cosmic Ray 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 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.

Students considering the Honours programme should consult the Physics Department before entering their second year. Admission to the third and fourth years of the Honours programme requires the permission of the Department. At least second class standing is required of all students entering or remaining in the Honours programme.

Students in Physics or Astronomy programmes for the B.Sc. degree are encouraged to choose electives in non-science subjects. In particular, students contemplating graduate studies should note that many graduate schools require a reading knowledge of a language other than English.

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.

THIRD AND FOURTH YEARS

Major

Mathematics 303 or 330 or 331

Mathematics 323 or 345

Physics 213 or 313

Physics 322

Physics 412†

Physics 413

Astronomy 300

Astronomy 400† or 401†

Astronomy 402

Honours

Mathematics 330 or 331

Mathematics 323 or 345

Physics 213 or 313

Physics 321

Physics 322

Physics 410† and 420†

Physics 412†

Physics 413

Physics 422† or 423†

Astronomy 300

Astronomy 402

Astronomy 429

Electives

† 1½ units.

Students wishing to take senior Astronomy courses without having completed Astronomy 200 must obtain the consent of the Department, and may be required to pass a qualifying examination.

In the Honours programme, because of prerequisites, maximum latitude in the choice of fourth-year courses may be obtained by taking in the third year: Mathematics 330 or 331, Mathematics 323 or 345, Physics 321, 322 and 413; also Physics 313 if Physics 213 has not already been taken. Students selecting the Physics 423† option are reminded to include its Mathematics 410† co-requisite.

The electives are to be chosen in consultation with the Physics Department. They are Astronomy 400† or 401†, and one of Physics 421†, 424†, 425†, 426† and 427†.

Third year Honours students are invited and fourth year Honours students are required to attend Astronomy 460, Seminar.

ASTRONOMY COURSES

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

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: Motz and Duveen, *Essentials of Astronomy*.

Dr. Tatum.

(3-3; 3-3)

ASTR 300. (3) **Spherical and Dynamical Astronomy**

Spherical trigonometry; the measurement of time; the effects of refraction, aberration, and parallax on the apparent position of a heavenly body; introductory celestial mechanics; the two-body problem and its applications; perturbations and precession; stellar motions and galactic dynamics.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 121 or 211, Mathematics 303 or 330 or 331; Mathematics 323 or 345 and Physics 321 are recommended.

Texts: Smart, *Spherical Astronomy*; Van de Kamp, *Elements of Astromechanics*.

Dr. Burke.

(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.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 322, 413 (may be taken concurrently), Mathematics 303 or 330 or 331.

Text: Steinberg and Lequeux, *Radio Astronomy* (translated by Bracewell).

(Not offered in 1971-72; to be offered in 1972-73.)

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

ASTR 401. (1½) **Modern Astronomy**

A variety of modern topics, such as solar physics, cosmology, rocket and satellite astronomy, radar astronomy.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 413 (may be taken concurrently), Mathematics 303 or 330, or 331, and Mathematics 323 or 345.

(Offered in 1971-72; not in 1972-73.)

Dr. Hartwick.

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

ASTR 402. (3) **Introduction to Astrophysics**

The observational data of astrophysics; stellar atmospheres and the production of stellar spectra; structure, constitution and evolution of the stars; interstellar matter.

Prerequisites: Astronomy 200 or the consent of the Department, Physics 213 or 313,

*Laboratories on alternate weeks.

Physics 413 (may be taken concurrently), Mathematics 303 or 330 or 331, and Mathematics 323 or 345.

Text: Unsöld, *The New Cosmos*.

Dr. Hartwick.

(3-0; 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 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. (Leave of absence 1971-72).

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.

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.

Max S. Power, B.A. (*Colo. Coll.*), B.A. (*Oxon.*), M.A., M.Phil. (*Yale*), Lecturer.

Norman J. Ruff, B.Sc. (Econ.) (*Southampton*), M.A. (*McMaster*), Lecturer.

G. Campbell Sharman, B.A., LL.B. (*Adelaide*), M.Sc. (*London*), M.A. (*Queen's*), Visiting 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 any three 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 3 must be *either* Political Science 300 *or* Political Science 301 *and* 302. Major students must also select a minimum of 3 units of course work in each of at least two of the Groups II-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).

During the Third and Fourth Years, Honours students must take at least 21 units in Political Science, selected from courses numbered 300 and above. Nine of these must be Political Science 300 (or, with permission, 301 *and* 302), 307 and 499. Honours students must also select a minimum of three units of course work in each of at least two of the Groups II-VI. Prospective Honours students may take courses numbered 300 and above prior to their Third and Fourth Years, but these will not count toward the 21 unit requirement.

All students are reminded that the Department supports the interdisciplinary course, Liberal Arts 305.

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. Open to First Year students with the permission of the Department.

Dr. Biddulph, Mr. Power.

(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 I— 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 more upon analysis and explication of the problems themselves than upon their historical context and development.

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.

(May be offered 1971-72; may be offered 1972-73.)

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.

(Not offered 1971-72; may be offered 1972-73.)

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 Christmastime, and one paper due at the end of the Spring Term. (Not recommended as a general elective).

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.

(Offered 1971-72; not offered 1972-73.) (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.

Prescribed reading: Nietzsche, *The Twilight of the Idols*; Freud, *Civilisation and Its Discontents*; Mannheim, *Ideology and Utopia*; Niebuhr, *Moral Man and Immoral Society*; Fromm, *Escape from Freedom*; Marcuse, *One-dimensional Man*; Lenin, *The State and Revolution*; Camus, *The Rebel*; Weldon, *The Vocabulary of Politics*; Bay, *The Structure of Freedom*.

Dr. Robbins.

(Not offered 1971-72; offered 1972-73.) (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.

(Offered 1971-72; not offered 1972-73.) 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

The political culture, political behaviour, parties and interest groups, governmental institutions and policy-making processes of Western European democracies will be studied in the context of comparative political analysis. Primary emphasis will be given France, the German Federal Republic, Italy and the United Kingdom.

Mr. Power.

(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. (1½) Government and Politics in the U.S.S.R.

An intensive analysis of the governmental process in the Soviet Union; examination of the political development of the U.S.S.R., the political culture and socialization process, interest groups and policy-making process, administration and the judicial system.

Dr. Biddulph.

(Not offered 1971-72; offered 1972-73.)

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.

Prerequisite: Political Science 216 or 318, (Canadian Government and Politics), or the permission of the instructor.

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 318 (formerly 410). (3) Government of Canada

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 both Political Science 216 and 318.

Mr. Ruff.

(Offered 1971-72; not offered after 1971-72.)

(3-0; 3-0)

POLI 319. (1½) An Introduction to Comparative Federalism

The origins of federalism, the theory of federalism, federal constitutions and politics; and federalism and constitutional change. Some case studies of twentieth-century federal experience.

Dr. Efrat.

(Offered annually.)

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

POLI 416 (formerly 418). (1½) Issues in Canadian Politics

An analysis of selected issues in the Canadian political process with a primary focus on the formulation of public policy and party politics at the federal or provincial level.

Prerequisite: Political Science 216 or 318 (Canadian Government and Politics), or the permission of the instructor.

Mr. Ruff.

(May be offered 1971-72; offered 1972-73.) 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 1971-72; offered 1972-73.) 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.

(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.

(May be offered 1971-72.) 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.

(Not open to students who have 3 units of credit in Political Science 325).

(Not offered 1971-72; may be offered 1972-73.)

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).

May be offered 1971-72; not offered 1972-73.) (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.

(May be offered 1971-72; offered 1972-73.)

(3-0; 3-0)

GROUP IV — POLITICAL BEHAVIOUR

POLI 330. (1½) Public Opinion and Electoral Behaviour

The course is designed to give the student a close familiarity with the key theoretical and research studies on (a) the factors underlying the formation of individual political opinions and the making of electoral decisions; (b) the formation and effectiveness of party and candidate strategy for electoral purposes; and (c) the relation of elections to the political system. Course obligations will include extensive reading plus one paper.

Dr. Sproule-Jones.

(Offered 1971-72; not offered 1972-73.)

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

POLI 331. (1½) Executive and Legislative Politics

An analysis of the recruitment and behaviour of legislators and political executives. The emphasis will be on conceptual tests that relate normative theories of representation, responsible policy-making, and party government to empirical studies of legislative and executive behaviour in Canada, Britain, the United States and other western democracies.

Mr. Power.

(May be offered 1971-72; may be offered 1972-73.)

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

POLI 332. (1½) Interest Groups and Parties

This course is primarily a survey and analysis of the key theoretical and research studies on interest groups and political parties. Particular attention will be paid to the analysis of organizational structures and influence. Course obligations will include extensive reading plus one research paper.

Dr. Sproule-Jones.

(Not offered 1971-72; may be offered 1972-73.)

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

POLI 435. (3) Political Institutions and Public Policy (formerly Political Decisions)

In formal terms, this course will apply non-market decision theory to the analysis of political institutions and public policies. In less formal terms, we shall examine the efficiency of political systems in meeting the demands of its citizens for certain public policies. The ultimate aim is to provide the student with a systematic approach to politics through which public actions or inactions can be appraised.

Dr. Sproule-Jones.

(Offered annually.)

(3-0; 3-0)

POLI 436. (1½) 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.

Mr. Power.

(Not offered 1971-72; may be offered 1972-73.)

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. Powers.

(Offered annually.)

(3-0; 3-0)

POLI 342. (1 ½) **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. Credit cannot be obtained for both Political Science 341 (3 units) and 342.

Dr. Powers.

(May be offered 1971-72; may be offered 1972-73.)

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

POLI 343. (1 ½) **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. (Not open to students who have credit in Political Science 341).

(May be offered 1971-72; may be offered 1972-73.)

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. 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. (1 ½) **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 1971-72; offered 1972-73.)

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. (Not open to students who have 3 units of credit in Political Science 454).

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) Seminar in the Political Theory of Philosophical Idealism.

POLI 511. (1 ½) Seminar in Democracy, Ideology and Societal Change.

POLI 512. (1 ½) Seminar in Communist Political Development.

POLI 516. (1 ½) Seminar in Canadian Politics.

POLI 517. (1 ½) Seminar in African Politics.

POLI 520. (1 ½) Seminar in Canadian Constitutional Problems.

POLI 535. (1 ½) Seminar in Public Choice.

POLI 540. (1 ½) Seminar in International Relations.

POLI 550. (1 ½) 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

- G. Alexander Milton, B.A. (*West. Wash.*), M.S. (*Ore.*), Ph.D. (*Stanford*), 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.
- Otfried Spreen, B.A. (*Bonn*), Dipl.-Psych., Ph.D. (*Freiburg*), 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.
- Charles W. Tolman, B.S., M.S., Ph.D. (*Wash.*), Associate Professor.
- R. Leslie W. Wright, B.A., M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Associate 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.
- Richard B. May, B.A. (*Whitman*), M.A., Ph.D. (*Claremont*) Assistant Professor.
- Frank J. Spellacy, B.A. (*West. Wash.*), M.Sc. (*Ore.*), Ph.D. (*U. of Vic.*), Assistant Professor.
- H. Edward Tryk, B.A. (*San Jose*), M.A., Ph.D. (*Ore.*), Assistant Professor.

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 84-85. 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 and may be taken in the second year. 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 Physiological 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.

NOTE: Students entering their fourth year in 1971-1972 should follow the requirements in the 1970-1971 calendar. Students entering their third year who have failed to meet any of the above requirements should consult the Departmental secretary.

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, 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 Physiological 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.

Drs. Wright, Tolman. (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, Beavin. (2-2; 2-2)

PSYC 230. (3) **Introduction to Psychobiology**

A study of empirical approaches to the understanding of the biological basis 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. Related methodological techniques will be integrated with these topics throughout the course.

Drs. Spreen, Spellacy. (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.

Drs. Rosenblood, Hoppe. (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: A first year mathematics course, or recent completion of Mathematics 12, or acceptable alternative qualifications as decided by the Instructor.

Drs. May, Beavin, 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.

NOTE: Students may take Psychology 301 if they are currently registered in Psychology 200 or 220 or 230 or 240.

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.

Drs. May, Goldwater, Wright. (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).

Drs. Beavin, Tryk. (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.

Drs. Hoppe, Bavelas, Rosenblood. (3-0; 3-0)

PSYC 334. (3) Personnel Psychology

Psychological theories and techniques applied to selection and management of personnel in business, industry, government, and the military forces. Methods of interviewing, testing, counselling, training and evaluation will be studied.

Drs. Milton, 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.

Drs. Duncan, 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 emergent 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).

Members of the Department. (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. Spreen, 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. May, 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.

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. 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.

Drs. Tryk, Spreen. (2-2; 2-2)

PSYC 414. (3) **Motivation**

The basic concern is with human behaviour. Topics will include instincts, relationship between perception and physiological changes, psychosomatic symptoms and personality, emotionally motivated behaviour, motivation and learning theory. Psychology 300 and 311 are recommended as a basic preparation.

Drs. Goldwater, 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. Students who plan to register in this course should consult the Department before registering.

Drs. Gaddes, Spreen, 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. Students who plan to register in this course should consult the Department before registering.

Dr. Goldwater. (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.

Drs. Tryk, Duncan.

(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).

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.

Members of the Department.

(2-2; 2-2)

GRADUATE COURSES

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

PSYC 501. (3) Proseminar

PSYC 503. (1-6) Practicum

PSYC 504. (1-6) Individual Study in Research

PSYC 505. (1 ½) Animal Learning (One term only. To be announced)

PSYC 506. (1 ½) Human Learning (One term only. To be announced)

PSYC 507. (1 ½) Personality (One term only. To be announced)

PSYC 508. (1 ½) Motivation (One term only. To be announced)

- PSYC 509. (1 ½) **History of Psychology** (One term only. To be announced)
- PSYC 510. (1 ½) **Theories of Psychology** (One term only. To be announced)
- PSYC 511. (1 ½) **Comparative Psychology** (One term only. To be announced)
- PSYC 512. (1 ½) **Physiological Psychology** (One term only. To be announced)
- PSYC 513. (1 ½) **Sensory Psychology** (One term only. To be announced)
- PSYC 514. (1 ½) **Perception** (One term only. To be announced)
- PSYC 515. (1 ½) **Human Neuropsychology** (One term only. To be announced)
- PSYC 516. (1 ½) **Psychotherapy** (One term only. To be announced)
- PSYC 517. (1 ½) **Quantitative Methods** (One term only. To be announced)
- PSYC 518. (1 ½) **Psychometric Methods** (One term only. To be announced)
- PSYC 519. (1 ½) **Social Psychology** (One term only. To be announced)
- PSYC 520. (1 ½) **Developmental Psychology** (One term only. To be announced)
- PSYC 521. (1 ½) **Human Factors** (One term only. To be announced)
- PSYC 522. (1 ½) **Personnel Psychology** (One term only. To be announced)
- PSYC 523. (1 ½) **Abnormal Psychology** (One term only. To be announced)
- PSYC 524. (1 ½) **Diagnostic Testing** (One term only. To be announced)
- PSYC 525. (1 ½) **Learning Disorders**
- PSYC 570. (1-3) **Psycholinguistics**
Offered in collaboration with the Department of Linguistics.
- PSYC 599. (3-6) **Thesis**
- PSYC 699. (3-15) **Ph.D. Dissertation**

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*), M.A. (*Harvard*), 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). (Leave of absence 1971-72).

Michael H. Walker, B.A. (*Zagreb*), M.A. (*Calif., Berkeley*), Visiting Lecturer (Russian and Serbo-Croatian).

Isabel M. Heaman, B.A.Lit. (*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).

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 normally 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: Rudy, Youhn and Nebel, *Russian: A Complete Elementary Course*; N. Harley, *Russian Tales*.

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: Rudy, Youhn and Nebel, *Russian: A Complete Elementary Course*; MacPherson and Wissotzky, *Passages for Russian Translation and Comprehension*; S. Khavronina, *Russian As We Speak It; Soviet Short Stories*.

Mr. Galichenko.

(4-0; 4-0)

RUSS 201 (formerly 300). (3) **Nineteenth Century Russian Literature Part I: Romanticism and Naturalism**

An introduction to the leading Russian poets and prose writers of the early nineteenth century.

Prerequisite: Completion of Russian 100. (Credit cannot be obtained for both Russian 201 and Russian 300).

Texts: Selected works of Zhukovsky, Batyushkov, Baratynsky, Pushkin, Lermontov and Gogol; D. Mirsky, *A History of Russian Literature*.

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*.

Mr. Galichenko.

(3-0; 3-0)

RUSS 306. (3) **Nineteenth Century Russian Literature Part II: Realism**

A study of the development of realistic Russian prose from 1830.

Prerequisite: Completion of Russian 200.

Texts: Pushkin, *Eugenii Onegin*; Lermontov, *Geroi Nashego Vremeni*; Gogol, *Mertvye Dushi*; Turgenev, *Zapiski Okhotnika*; Tolstoy, *Sevastopol'skie Rasskazy*; Goncharov, *Oblomov*; Dostoevsky, *Zapiski iz Mertvogo Doma*; Chekhov, *Dama s Sobachkoi*.

Mrs. Heaman.

(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 1971-72, offered 1972-73).

(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: Zamyatin, *We*; Babel, *Red Cavalry*; Fadeev, *The Rout*; Sholokhov, *The Quiet Don*; Ilf and Petrov, *The Golden Calf*; Gladkov, *Cement*; Kataev, *Forward, Time!*; Simonov, *The Quick and Dead*; Pasternak, *Doctor Zhivago*; Solzhenitsyn, *One Day in the Life of Ivan Denisovich, The First Circle, The Cancer Ward*.

Mr. Walker.

(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.

Texts: Fonvizin, *The Brigadier*; Griboedov, *Woe from Wit*; Pushkin, *Boris Godunov*; Gogol, *The Inspector General*; Ostrovsky, *The Storm*; Gorky, *The Lower Depths*; Chekov, *The Cherry Orchard*; Mayakovsky, *The Bedbug*.

Mr. Walker.

(3-0; 3-0)

***RUSS 403. (3) Dostoevsky 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*.

Dr. Rickwood.

(3-0; 3-0)

RUSS 404. (3) Eighteenth Century Russian Literature

(Not offered 1971-72, offered 1972-73).

(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*.

Dr. Rickwood.

(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*; Y. Olesha, *Zavist'*.

Dr. Rickwood.

(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*; *Puteshestvie Afanasiya Nikitina*; *Perepiska Knyaza Kurbskogo s Ivanom Groznym*; *Domostroy*; *Povest' o Frole Skobeeye*; *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

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, Slavna, *Serbo-Croatian Reading Passages*; Partridge, Monica, *Serbo-Croatian: Practical Grammar and Reader*.

Mr. Walker.

(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.

Text: Ogawa, Kenji, *New Intensive Japanese*.

Mr. Hsiao.

(4-1; 4-1)

JAPA 200. (3) **Second Year Japanese**

Sequence to the preceding first year Japanese course, aimed at reading and writing Japanese letters and Chinese characters, as well as conversational practice.

Prerequisite: Completion of Japanese 100 or its equivalent.

Texts: Ogawa, Kenji, *New Intensive Japanese*; Sakade, Florence, *A Guide to Reading and 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)

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

FACULTY OF EDUCATION

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FACULTY OF EDUCATION

- John A. Downing, B.A. (*Birkbeck Coll.*), Ph.D. (*London*), Professor.
- Geoffrey P. Mason, M.A. (*Brit. Col.*), Ph.D. (*Wash. St.*), Professor. (Leave of absence 1971-72).
- Fred T. Tyler, B.Sc., M.A., M.Ed. (*Alta.*), Ph.D. (*Calif.*), Professor. (Leave of absence 1971-72).
- Robert D. Armstrong, B.Ed., B.A., M.Ed. (*Alta.*), Ed.D. (*Calif.*), Associate Professor.
- J. Douglas Ayers, B.A., B.Ed. (*Brit. Col.*), Ph.D. (*Tor.*), Associate Professor.
- David J. Chabassol, B.A., B.Ed. (*Acadia*), M.Ed. (*Tor.*), Ph.D. (*Alta.*), 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.
- Miss 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.
- Cary F. Goulson, M.A. (*Brit. Col.*), Ed.D. (*Tor.*), Associate Professor.
- 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.
- Fred L. Martens, B.A., B.Ed. (*Brit. Col.*), M.S. in P.E. (*Wash.*), Ph.D. (*Ore.*), 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.
- 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.
- 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. (*Ore. St.*), Assistant Professor.
- Mrs. 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.
- Donald W. Knowles, B.A., B.Ed., M.Ed., Ph.D. (*Alta.*), Assistant Professor.
- Werner W. Liedtke, B.Ed., M.Ed., Ph.D. (*Alta.*), Assistant Professor.
- Mrs. Margaret McHugh, B.A. (*Utah*), M.A.Ed. (*Idaho St.*), Ph.D. (*Ore.*), Assistant Professor.
- Mrs. Norma I. Mickelson, B.Ed. (*Brit. Col. - Vic. Coll.*), M.A. (*U. of Vic.*), Assistant Professor.
- Miss Margaret M. Moody, M.Sc. (*Ore.*), Assistant Professor.
- Walter Muir, B.Ed., M.Ed. (*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.

Theodore J. Sawchuk, B.Ed. (*Alta.*), M.Sc. (*St. Coll. of Wash.*), M.Ed. (*Alta.*), Assistant Professor and Assistant to the Dean for Administrative and Supportive Services.

John J. Sheppy, B.A., M.Ed. (*Brit. Col.*), Assistant Professor. (Leave of absence (1971-72)).

Mrs. 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.

Joseph W. Thomson, B.A. (*Trenton St. Coll.*), M.A., Ph.D. (*Ill.*), Assistant Professor.

Henry G. Timko, B.S. (*Kutztown St. Coll.*), M.A., Ed.D. (*Ill.*), Assistant Professor.

Miss 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.

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.

Larry D. Yore, B.S., M.A. (*Minn.*), Visiting Assistant Professor.

Mrs. R. Anne McLaughlin, B.Com. (*Brit. Col.*), Senior Lecturer.

Gerald A. Carr, B.A., B.S., M.S. (*Calif., Los Angeles*), Lecturer.

David Docherty, B.Sc., M.Sc. (*Ore.*), Lecturer.

Geoffrey S. Hodder, B.Ed. (*U. of Vic.*), Lecturer.

Leslie H. Peake, Dip. in P.E. (*St. Paul's Coll.*), Lecturer.

Geoffrey D. Potter, B.A. (*Sir George Williams*), Lecturer.

Peter Shostak, B.Ed., M.Ed. (*Alta.*), Lecturer.

Margery M. Vaughan, L.R.S.M. (*Royal School of Music*), Mus.G. (*West. Ont.*), B.Mus. (*Tor.*), M.Litt. (*Durham*), 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

D2. SECONDARY CURRICULUM

E. POST-BACHELOR OF EDUCATION (ELEMENTARY) DEGREE PROGRAMME

F. GRADUATE STUDIES IN EDUCATION

GENERAL REQUIREMENTS

Applicants seeking entry to the Faculty must meet the general requirements specified for admission or re-registration given on pages 35-41, and in addition, where applicable, requirements specified in the following section entitled *Minimum Requirements for Admission to Professional Years*. The University reserves the right to refuse admission to this Faculty on the grounds of physical or mental disabilities, 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.

Students who have registered in another Faculty in September and who seek to transfer into 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, the following definitions for terms used in admission requirements will apply:

- (a) "year" — a minimum of 15 units of work;
- (b) "overall" — all courses taken and completed including those of failed and supplemental status, but not including those from which a student withdrew officially.

Application must be made in keeping with the regulations specified on pages 35 and 36 under *Application for Re-registration* and *Application for Admission*.

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 university, normal school or teachers' college, or British Columbia Grade 13, 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 transfer credit for the work of the professional year on a Bachelor of Education Degree programme.

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 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 towards a Bachelor of Education 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 a course or courses specified by the Committee before he is permitted to proceed towards a Bachelor of Education Degree.

A student registered in the Faculty of Arts and Science may receive retroactive credit for courses in Education and/or Fine Arts upon transfer to the Faculty of Education provided he obtains the approval of:

1. The Dean of the Faculty of Arts and Science to take the Education or Fine Arts course for no credit and extra to the degree;
2. The instructor;
3. The Education Advising Centre.

(NOTE: Any course forming part of a professional year may not be selected.)

In 1970-71, a system of priorities for enrolment in the professional years was established. It is anticipated that the same system of priorities will apply for the 1971-72 Academic Year.

STUDENTS ENTERING THE BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM) DEGREE PROGRAMME IN SEPTEMBER 1971, AND THEREAFTER, ARE ADVISED THAT BECAUSE OF PROGRAMME MODIFICATIONS NOW BEING PLANNED IT IS UNLIKELY THAT THE PROFESSIONAL COURSES LEADING TO A TEACHING CREDENTIAL CAN BE COMPLETED IN LESS THAN FOUR YEARS.

MINIMUM REQUIREMENTS FOR ADMISSION TO PROFESSIONAL YEARS

A. THE BACHELOR OF EDUCATION DEGREE

A1. ELEMENTARY CURRICULUM

ADVANCE NOTICE REGARDING G.P.A. REQUIREMENTS

1972-73: G.P.A. of 3.00 in the immediately preceding pre-professional year (15 units) or an overall G.P.A. of 3.00.

1973-74 and following:

- (1) for students who take the professional year in their *third* year a G.P.A. of 3.00 in the immediately preceding pre-professional year (15 units) or an overall G.P.A. of 3.00.
- (2) for students who take the professional year in their *fourth* year a G.P.A. of 3.00 in the immediately preceding two years (30 units) or an overall G.P.A. of 3.00.

- (a) Regular Programme — 1971-72: (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 2.00 in the immediately preceding pre-professional year (15 units) or an overall G.P.A. of 2.00 is required.

- (b) Transitional programme — 1971-72: (For students transferring from outside the Faculty.)

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 2.00 (UVic) in the immediately preceding pre-professional year (15 units) or an overall G.P.A. of 2.00 is required.

ADVANCE NOTICE REGARDING G.P.A. REQUIREMENTS

In addition to present G.P.A. requirements for teaching areas,
1972-73: G.P.A. of 3.00 in the immediately preceding pre-professional year (15 units) or an overall G.P.A. of 3.00
1973-74 and following: G.P.A. of 3.00 in the immediately preceding two years (30 units) or an overall G.P.A. of 3.00

1971-72 — Completion of:

- (a) two teaching areas with a G.P.A. of 3.00 in the senior courses of each (except where fewer than 9 units of senior work is taken in which case the senior level courses and one or more of the immediately preceding junior-level courses in that area will be included to a total of 9 units;
- (b) the specified co-requisites; and
- (c) the courses in Education required in the first four years of the programme.

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 263).

C. DIPLOMA PROGRAMMES FOR GRADUATES

C1. ELEMENTARY CURRICULUM

ADVANCE NOTICE REGARDING CHANGES IN REQUIREMENTS

1973-74 and following: A degree, acceptable to the Faculty as to content, with a G.P.A. of at least 3.00 (UVic) on the immediately preceding two years (30 units) or an overall G.P.A. of 3.00.

1971-72: A degree, acceptable to the Faculty as to content, with a G.P.A. of at least 3.00 (UVic) on the best 21 units of acceptable senior courses. The following courses at lower and upper levels are recommended:

English	6 units
Mathematics	3 units
Laboratory Science	3 units
Geography or History	3 units

Students may be required to complete a further 3 to 6 units of work before being admitted to this Diploma programme.

C2. SECONDARY CURRICULUM

ADVANCE NOTICE REGARDING G.P.A. REQUIREMENTS

In addition to present G.P.A. requirements for teaching areas,
1972-73: G.P.A. of 3.00 in the immediately preceding pre-professional year (15 units) or an overall G.P.A. of 3.00
1973-74 and following: G.P.A. of 3.00 in the immediately preceding two years (30 units) or an overall G.P.A. of 3.00

1971-72:

- (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, commerce, English, French, home economics, geography, German, history, Latin, mathematics, music, physical education, physics, Spanish, theatre; with a G.P.A. of 3.00 (UVic) 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) in these courses. An additional 9-unit sequence of junior and senior course work in a second teaching subject area may be required in 1971-72 and will be required in 1972-73.

D. INTERNSHIP PROGRAMMES

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.
This programme has been suspended and will not be offered in 1971-72.

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.

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 and Internship programmes 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 53 to 57 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 universities 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 page 53.

SPECIAL REQUIREMENTS

Students wishing information about programmes in Industrial Education, Music Education, and Physical Education are referred to pages 261, 253 and 254 respectively.

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 are advised that the elementary professional year may be undertaken under three different programmes and that they may elect any one of these three as places are available:

- (1) 3-3-3 Programme: This programme provides for the student teaching in three practica of three weeks each during the regular year.
- (2) 2-10 Programme: The 2-10 programme is scheduled to be put into operation in September 1971. 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.
- (3) Internship: In this programme, student teaching is undertaken at Prince George and includes ten months of supervised work in the schools.

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 information concerning teacher certification is given as a guide only for the benefit of students undertaking training at the University and is subject to any changes which may be issued by the Department of Education subsequent to the publication of this Calendar.

Under changes in regulations governing teacher certification which became effective after April 1, 1968, there are two types of permanent teaching certificates. These establish the minimum permanent certificate to be granted and do not attempt to grade within the general classifications or to set upper limits, and are as follows:

- (1) *Standard Teaching Certificate* — to be awarded to those applicants who have successfully completed an acceptable three-year programme in the Faculty of Education beyond secondary school graduation and including both academic and professional studies;
- (2) *Professional Teaching Certificate* — to be awarded to all applicants who have successfully completed an acceptable four- or five-year programme of professional and academic studies in the Faculty of Education normally culminating in a degree.

The *Teaching Licence* may be granted to an applicant who provides evidence of successful completion of an acceptable programme of academic and professional studies but who does not yet qualify for the Standard Certificate. This licence is valid for a four-year period only, although it may be renewed at the discretion of the Department of Education upon submission of evidence satisfactory to that Department.

Candidates with an acceptable year of professional training may proceed to the Bachelor of Arts or other appropriate degree in another faculty and normally qualify as follows:

- Full First Year — Teaching Licence
- Full Second Year — Standard Certificate
- Full Third Year — Professional Certificate

All initial teaching certificates issued are interim only and are normally valid for four years. For permanent certification, the teacher is required to have completed two years of recent satisfactory teaching in British Columbia schools and to receive the recommendation of the District Superintendent and the approval of the Department of Education. An interim certificate which has expired is no longer valid unless reinstated at the discretion of the Department of Education through extension of the period of validity.

APPLICATION FOR TEACHER CERTIFICATION

The initial application for a teaching certificate by a candidate who has completed 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 of the Department of Education*, Parliament Buildings, Victoria. It is also the responsibility of the teacher to make application to the Department of Education for any change in certification, including permanent certification, or for extension of interim certification.

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 professional training. Students will be asked to approve release of this information to the Department of Education officials. This 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. The type of certificate issued is dependent upon the standing within the University in relation to the degree towards which the candidate is working, as well as basic professional training, and will be in terms of regulations of the Provincial Department of Education in force at the time of issue. A person who has previously completed basic professional training but who has been registered in another faculty during the Winter Session and plans to apply to the Department of Education for a change of certification, 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

STUDENTS ENTERING THE BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM) DEGREE PROGRAMME IN SEPTEMBER 1971, AND THEREAFTER, ARE ADVISED THAT BECAUSE OF PROGRAMME MODIFICATIONS NOW BEING PLANNED IT IS UNLIKELY THAT THE PROFESSIONAL COURSES LEADING TO A TEACHING CREDENTIAL CAN BE COMPLETED IN LESS THAN FOUR 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.

In order to complete the degree, the candidate is required to obtain a G.P.A. of 3.00 on the work of the professional year and, in addition, a G.P.A. of 3.00 on all work taken subsequent to the professional year. This requirement will apply to all students who take the professional year in 1971-72 and subsequently or who enter the programme from other institutions with the professional year already complete. For all other students, the regulations in the 1970-71 Calendar will obtain.

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 British Columbia Grade 13 or from another faculty, university or college, will be required to make up any deficiency in the Education and Core courses listed. 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. Teaching areas and electives*** or the Remedial Specialty	30 units
TOTAL 75-76½ units	

* Mathematics 160 is not acceptable for credit in the mathematics teaching area.

** 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 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. 249)	3	
Approved three units from the following:		
Art Education 100;		
Music Education 106 and one of Music Education 105, 107, 108;		
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); or elective	3	15 units

Year Two: Pre-Professional Year

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

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

* Primary students who have completed Education 245 will not take Education 745 (Note that this exemption does not apply to students who have taken Education 145).

** Students will not choose Education 701 if they have completed Art Education 100; nor Education 705 or 706 or 707 if they have completed 3 units of music education; nor Education 747 if they have completed courses in physical education.

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; or Remedial Specialty	24	30 units

TOTAL UNITS 75½-76½

- b. **Transitional Programme:** (For students who have taken two years at other institutions or in another Faculty; see page 243 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

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; or Remedial Specialty	21	30 units

TOTAL UNITS 77½

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 (or approved substitute)	.....	3
Education 342	.....	1½
Education 343	.....	1½
3 units from:	.....	3
Education 344, 347, 348, 415, 442, Theatre 181, 382, Library Education 430, 431.		

Intermediate option:**

English 301	.....	3
Education 347	.....	1½
Education 348	.....	1½
3 units from:	.....	3
Education 344, 415, 442, Theatre 181, 382, Library Education 430, 431.		

* 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 431	.....	3	
One of the following options:	.....	6	12

Primary option:

Education 341	.....	3
Education 342 and 343	.....	3

Intermediate option:*

English 301	.....	3
3 units from:	.....	3
Education 415, 442, Theatre 181, 382		

* Education 342 and 343 must be included in the core.

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: Approved Mathematics	12
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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, 210, 200, 201, 332, 337.

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.

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, 107, 108

Area:

Music Education 305	3
Courses chosen from:	12
Music Education 107, 108 (if not taken in core), Music 110, 115, 140, 100, 356, 360, 334, 336	
Performance groups as described below	0 15

Students wishing to enter the Music Education teaching area, elementary or secondary programme, 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, Music Education 100); or
- (b) one year in each of two university performance groups (as specified in (a) above); or
- (c) equivalent participation in an off-campus performance group(s) approved by the Music Education Section.

Physical Education:

Core: (1) *Old Area*

(2) *New Area*

Physical Education 140	(0)	Physical Education 100	(0)
Physical Education 141	(1½)	Physical Education 142	(1½)
Physical Education 142	(1½)	Physical Education 143	(1½)

Corequisite:

Biology 150 or Education 145	(3)	Biology 150 or Education 145	(3)
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Area:

Physical Education 240	0	Physical Education 101	0
Physical Education 241	3	Physical Education 151	1½
Physical Education 340	0	Physical Education 241	3
Physical Education 341	1½	Approved Physical Education	7½
Physical Education 342	1½		
Physical Education 344	1½		
Physical Education 440*	0		
Physical Education 441	1½		
Physical Education 443	1½		
Physical Education 444**	1½ 12		.... 12

* Physical Education 440 is required on the five-year degree programme only.

** 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 will register for Physical Education 101 to complete the activity areas formerly taken under Physical Education 340.

Completion of a Physical Education teaching area requires attendance in at least three regular winter sessions, exclusive of the professional year.

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 35 and 36.

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 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 35 and 36, 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 should qualify under Priority 1 or 2 for First Year. Applicants for Second Year should have C+ or equivalent standing in their last year in Secondary School and/or in First Year University.
3. *Physical Education Experience*: A student must, by August 15, submit to the Physical Education Section a letter describing his experience in physical education, athletics, and recreation activities in secondary school and in the community.
4. *Physical Proficiency Test and Teaching Attitude Scale*: The standards achieved on this examination and scale will be included in the criteria for acceptance to the programme. Students planning to enter this teaching area will undergo a physical proficiency examination and answer the items of a teaching attitude scale at 8:30 a.m. on Wednesday, September 1st, in the Gymnasium. Gym clothing will be required. Students should expect to be in Victoria for three days.

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.

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.

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,
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 (unless 100 completed)		
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:

A General Programme in a subject area as prescribed by the Faculty of Arts and Science may be selected as one teaching area with the prior approval of the Education Advising Centre.

Remedial Specialty for Elementary Schools:

The Remedial Specialty is designed as a programme for the training of remedial teachers at the elementary level and as a prerequisite for graduate studies in the area. This programme replaces the normal requirement for two teaching areas.

Corequisite: Biology 150 or Education 145

Area:

Sociology 100 (or 200 with permission)	3	
Sociology 301 (or others with permission)	3	
Approved psychology	9	
Education 302	1½	
Education 402	1½	
Education 407	1½	
Education 408	1½	
Education 415	1½	
Education 416	1½	
Education 417	3	
Two of: Education 403, 409B, 409C,		
409D, 409E, 413, 442	3	30

Admission to the Remedial Specialty requires the approval of the Education Advising Centre. Students interested in this area are advised to take Education 200 in Year One.

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 prerequisite 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. When work is taken subsequent to the professional year, an overall G.P.A. of 3.00 in this work will be required.

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, 750-770	3
b. Courses chosen from two teaching areas (including prerequisites and co-requisites) ...	45
c. Electives*	9
	45 units
	9 units
	TOTAL 75 units

* When choosing electives students should note the following:

1. Psychology 335 is not 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 1971-72 Only

Education 798	3	
One of Education 750 to 770 (first teaching area)	1½	
One of Education 750 to 770 (second teaching area)	1½	
Education 401	1½	
Education 430 or approved elective*	1½	
Education 420, 423, 425, or 427	3	
Approved Education elective	3	15 units

*Students may substitute an approved elective in place of Education 430 provided they have completed units on school law and organization in Education 498.

Year Five: Professional Year Commencing 1972-73

Education 798	3	
One of Education 750 to 770 (first teaching area)	1½	
One of Education 750 to 770 (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 244.
- (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 750-770 (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. Normal patterns of the division may be:

	<i>Units</i>	<i>Units</i>
First teaching area	24	21
Second teaching area	15	18
Corequisites	6	6
Total units	45	45

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:

History in Art 100 or 120	3	
Art Education 100	3	
Art 105	6	
Art Education 300	3	15

Additional area courses may be chosen from courses in Visual Arts and History in Art approved by the Art Education section. Only those courses which are accepted for credit by the Faculty of Education may be considered for approval.

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 101) will substitute 3 units in Biology or Bacteriology.

Chemistry:

Corequisites:

English 110 or 120	3	
Mathematics 130	3	
Mathematics 230	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 331 and 334)	3	16

Additional area courses will be chosen from Chemistry 300; 326; 331 and 334.

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

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

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 260	3
German 290	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 ENTERING FIRST YEAR. STUDENTS NOW REGISTERED IN THIS AREA SHOULD SEEK ADVICE FROM THE EDUCATION ADVISING CENTRE.

Corequisites:

English 110 or 120	3..... 3
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Area:

Approved junior social sciences from two areas listed below	6
Education 302	1½
Education 417	3
Education 418	1½
Education 419	1½
Six units chosen from:	6.....19

- Education 300
- Education 413
- Education 425
- Education 427
- Senior social sciences for which prerequisites are held.

Social Science courses will be chosen from: Anthropology, Economics, Political Science, Psychology, Sociology.

- NOTE: (1) Students are advised that entry into the required course, Education 302, carries the prerequisite of Education 301.
- (2) If Education 425 or 427 are elected to satisfy guidance section requirements, an alternative foundation course will be taken in the professional year.

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 318 may be elected in place of one senior history course. Students in this area may not elect History/History in Art as their second area.

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 100 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 Director of Industrial Education, British Columbia Vocational School, Burnaby	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 for twelve months 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 100 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, or 231	3
Mathematics 332 or 333	3
Mathematics 337	3.....15

Additional area courses may include Mathematics 170, 171, 271, 272.

Music:

Corequisites:	
English 120	3
English 200 or 201	3..... 6
Area:	
Music performance groups (see page 298)	0
Music 100	3
Music 110	3
Music 115	2
Music 140 or 240 (preferably piano for the student electing the choral option)	1
One of the following options:	9-12.... 18-21
Choral: Music 356	3
Music 360	3
Music Education 305	3..... 9
Instrumental:	
Music 330	2
Music 331	2
Music 332	2
Music 356	3
Music Education 305	3.....12

Additional area courses may be chosen from senior music history electives and Music 200, 205, 240, 300, 365, 400, 440, 340 (Choral option only), 350 (formerly 335) (Instrumental option only).

Students wishing to enter the Music Teaching area are referred to page 253 regarding acceptance and possible credit for A.R.C.T.

Physical Education:

Corequisites:

English 100, 110 or 120	3
Biology 150 (unless Biology 12 completed)	3..... 3-6

Area:

(1) Old Area		(2) New Area	
Physical Education 140	0	Physical Education 100	0
Physical Education 141	1½	Physical Education 101	0
Physical Education 142	1½	Physical Education 142	1½
Physical Education 240	0	Physical Education 143	1½
Physical Education 241	3	Physical Education 151	1½
Physical Education 340	0	Physical Education 241	3
Physical Education 341	1½	Physical Education 350	1½
Physical Education 342	1½	Physical Education 341	1½
Physical Education 440	0	Physical Education 342	1½
Physical Education 441	1½	Physical Education 460	1½
Physical Education 443	1½	Physical Education 441	1½
Physical Education 344	1½	Physical Education 443	1½
Physical Education 444*	1½.....15	Physical Education 450	1½
		Physical Education 444*	1½....19½

* 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 254 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

B. THE BACHELOR OF EDUCATION (ELEMENTARY) DEGREE

This programme is being phased out by Senate approval in 1968. Beginning in 1971-72, students who have completed professional training and 15 units of acceptable first year work may be accepted on the four-year programme but will be required to complete the degree by 1977, otherwise they will be required 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 251 to 255 in addition to the specific education and core courses. In meeting requirements for the degree some students may be able to complete a second area.

For graduation the candidate is required to obtain a minimum G.P.A. of 3.00 in the 9-15 units of course work beyond the core requirement contained in the teaching area of his choice. If the candidate selects as his teaching area an academic subject area as prescribed by the Faculty of Arts and Science (General Programme), he must obtain a minimum G.P.A. of 3.00 in 9 units of senior courses comprising this academic teaching area.

Students entering the programme for the first time from other institutions with the professional year already complete will be required to obtain a G.P.A. of 3.00 in all work taken subsequent to the Professional Year.

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 teaching area.

** When choosing electives, students should note the following:

1. Students concentrating on Primary Education must include Education 340.
2. Psychology 335 is not 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

A one year professional programme for graduates of a faculty other than Education who are interested in elementary or secondary teaching and who meet the requirements for admission. Successful completion of this programme 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 770 (first teaching area)	1½
*One of Education 750 to 770 (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.

D. INTERNSHIP PROGRAMMES

D1. ELEMENTARY CURRICULUM

During the session 1971-72 in co-operation with the Prince George School District, the University plans to offer an elementary internship programme preparing students for a teaching certificate by providing a year of classroom experience in Prince George schools and two summer sessions on the Victoria campus. This programme is designed primarily for students in the Faculty of Education who have completed the first two years of the five-year Bachelor of Education (Elementary Curriculum) degree and who would like to spend their professional year as interns.

During May and June students will be engaged in a practicum in Prince George schools which will prepare them for their assignments in the Fall. They will then spend two months on the University of Victoria campus, after which they will return to Prince George for the internship year. During the school year special training sessions and workshops will be arranged on Saturdays. The interns are paid for their services to the District. At the end of the internship year the students will return to Victoria to complete their professional courses during the period of the Summer Session. After successful completion of the programme the intern will be eligible to apply to the Department of Education for a British Columbia interim teaching certificate and will be free to accept a teaching position anywhere in the Province.

Students will be contacted during their Education 297 seminars and given details on application procedures if such a programme is to be offered in 1972-73.

Prospective candidates may write to the University Admissions Office for further information and application forms.

D2. SECONDARY CURRICULUM

The Faculty of Education has offered for the past four years a teaching internship programme for the preparation of secondary teachers. This has been suspended and therefore will not be offered in the 1971-72 session.

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 310 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.

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.

Mr. Williams and faculty. (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.

Members of the Faculty. (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.

Members of the Faculty. (1-0; 1-0)

EDUC 200. (3) **Introduction to Educational Psychology**

The application of psychological principles to elementary classroom practice.

Dr. Timmons, Dr. Viesti, Dr. Timko, Dr. Galloway. (3-0; 3-0)

EDUC 201. (1½) **Educational Psychology**

The application of psychological principles to elementary classroom practice.

Prerequisite: Senior psychology courses acceptable to instructor.

(Not offered 1971-72).

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.

Members of the Faculty. (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.

Members of the Faculty. (1-0; 1-0)

EDUC 300. (1½) **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. (1½) **Introduction to Measurement in Education**
 Elementary statistics, test validity and reliability, marking and grading.
 Dr. Ayers, Dr. Taylor. (1½-0; 1½-0)
- EDUC 302. (1½) **Use of Group Tests**
 Study of the purposes, uses, administration, scoring, and interpretation, of group tests commonly used in schools. Includes tests of aptitudes, achievement, interests, and personality.
 Prerequisite: Education 301 or consent of instructor.
 September to December only.
 Dr. Taylor. (3-0; 0-0)
- EDUC 303. (1½) **Introduction to Psychology of Classroom Learning**
 An introduction to the psychology of learning in the secondary school.
 September - December. Also January - April.
 Dr. Downing, Dr. Thomson, Dr. Timko, Dr. Viesti. (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.
 Dr. Downing, Dr. Knowles. (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.
 Dr. Dey, Mrs. Mickelson. (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 grades.
 Dr. Johnson. (3-0; 3-0)
- *EDUC 342 (1½) **Foundations of Reading**
 Consideration of the processes and psychology of reading. Developmental scope and sequence.
 September - December only.
 Dr. Johnson, Mrs. Michelson. (3-0; 0-0)
- *EDUC 343. (1½) **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.
 Mrs. Michelson. (0-0; 3-0)
- EDUC 344. (1½) **Oral Communication and Speech Development in the Elementary School**
 Factors influencing communication; improvement of oral facility in teacher and pupil; analysis of English sounds and voice characteristics; early recognition of speech problems; classroom activities for speech development.
 January - April only.
 (Offered in 1972-73 and alternate years.) (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.
 Dr. Daugs. (2-2; 2-2)

* The professional year is prerequisite to this course.

***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 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.

Mr. Owen.

(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. Evanechko.

(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) Introduction to Educational Media

Analysis of the theory, practice, and values of teaching with audio-visual media. Demonstrations and laboratory experiences in the utilization of filmstrips, slides, audio tapes, overhead transparencies, motion pictures, opaque visuals, graphics, models, and displays.

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 1971-72).

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.

Members of the Faculty.

(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. Taylor.

(1½-0; 1½-0)

***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)

* The professional year is prerequisite to this course.

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.

September - December. Also January - April.

Dr. Galloway.

(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.

Dr. Chabassol.

(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.

(Offered in 1971-72 and alternate years.) 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.

(Offered in 1972-73 and alternate years.)

***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.

(Offered in 1971-72 and alternate years.) January - April only.

Mr. Ruth.

(0-0; 3-0)

***EDUC 409D. (1 ½) 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.

(Offered in 1971-72 and alternate years.)

Dr. Thomson.

* The professional year is prerequisite to this course.

***EDUC 409E. (1 ½) 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.

(Offered in 1971-72 and alternate years.) January - April only.

Dr. Timmons.

(0-0; 3-0)

EDUC 413. (1 ½) Mental Health

An examination of the principles of mental health and their application to the classroom.

(Not offered 1971-72.)

(3-0; 0-0) or (0-0; 3-0)

***EDUC 415. (1 ½) 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 ½) 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. Peavy.

(3-0; 3-0)

EDUC 418. (1 ½) 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 the Third and Fourth Years.

Prerequisite: Education 417 (may be taken concurrently), and consent of the instructor.

September - December only.

Dr. Viesti.

(3-0; 0-0)

EDUC 419. (1 ½) 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 and 418 (may be taken concurrently), and consent of the instructor.

January - April only.

Dr. McHugh.

(0-0; 2-2)

* The professional year is prerequisite to this course.

***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.

Dr. Goulson. (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.

(3-0; 3-0)

EDUC 427. (3) Sociology of Education

The social structure of western civilization and its significance for education.

(Not offered 1971-72).

EDUC 430. (1 ½) 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.

One term only, to be announced.

Dr. Hodgkinson, Mr. Sawchuk. (3-0)

***EDUC 431. (1 ½) 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.

Mr. Sawchuk. (0-0; 3-0)

***EDUC 440. (1 ½) 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 ½) 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)

***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)

* The professional year is prerequisite to this course.

***EDUC 444. (1 ½) Mathematics Education in the Elementary School**

Current trends and curricular developments in elementary mathematics. Students will have the opportunity of making a special study at either the primary or intermediate level.

Prerequisite: Education 744 or Mathematics 203.

(Not offered 1971-72).

***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.

(Offered 1972-73 and alternate years). (3-3; 3-3)

***EDUC 450. (3) Individualizing Instruction for Continuous Progress**

(Not offered 1971-72).

†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 1971-72).

EDUC 495. (1 ½) Directed Studies

Research projects, directed reading, or additional course work as approved by the Dean of Education or his designate.

Members of the Faculty.

***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).

January - April only.

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 1971-72).

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.

Prerequisite: Education 398.

Members of the Faculty.

(1-0; 1-0)

EDUC 701. (1) Curriculum and Instruction in Art

A study of the curriculum organization and techniques of instruction in elementary art.

Mr. Cawood, Mr. Hodder, Mr. Jickling, Miss Moody, Mr. Shostak.

(2-0; 2-0)

* The professional year is prerequisite to this course.

† Approved for credit in the Faculty of Arts and Science.

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.

September - December. Also January-April.

Dr. Bradley, Dr. Churchley, Miss Vaughan. (2-0)

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.

September - December. Also January-April.

Dr. Bradley, Dr. Churchley, Miss Vaughan. (2-0)

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.

September - December. Also January-April.

Dr. Bradley, Dr. Churchley, Miss Vaughan. (2-0)

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.

Dr. Armstrong, Dr. Dey, Dr. Evanechko, Dr. Johnson, Mrs. Mickleson, Dr. Ollila.
(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.

Dr. Burbank, Dr. Horne, Dr. Liedtke, Dr. Vance. (1-1; 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.

Mr. Hall, Mr. Swailes, Mr. Williams, Mr. Yore. (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.

Mr. Owen. (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.

Mrs. Hibberson, Mrs. McLaughlin, Mr. Peake. (2-2)

EDUC 750-770. **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. Hodder.

EDUC 753. (1½) **English**

Dr. Monk.

EDUC 754. (1 ½-3) 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. (1 ½) Geography

EDUC 757. (1 ½) Guidance

Dr. McHugh.

EDUC 758. (1 ½) History

Dr. Goulson.

EDUC 759. (1 ½) Industrial Education

EDUC 761. (1 ½) Mathematics

Dr. Horne.

EDUC 762. (1 ½) Music

Dr. Churchley.

EDUC 764. (1 ½) Physical Education

Dr. Martens.

EDUC 767. (1 ½) Theatre

EDUC 768. (1 ½) Commerce

EDUC 769. (1 ½-3) 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. Swailes, Mr. Yore.

EDUC 770. (1 ½) Home Economics

EDUC 797. (3) Seminar and Elementary Student Teaching

For students registered in the professional year, elementary programme. This course may be satisfied by the internship programme or 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 an eight-day September practicum in addition to the regular student teaching requirements, to be arranged by the Student Teaching Office.

Members of the Faculty.

EDUC 798. (3) Seminar and Secondary Student Teaching

For students registered in the professional year, secondary programme. This course may be satisfied by the internship programme or by sessional and post-sessional practica.

Members of the Faculty.

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.

Mr. Shostak, Mrs. Small, Miss Moody, Mr. Cawood,
Mr. Jickling, Mr. Hodder.

(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. Jickling, 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 for Elementary Schools**

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 elementary leadership in art. This will include work with children and a parallel study of the visual development of children.

Mr. Cawood, Miss Moody. (3-0; 3-0)

***A E 400. (3) Special Study**

This will include a study of a particular field of Art Education carried out under the direction of a member of 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 Art Education 301, or consent of the instructor.

Mrs. Small (Seminar). Other Art Education Faculty (Special Problems). (3-0; 3-0)

MUSIC EDUCATION

ME 100. (0) Laboratory Chorus

Materials and rehearsal techniques for use with elementary and secondary school choral groups. Emphasis upon rehearsal rather than performance.

Open to all students. It is strongly recommended that all students on music education teaching areas participate each year.

Dr. Bradley.

ME 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. (3-0; 0-0)

ME 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. (3-0)

* The professional year is prerequisite to this course.

ME 107. (1½) Educational Materials for Listening

Continuation and development of classroom music activities with special emphasis on listening and creative experiences.

Co- or Prerequisite: Music Education 106.

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

ME 108. (1½) Piano Class for Classroom Teachers

Development of piano keyboard skills useful in classroom music.

Co- or Prerequisite: Music Education 106.

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

ME 305. (3) Music Education (Advanced)

A study of modern methods, materials, objectives, and philosophy pertaining to the teaching of music in elementary and secondary schools.

Prerequisite: Music Education 105 or approval of instructor.

Dr. Churchley. (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.

(Offered in 1972-73 and alternate years).

***LE 431. (3) School Library Services**

The role of the school library, programmes and services, administering the library, staffing, supervision, etc.

(Offered in 1971-72 and alternate years). (3-0; 3-0)

PHYSICAL EDUCATION

PE 100. (0) Year 1 — Basic Skills in Physical Education Activities

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	Wrestling, Dance
Area 6	Skating, 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.

Members of the Faculty.

PE 101. (0) Year 2 — A Continuation of Physical Education 100 (Year 1)

Members of the Faculty.

* The professional year is prerequisite to this course.

PE 142. (1 ½) Introduction to Health Education

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. (1 ½) 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 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.

Members of the Faculty.

(2-2; 2-2)

PE 151. (1 ½) Theory and Practice in Fundamental Movement

A study of basic movement skills and basic principles of movement. Practical aspects include rhythemics, tumbling, skills, and movement education.

(Not offered in 1971-72).

Mrs. McLaughlin.

PE 241. (3) Human Physiology and Anatomy (1970-72)

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. (1 ½) 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, Dr. Eckerson.

(0-0; 3-0)

PE 342. (1 ½) 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. (1 ½) 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. (1 ½) **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.

September-December. Also January-April.

Dr. Eckerson.

(3-0)

PE 350. (1 ½) **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. Also January - April.

Members of the Faculty.

(3-0)

PE 440. (0) **Methods and Skills in Physical Education (1971-72 only)**

Skill improvement and teaching techniques in:

(a) Track and Field (II)

(b) Elective A: *One* of Curling, Golf.

(c) Elective B; (Women only) *Two* of Basketball (II), Field Hockey (II),
Gymnastics, Dance.

(d) Elective C: (Men only) *Two* of Basketball (II), Soccer (II),
Gymnastics (III), Wrestling, Rugby.

Members of the Faculty.

(0-3; 0-3)

PE 441. (1 ½) **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 ½) **Perceptual-Motor Foundations**

Implications of perceptual-motor development for learning; psychology of motor-skill acquisition.

January-April only.

Dr. Collis.

(0-0; 3-0)

PE 443. (1 ½) **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 ½) **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.

Dr. Howe.

(3-0; 0-0)

PE 445. (1 ½) **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 exercises techniques.

September - December only.

Dr. Eckerson.

(3-0; 0-0)

PE 450. (1½) Theory and Techniques of Teaching Skills in Individual Activities

Methods of teaching minor games, swimming, badminton, tennis, wrestling, dance, track and field, gymnastics.

Prerequisites: Physical Education 100, 101, 151.

(Not offered 1971-72).

PE 460. (1½) 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.

Members of the Faculty.

(1-1; 1-1)

INDUSTRIAL EDUCATION

These courses are offered only at the British Columbia Vocational School, Burnaby.

IE 250. (3) Technology of Woodworking I

Fundamentals of bench and machine woodwork; design and layout; hand and machine tool maintenance. (2-4; 2-4)

IE 251. (3) Technology of Metal Working 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)

IE 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)

IE 254. (1½) 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)

IE 255. (3) Electricity in Industrial Education I

D.C. fundamentals and circuits; D.C. motors and generators; signal circuits; electrochemical devices; D.C. measurement; residential wiring circuits. (3-3; 3-3)

IE 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)

IE 257. (1½) 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)

IE 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)

IE 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 pre-fabrication methods; western platform frame and post and beam construction.

Prerequisite: Industrial Education 250. (2-4; 2-4)

I E 353. (3) Design in Industrial Education

Functional structural and aesthetic aspects of design applied to Industrial Education projects. (2-4; 2-4)

I E 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)

I E 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)

I E 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)

I E 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)

I E 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)

I E 359. (1 ½) 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)

I E 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)

I E 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)

I E 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)

I E 453. (1 1/2) 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 1/2) Learning Principles

September - December only.

Dr. Downing.

EDUC 501. (1 1/2) Theory of Measurement

September - December only.

Dr. Ayers.

EDUC 502. (1 1/2) Seminar in Educational Evaluation

Dr. Taylor.

- EDUC 503. (1 ½) **Verbal Learning**
 January - April only.
 Mr. Ruth.
- EDUC 504. (1 ½) **Psychology of Conceptual Learning**
 January - April only.
 Dr. Downing.
- EDUC 505. (1 ½) **Basic Concepts in Human Development**
 September - December only.
 Dr. Chabassol.
- EDUC 506. (1 ½) **Selected Topics in Human Development**
 January - April only.
 Dr. Knowles.
- EDUC 507. (1 ½) **Psychology of Individual Differences**
 January - April only.
 Dr. Timko.
- EDUC 508. (1 ½) **Theories of Learning**
 September - December only.
 Dr. Timmons.
- EDUC 509. (1 ½) **Psychology of Classroom Learning**
 January - April only.
 Dr. Thomson.
- EDUC 510. (1 ½) **Psychology of Group Differences**
 September - December only.
- EDUC 512. (1 ½) **Measurement in the Affective Domain**
 September - December only.
- EDUC 515. (1 ½) **Advanced Diagnosis of Learning Disabilities**
 Prerequisite: Education 402, 415, 416, or consent of instructor.
 September - December only.
 Dr. Tinney.
- EDUC 516. (1 ½) **Advanced Remediation of Learning Disabilities**
 Prerequisite: Education 515, or consent of instructor.
 January - April only.
 Dr. Tinney.
- EDUC 517. (3) **Practicum in Counselling**
 Dr. Knowles.
- EDUC 518. (1 ½) **Seminar in Counselling Psychology**
 September - December only.
 Dr. McHugh.
- EDUC 519. (1 ½) **Advanced Seminar in Counselling Psychology**
 January - April only.
 Dr. Viesti.
- EDUC 520. (3) **Seminar in the Philosophy of Education**
- EDUC 521. (3) **Educational Classics**

- EDUC 531. (1 ½) **Administration of Public Education in Canada**
September - December only.
Dr. Hodgkinson.
- EDUC 532. (1 ½) **Administration of the Educational Programme**
January - April only.
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 1 Reading — September - December only. Dr. Armstrong.
Section 2 Language — January - April only. Dr. Armstrong.
Section 3 Social Studies
Section 4 Arithmetic
Section 5 Science
- EDUC 541. (1 ½) **Research in Curriculum and Instruction in the Secondary Grades**
Section 1 English
Section 2 Geography
Section 3 History
Section 4 Mathematics
Section 5 Science
- EDUC 556. (1 ½) **Basic Concepts of Curriculum Development**
- EDUC 557. (1 ½) **Applied Concepts of Curriculum Development**
- EDUC 558. (1 ½) **Development and Implementation of the Curriculum in a Specific Area**
Dr. Horne.
- EDUC 560. (1 ½) **Statistical Methods In Education**
September - April only.
Mr. Muir.
- EDUC 561. (1 ½) **Methods in Educational Research**
September - April only.
Mr. Muir.
- EDUC 562. (1 ½) **Advanced Statistical Methods in Education**
January - April only.
Mr. Muir.
- EDUC 570. (3) **Motor Learning**
- EDUC 572. (3) **Advanced Exercise Physiology**
- 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

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 38-41 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 54-68), 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 Gowans, 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*), Visiting Associate Professor.

John C. Freeman, B.A. (*Harpur*), M.A. (*Delaware*), Assistant Professor.

Partha Mitter, B.A. (*Calcutta*), B.A. (*London*), M.A. (*Cantab.*), Ph.D. (*London*), Assistant Professor, (Leave of absence 1971-72).

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 320	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. 101, 102	3	Clas. 100, 330, 340	
One of:		Hist. 204	
Anth. 100		Ling. 100, 210	
Geog. 101, 303	3	Theatre 310	6
	<hr style="width: 100%; border: 0.5px solid black;"/>		<hr style="width: 100%; border: 0.5px solid black;"/>
	15		15

Years 3 and 4			
<i>Year 3</i>	<i>Units</i>	<i>Year 4</i>	<i>Units</i>
II A 340		II A 360	
II A 441 or 481	6	II A 380	
One of:		II A 490	9
Geog. 307		One of:	
Anth. 441	3	Geog. 307	
One of:		Anth. 441	3
Hist. 212		One of:	
Hist. 200, 303		Econ. 101, 321	
Hist. 305		Eng. 203	
Hist. 311		Hist. 200, 212, 303, 305,	
Hist. 312	3	311, 312	
One of:		Pol. Sc. 300, 310	
Class. Latin lit. in transl.		Music 110 or 210	
Hist. 200		Theatre 311 or 312	3
Eng. 410 or 413 or 418			
or 424 or 425			
Music 110			
Theatre 310 or 311	3		
	<hr/>		<hr/>
	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.

†HA 100. 3) **Survey of World Art**
(Summer Session only).

†*HA 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.

Text: (*Syllabus*), Distributed.

Dr. Gowans, members of the Department and teaching assistants. (3-0; 3-0)

†*HA 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.

Dr. Gunasinghe. (3-0; 3-0)

†*HA 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.

Dr. Gunasinghe. (3-0; 3-0)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

†*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.

Texts: Norris K. Smith, *Medieval Art*; P. Kidson, *Medieval World*.

Mr. Morris.

(3-0; 3-0)

†*H A 340. (3) **Renaissance and Baroque Art in Western Europe**

The evolution of art and architecture as the expression of ideas from ca. 1400-1750, with special emphasis on the art of "Old Masters" such as van Eyck, Ghiberti, Donatello, van der Weyden, Leonardo, Raphael, Michelangelo, Titian, Bernini, Rembrandt, etc.

Mr. Freeman.

(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 concept of what art is and what artists do in and for society. The parallel developments in sculpture will be considered.

Mr. Welch.

(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.

(Not offered 1971-72.)

(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. Students registered in this course will have special tutorial sections, with course assignments and examinations related to their particular major areas of study.

Dr. Gowans.

(3-0; 3-0)

†*H A 420. (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. (In 1971-72, area is Islamic Art History).

Mr. Welch.

(3-0; 3-0)

†*H A 441. (3) **Special studies In Renaissance Tradition**

Specialized aspects of painting, sculpture and architecture in Europe from 1300-1500, or later manifestations of the tradition then established.

(Not offered 1971-72.)

(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.

Texts: Alan Gowans, *Images of American Living*; *Building Canada*.

Mr. Freeman.

(3-0; 3-0)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

† 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 Education.

* Approved for credit in the Faculty of Arts and Science.

GRADUATE COURSES

H A 501. (3) **Problems in History of Art History**

H A 503. (3) **Special Problems of East-West Relationships**

H A 505. (3) **Directed Readings**

H A 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 W. 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.
Boyd W. Hood, B.M. (*Eastman Sch. of Music*), M.M. (*Ball St. U.*), Assistant Professor.
Christine Mather, A.R.C.M., M.Mus. (*Michigan*), Visiting Assistant Professor.
Brian Cherney, B.Mus., M.Mus. (*Tor.*), Lecturer.
Derek E. Healey, B.Mus. (*Durham*), F.R.C.O., A.R.C.M., Lecturer.
Les Thimmig, B.Mus. (*Eastman*), M.M.A. (*Yale*), 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 Conservatory which is affiliated with the University of Victoria. See page 343.

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.
Mary Ducker, G.R.S.M., L.R.A.M., piano.
Donald DeRoche, B.M., M.M. (*Illinois*), clarinet.
Kathryn Ely, B.Ed., B.M. (*Illinois*), harp.
Richard Ely, B.M. (*Montana*), M.M. (*Illinois*), French horn.
Ian Franklin, oboe.
Elfreda Gleam, F.T.C.L., L.R.A.M., violin.
Donald Haig-Robinson, L.R.A.M., A.R.C.M., piano.
Margaret Hendry, A.T.C.M., piano.
Sydney Humphreys, L.R.S.M., A.R.A.M., A.R.C.M., F.R.A.M., violin.
James Hunter, Graduate, Toronto Conservatory, cello.
Zdenek Kriz, Diploma, University of Bratislava, viola.
Ted Lazenby, trombone.
Dennis Lillie, B.Mus. (*San Francisco*), trumpet.
Else Menting, A.R.C.T., piano.
Jan Menting, Instructor, Canadian Forces, flute.
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.
Roland Small, bassoon.
Noel Smith, A.R.C.M., piano.
Marjorie Tebo, A.L.C.M., L.R.S.M., piano.
Beal Thomas, B.M. (*So. Methodist*), S.M.M. (*Union*), organ.
Madeleine Till, L.R.A.M., G.R.S.M. (*London*), piano.
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, students seeking admission to the Bachelor of Music programme must provide evidence of marked musical ability** and should arrange an interview with the Department of Music (477-6911, Local 361), which should take place during March or April or at the latest in September, before registering for any music course.

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 students may take an extra unit in Composition (see Music 105) with the permission of the Department. Students intending to proceed to the Major in Performance should take Music 145 instead of Music 140. Music 336 (Keyboard Technique) may be required during the first and/or second year of those without minimum keyboard skill.

Year 1

Music 100	3
Music 110	3
Music 115	2
One of: Music 140, or 145	1 or 3
*Two of: Music 150, 151, 152, 153, 154, 155	0
English 110 or non-music elective	3
*Non-Music elective	3
	<hr/>
	15 or 17

*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.

**Students intending to elect the Performance Major are advised that the Pre-requisite to this programme is the Performers' A.R.C.T. diploma or equivalent evidence of ability.

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	
240	1	340	1	elective	3
350	3	Non-Music elective	3	2 Music Electives	6
	<hr/> 16		<hr/> 16		<hr/> 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
		Non-music elective	3	Non-music elective	3
	<hr/> 16		<hr/> 16		<hr/> 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			Two non-music electives	6
240	1	Music Ed. 305 or two of Music Ed. 106, 107 or 108	3	Two Music electives	6
350	3				
Non-music elective	3	Two of 330-336 series	3		
		340	1		
		Non-music elective	3		
	<hr/> 16		<hr/> 16		<hr/> 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/> 15		<hr/> 15		<hr/> 15

*Students in all years will normally take two of Music 150, 151, 152, 153, 154, 155.

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. (2-2; 2-2)

*†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.

Prerequisite: Music 300. (3-0; 3-0)

COMPOSITION

MUS 105. (1) **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. (3-0; 3-0)

†MUS 115. (2) **The elements of Music**

A study of the technical, historical, and aesthetic materials necessary to the critical evaluation of music. (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. (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. (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)
- †MUS 332. (1½) **Woodwinds**
Group instruction in playing all orchestral woodwind 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 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. (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 Victoria Conservatory of Music, with whom the University is in affiliation.

- †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)
- †MUS 340. (1) **Individual Tuition**
 Lessons in instruments or voice.
 Prerequisite: Music 240. (0-1; 0-1)
- †Approved for credit in the Faculty of Education.

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 150. (0) **University Chorus**

(0-2; 0-2)

†MUS 151. (0) **University Orchestra**

(0-2; 0-2)

†MUS 152. (0) **University Concert Band**

(0-2; 0-2)

†MUS 153. (0) **Wind Ensembles**

(0-2; 0-2)

†MUS 154. (0) **String and Piano Ensembles**

(0-2; 0-2)

†MUS 155. (0) **University Chamber Singers**

(0-2; 0-2)

†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**

*MUS 503. (1 ½)

Bibliography

(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**

*All students in Musicology must register for this in their first term of graduate study.

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
†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 597. M.Mus. Graduating Composition(s)
§MUS 598. M.Mus. Practicum
§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.

§Credit to be determined.

**All students in Musicology must register for this each year they are in residence.

DEPARTMENT OF THEATRE

Ralph G. Allen, B.A. (*Amherst*), D.F.A. (*Yale*), Associate Professor and Chairman of the Department.

Robert M. Cothran, Associate 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*), Assistant Professor.

John F. Krich, A.B. (*Baldwin-Wallace*), M.F.A. (*Yale*), Assistant Professor.

Irene M. Pieper, B.A. (*Calif.*), M.A. (*San Fran. St. Coll.*), Assistant Professor.

Robert C. Field, B.A. (*Yankton College*), M.A. (*Miami*), Lecturer.

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 developmental drama.

Students who wish to enter the B.F.A. Theatre programme, or who wish to transfer to the programme from other departments, faculties, or universities, must consult the Theatre Department, and all students must consult the Chairman of the Theatre Department during the first two days of registration.

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, a season of experimental productions is presented.

PROGRAMME OF COURSES

General Programme

All B.F.A. students must complete sixty units of course work of which no fewer than thirty and no more than thirty-six normally will be in theatre. Each student is required to take English 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 developmental 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.

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)

†Approved for credit in the Faculty of Education.

*Approved for credit in the Faculty of Arts and Science.

†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. Cothran, Mr. Field.

(1-4; 1-4)

HISTORY OF THEATRE

†*THEA 310. (3) **The History of the Theatre to 1642**

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.

(Not offered 1971-72).

(3-0; 3-0)

†*THEA 311. (3) **The History of the Theatre from 1642 to the Rise of Naturalism**

An examination of the late seventeenth-, eighteenth-, and nineteenth-century theatre with particular emphasis on England, France, Italy and Germany.

(3-0; 3-0)

†*THEA 312. (3) **Modern World Drama**

A history of the theatre from Ibsen to the present.

(Not offered 1971-72).

(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)

THEA 360. (1½) **Special Projects in Dance**

Study of contemporary and traditional dance. Prerequisite: permission of the instructor.

(0-3; 0-3)

†Approved for credit in the Faculty of Education.

*Approved for credit in the Faculty of Arts and Science.

†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: 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 1971-72). (1-4; 1-4)

DESIGN AND TECHNICAL PRACTICE

THEA 340. (Art 340). (3) **Scenery for the Theatre**

Problems in the design and construction of stage scenery. Practical work will be required. 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)

DEVELOPMENTAL DRAMA

†THEA 181. (3) **Creative Drama**

Practical exploration of dramatic imagination, awareness and interaction by the student, both individually and in groups. A survey of such work with young children. Both studio work and work with children will be required. (0-6; 0-6)

†THEA 382. (3) **Youth Theatre**

Creative drama developments, with specialized exploration of dramatic imagination through movement and non-verbal methods both individually and in groups. A survey of dramatic activity with older children with detailed examination of the evolving theatre forms. Both studio work and work with children will be required. Prerequisites: Theatre 181 (or 180-480) and permission of the instructor.

(1-4; 1-4)

†Approved for credit in the Faculty of Education.

†THEA 383. (3) **Theatre-for-Young-Audiences**

A study of the problems of Theatre-for-Young-Audiences, with practical work in a variety of forms and media. Each student will be responsible for two specific projects. There will also be a study of architecture and equipment of theatre forms. Studio work will be required. Prerequisites: Theatre 181 (or 180-480) and permission of the instructor. (1-4; 1-4)

†THEA 481. (3) **Theory of Dramatic Education**

The philosophic basis of dramatic work in education; psychoanalytic and psychotherapeutic studies of dramatic play and theatre; social anthropology (including the origins of drama) and its relevance to children's play; social psychology and group studies; theories of the cognition and language of children and their relationship to both dramatic impersonation and imagination.

Prior reading: texts for Theatre 181, 382 and 383 are assumed to have been read before entry to the course. Prerequisite: permission of the instructor.

(Not offered 1971-72.)

(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 Developmental 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) **Graduating Project**

Students may take directed studies under this number for credit more than once according to their areas of interest and with the permission of the Department.

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**

†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.

- THEA 505. (3) **Contemporary Theatrical Styles**
- THEA 506. (3) **Seminar in Child 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 514. (3) **M.A. Thesis**
- THEA 515. (3) **M.F.A. Final Project**
- 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.

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).

Dana W. Atchley, B.A. (*Dartmouth*), B.F.A., M.F.A. (*Yale*), Assistant Professor (Foundation Studies and Photography).

Peter William Daghli, Dip. (*Montreal*), Assistant Professor (Drawing and Print-making).

Eric G. Hilton, D.A. (*Edinburgh Coll. of Art*), Assistant Professor (Sculpture).

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 self-conscious 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 the *2nd of July, 1971*. 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)
				Art 316	(3)
Theatre			Sculpture	Art 375	(3)
Design	Art 340	(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, 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)

†Approved for credit in the Faculty of Education.

†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)

†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. *Intaglio* — etching, drypoint, engraving

Relief — linocut, woodcut

Planographic — lithography, silkscreen

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. (0-4; 0-4)

This course may be taken concurrently with Art 316.

†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-Farm-Giving Seminar**

This course will be taken under consultation with visiting and resident faculty.

† Approved for credit in the Faculty of Education.

Faculty of Graduate Studies

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. (A. R. Fontaine, Dean pro tem)

A. R. Fontaine, 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, Department of Geography

Representing Fine Arts

A. Gowans, Department of History in Art

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 student's responsibility 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~~ 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 a 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. Details of the student's programme are recommended by the Supervisory Committee to the Faculty of Graduate Studies.

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 16 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*

A student will normally be required to demonstrate to the satisfaction of the Department or Faculty concerned a reading knowledge of at least one language other than his own.

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 16 for graduation at Convocation in the Spring.

NOTE: These regulations may be modified at any time with the approval of the Senate or the Board of Governors on the recommendation of the Faculty of Graduate Studies.

DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY

The Department of Anthropology and Sociology offers courses of study leading to the degree of Master of Arts in the following areas:

Anthropology — Ethnology of Northwest North America; Archaeology of Northwest North America; Ethnology of the Pacific.

Sociology — Minority and Ethnic Group Relations; Community Structure and Process; Sociology of Medicine; Sociology of Occupations; Sociology of Religions.

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 310-314 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

W. Gordon Fields, Ph.D. (*Stanford*)
Professor.

Arthur R. Fontaine, D.Phil. (*Oxon.*)
Professor.

George O. Mackie, 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.

John E. McNerney, Ph.D. (*Brit. Col.*)
Associate Professor.

John N. Owens, Ph.D. (*Ore. St.*)
Associate Professor.

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

Arthur T. Bergerud, Ph.D. (*Brit. Col.*)
Assistant Professor.

Louis A. Hobson, Ph.D. (*Wash.*)
Assistant Professor.

Jack L. Littlepage, Ph.D. (*Stanford*)
Assistant Professor.

John W. Paden, Ph.D. (*Idaho*)
Assistant Professor.

Richard A. Ring, Ph.D. (*Glasgow*)
Assistant Professor.

E. Derek Styles, Ph.D. (*Wis.*)
Assistant Professor.

Areas of Research

Embryology and Natural History of
Marine Invertebrates;
Cephalopods.

Functional Morphology of Marine
Invertebrates: Echinoderms.

Behavioural Physiology and
Ultrastructure of Marine Invertebrates:
Coelenterates.

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.

Behaviour and Physiology of Fishes.

Plant Anatomy and Morphogenesis.

Physiology of Marine Invertebrates.

Wildlife Management; Population
Ecology of Birds and Mammals.

Biological Oceanography:
Phytoplankton Ecology and Physiology.

Biological Oceanography:
Zooplankton Physiology and Ecology.

Mycology: Ascomycete Morphology and
Systematics; Soil Microbiology.

Physiology and Ecology of Insects.

Plant Genetics; Flavonoid biosynthesis:
Paramutation.

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 44, 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, Mossbauer spectrometer, gas chromatographs, multinuclear NMR facilities, infrared and ultraviolet spectrometers, high efficiency beta counting system, laser interferometers.

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 6 units of graduate courses in chemistry. For the Ph.D. degree 10 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.

DEPARTMENT OF CLASSICS

The Department of Classics offers a program 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. For further information, please contact the Chairman of the Department and see the Department's entry in the undergraduate section of this calendar.

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 fulfil 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 Intellectual 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.

In the first year of the two-year programme, students will normally complete 3 units of methodology and historiography, and 12 units of advanced undergraduate course work for a total of 15 units. The second year is the same as the one-year programme: four half-year graduate seminars, a thesis seminar, and a thesis. The 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 foreign 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 research:

- 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.
- B. W. Dippie, Ph.D. (*Texas*), Intellectual-cultural; Nineteenth Century U.S.
- E. R. Forbes, M.A. (*Dalhousie*), Post-Confederation Canada.
- Miss C. S. M. Girard, Ph.D. (*Bryn Mawr*), Twentieth Century Diplomacy; Modern France. (Leave of absence, 1971-72.)
- J. E. Hendrickson, Ph.D. (*Ore.*), American West. (Leave of absence, 1971-72.)
- S. W. Jackman, Ph.D. (*Harvard*), Nineteenth Century British.
- 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.
- S. G. Pettit, M.A. (*Brit. Col.*), Colonial British Columbia; Intellectual History.
- C. M. Rowe, B.A. (*Liverpool*), Expansion of Europe.
- Miss P. E. Roy, Ph.D. (*Brit. Col.*), Western Canada.
- 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.
- W. T. Wooley, Ph.D. (*Chicago*), U.S. Diplomacy; Urban History.

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

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.

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 of students 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 last term of residence.

Ph.D. Dissertation.

This should be a major contribution to original musical research.

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, and using the facilities of, the Dominion Astrophysical Observatory.

Geophysics

Geomagnetism and Space Physics — Experimental and theoretical investigation of geomagnetic variations and related topics.

Plasma Studies — Plasma diagnostic techniques.

Upper Atmospheric Physics — Study of the airglow and related phenomena.

Nuclear Studies

Cosmic Rays — Continuous monitoring of low energy nucleonic component and atmospheric correlations using an IBM-360/44 computer.

Nuclear Magnetic Resonance — Nuclear spin relaxation in liquids and solids.

Tri-University Meson Facility (TRIUMF) — Design and construction of 500 MeV, 100 μ a sector-focussed cyclotron with three other western universities.

Physics of Fluids

Gas kinetics.

Steady and Unsteady Flow — Experimental and theoretical studies of shock waves and flow in shock tubes.

Underwater Acoustics — Model studies of reverberation and other acoustic problems.

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 or 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.

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.

Other Programmes

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.

Division of
Continuing Education

DIVISION OF CONTINUING EDUCATION

Director: to be appointed

Associate Director: Laurence E. Devlin, B.Ed., M.A., Ph.D.

In the academic year 1970-71, the Division offered courses in Business and Management, Creative Arts, Languages, Liberal Arts and Professional Development. The following course titles are illustrative of the type of offering in the above areas: Accounting, Business Administration, Economics, The Musical Experience, French by the Audio Visual Method, Conversational German, Developing the Learning Capacity of Pre-School Children, East Asia, Law for the Layman, The Nurse and the Counselling Relationship, Numerical Techniques for Engineers and Scientists and The Education of Adults.

In addition to courses, the Division sponsors special programmes of continuing education in cooperation with other Departments of the University. In the academic year of 1970-71, these special courses included Three Weekends on Campus, a series of weekends in the fine arts during which participants lived on campus, The Initial Teaching Alphabet Workshop, and an Integrated Computer Programme.

All courses sponsored by the Division are open to any adult in the Greater Victoria area or on Vancouver Island. There are no prerequisites for courses unless specified.

For a calendar of the Division listing Fall and Spring programmes in 1971-72, interested adults should write to:

The Associate Director
Division of Continuing Education
University of Victoria.

Summer Session

SUMMER SESSION

Director: to be appointed.

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 63.
7. Summer Session examinations are held at the close of Summer Session.
8. For regulations regarding standing and credit, see page 61.

Off-Campus Courses

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 — Clearihue 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 towards 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 13, 1971, to Friday, April 28, 1972.

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 1971 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 2.

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 10. 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 10.

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 65 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 15, 1972 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 66 of the Calendar.

List of Courses

A list of courses to be offered may be obtained from the Registrar's Office.

Affiliate
Victoria Conservatory of Music

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 292.

Pre-Professional Education

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
Approved 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

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 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 352.

Section 2: Government of British Columbia awards. See page 365.

Section 3: University bursaries requiring application. See page 366.

Section 4: Undergraduate awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See page 367.

Section 5: Undergraduate awards for which application must be made to the Senate Committee on Awards. See page 376.

Section 6: Undergraduate awards administered by the University of British Columbia and other institutions and organizations. See page 379.

Section 7: Awards for graduate study. See page 385.

Section 8: Loan funds. See page 386.

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.

PRESIDENT'S ENTRANCE SCHOLARSHIPS — Five scholarships of \$500 each for British Columbia secondary school graduates who are entering the University of Victoria in September 1971. Awards will be based upon high standing in the matriculation record of students in June 1971. 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 School Districts 61 and 63.

ALDYEN HAMBER CHAPTER I.O.D.E. ENTRANCE SCHOLARSHIPS — 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 HARBOR 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.

THE ISLAND TUG AND BARGE 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.

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 or Grade 13 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.

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 or XIII. 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.

UNIVERSITY OF VICTORIA ALUMNI SCHOLARSHIP — Contributions to the Alumni Annual Giving Campaign and other funds have made possible the institution of a \$500 scholarship by the Alumni Association of the University of Victoria. The award, renewable annually for a total of four years, will be awarded 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.

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 exceptional talent.

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 or Grade XIII 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.

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 or XIII in high school to a full programme of studies at the University of British Columbia 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

* Administered by the University of Victoria Foundation.

she is registered. Candidates in Grade XIII will be considered on the basis of standing obtained in the Departmental Examinations written in June; those 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 or XIII in high school to a full programme of studies at the University of British Columbia 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 XIII will be considered on the basis of standing in the Departmental Examinations written in June; those 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 or XIII 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 or the University of Victoria. 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 reward 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 or XIII to a full course of University studies. Three scholarships of approximately equal value are provided, one for attendance at each of the University of British Columbia, the University of Victoria, and Simon Fraser University, 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 SCHOLARSHIP — Four scholarships, in the amount of \$300 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 an eligible student proceeding directly in the fall from Grade XII or XIII to a full programme of studies at the University of British Columbia or the University of Victoria or Simon Fraser University or Notre Dame University of Nelson. Candidates for these scholarships must (a) write the required scholarship examinations conducted in June by the Department of Education, B.C.; (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. This application form, which is to be received by the University not later than May 15, must clearly indicate (i) the applicant's relationship to a member or deceased member of the Royal Arch Masonic Order, the name of the member, and the name of the Chapter with which he is or 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. Only candidates who obtain an overall average of 70% in the Department examinations will be considered. 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 or the University of Victoria 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 letter, to be received by the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., not later than June 1. 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 or the University of Victoria 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 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 letter to be received by the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., not later than June 1. In the letter the student should give his full name and home address, name and address of his school, and the name of the institution he will attend in the fall. He must also give essential details of family employment with the Company.

THE VANCOUVER SUN SCHOLARSHIPS FOR 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 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 letter to the Scholarship and Bursary Office, Room 207, Buchanan Building, University of British Columbia, Vancouver 8, B.C., not later than May 15. The letter of 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 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 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 recommen-

dation 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 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 or XIII 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 or XIII 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 or XIII 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 super-annuated); (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 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 Grades XII or XIII 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 sons and daughters 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 or Grade XIII 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 academic standing (normally an overall average of at least 65% in Grade XII or XIII). In the selection of the winners, 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 or Grade XIII 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. Applications, on forms 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.

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 or XIII 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, or, if a Grade XIII student, an average of at least 85%

in these 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) or Grade XIII (Senior Matriculation) who, in the session 1971-72, 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, or moral force of character, and of instincts to lead and 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. Grade XIII students similarly should not apply unless they are likely to obtain an overall average of at least 85%.

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.

CECILIA GREEN MEMORIAL SCHOLARSHIP—One hundred dollars (\$100)

awarded to the first ranking student from Victoria High School in the University Entrance Examinations who has not already merited another award. The recipient must attend the University of Victoria or the University of British Columbia.

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. 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 his decease, or a member who has retired from the industry and holds a Retirement Card from this local union, shall also be deemed eligible. In making the award, the bursary committee will be guided by the following: The average marks obtained by the Grade XII student during that school term; Indication of need; All applicants must be on the university programme proceeding to any degree-granting university, or to the B.C. Institute of Technology. All those desiring to compete must notify Ed Linder, Financial Secretary of the I.W.A. Local 1-80, 351 Brae Rd., Duncan, B.C. by a letter not later than June 21st, 1971. 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.

MEDICINE HAT NEWS SCHOLARSHIPS — Four scholarships, each valued at \$150, are offered annually. They are available to carriers and former carriers of the *News*, and to children of employees of the *News*. They are tenable at a university, accredited junior college or accredited technical institute. Selection will be based on school performance. The purpose is to help young men and women make a start in university or technical education. Application forms are obtainable from The Medicine Hat *News*, Medicine Hat, Alberta, and must be returned not later than August 1.

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) SCHOLARSHIPS — The Legion (Pacific Command), offers annually a number of scholarships for students proceeding from high school to university. These 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.

GOVERNMENT SCHOLARSHIPS — Government Scholarships to the value of three quarters, one-half, or one-third of fees for one year in the University of Victoria can be won by students who obtain the appropriate standard for full course loads completed in Grade XII (academic-technical), Grade XIII, and undergraduate studies in the University. (Students enrolling in certain professional programmes, i.e., Diploma Programmes, B.L.C., B.S.W., LL.B., M.D., etc., may be eligible for government scholarship also).

All students competing for scholarship must have fulfilled regulations pertaining to residency and have submitted an accurately completed scholarship application form *by the specified date*.

Full information from the Department of Education will be available from the Financial Aid Officer well in advance of the submission date.

GOVERNMENT BURSARIES — Government Bursaries are provided annually. Eligibility for awards is based on academic acceptability, demonstrated financial need, and residency. Applications, complete in every respect, must be submitted by the date specified. The student also must be undertaking a full course load during the winter session to be eligible for a bursary award.

Bursaries are not repayable, and cannot be deferred. Priority in the granting of awards is given to students commencing their first year of university work. Bursary awards are not available for graduate studies.

Application forms and further information on bursaries, including date of application, will be available from the Financial Aid Officer, Admissions Office, well before the end of the university academic year.

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 come from families with a gross income of \$9,500 or more 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.

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.

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** — One hundred and fifty dollars (\$150) 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.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY SCHOLARSHIPS — Four scholarships of \$250 each to be awarded for the 1971-72 season 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.

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.

*MATTHEW COWAN ANNUAL SCHOLARSHIP — Approximately 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.

*CRESTVIEW-CHELSEA THEATRE AWARD — An award of two hundred dollars (\$200) 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.

T. EATON COMPANY (Canada) LTD. SCHOLARSHIP — Two hundred dollars (\$200) awarded to the first-year student who, in the opinion of the Department of Mathematics, is the most outstanding student in first year Mathematics. The winner must continue at the University of Victoria.

*Administered by the University of Victoria Foundation.

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 (\$200) 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 SCHOLARSHIP — This scholarship, made available by Miss Emily A. Harman of Toronto in memory of her late brother, is 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.

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 ISLAND TUG AND BARGE, LIMITED, 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 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.

*Administered by the University of Victoria Foundation.

***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 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.

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.

***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.

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.

*Administered by the University of Victoria Foundation.

RITHET 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 — Fifty dollars (\$50) 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 — One hundred and fifty dollars (\$150), 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.

SEAFORTH HIGHLANDERS OF CANADA SCHOLARSHIP — Two hundred dollars (\$200) awarded to a student attaining the highest standing in the study of a third or fourth year Military History course. The selection will be made by the Senate Committee on Awards on the recommendation of the Department of History.

*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.

SPECIAL SCHOLARSHIPS IN BIOLOGY — A number of scholarships are available to students enrolled in courses in the Department of Biology, on the recommendation of the faculty.

*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 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.

*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. CLIFF CARL AWARD — One hundred dollars (\$100) 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 dollars (\$100) 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.
- 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.
- 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 — Awarded to the most deserving student completing first or second year and specializing in Biology. The award is in the amount of one hundred dollars (\$100) for the academic year 1971-72.
- *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.
- *Administered by the University of Victoria Foundation.

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.

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 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 — 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.

***MARTLET CHAPTER, I.O.D.E., CUTHBERT HOLMES ENGLISH HONOURS ESSAY PRIZE** — 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.

*Administered by the University of Victoria Foundation.

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.

ALCAN SCHOLARSHIP — Granted annually on the basis of financial need, character, and ability. The scholarship has a value of five hundred dollars (\$500) and is supplemented by a grant of three hundred dollars (\$300) to the University. The Scholarship is open to students in Honours or Science Major programmes in Chemistry, Mathematics, Metallurgy and Physics, or students in courses leading to a degree in Engineering. The recipient of the scholarship may apply for it in the following year and will be considered on equal basis with the other students. The recipient is in no way bound to enter the donor's employ nor is the donor committed in any way to find employment for the student after graduation.

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) — 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. Scholarship 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 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** — Awarded annually to a student of outstanding merit and promise and qualities of character indicating worthiness to hold the scholarship, who is planning a business career and is continuing his studies at a recognized university or is articulated to a chartered accountant, or C.G.A. Selection of the student is to be made by the Committee on Awards of the University of Victoria. Applications must be submitted before April 30.

THE 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 a son or daughter of a veteran of World War II or World War I, or the wife or widow of a veteran of World War II, 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 VICTORIA MEDICAL SOCIETY SCHOLARSHIP II — 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 1972, 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.

SECTION 6

ENTRANCE 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 \$5,500, each with a maximum value of \$300, 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 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 Grades XII and XIII. 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.

UNDERGRADUATE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

ASSOCIATION FOR RETARDED CHILDREN OF BRITISH COLUMBIA BURSARIES — Bursaries in various amounts are offered by the Association for Retarded Children of British Columbia 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: Association for Retarded Children of British Columbia, 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.

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., 253 Bay Street, Toronto, not later than March 31 of each year. Whenever possible these applications should be filed in February. The awards are made at the annual meeting of the General Committee on the fourth Friday in May.

THE MERRILL C. ROBINSON BURSARY — One thousand dollars (\$1000) provided by the Canadian National Institute for the Blind, British Columbia Division, to be awarded annually to assist a blind student attending the University of Victoria, Simon Fraser University, or University of Notre Dame at Nelson, in graduate or undergraduate studies. 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, 1971. 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, 1972.

He must have completed two years of university study by October 1, 1972.

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 in 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, 1971, and if elected, to go to Oxford in October 1972. Further information concerning the Scholarship and the opportunities for study at Oxford University may be obtained from Michael J. Brown, 804 - 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 1971-72 Scholarship must be: unmarried; between the ages of 18 and 24 inclusive as of July 1, 1971; and have completed two years of undergraduate university-level work but not have attained the bachelor's degree or equivalent at the time that he begins his Scholarship year. He must be a citizen of the country in which his permanent residence and sponsoring Rotary club are located.

In this and all other programmes of the Rotary Foundation, a Rotarian, a dependent of a Rotarian, a child, stepchild, grandchild, brother or sister of a Rotarian, or any spouse thereof, is ineligible for an award.

An Undergraduate Scholarship covers the cost of round trip transportation between the Scholar's home and place of study, registration, tuition, laboratory and other school fees, necessary books and educational supplies, meals and lodging, incidental living costs, limited educational travel during the Scholarship year and, in specified instances, intensive language training in the country of study prior to the beginning of the regular academic year.

Awards may be made for study in any field, but not for independent or unsupervised research. Undergraduate Scholarships are awarded for one academic year of study in another country. They are not granted to students to continue studies already begun in a country. It is not expected or intended that an Undergraduate Scholarship will be used as part of a longer period of study abroad. In many cases it is not possible to obtain academic credit for work done during the Scholarship year. Each candidate should ascertain for himself, in advance, whether it will be possible to receive academic credit for courses taken or work completed during the year abroad.

Application for an Undergraduate Scholarship must be made through a Rotary club in the district in which the applicant's permanent residence is located or the district in which is located the school at which he is studying at the time of his application. The sponsoring Rotary club will provide the necessary application forms and explanatory literature. Rotary clubs may obtain this material from their district governor or the secretariat of Rotary International in December of each year. Application forms must be completed and returned to the Rotary Club by March 15.

THE 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, 1105 West Pender 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 — 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 any 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 any 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 20. 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.

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.

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.

Canada Student Loans Plan — This plan was introduced by the Federal Government as a broad programme to assist students who, in the absence of a loan, would be unable to pursue full-time post-secondary studies at a university or other educational institution. Canada Student Loans, available only on the basis of certificates of eligibility issued by the appropriate authority (issuing agency) for a province, may be made by any branch of the chartered banks and by certain designated credit unions with the guarantee of the Federal Government. Applications for certificates of eligibility must be made to provinces participating in the plan, and decisions on individual applications are made by the Provincial appropriate authority (issuing agencies). Students applying for certificates who meet residence and other requirements must also demonstrate that the financial means available to them from all other sources are insufficient so that a guaranteed loan is needed. In no case will a loan for an academic year exceed a maximum of \$1,000 or total loans exceed \$5,000 during a student's academic career. Provincial authorities may issue certificates of eligibility under the plan up to the limits of provincial allocations in each loan year. Borrowers under the plan are required to repay principal and pay interest, but no payments are required as long as they are full-time students at a specified post-secondary educational institution and for six months thereafter; interest during this period is paid by the Federal Government on behalf of the student. After a student's interest-free period has expired he is required to make regular monthly payments which include repayment of principal and interest on the outstanding balance at the rate that is in effect for student loans at the time the loan is negotiated. The number of years over which a loan may be repaid depends on the loan amount and other considerations but may not exceed ten years from graduation. A student should apply for a loan under this plan only for the funds needed to enable him to continue his studies and in doing so he should give responsible consideration to the repayment obligations he is assuming; a student who actually borrowed the maximum of \$5,000 would, for instance, be obligating himself to pay, after the expiry of his interest-free period, about \$65.00 each month until ten years after he leaves university. A student in need of a Canada Student Loan should, as a first step, obtain an application form and further information from the appropriate authority (issuing agency) of his province. **Students proposing to attend the University of Victoria should apply to the Financial Aid Officer, Admissions Office, University of Victoria, 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 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 1969-70

*Throughout this list, an asterisk indicates that the award or scholarship is administered by the University of Victoria Foundation.

Adelphi Book Shop Prize	Elaine Claire Jones
*Kathleen Agnew Memorial Scholarship of \$150	David Glen Fredricksen
Alcan Scholarship of \$500	Terrance Arthur Slater
Alliance Francaise Book Prize	Leona Joan Jickling
Association of Childhood Education (Victoria Branch)	
Marian D. James Memorial Award of \$50	Barbara Edith Allan (by reversion to Anne Marita Tamboline)
Austrian Government Book Prizes	Ester Miccaela Cryderman Robert Alan Oakley
*The J. Alan Baker Memorial Scholarship of \$500	Ralph William Sarkonak
Bapco Paint Limited Scholarship of \$100	Helen Rae Griffin
The Beaver Books Shop Prize	Martha Susan Courthope Poussette
Beta Sigma Phi Sorority City Council Scholarship of \$100	Ingrid Maier
Birks Gold Watch	Lothar Hermann Redlin
Birks Family Foundation Bursaries	Terrance Ronald Andrews Irene Teresa Barber Frances Rose Chapman Gerald Benjamin Doersam Carole Anne Le Garff Alice Molyneaux Morris Tony Kwok Sen Quon Bruce Daniel Runyan Johan A. C. Van Inschoot
Blaney's Travel Service Limited Award of \$200	Judy Rae Robbins
*The British Columbia 1958 Centennial Scholarship of \$500	Lothar Hermann Redlin
British Columbia Historical Association Book Prizes	Linda Mae Dial Phyllis Doreen Huggett
British Columbia Hydro and Power Authority Scholarships of \$250 each	Paul Chow Dianne Louise Draper Ingrid Maier Patricia Ann McDonald Jean Mallory Miller Dagmar Erika Schweitzer Wilma Alexis Smith Cedric Albert Zala
The British Columbia Psychological Association Gold Medal	Richard Earl Brown
The British Columbia Telephone Company Scholarship of \$100	Terrance Arthur Slater
Dr. Maxwell Cameron Memorial Medal and Prize	Susan Phyllis Irving
Camosun Gyro Club Bursary of \$150	Suzanne Maria Velay
Canadian Association of Health, Physical Education and Recreation, Inc. (Greater Victoria Branch) of \$100	Linda Ann Manarin
Canadian Cancer Society, British Columbia Division Bursary of \$500	Barbara Ellen Brayshaw
Canadian Daughters' League Assembly No. 5 — Gertrude M. Ralston Memorial Bursary of \$100	Derry Allen McDonnell
Canadian Institute of International Affairs Book Prize	Bruce Alexander McKean
Canadian Union of Public Employees Entrance Scholarships of \$100 each	Ann Elizabeth Briggs Russell Terry Mark Mary Jane McLennan

Joan Olivia Richardson
Alison Elizabeth Thomson

- Canadian Union of Public Employees Scholarships
of \$250 each Mark Edward Bailey
George Westly Christian Hall
- John Wesley and Emily E. Church Memorial Scholarship
of \$100 Lynn Catherine Bain
- *The Clearihue Bursary of \$300 Michael George Richardson
- Comitas Club Scholarship of \$50 Ingrid Maier
- *Mary Hannah Cooper Scholarship Fund of \$300 Linda Lou Scott Brown
- *The Edgar Ferrar Corbet Scholarship of \$250 Robert Alan Oakley
- *Matthew Cowan Annual Scholarship of \$150 Brian John Harvey
- *The Adeline Julienne Deloume Memorial Scholarships
of \$250 each Penelope Jean Blumensaat (Nee Shaw)
Ralph William Sarkonak
- of \$200 each Ester Miccaela Cryderman
Richard George Hodgson
Leona Joan Jickling
- of \$100 each Carol Margaret Benell
Paul Andre Griffiths
Daphne Lynne Mayfield
Jean Mallory Miller
Denise Laurine Mooney
Patricia Jane Robinson
- of \$50 each Barbara June Cochrane
Sheelagh Kathleen Craig
Karen Louise Falder
Gregory Hugh Russel
- The Arthur S. Denny Scholarship of \$100 Steven Joseph Gergel
- *The Denton Memorial Book Prize Frances Dawn McMahon
- *Gwen Downes Memorial Book Prize Nigel C. P. Whitehouse
- T. Eaton Company (Canada) Limited Scholarship of \$200 Steven Joseph Gergel
- Percy H. Elliott Memorial Scholarship of \$130 Leona Joan Jickling
- *The H. O. English Scholarship of \$200 Judy Rae Robbins
- Faculty Women's Club Prize of \$100 Wendy Arlene Young
- Bursaries in Studio/Visual Arts
of \$100 each Monica Jane Linnell
Jan Vriesen
- of \$50 each Alan David Graves
Richard Alan Steffin
Terry Alfred Linford
Sharon Anne Ross
(by reversion to: Marjorie Lynne Cushing)
- Francis Gold Wrist Watch Terrance Arthur Slater
- The French Government Book Prizes Penelope Jean Shaw
Suzanne Maria Velay
- French Government Medal Ralph William Sarkonak
- Government of the Federal Republic of Germany
Book Prizes Vivien Veronica Arndt
Ester Miccaela Cryderman
Brenda Joan Cunningham
Dennis Burnie Dorais
Kathryn Daima Mann
Robert Alan Oakley
Ellen Sylvia Ogilvie
- The Governor-General's Medal Dianne Marguerite Trythall
- Grand Post of the Native Sons of B.C. —
Bruce McKelvie Scholarship of \$250 Gary William Long
(by reversion to: David Arnold Ginnever

Grolier Limited Award	James Craig Horsland
The Gyro Club of Victoria Scholarship of \$200	Brent Gerald Mullin
*The George Hamilton Harman Memorial Scholarship of \$100	Douglas Alan Ball
Harbord Insurance Limited Scholarship of \$500	Nancy Jane Meredith
*The William A. and Frances E. Harper Scholarship of \$75	Charlotte Ann Hurford
*Cuthbert Holmes Book Prize	Georgia May Wilson
The IBM Thomas J. Watson Memorial Bursaries of \$100 each	Geraldine Anne Bergen Kathryn Louise Cass Helen Rae Griffin Caroline Viola Louise Hewer Jack Wilfred Kenny Fay Hing Lee Kenneth James Lushington Leslie Anne Wallace Richard Alan Wodyga
The Don Ingham Memorial Scholarship of \$200	Reginald Richard Dunkley
The Island Tug and Barge Limited Scholarship of \$150	Reginald Richard Dunkley
The Island Tug and Barge Limited Indian Scholarship of \$150 (no award this year)	
Robert H. B. Ker Scholarship of \$200	Alfred Small
*Freeman F. King Scholarship of \$250	Heather Louise Heppenstall
Kiwanis Scholarship of \$250	John Charles Sobkowicz (by reversion to: Patrick Terence Hugh O'Neill)
Labatt Breweries of British Columbia Limited Scholarship of \$400	Annette Mary Walker
Ladies Pharmaceutical Auxiliary (Victoria) Bursary of \$50	Susan Mae Makara
Leon J. Ladner B.C. History Scholarships of \$300	Ian D. Parker
of \$100 each	Phyllis Doreen Huggett Esther Jane Panton
Lady Laurier Club Scholarship of \$100	Ronald Nelson Tucker
*Sara and Jean MacDonald Bursary Fund	Elaine Anne Lanzo Sharon Lauraine Lee Teresa Maria Mauro (by reversion to: Susan Marlene Lucyk) Gertrude Friedericke Rey
*Martlet Chapter, I.O.D.E. Prize for Scholarship in History in Art	Alistair William Kerr
Benny Nicholas Memorial Award of \$100	Hermione Frey
Angelina Norris Bursary of \$50	Stevan Fielding
Oak Bay Business and Professional Women's Club Bursary of \$100	Linda Mae Dial
Ocean Cement Limited Scholarship of \$100	Steven Joseph Gergel
Open Door Society Book Prize (no award this year)	
Pacific Coast Fishermen's Mutual Marine Insurance Company Bursary of \$450	David Roy Sharcott
Esther Pearce Memorial Prize of \$50	Heather Jill Brock
The Honourable and Mrs. G. R. Pearkes Prize of \$50	John Best Windsor
R. M. Petric Memorial Fellowship	Paul Laskarides
*The Alan Pratt Memorial Scholarship of \$100	Geraldine Anne Bergen
*Oliver Prentice Memorial — Douglas Rotary Scholarship of \$150	Darindranathi Charitha Gunsekera
The President's Entrance Scholarships of \$500 each	Peter Gerald Ludemann David Joseph Newberry (by reversion to: Manfred John Maier)

William Allan Squires
David Anthony Todd
Bruce Edward Turkington

The President's Scholarships

- of \$350 each Brenda Joan Cunningham
Richard George Hodgson
- of \$300 each Jane Elizabeth Arnott
Marni Elizabeth Davis
Jacquelyn Farnden
Thomas John Farnsworth
Kathryn Ellen Fowler
Rodney Leonard Hayley
Patrick Terence Hugh O'Neill
Maureen Elizabeth Pinkney
Eleanor Jean Smith
- of \$250 each Carol Margaret Benell
Phillip Chang
Charles John David Duder
John Eugene Fitterer
Marjorie Louise Greck
Alan Charles Howatson
Janet Kathleen Lawrence
John David Robert Naysmith
Glenn Alexander Paruk
Paul Julius Pearlman
Cecil Paul Ridout
Patricia Jane Robinson
Denise Maureen Adele Schuetze
Leslie Anne Woodland
- of \$200 each Vivien Veronica Arndt
Morris Lionel Barer
Richard William Careless
Karen Ethel Carruthers
Gary Nicholas Chilibeck
Barbara June Cochrane
Meryl Lee Connor
Melanie May Crombie
Ester Miccaela Cryderman
Stephen Fred Dembiske
Marion Georgina Doubinin
Sheelah Jean Dunn
Bruce Arthur Fryer
Nicholas Antony Jude Hall-Patch
Brian John Harvey
David John Hatter
James Frederick Henderson
Penelope Anita Hill
Sandra Winnifred Hodgkin
Charlotte Ann Hurford
Kenneth Duncan Jacques
Leona Joan Jickling
Jeanne Marlene Massey
Robert Paul McDougall
Patrick Robert Morris
Alistair James Murdoch
Daphne Marguerite Pedersen
Russell Ormond Redman
John Mason Roberts
Ann Marita Tamboline
Ernest John Thomas
Suzanne Maria Velay
Barbara Yolande White
John Best Windsor
Barbara Joan Yates

of \$150 each James Robert Alexander
 Barbara Edith Allan
 Mary Dianne Cains
 Kathryn Louise Cass
 Paul Chow
 Jennifer Susan Dawes
 Dianne Louise Draper
 Rosemary Margaret Flynn
 John Gordon Gibson
 Dianne Lynne Haines
 Caroline Viola Louise Hewer
 Fay Hing Lee
 Patricia Ann McDonald
 Dale Thomas Miller
 Jean Mallory Miller
 Brent Gerald Mullin
 Hilda Agnes Oscienny
 Thomas Lloyd Ripley
 Julia Mary Roberts
 Barry Raymond Ruddick
 Dagmar Erika Schweitzer
 Wilma Alexis Smith
 John Charles Sobkowicz
 Leslie Anne Wallace
 Sylvia Lynn Warburton
 Richard Allan Wodyga
 Anne Louise Woollard
 Cedric Albert Zala

of \$100 each Arlene Rose Alexandrovich
 Geoffrey Nigel Appleby
 Mark Edward Bailey
 Lynn Catherine Bain
 Shirley Anne Baird
 Douglas Alan Ball
 Irene Teresa Barber
 Geraldine Anne Bergen
 Penelope Jean Blumensaat (nee Shaw)
 Heather Jill Brock
 Ian Denby Cameron
 Barry Lee Chow
 Herbert David Dodd
 Michael David Donison
 Robert James Fahlman
 Gail Susan Freeman
 Cynthia Faith Graham
 Michael Scott Greene
 Helen Rae Griffin
 George Westly Christian Hall
 Andrew Paul Harcombe
 Judith Louise Harold
 Richard Edward Izard
 Jack Wilfred Kenny
 Gwcnynth Louise L'Hirondelle
 Kenneth James Lushington
 John Bruce McKinnon
 Willa Jane Noble
 Angela Maria Plasterer
 David Edward Ponsford
 Karl Schanzenbacher
 Patrick Maynard Scott
 Bronwyn Edith Taylor
 Pamela Jane Trythall
 Bryan Ross Wade
 Douglas Stanley Wakefield
 Patricia Louise Whitehouse

of \$75 each	Elizabeth Katherine Angus Susan Jane Beckett Mary Thompson Bigelow Michael Clement Brock Laurel Lynn Burgess Mary Lee Burrows Terry Christopher Chatton Catherine Anne Clarkson Christina Mary Hall Frederick Earl Hansford Linda Jean Hughes Sandra Rosemary Johnson David John Kelley Cathryn Marguerite Kitcher Ken G. P. Lee Monica Jane Linnell Linda Colleen McGillivray Emily Jean McKenzie Dorina Eleanor Medland Daryl John Noullette Patricia Janet Parkes Mary Jeannette Petovello (nee Abbott) David Frederick Rahal Ilse Gertrud Sartorius James John Severs Susan Linda Stancombe Kathryn Susan Tattrie Axel Ernst Vanderwilt Wendy Elizabeth Walton Francis Bernhardt Wille
of \$50 each	Henry John F. I. Block Ian Graham Cahill David Glen Fredricksen Steven Joseph Gergel Terrance Warren Gunderson Diana Ruth Ingram Daphne Lynne Mayfield Robert Alan Oakley Kenneth Charles Palmer Anthony Harald Senyk Ronald Nelson Tucker Wendy Arlene Young
The Professional Men's Garden Club of Victoria Scholarship of \$100	Leon Edward Pavlick
Read Jones Christoffersen Limited, Consulting Engineers, Scholarship of \$200	Russell Ormond Redman
Rithet Consolidated Limited Bursary of \$100	Alistair James Murdoch
Rose's Limited Jewelers Watch	Keith Walker
The Rotary Club of Douglas (Victoria) Scholarship of \$100	Dale Thomas Miller
The Rotary Club of Victoria Scholarship of \$250	Sandra Lois McLoughlin (by reversion to: James Stuart Hamilton)
The Royal Canadian Legion (Victoria) Sir Percy Lake Memorial Scholarship of \$300	Penelope Jean Blumensaat (nee Shaw)
*Royal Institution and Frank Eaton Memorial Scholarship of \$50	Thomas Fredric Garfat
The Madame Sanderson Memorial Scholarship of \$50	Patricia Jane Robinson
*The Edward J. Savannah Memorial Scholarship of \$150	James Harry Alexander
Seaforth Highlanders of Canada Scholarship of \$200	Wilfred Gourlay Lund
*The Nora Lugin Shaw Memorial Scholarship of \$60	Catherine Aero Ruth Ralphs
The Andrew Sheret Limited Scholarship of \$150	Michael Barrett Percy
The A. W. Sheret Scholarship of \$150	Douglas Alan Ball

The Spanish Government Book Prize	Ilse Gertrud Sartorius
*The Robert Lorne Stanfield Book Prizes in Political Science	
Political Science 200	Robert Paul McDougall Daphne Marguerite Pedersen
Political Science 410	Michael David Donison Harry James Wruck
The Prizes of the Ambassador of Switzerland to Canada	Denise Laurine Mooney Angela Maria Plasterer
*The Taylor Education Bursary of \$300 each	Lesley Anne Lee Arlene Lois Zannet (by reversion to: Karen Ethel Carruthers)
*The Taylor Scholarship in Music of \$50	Marilyn June Martynuk
United Nations Association (Victoria Branch) Scholarship of \$250	Arlene Rose Alexandrovich
University Extension Association of Victoria Scholarship of \$150	Marion Linda Metcalfe
University of Victoria Faculty Association Scholarship of \$200	Ester Miccaela Cryderman
University Women's Club Scholarship of \$200	Heather Jill Brock
University of Victoria Alumni Scholarship of \$500	Cynthia Wilma Brand
University of Victoria Graduate Studies Awards Fellowships: \$2,500 each	Nadhim Mohamed Al-Qazzaz Barrow Baldwin Gerard Bentryn Adolf Ceska Christine Derbyshire Elisabeth Ann Dixon John Nicholas Dorner Diana Maria Easton Maxwell Bruce Fairbairn Peter Vaughn Fankboner Carol Mavis Frawley Linda Jane Halliday Geoffrey Hargreaves John Allyn Higenbottam Seung Kon Kim Ralph Johannes Maddess Michael Woodford Morgan Sheila Patricia Mosler Yuko Ohara Kang Hoh Phua John Ramsay Chaman Lal Singla Mabel Marie Slater Donald Mouroe Smith Saskia Gail Tuyn Johannes Pieter Van Netten Judith Wallach Maria Wozniak Michael Wright
Scholarships: \$1000 each	Clifford Bancroft Zina Mary Barnieh Marilyn Bowering Mary Victoria Brizan John Alexander Carmichael Christine Chester Thomas Charles Cockburn David James Crockett Peter Francis Davies Maureen Helen Edge James Oliver Evans Robert Fisher

Paul Joseph Felse
 Thomas Gerald Fleming
 James Martin Goddard
 Barbara Pritchard Harris
 Maureen Haugen
 Roger Earl Haugen
 David John Hawke
 John Thomas Holts
 Leopoldina Hrubant
 Kenneth Alan Jones
 Murray John King
 Donald Edward Lange
 Chee Mou Lee
 Jerome Peter Lejeune
 Adrian Roy Leslie
 Sim Too Lim
 Diane Sinclair Macdonald
 John James McFarland
 Peter Murphy
 Kouichi Nakano
 Samuel Olumuyiwa Ogunade
 Peter Roger Oliver
 John Wilson Owen
 Paul Palmer
 Geoffrey Duncan Phillips
 Heather Marilyn Pittwell
 Gavin Quiney
 James Robert Reid
 Dorothy June Roberts
 Harley Schwartz
 Robert Dale Seens
 Gregg Brian Shoop
 Seiichi Tanaka
 Nicholas Craig Tuele
 Marilyn Santina Vassallo
 Marie-Emmanuelle Vinay
 Allan Wilson
 Margaret Wood

*The Victoria Branch of National Council of Jewish Women
 Book Prize Robert Kenneth Plewes
 Victoria Central Lions Club —
 Dr. Cliff Carl Award of \$100 Christopher William Taylor
 Victoria Central Lions Club —
 Millard H. Mooney Fine Arts Bursary of \$100 Linda Lou Scott Brown
 The Victoria Council, United Commercial Travellers
 of America Scholarship of \$100 Robert Alan Oakley
 The Victoria Medical Society Scholarship I of \$250 Diana Ruth Ingram
 The Victoria Medical Society Scholarship II of \$500 Donald Arthur Ross
 Victoria Municipal Chapter, I.O.D.E.
 Scholarship for General Proficiency of \$100 Heather Jill Brock
 Victoria Municipal Chapter, I.O.D.E.
 Scholarship in Canadian History of \$100 Nancy Elizabeth Dickson
 Victoria Natural History Society Scholarship of \$100 Andrew Paul Harcombe
 *The Weber Memorial Bursary of \$100 Diana Ruth Ingram
 *The Westad Scholarship of \$250 Barry Raymond Ruddick
 The Weston Bakeries, Limited, Scholarship of \$250 Lily Wei-Line Low
 *The J. B. Wood Book Prize in Russian Suzanne Lea Murphy
 The Woods Trust Scholarships of \$250 each Ian Graham Cahill
 Darindranath Charitha Gunsekera
 Terrance Warren Gunderson
 (by reversion to: John Eugene Fitterer)
 Daphne Lynn Mayfield

Michael Barrett Percy
 Ronald Nelson Tucker
 Sylvia Lynn Warburton
 Wendy Arlene Young

The Woodward Stores, Limited, Scholarship of \$250 James Harry Alexander
 May E. Wootton Memorial Scholarship of \$100 Daphne Lynne Mayfield
 The Xi Nu Chapter, Beta Sigma Phi Sorority,
 Annual Bursary of \$25 Marilyn Elspeth MacQueen Quinn
 The Yorkshire Trust Company Scholarship of \$175 James Robert Alexander
 The Rosalind W. Young Scholarship of \$200 Susan Marie Cowie

Government of British Columbia Scholarships

The University honours 1,147 students presently enrolled who have received a government scholarship.

DEGREES CONFERRED MAY 1970

B.A. — 289; B.Sc. — 146; B.Ed. — 150; B.F.A. — 12; B.Mus. — 1; M.A. — 30; M.Sc. — 20; Ph.D. — 1: TOTAL — 648.

STUDENTS OF NON-B.C. ORIGIN

Determined by location of previous educational institution attended.

	1969-	1970-
	70	71
Alberta	68	80
Saskatchewan	45	49
Manitoba	28	33
Ontario	89	91
Quebec	33	23
New Brunswick	6	4
Nova Scotia	17	16
Prince Edward Island	1	3
Newfoundland	1	1
Yukon	1	—
Northwest Territories	—	—
Other Countries	199	250
	<hr/>	<hr/>
	488	550

† ENROLMENT 1965-66 TO 1970-71

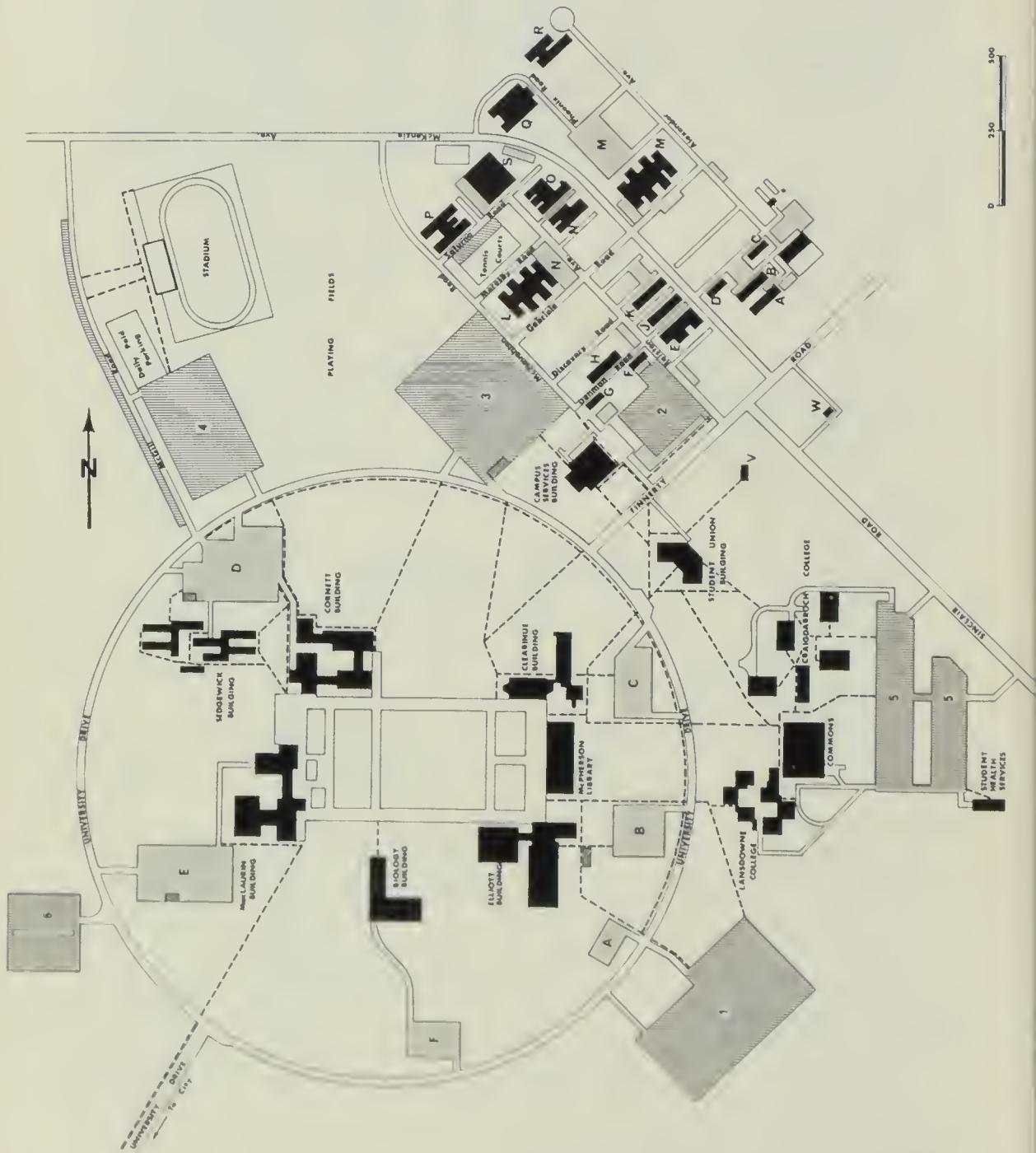
	1965- 66	1966- 67	1967- 68	1968- 69*	1969- 70*	1970- 71*
Arts and Science						
First Year	1044	1063	1160	1311	1280	1189
Second Year	594	694	783	782	906	894
Third Year	268	336	431	429	493	601
Fourth Year	222	296	391	425	463	418
Graduates	11	—	—	—	—	—
Unclassified	6	21	—	—	49	48
Total in Faculty	2145	2410	2765	2947	3191	3150
Faculty of Education						
Elementary Field:						
First Year	203	216	247	331	355	260
Second Year	158	151	208	239	302	355
Third Year	104	124	146	153	209	240
Fourth Year	38	44	49	56	72	77
Fifth Year	—	—	2	6	10	11
Partial and Irregular (2nd Year)	—	3	—	—	—	—
Diploma Programme ...	—	—	24	45	37	25
Internship Programme ..	—	—	—	—	13	21
Post B.Ed. Degree (Elem.) 5th Year Programme	—	—	2	—	—	1
Transfer Programme ...	142	159	121	142	133	**
Secondary Field:						
First Year	80	80	106	172	163	127
Second Year	29	48	85	103	143	122
Third Year	25	35	45	69	72	114
Fourth Year	21	22	23	28	38	66
Fifth Year	14	16	23	20	44	40
Internship Programme ..	—	—	—	17	20	44
Diploma Programme ...	20	25	48	50	72	60
Accelerated Industrial Educ.	—	—	—	—	20	30
Unclassified	3	4	1	2	13	23
Total in Faculty	837	927	1130	1433	1716	1615
Faculty of Fine Arts:						
First Year	—	33	53	90	93	93
Second Year	—	3	27	40	72	75
Third Year	—	1	5	16	28	55
Fourth Year	—	—	3	9	21	32
Unclassified	—	—	—	—	2	11
Total in Faculty	—	37	88	155	216	266
Faculty of Graduate Studies:						
Total in Faculty	—	49	92	191	246	285
TOTAL	2982	3423	4075	4726	5369	5316

† Full-time only.

* Figures compiled December 1.

1967-68 figures compiled September 29, 1967.

** Now included within appropriate year.



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 UNIVERSITY DRIVE

STADIUM

PLAYING FIELDS

WOODSWICK BUILDING
 CORNELL BUILDING

BIOLOGY BUILDING

ELLIOTT BUILDING

MURPHYSON LIBRARY

CLEABINI BUILDING

LANSDOWNE COLLEGE

COMMONS

STUDENT UNION BUILDING

COLLEGE

STUDENT SERVICES

STUDENT SERVICES

CAMPUS SERVICES BUILDING

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UNIVERSITY OF VICTORIA

LEGEND

-  BUILDINGS
-  RESERVED PARKING
-  STUDENT AND STAFF PARKING
-  MOTORCYCLE PARKING
-  SIDEWALKS

* VISITOR METEOR PARKING AVAILABLE IN LOTS 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
- CLEARHUE - CLASSROOMS, COUNSELLING
- CORNETT
 - ANTHROPOLOGY & SOCIOLOGY
 - ECONOMICS, GEOGRAPHY
 - PSYCHOLOGY, HISTORY
 - POLITICAL SCIENCE
 - GERMANIC LANGUAGES & LITERATURE
- SEDGEWICK - CLASSICS, 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
- BIOLOGY - BIOLOGY
- CRAIGDARROCH COLLEGE
 - STUDENT RESIDENCES
- LANSDOWNE COLLEGE
 - STUDENT RESIDENCES
- COMMONS - DINING ROOM
 - COFFEE SHOPS, LOUNGES
- STUDENT UNION
 - CLUBS, LOUNGES
 - CAFETERIA
- CAMPUS SERVICES
 - BANK, BOOKSTORE, BARBER
 - BEAUTY SHOP, COFFEE SHOP
 - DRUG STORE, COMPUTER

KEY TO BUILDINGS

- A. CARPENTER'S SHOP
- B. TRAFFIC AND SECURITY OFFICE PAINT SHOP
- C. BUILDINGS AND GROUNDS OFFICES
- D. CAMPUS PLANNING OFFICES
- E. FACULTY LOUNGE
- F. INFORMATION OFFICE NOURING
- G. COMPUTER SERVICES
- H. COMPUTER SERVICES
- J. OFFICES
- K. OFFICES
- L. CAFETERIA, CLASSROOMS, GRAD STUDIES PERSONNEL
- M. REGISTRAR, PURCHASING, ACCOUNTING ADMISSIONS
- N. HISTORY IN ART, LANGUAGES
- O. BACTERIOLOGY AND BIOCHEMIST
- P. ATHLETICS PHYSICAL EDUCATION
- Q. PHOENIX THEATRE
- R. ADMIN STORES, AUDIO VISUAL
- S. GYMNASIUM
- V. STUDENT PLACEMENT OFFICE
- W. DEVELOPMENT OFFICE

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1971 - 72

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Skelton, Robin
**Vinay, Jean-Paul

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*Cheffins, Ronald I.
**Cumming, M. Elaine
Farrell, Bryan H.

**Forward, Charles N.
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**Spreen, Otfried
Wikkramatileke, William A. R.

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**Fontaine, Arthur R.
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Pal, Izzud D.
Shelton, William G.
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*Barss, Walter M.
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*Davidson, Roger R.
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**Gordon, William R.
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Moss, Kenneth C.
**Noble, O. Phoebe

Owens, John N.
Reid, Robert G. B.
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Kess, Joseph F.
Koster, Patricia
Limbrick, Elian
Macey, Samuel L.
Mentha, Jean-Pierre

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Terry, Reginald C.
Thatcher, David S.
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*Zietlow, Edward R.
Gooch, Velma

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Money, John

Powers, Richard J.
Roy, Patricia

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Bowden, Leon
Bushnell, Gordon Wm.
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Lobb, Donald E.

*Miller, Donald J.
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