



UNIVERSITY OF VICTORIA

CALENDAR 1968-69

VICTORIA, BRITISH COLUMBIA, CANADA



UNIVERSITY
OF VICTORIA
LIBRARY

Tuesday, July

Last day for students who are submitting applications

register forms by 5:00 p.m. or earlier. Students are strongly advised to apply as early as possible. For late

Thursday, August 15

Last day for submission of Application for Admission forms by all students seeking entry for the first time. Students are strongly advised to apply as early as possible. For late application fee, see page 44.

Monday, September 16 - Thursday, September 19

Registration in person. Students are informed by the Registrar's Office of the time and day.

Monday, September 23

Lectures begin.

Late registration fee becomes effective. See page 44.

Friday, October 4

Last day for changes in students' courses (to 4:00 p.m. only).



UNIVERSITY OF VICTORIA

VICTORIA, BRITISH COLUMBIA, CANADA

Calendar *1968-69*

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.

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ACADEMIC YEAR 1968-69

<i>Day</i>	<i>Date</i>	<i>Item</i>	1968
Tuesday	2 July	Summer Session 1968 begins.	
Tuesday	2 July	Last day for submission of applications for re-admission by students registered in session 1967-68 or earlier.	
Wednesday	3 July	Fee for late submission of application for students mentioned above becomes effective at 12:00 noon.	
Monday	5 Aug.	Supplemental examinations begin.	
Friday	9 Aug.	Supplemental examinations end.	
Thursday	15 Aug.	Last day for submission of applications for admission.	
Friday	16 Aug.	Fee for late submission of applications for admission (including required transcripts) becomes effective at 12:00 noon.	
Friday	16 Aug.	Summer Session ends.	
Sunday	1 Sept.	Academic Year begins.	
Monday	2 Sept.	Labour Day. University closed.	
Tuesday	3 Sept.	Regular office hours become effective.	
Sunday	15 Sept.	Assigned accommodation in University residences becomes available in the evening.	
Monday	16 Sept.	Board of Governors meets.	
Monday	16 Sept.	Registration in person for the winter session. Details of place and time are mailed to all students receiving Notice of Admission or Authorization to Re-register. Registration closes at 4:00 p.m. Ability Tests will be administered for new students.	
	through		
Thursday	19 Sept.		
Friday	20 Sept.	Registration in person for all students receiving Notice of Admission to, or currently registered in, the Faculty of Graduate Studies, from 9:30 a.m. to 5:00 p.m., in the gymnasium.	
Monday	23 Sept.	Lectures begin. Late registration fee becomes effective.	
Tuesday	24 Sept.	Meeting for all new students at 1:00 p.m., University gymnasium; sponsored by A.M.S.	
Tuesday	24 Sept.	Joint Faculties meeting at 7:30 p.m.	
Wednesday	25 Sept.	Senate meets.	
Tuesday	1 Oct.	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.	
Friday	4 Oct.	Last day for changes in students' courses. All changes must be reported to the Registrar's Office by 4:00 p.m. on this date.	
Monday	7 Oct.	Late payment fee becomes effective.	
Tuesday	8 Oct.	Faculty Association meeting at 12:45 p.m.	
Wednesday	9 Oct.	Senate meets.	
Monday	14 Oct.	Thanksgiving Day. University closed.	
Tuesday	15 Oct.	Faculty of Graduate Studies meeting at 12:45 p.m.	
Monday	21 Oct.	Board of Governors meets.	
Tuesday	22 Oct.	Joint Faculties meeting at 12:45 p.m.	
Tuesday	5 Nov.	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.	
Monday	11 Nov.	Remembrance Day. University closed.	

<i>Day</i>	<i>Date</i>	<i>Item</i>
Tuesday	12 Nov.	Faculty Association meeting at 12:45 p.m.
Wednesday	13 Nov.	Senate meets.
Monday	18 Nov.	Board of Governors meets.
Tuesday	19 Nov.	Faculty of Graduate Studies meeting at 12:45 p.m.
Tuesday	26 Nov.	Joint Faculties meeting at 12:45 p.m.
Tuesday	3 Dec.	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.
Friday	6 Dec.	Last day of lectures (subject to revision).
Monday	9 Dec.	Examinations begin.
Tuesday	10 Dec.	Faculty Association meeting at 12:45 p.m.
Wednesday	11 Dec.	Senate meets.
Monday	16 Dec.	Board of Governors meets.
Tuesday	17 Dec.	Faculty of Graduate Studies meeting at 12:45 p.m.
Friday	20 Dec.	First term ends.
Wednesday	25 Dec. }	Christmas. University closed.
Thursday	26 Dec. }	

1969

Wednesday	1 Jan.	New Year's Day. University closed.
Thursday	2 Jan.	Second term begins.
Tuesday	7 Jan.	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.
Wednesday	8 Jan.	Senate meets.
Monday	13 Jan.	Late payment fee becomes effective.
Tuesday	14 Jan.	Faculty Association meeting at 12:45 p.m.
Monday	20 Jan.	Board of Governors meets.
Tuesday	21 Jan.	Faculty of Graduate Studies meeting at 12:45 p.m.
Tuesday	28 Jan.	Joint Faculties meeting at 12:45 p.m.
Tuesday	4 Feb.	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.
Tuesday	11 Feb.	Faculty Association meeting at 12:45 p.m.
Wednesday	12 Feb.	Senate meets.
Monday	17 Feb.	Board of Governors meets.
Tuesday	18 Feb.	Faculty of Graduate Studies meeting at 12:45 p.m.
Friday	28 Feb. }	Mid-term break. Classes cancelled. Library open.
Saturday	1 Mar. }	
Tuesday	4 Mar.	Faculty meeting at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.
Tuesday	11 Mar.	Faculty Association meeting at 12:45 p.m.
Wednesday	12 Mar.	Senate meets.
Monday	17 Mar.	Board of Governors meets.
Tuesday	18 Mar.	Faculty of Graduate Studies meeting at 12:45 p.m.
Tuesday	25 Mar.	Joint Faculties meeting at 12:45 p.m.
Tuesday	1 Apr.	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.

<i>Day</i>	<i>Date</i>	<i>Item</i>
Friday	4 Apr.	Good Friday. University closed.
Tuesday	8 Apr.	Faculty Association meeting at 12:45 p.m.
Wednesday	9 Apr.	Senate meets.
Friday	11 Apr.	Last day of lectures.
Tuesday	15 Apr.	Faculty of Graduate Studies meetings at 12:45 p.m.
Wednesday	16 Apr.	Sessional examinations begin.
Monday	21 Apr.	Board of Governors meets.
Wednesday	30 Apr.	Last day for submission of application for scholarships listed on pages 262-64.
Friday	2 May	Sessional examinations end.
Saturday	17 May	Summer office hours become effective.
Monday	19 May	Victoria Day. University closed.
Tuesday	20 May	Faculty meetings at 12:45 p.m.: Arts and Science; Education; Fine Arts; Nursing.
Tuesday	20 May	Board of Governors meets.
Wednesday	21 May	Senate meets.
Saturday	31 May	Convocation.
Monday	16 June	Board of Governors meets.
	July-August	Summer Session 1969.

1968

JANUARY

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1969

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UNIVERSITY OF VICTORIA

VISITOR

Major-General The Honourable George R. Pearkes, v.C., P.C., C.C., C.B., D.S.O., M.C.,
C.D., LL.D., Lieutenant-Governor of the Province of British Columbia.

CHANCELLOR

Richard B. Wilson, B.Comm. (*McGill*).

PRESIDENT

Robert T. D. Wallace, M.A. (*Brit. Col.*), Acting President.

OFFICERS OF CONVOCATION

The Chancellor (Chairman).

The Registrar (Secretary).

BOARD OF GOVERNORS

Ex Officio:

The Chancellor.

The President.

Appointed by the Lieutenant-Governor in Council:

W. E. Ireland, M.A. (Honorary Secretary). Term expires June 30, 1968.

A. B. Christopher. Term expires June 30, 1968.

Jean K. Petric, B.Sc., Ph.D. Term expires June 30, 1968.

H. B. Elworthy. Term expires June 30, 1969.

L. G. McKenzie, Q.C., B.A., LL.B. Term expires June 30, 1969.

W. C. Mearns, B.A. Term expires June 30, 1969.

Elected by the Senate:

Charles Gregory, M.B., Ch.B., Cert. in Psych. R.C.P.S. Term expires February 1970.

G. F. Homer, M.D., F.R.C.S. (Eng.). Term expires February 1970.

J. G. Ruttan, B.A., M.A., B.C.L. Term expires February 1970.

SENATE

Ex Officio:

The Chancellor.

The President (Chairman).

The Deans of the Faculties.

The University Librarian.

The Registrar (Secretary).

Elected by the Faculties:

H. W. Dosso, B.A., M.Sc. (Graduate Studies). Term expires June 1970.

P. L. Smith, B.A., M.A., Ph.D. (Arts and Science). Term expires June 1969.

G. A. Brand, B.A., M.Ed. (Education). Term expires June 1969.

Elected by the Joint Faculties

Ronald I. Cheffins, B.A., LL.B., LL.M. Term expires June 1970.

John M. Dewey, B.Sc., Ph.D. Term expires June 1970.

Cary F. Goulson, M.A., Ed.D. Term expires June 1970.

John E. McInerney, B.Sc., M.Sc., Ph.D. Term expires June 1970.

Derek V. Ellis, B.Sc., M.Sc., Ph.D. Term expires June 1969.

James E. Hendrickson, B.A., B.Ed., M.A., Ph.D. Term expires June 1969.

Gordon N. Hobson, M.A., Ph.D. Term expires June 1969.
C. Anthony Emery, M.A. Term expires June 1968.
Sydney W. Jackman, Ph.D. Term expires June 1968.
Alexander D. Kirk, M.Sc., Ph.D. Term expires June 1968.
R. J. Powers, B.A., M.A., Ph.D. Term expires June 1968.
R. E. L. Watson, M.A., Ph.D. Term expires June 1968.

Elected by the Alma Mater Society:

John Thies. Term expires September 1968.
Douglas MacAdams. Term expires September 1968.

Elected by the Graduate Students' Society:

Ellery Littleton, B.Ed. Term expires September 1968.

Appointed by the Senate:

R. T. D. Wallace, M.A.

Elected by the Convocation:

C. Hilary Butler, B.A., M.A. Term expires December 1969.
J. F. K. English, B.A., M.A., B.Paed., Ed.D., LL.D. Term expires December 1969.
Charles Gregory, M.B., Ch.B., Cert. in Psych. R.C.P.S. Term expires December 1969
J. G. Ruttan, B.A., M.A., B.C.L. Term expires December 1969.
Frederick H. Sanders, B.A., A.M., Ph.D. Term expires December 1969.
L. J. Wallace, B.A., M.Ed. Term expires December 1969.

Appointed by the Lieutenant-Governor in Council:

N. D. Cameron, B.A. Term expires August 1969.
G. F. Homer, M.D., F.R.C.S. (Eng.). Term expires August 1969.
F. P. Levirs, B.A., M.A., M.S.Ed. Term expires August 1969.
Mrs. M. T. Ricker, R.N., B.Sc. Term expires August 1969.

FACULTY COUNCIL

Ex Officio:

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

Elected by the Joint Faculties:

Arts

James E. Hendrickson, B.A., B.Ed., M.A., Ph.D. Term expires November 1968.
Elaine Limbrick, B.A., Docteur de l'Université de Poitiers. Term expires November 1969.

Science

Frank P. Robinson, A.B., Ph.D. Term expires November 1968.
Howard J. Simmons, B.Sc., Ph.D. Term expires November 1969.

Education

Robert Swailes, B.S.A., M.Ed. Term expires November 1968.
Kathleen M. Christie, B.A. Term expires November 1969.

CHANCELLOR EMERITUS

Joseph B. Clearihue, M.C., E.D., Q.C., B.A. (*McGill and Oxon.*), M.A., B.C.L. (*Oxon.*), LL.D. (*Brit. Col. and U. of Vic.*).

DEAN EMERITUS

Henry C. Gilliland, M.A. (*Brit. Col.*), Dean Emeritus of Education.

PROFESSORS EMERITI

- C. Vyner Brooke, B.A. (*Queen's*), A.M., Ph.D. (*Harvard*), Professor Emeritus of Spanish.
Jeffrey A. Cunningham, B.A. (*Queen's*), LL.D. (*U. of Vic.*), Professor Emeritus of Zoology.
G. Reid Elliott, B.A. (*Sask.*), Ph.D. (*Tor.*), Professor Emeritus of Economics.

RECIPIENTS OF THE LL.D. (Honoris Causa)

- *Charles Johnstone Armstrong, May 1961.
*Rosalind W. Young, May 1961.
Jeffrey Aikin Cunningham, May 1964.
Walter Charles Koerner, November 1964.
W. Kaye Lamb, November 1964.
H. Rocke Robertson, November 1964.
Louis-Albert Vachon, November 1964.
Bristow Guy Ballard, May 1965.
Thomas Rice Henn, May 1965.
Robert Wellington Mayhew, May 1965.
George Randolph Pearkes, May 1965.
Joseph Badenoch 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.

UNIVERSITY OF VICTORIA FOUNDATION

Michael G. Stirling, C.D., Director.

Advisory Board:

- Thomas G. Denny (*Chairman*).
William H. Armstrong.
R. O. Bull.
Peter W. Carrodus, LL.B.
James R. Genge, M.A.
Justin V. Harbord.
Carron B. Jameson, B.Sc., D.M.D.
Robert W. Phipps.
John W. Porteous.
Malcolm G. Taylor, B.A., M.A., Ph.D., LL.D.
Richard B. Wilson, B.Comm.
Robert A. Wootton.

Honorary Members:

- Joseph B. Clearihue, M.C., E.D., Q.C., B.A., B.C.L., LL.D.
Robert W. McQueen, B.Comm., C.A.

PROVINCIAL ACADEMIC BOARD FOR HIGHER EDUCATION

Appointed by the Lieutenant-Governor in Council:

- S. N. F. Chant, O.B.E., M.A., LL.D. (*Chairman*).
Harry M. Evans, B.A.

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

Appointed by University of Victoria:

F. T. Tyler, B.Sc., M.A., M.Ed., Ph.D. Term expires November 1969.

R. E. L. Watson, M.A., Ph.D. Term expires November 1969.

Appointed by the University of British Columbia:

C. B. Bourne, B.A., LL.B.

Ian McTaggart Cowan, B.A., Ph.D., F.R.S.C.

Appointed by Simon Fraser University:

Ronald J. Baker, B.A., M.A.

C. D. Nelson, B.A., M.A., Ph.D.

Secretary: Dennis Franklin.

JOINT BOARD OF TEACHER EDUCATION

Representing University of Victoria:

The President, Dr. Malcolm G. Taylor, or his nominee.

The Dean of the Faculty of Education, Dr. Fred T. Tyler, or his nominee.

Representative of Senate, Mr. G. A. Brand.

Representing the Provincial Department of Education:

The Deputy Minister, Dr. G. N. Perry, or his nominee.

The Superintendent, Mr. F. P. Levirs, or his nominee.

The Registrar, Mr. Harry M. Evans, or his nominee.

The Co-ordinator of Teacher Recruitment, Mr. Philip J. Kitley, or his nominee.

Representing the University of British Columbia:

The President, or his nominee.

The Dean of the Faculty of Education, Professor Neville V. Scarfe, or his nominee.

Representative of Senate, Dean Walter H. Gage, Chairman.

Representing Simon Fraser University:

The President, Dr. Patrick McTaggart Cowan, or his nominee.

The Dean of the Faculty of Education, Dr. A. R. MacKinnon, or his nominee.

Mr. Ronald J. Baker.

Representing the B.C. School Trustees' Association:

Mr. F. N. A. Rowell.

Mr. F. M. Reder.

Representing the B.C. Teachers' Federation:

Mr. C. D. Ovans.

Mr. J. W. Killeen.

Secretary: Mr. J. E. A. Parnall, Registrar, University of British Columbia.

OFFICE OF THE PRESIDENT

Robert T. D. Wallace, M.A. (*Brit. Col.*), Acting President.

J. Trevor Matthews, B.A. (*Brit. Col.*), M.B.A. (*Stanford*), Assistant to the President, and Secretary of the Board of Governors.

Miss Catherine D. Cameron, Secretary to the President.

Campus Planning:

J. Arthur Webb, B.Sc. (*Alta.*), Director.

Information Services:

David H. Dunsmuir, B.A. (*Tor.*), Information Officer.

Frank Edmonds.

OFFICE OF THE DEAN OF ARTS AND SCIENCE

Appointment pending.

OFFICE OF THE DEAN OF EDUCATION

Fred T. Tyler, B.Sc., M.A., M.Ed. (*Alta.*), Ph.D. (*Calif.*), Dean of the Faculty of Education.

George A. Brand, B.A., M.Ed. (*Brit. Col.*), Director of Student Teaching.

Arthur Kratzmann, M.Ed. (*Alta.*), Ph.D. (*Chicago*), Director of Teacher Education.

William K. Cross, B.Ed. (*Brit. Col.*), Assistant Director of Student Teaching (Elementary).

Cary F. Goulson, M.A. (*Brit. Col.*), Ed.D. (*Tor.*), Assistant Director of Student Teaching (Secondary).

OFFICE OF THE DEAN OF GRADUATE STUDIES

M. H. Scargill, B.A., Ph.D. (*Leeds*), Dean of the Faculty of Graduate Studies.

Roger G. Napier, B.Sc. (*U. of Vic.*), Administrative Assistant.

OFFICE OF THE DIRECTOR OF FINE ARTS

Peter Garvie, M.A. (*Cantab.*), Director of the School of Fine Arts.

OFFICE OF THE DEAN OF ADMINISTRATION

Robert T. D. Wallace, M.A. (*Brit. Col.*), Dean of Administration.

Edgar R. Lloyd, B.Comm. (*Brit. Col.*), Administrative Assistant.

Personnel:

William G. Bender, B.A. (*Brit. Col.*), Director of Personnel.

Buildings and Grounds:

Arthur J. Saunders, B.A.Sc. (*Brit. Col.*), P.Eng., Superintendent.

George E. Apps, B.A.Sc. (*Brit. Col.*), P.Eng., Engineer.

Albert A. Lock, Supervisor of Services.

Thomas W. O'Connor, Supervisor of Traffic and Security.

Bookstore:

Mrs. E. Joyce McKay, B.A. (*Man.*), Manager.

Computer Centre:

Peter A. Darling, M.A.Sc. (*Brit. Col.*), P.Eng., Director.

Robert C. Allen, B.Sc. (*Brit. Col. - Vic. Coll.*), Administrative Systems Supervisor.

University Development Board:

Floyd A. Fairclough, Manager.

Athletics:

Robert D. Bell, B.A. (P.E.) (*Sask.*), M.A. (*Oregon*).

OFFICE OF THE DEAN OF COLLEGE AND STUDENT AFFAIRS

Ronald R. Jeffels, C.D., B.A., B.Ed. (*Alta.*), M.A. (*Cantab.*), Dean of College and Student Affairs.

Counselling and Testing:

Miss Esme N. Foord, M.A. (*Queen's*), B.Paed., Ed.D. (*Tor.*), Director.

James A. Johnson, C.D., M.A. (*Dalhousie*), Assistant Counsellor.

Mrs. Dorothy Sommer, B.A. (*U.C.L.A.*), M.S. (*U.S.C.*), Assistant Counsellor.

Student Health Service:

Dr. J. E. Petersen, Director.

Mrs. W. Oliver, R.N., Nurse in charge.

Student Union Building:

Richard F. Chudley, C.D., Manager.

Women's Activities and Housing:

Mrs. Shirley Baker, B.Sc. (*Sask.*), Co-ordinator.

Mrs. Diana Caleb, B.A. (*Brit. Col. - Vic. Coll.*), Residence Director.

OFFICE OF THE REGISTRAR

Ron J. P. Ferry, B.A. (*Tor.*), Registrar, Admissions Officer.

Miss Patricia Sullivan, B.A. (*Sask.*), Associate Registrar.

Mrs. Marjorie Hoey, Assistant Registrar.

Herbert R. Widdifield, B.A. (*R.M.C.*), Administrative Assistant.

Nels I. Granewall, B.A. (*U. of Vic.*), Financial Aid Officer.

OFFICE OF THE BURSAR

Robert W. McQueen, B.Comm. (*Brit. Col.*), C.A., Bursar.

M. Warren Davidson, Purchasing Agent.

Dennis G. Davis, C.A., Chief Accountant.

J. Gerald G. Underhill, B.Comm. (*Brit. Col.*), C.A., Accountant.

Mrs. Marjorie Sinclair, C.O.A., Assistant Accountant.

OFFICE OF THE LIBRARIAN

Dean W. Halliwell, M.A. (*Sask.*), B.L.S. (*Tor.*), University Librarian.

G. Robert Campbell, Systems Analyst.

Gordon C. New, B.A. (*McMaster*), B.L.S. (*Tor.*), Administrative Assistant.

Mrs. Helen M. Rodney, B.A. (*Alta.*), B.L.S. (*Tor.*), Head, Reference Division.

Miss Priscilla R. Scott, B.A. (*Brit. Col.*), B.L.S. (*Tor.*), Head, Circulation Division.

William R. Taggart, B.A. (*Man.*), M.A., B.L.S. (*McGill*), Head, Collections Division.

Mrs. June G. Thomson, B.A. (*Alta.*), M.A. (*Tor.*), B.L.S. (*McGill*), Head, Cataloguing Division.

Miss Ann Van der Voort, B.A. (*Queen's*), B.L.S. (*Tor.*), Head, Acquisitions Division.

Miss Jean I. Whiffin, B.A., B.L.S. (*Tor.*), Head, Serials Division.

Miss Marilyn E. Berry, B.A., B.L.S. (*Brit. Col.*), Circulation Librarian.

Bert F. Crandall, B.A. (*Arizona*), B.L.S. (*Brit. Col.*), Cataloguer.

John O. Dell, B.A., B.L.S. (*Brit. Col.*), Cataloguer.

Robert W. Farrell, M.A. (*Dublin*), B.L.S. (*McGill*), Collections Librarian.

Joseph L. Gentry, B.A., B.L.S. (*Brit. Col.*), Reference Librarian.

Howard B. Gerwing, B.A., B.L.S. (*Brit. Col.*), Special Collections Librarian.

Robert M. Gray, B.A. (*Brit. Col.*), M.A. (*U.C.L.A.*), B.L.S. (*U. C. Berkeley*),
Reference Librarian.
Hugh C. Irving, B.A., B.L.S. (*Brit. Col.*), Cataloguer.
Robert H. Ker, M.A. (*McGill*), M.L.S. (*Calif.*), Reference Librarian.
Nicholas T. Koerner, M.A. (*Brit. Col.*), B.L.S. (*McGill*), Cataloguer.
Mrs. Barbara J. Lowther, B.A., B.L.S. (*Brit. Col.*), Reference Librarian.
Dr. Peter Melnyk, Ph.D. (*Lvov*), B.Ag.Sc. (*Vienna*), M.S.L.S. (*Syracuse*), Cataloguer.
Miss Sophia Preisman, M.A. (*Vienna*), Ph.D. (*Florence*), B.L.S. (*McGill*), Collec-
tions Librarian.
Miss Frances Roscoe, B.A. (*Our Lady of the Elms*), M.L.S. (*U.C.L.A.*), Reference
Librarian.
Mrs. Doris Stastny, M.A. (*Cantab.*), B.L.S. (*Brit. Col.*), Cataloguer.
Harry Stastny, B.A. (*Brit. Col.*), B.L.S. (*McGill*), Collections Librarian.
Miss A. Jean Taylor, B.Sc., B.L.S. (*Brit. Col.*), Cataloguer.
Miss Grace Tuckey, B.A., B.S.W. (*Brit. Col.*), Curriculum Librarian.
Mrs. Marta Williamson, B.A., B.L.S. (*Brit. Col.*), Reference Librarian.

EVENING DIVISION OFFICE

Robert T. D. Wallace, M.A. (*Brit. Col.*), Director.
Mrs. Cora E. Browne, B.A. (*Brit. Col. - Vic. Coll.*), Assistant to the Director.

SUMMER SESSION OFFICE

Robert T. D. Wallace, M.A. (*Brit. Col.*), Acting Director.
Mrs. Cora E. Browne, B.A. (*Brit. Col. - Vic. Coll.*), Assistant to the Director.

FACULTY, TEACHING, LIBRARY, AND RESEARCH 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.

- Adey, Lionel, M.A. (*Birmingham*), Ph.D. (*Leicester*), Assistant Professor, English.
- Alford, Norman W., B.A. (*London*), Ph.D. (*Texas*), Assistant Professor, English.
- Algard, Franklin Thomas, A.B. (*San Jose State*), Ph.D. (*Stanford*), Associate Professor, Biology.
- Allen, Ralph G., B.A. (*Amherst*), D.F.A. (*Yale*), Associate Professor and Chairman of the Division of Theatre.
- Archbold, Geoffrey J. D., B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Assistant Professor, Classics.
- Armstrong, Wendy D., B.A. (*U. of Vic.*), M.Sc. (*Guelph*), Laboratory Instructor, Biology.
- Austin, A., B.Sc., Ph.D. (*Wales*), Assistant Professor, Biology.
- Avison, John, C.D., B.A. (*Brit. Col.*), B.Mus. (*Wash.*), Part-time Lecturer, Fine Arts.
- Baartz, Arne P., M.A., Ph.D. (*Oregon*), Assistant Professor, Mathematics.
- Bakony, Leo I., B.A. (*Brit. Col.*), Ph.D. (*Wash.*), Professor, Economics.
- Baldner, Ralph, A.B. (*Miami, Ohio*), M.A. (*Vanderbilt*), Ph.D. (*Calif.*), Associate Professor, French. (Leave of absence 1968-69.)
- Ball, Donald W., M.A. (*Calif.*), M.S. (*Oregon*), Lecturer, Anthropology and Sociology.
- Ballantyne, David J., B.Com. (*Brit. Col.*), M.S. (*Wash. State*), Ph.D. (*Maryland*), Associate Professor, Biology.
- Barnett, Howard B., A.R.C.T., B.A., Mus.Bac. (*Tor.*), M.A., Ph.D. (*S. Calif.*), Associate Professor, Fine Arts.
- Barr, Iain Y. A., B.Sc. (*U.N.B.*), M.F. (*Brit. Col.*), Laboratory Instructor, Biology.
- Barrodale, Ian, B.Sc. (*Univ. Coll. of N. Wales*), M.Sc. (*Brit. Col.*), Ph.D. (*Liverpool*), Assistant Professor, Mathematics.
- Barron, David J., M.A. (*Aberdeen*), Instructor, English. (Leave of absence 1968-69.)
- Barss, Walter M., M.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor, Physics.
- Beardsmore, Barrington F., B.A. (*Liverpool*), M.A. (*McMaster*), Instructor, French.
- Bell, Marcus A. M., B.S.F. (*Brit. Col.*), M.F. (*Yale*), Ph.D. (*Brit. Col.*), Assistant Professor, Biology.
- Bell, Robert D., B.A. (P.E.) (*Sask.*), M.A. (*Oregon*), Instructor and Co-ordinator of Athletics, Education.
- Benzie, William, M.A., M.Ed., Ph.D. (*Aberdeen*), Assistant Professor and Director of Freshman English.
- Berger, Mrs. Carol, B.A. (*Wells Coll.*), M.A. (*Calif.*), Instructor, English.
- Berry, Marilyn E., B.A., B.L.S. (*Brit. Col.*), Circulation Librarian.
- Bertram, Gordon W., B.A. (*Brit. Col.*), Ph.D. (*Calif.*), Professor of Economics and Chairman of the Department of Economics.
- Best, Michael R., B.A., Ph.D. (*Adelaide*), Assistant Professor, English.
- Bishop, Roger J., B.A. (*Brit. Col.*), B.L.S., M.A. (*Tor.*), Professor, English.
- Bourguès, Jeanne E., L. ès L., (*Toulouse*), Visiting Assistant Professor, French.
- Bouygues, Claude P., L. ès L., C.A.P.E.S., D.E.S. (*Paris*), Visiting Lecturer, French.
- Bowden, Leon, B.Sc. (*London*), B.Litt. (*Oxon.*), Assistant Professor, Mathematics.
- Brand, George A., B.A., M.Ed. (*Brit. Col.*), Professor, Director of Student Teaching.
- Bray, Roger W., B.A. (*Oxon.*), Instructor, Fine Arts.
- Brown, Dennis E., M.A. (*London*), Instructor, English. (Leave of absence 1968-69.)
- Bullock, C. J., B.A. (*Leeds*), Instructor, English.
- Bushnell, G. W., B.Sc., M.A. (*Oxon.*), Ph.D. (*West Indies*), Assistant Professor, Chemistry.

- Butler, Ross E., M.A. (*Oregon*), Instructor, Spanish.
- Cabañas, Pablo, Licenciado (*Madrid*), Doctor en Filosofía y Letras (*Madrid*), Professor and Head of the Department of Hispanic and Italian Studies.
- Caleb, Mrs. Diana, B.A. (*Brit. Col. - Vic. Coll.*), Part-time Laboratory Instructor, Biology.
- Careless, J. M. S., A.M., Ph.D. (*Harvard*), Visiting Professor, History.
- Carl, G. Clifford, M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Part-time Lecturer, Biology.
- Carr, Gerald A., B.A., M.S. (*U.C.L.A.*), Instructor, Education.
- Carson, John, M.A. (*Oxon.*), Associate Professor, Classics.
- Carter, R. A. L., B.A. (*R.M.C.*), M.A. (*Queen's*), Instructor, Economics.
- Chabassol, David J., B.A., B.Ed. (*Acadia*), M.Ed. (*Tor.*), Ph.D. (*Alta.*), Associate Professor, Education. (Leave of absence 1968-69.)
- Chard, Donald F., M.A. (*Dalhousie*), Instructor, History.
- Cheffins, Ronald I., B.A., LL.B. (*Brit. Col.*), LL.M. (*Yale*), Professor of Political Science and Public Law, and Chairman of the Department of Political Science.
- Cherneck, Robert V., B.A. (*U. of Vic.*), M.A. (*Wash.*), Instructor, Economics.
- Christiansen, Robert A., B.A., M.S., Ph.D. (*Iowa*), Assistant Professor, Mathematics.
- Christiansen, Mrs. Susan Beth, B.A., M.S. (*Iowa*), Part-time Lecturer, Mathematics.
- Christie, Mrs. Kathleen M., B.A. (*Brit. Col.*), M.A. (*Calif.*), Assistant Professor, Education.
- Christmas, Peter G., B.A. (*Swansea*), Instructor, English.
- Chu, Godwin C., B.A. (*Taiwan*), M.A., Ph.D. (*Stanford*), Associate Professor, Anthropology and Sociology.
- Clark, Lewis J., B.A. (*Brit. Col.*), M.Sc. (*Wash.*), Ph.D. (*Oregon State*), Professor, Chemistry.
- Climenhaga, John L., M.A. (*Sask.*), Ph.D. (*Michigan*), Professor and Head of the Department of Physics.
- Cockayne, Ernest J., M.A. (*Oxon.*), M.Sc. (*McGill*), Ph.D. (*Brit. Col.*), Assistant Professor, Mathematics.
- Coldwell, Joan, M.A. (*London*), Ph.D. (*Harvard*), Assistant Professor, English.
- Connor, F. Michael, B.Sc. (*Newcastle*), Laboratory Instructor, Physics.
- Cook, Clarence C., B.A. (*Tor.*), M.Sc. (*Mich.*), LL.D. (*R.M.C.*), Part-time Lecturer, Physics.
- Cooperstock, Fred I., B.Sc. (*Man.*), Ph.D. (*Brown*), Assistant Professor, Physics.
- Corry, Michael R., B.A. (*U. of Vic.*), Laboratory Instructor, Biology.
- Courtney, Richard, B.A., Dip. Ed. (*Leeds*), F.R.S.A., Associate Professor, Fine Arts.
- Crampton, Mrs. Heather E., M.Sc. (*Tor.*), Part-time Laboratory Instructor, Biology.
- Crandall, Bert F., B.A. (*Arizona*), B.L.S. (*Brit. Col.*), Cataloguer, Library.
- Crawford, Leslie W., M.S. (*E. Montana Coll.*), Ed.D. (*Calif.*), Assistant Professor, Education.
- Cross, William K., B.Ed. (*Brit. Col.*), Assistant Professor, Education; Assistant Director of Student Teaching (Elem.).
- Crumrine, N. Ross, B.A. (*Northwestern*), M.A. (*Arizona*), Instructor, Anthropology and Sociology.
- Cutt, Mrs. Margaret N., M.A. (*Alta.*), Lecturer, English.
- D'Alessio, Juan C., M.A. (*Buenos Aires*), D.Phil. (*Oxon.*), Assistant Professor, Philosophy.
- Danc, Michael M., B.A. (*Wash.*), M.A. (*Harvard*), Assistant Professor, Russian. (Leave of absence 1968-69.)
- Davidson, Roger R., B.Sc. (*Queen's*), M.A. (*Tor.*). Ph.D. (*Florida*), Assistant Professor, Mathematics.
- Davis, J. Kent, B.A., M.S. (*Wyoming*), Ph.D. (*Wisconsin*), Assistant Professor, Education.

- Dell, John O., B.A., B.L.S. (*Brit. Col.*), Cataloguer, Library.
- Deloume, Fernand E., B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*U.S.C.*), P.Eng. (*Brit. Col.*), Associate Professor, Mathematics.
- Denike, Howard, B.Mus. (*Wash.*), Part-time Lecturer, Fine Arts, and Conductor of University Concert Band.
- Dennis, Mrs. Mary M., M.S.A. (*Brit. Col.*), Laboratory Instructor, Biology.
- Dewey, John M., B.Sc., Ph.D. (*London*), Associate Professor, Physics.
- Dey, Jean D., M.Ed. (*Alta.*), Associate Professor, Education.
- Dilnot, Alan F., B.A., B.Phil. (*Oxon.*), Instructor, English.
- Dingle, T. W., B.Sc., Ph.D. (*Alta.*), Assistant Professor, Chemistry.
- Dobereiner, John P., Dip. V.S.A., B.Ed. (*Brit. Col.*), M.F.A. (*Wash.*), Assistant Professor, Fine Arts.
- Docherty, David, M.Sc. (*Oregon*), Lecturer, Education.
- Doody, Margarct, B.A. (*Dalhousie*), B.A. (*Oxon.*), Instructor, English.
- Dosso, Harry W., B.A., M.Sc., Ph.D. (*Brit. Col.*), Associate Professor, Physics.
- Downes, Gwladys V., M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Professor, French.
- Drengson, Alan R., M.A. (*Wash.*), Instructor, Philosophy.
- Duncan, Pam, B.A. (*Wisconsin St.*), M.A. (*U. of Chicago*), Ph.D. (*U. of Wisconsin*), Assistant Professor, Psychology.
- Edell, Frederick, M.F.A. (*Yale*), Assistant Professor, Fine Arts (Leave of absence 1968-69.)
- Edwards, P. M. H., 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. (*Univ. of Penn.*), Associate Professor, French.
- Efrat, Mrs. Barbara S., B.A. (*Pembroke Coll.*), M.A. (*Brown Univ.*), Part-time Lecturer, Classics.
- Efrat, Edgar S., B.A. (*Reed Coll.*), M.A., Ph.D. (*Texas*), Assistant Professor, Political Science.
- Ehle, Byron L., A.B. (*Whitman*), M.A. (*Stanford*), Instructor, Mathematics. (Leave of absence 1968-69.)
- Elias, Wilma E., M.A. (*Sask.*), Ph.D. (*Brit. Col.*), Associate Professor, Chemistry.
- Elliott, G. Reid, B.A. (*Sask.*), Ph.D. (*Tor.*), Professor Emeritus of Economics.
- Ellis, Derek V., B.Sc. (*Edin.*), M.Sc., Ph.D. (*McGill*), Associate Professor, Biology. (Leave of absence 1968-69.)
- Emery, C. Anthony, M.A. (*Oxon.*), Associate Professor, Fine Arts. (On partial leave 1968-69.)
- Eshleman, Winston H., M.A. (*Stanford*), Ed.D. (*Arizona*), Assistant Professor, Education.
- Evans, Timothy L., B.A. (*Cantab.*), Instructor, English.
- Faber, Melvyn D., B.A. (*Chicago*), M.A., Ph.D. (*Calif.*), Assistant Professor, English.
- Farquhar, Hugh E., M.A. (*Brit. Col.*), Ph.D. (*Alta.*), Professor, Education.
- Farrell, Bryan H., M.A. (*Wash.*), B.A., Ph.D. (*N.Z.*), Professor and Head of the Department of Geography.
- Farrell, Robert W., M.A. (*Dublin*), B.L.S. (*McGill*), Collections Librarian.
- Fields, W. Gordon, B.A. (*Brit. Col.*), A.M., Ph.D. (*Stanford*), Professor and Head of the Department of Biology.
- Fontaine, Arthur R., B.Sc. (*McGill*), D.Phil. (*Oxon.*), Professor, Biology.
- Foord, Esme N., M.A. (*Queen's*), B.Paed., Ed.D. (*Tor.*), Associate Professor, Education; Director of Counselling and Testing.
- Forbes, George H., B.A. (*Brit. Col.*), Instructor, English.
- Forrester, Elizabeth A. M., B.Sc. (*Glasgow*), M.A. (*Brit. Col.*), Senior Laboratory Instructor, Geography.
- Forward, Charles N., M.A. (*Brit. Col.*), Ph.D. (*Clark*), Associate Professor, Geography.
- Foster, Harold D., B.Sc. (*London*), Instructor, Geography.

- Freeman, John C., B.A. (*Harpur*), M.A. (*Delaware*), Instructor, Fine Arts, and Curator of Maltwood Museum.
- Frenzel, K. Arnold, B.A. (*Pacific Lutheran*), M.A. (*Wash.*), Assistant Professor, Economics.
- Friedmann, Gerhart B., B.Sc., M.A. (*Madras*), Ph.D. (*Brit. Col.*), Assistant Professor, Physics.
- Gaddes, William H., M.A. (*Brit. Col.*), Ph.D. (*Claremont*), Professor, Psychology.
- Galloway, Charles G., B.A. (*Cent. Wash. State Coll.*), M.A. (*Harvard*), Ph.D. (*Calif.*), Assistant Professor, Education.
- Garvie, Peter, M.A. (*Cantab.*), Professor and Director of the School of Fine Arts, Honorary Lecturer in the Faculty of Arts and Science.
- Gentry, Joseph L., B.A., B.L.S. (*Brit. Col.*), Reference Librarian.
- Gerwing, Howard B., B.A., B.L.S. (*Brit. Col.*), Special Collections Librarian.
- Gibbins, Sidney G., B.S. (*Calif. Inst. Tech.*), Ph.D. (*Wash.*), Assistant Professor, Chemistry.
- Gillespie, Neil K., B.Sc. (*U. of Vic.*), Laboratory Instructor, Physics.
- Gilliland, Henry C., M.A. (*Brit. Col.*), Dean Emeritus of Education.
- Girard, Charlotte S.M., B.A. (*Brit. Col.*), M.A., Ph.D. (*Bryn Mawr*), Assistant Professor, History.
- Gisel, Diane, B.A. (*U. of Vic.*), M.A. (*McGill*), Part-time Lecturer, Mathematics.
- Goddard, James M., B.Sc. (*Salford*), Laboratory Instructor, Biology.
- Goede, William J., B.A. (*Wis.*), Ph.D. (*Calif.*), Instructor, English.
- Gooch, Bryan N. S., M.A. (*Brit. Col.*), A.R.C.T. (*Tor.*), F.T.C.L. (*London*), Assistant Professor, English.
- Gooch, Mrs. Velma, M.A. (*Alta.*), Lecturer, English.
- Gordon, William R., M.A. (*Brit. Col.*), Ph.D. (*Calif.*), Assistant Professor, Mathematics.
- Gordon, Mrs. Zulette, B.A. (*Brit. Col.*), M.A. (*Calif.*), Lecturer, Mathematics.
- Goulson, Cary F., M.A. (*Brit. Col.*), Ed.D. (*Tor.*), Associate Professor, Education; Assistant Director of Student Teaching (Secondary).
- Gow, James J., B.L., Ph.D., LL.D. (*Aberdeen*), Part-time Lecturer, Political Science.
- Gowans, Alan, M.A. (*Tor.*), M.F.A., Ph.D. (*Princeton*), Professor and Chairman of the Division of Art and Art History, Honorary Lecturer in the Faculty of Arts and Science.
- Graff, John Paul, A.B. (*Yale*), M.A. (*Calif.*), Instructor, Philosophy.
- Graham, Malcolm, B.S., M.D., C.M. (*McGill*), M.S. (*Iowa*), F.A.C.S., Honorary Research Associate, Psychology.
- Grant, Patrick, B.A. (*Queen's, Belfast*), D.Phil. (*Sussex*), Assistant Professor, English.
- Gray, Robert M., B.A. (*Brit. Col.*), M.A. (*U.C.L.A.*), B.L.S. (*U.C. Berkeley*), Reference Librarian.
- Greene, John C. E., M.A. (*Alta.*), Instructor, French.
- Griffiths, David A., M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Associate Professor, Acting Head of the Department of French Language and Literature.
- Grooms, Richard H., Sp. Dip. (*Paris*), M.Sc. (*Wisconsin*), Associate Professor, Fine Arts.
- Groves, T. D. D., M.S.A. (*Brit. Col.*), Ph.D. (*Purdue*), Assistant Professor, Bacteriology and Biochemistry.
- Guerrero, Josefa, B.A. (*London*), Instructor, Spanish. (Leave of absence 1968-69.)
- Hagmeier, Edwin M., B.A. (*Queen's*), M.A., Ph.D. (*Brit. Col.*), Associate Professor, Biology. (Leave of absence 1968-69.)
- Hall, John F., A.M. (*Stanford*), M.S. (*Oregon State*), Assistant Professor, Education.
- Halliwell, Dean W., M.A. (*Sask.*), B.L.S. (*Tor.*), University Librarian.
- Handi, Fouad A., M.D. (*Alexandria*), Ph.D. (*Edin.*), Part-time Lecturer, Psychology.
- Hannay, Robert D., B.Sc. (*U. of Vic.*), Laboratory Instructor, Physics.

- Hare, Carl R. D., M.A. (*Alta.*), Dip. R.A.D.A., Associate Professor, Fine Arts.
- Harris, Mrs. Bernadette, B.S. (*Illinois*), M.S. (*San Diego State*), Part-time Lecturer, Astronomy.
- Hartmansheni, Herta M., Ph.D. (*Marburg*), Associate Professor, German.
- Hartwick, F. David A., B.Eng. (*McGill*), M.A., Ph.D. (*Tor.*), Assistant Professor, Astronomy.
- Harvey, Donald, A.T.D. (*Britain*), Associate Professor, Fine Arts.
- Hayman, John G., M.A. (*Oxon.*), M.A. (*Cornell*), Ph.D. (*Northwestern*), Assistant Professor, English.
- Hendrickson, James E., B.A. (*Sask.*), B.Ed. (*Alta.*), M.A., Ph.D. (*Oregon*), Associate Professor, History.
- Hendrie, Gerald M., M.A., Mus.B., Ph.D. (*Cantab.*), F.R.C.O., A.R.C.M., Associate Professor and Chairman of the Division of Music.
- Henrich, Thorston W., A.B. (*Calif.*), M.A. (*S. Dakota*), Laboratory Instructor, Biology.
- Hess, T. M., B.A. (*Colo.*), Ph.D. (*Wash.*), Assistant Professor, Linguistics.
- Hesse, Karl H., M.Sc. (*Queen's*), Part-time Lecturer, Astronomy.
- Hewitt, Jay, B.A. (*Calif.-Santa Barbara*), M.A., Ph.D. (*Iowa*), Assistant Professor, Psychology.
- Hibberson, Mrs. Maureen C., B.P.E. (*Brit. Col.*), M.A. (*Oregon*), Assistant Professor, Education.
- Hickman, W. Harry, M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Professor, French. (Leave of absence 1968-69.)
- Higgins, Stella, B.A. (*U. of Vic.*), Part-time Lecturer, History.
- Hinrichs, Lowell A., M.A., Ph.D. (*Oregon*), Associate Professor, Mathematics.
- Hobson, Gordon Neville, M.A., Ph.D. (*Alta.*), Associate Professor, Psychology.
- Hogg, Mrs. Sheila M., B.A. (*U. of Vic.*), M.A. (*Wash.*), Lecturer, English.
- Horne, Edgar B., B.A.Sc., M.A. (*Brit. Col.*), Ph.D. (*Illinois*), Associate Professor, Education.
- Howatson, Charles H., M.A. (*Brit. Col.*), Associate Professor, Geography.
- Hurst, Mrs. Thelma A., B.A. (*West. Ont.*), Instructor, English.
- Hutchison, Alexander N., M.A. (*Aberdeen*), Instructor, English. (Leave of absence 1968-69.)
- Huxley, Herbert H., M.A. (*Cantab.*), Professor, Classics.
- Ingham, Donald G., B.Sc. (*U. of Vic.*), Laboratory Instructor, Physics.
- Irving, Hugh C., B.A., B.L.S. (*Brit. Col.*), Cataloguer, Library.
- Jackman, Sydney W., Ph.D. (*Harvard*), F.R. Hist. S., Professor, History.
- Jacobson, Herbert R., A.B., M.A. (*Chico State*), Senior Laboratory Instructor, Biology.
- Jain, Tikam C., M.Sc., Ph.D. (*Agra*), Assistant Professor, Chemistry.
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- Thompson, R. T. F., B.A., B.Ed., M.Ed. (*Man.*), Lecturer, Education.
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- Williamson, Mrs. Marta, B.A., B.L.S. (*Brit. Col.*), Reference Librarian.
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- Zietlow, Edward R., M.A. (*Boston*), Ph.D. (*Wash.*), Assistant Professor, English.

HISTORICAL OUTLINE

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

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

In 1920, as a result of local demands, Victoria College began the second stage of its development, reborn in affiliation with the University of British Columbia. Though still administered by the Victoria School Board, the College was now completely separated from Victoria High School, moving in 1921 into the magnificent Dunsinuir 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 28-acre campus at Gordon Head was acquired. Academic expansion was rapid after 1956, until in 1961 the College, still in affiliation with U.B.C., awarded its first bachelor's degrees.

In granting autonomy to the University of Victoria, the *Universities Act* of 1963 vested administrative authority in a Chancellor elected by the Convocation of the University, a Board of Governors, and a President appointed by the Board; academic authority was given to a Senate which 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. Richard B. Wilson was elected Chancellor of the University by acclamation in September 1966 for a term beginning January 1, 1967.

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 the Hebrew characters 'Let there be Light'."

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)

Education - Arts Building (1966)

Social Sciences Complex (1966)

Men's Residences (1967)

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.

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 neckpiece), outside shell of silk taffeta in a solid colour, lined with identical material.

Faculty colours are as follows: B.A. — scarlet
B.Sc. — gold
B.Ed. — blue
B.F.A. — green
B.Mus. — pink

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

All enquiries relating to admission to the University should be addressed to the Registrar.

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

GENERAL INFORMATION

The academic year begins on the first of September and ends on the last day of August. The Winter Session is divided into two terms—the first, September to December; the second, January to May. The Summer Session consists of seven weeks' instruction in July and August. The Calendar for Summer Session is published separately. Credit courses offered through Evening Division are published in the regular Calendar.

For the Session 1968-69 the University offers the following degrees through the Faculty of Arts and Science, the Faculty of Education, the Faculty of Graduate Studies, the School of Fine Arts, and the School of Nursing: Bachelor of Arts, Bachelor of Science, Bachelor of Education (a five-year degree preparing teachers for the Elementary and Secondary schools of the Province; or a four-year degree preparing Elementary teachers); Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science in Nursing, Master of Arts, Master of Science, Doctor of Philosophy. Also offered are Diploma Programmes in Education for graduates seeking teacher certification.

By a proper selection of First Year courses in Arts and Science, students may equip themselves to enter the first year of Engineering, Forestry, and the second year of Agriculture, Physical Education, Pharmacy at certain other universities. Courses preparatory to Medicine, Dentistry, Law, Architecture, etc., may be taken at the University. See page 236 **Pre-professional education**.

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

Students are warned not to assume that regulations remain unchanged from year to year. They should note regulations and outlines of courses as they appear in this Calendar.

General Regulations

1. Students who are accepted by transfer from other institutions must complete all further courses at the University of Victoria. The University will normally not grant a degree for residence of less than two regular winter sessions or the equivalent.

2. If, in the first two years of a degree programme, students undertake more than the minimum thirty units required, they may not receive credit in higher years for these extra units. However, second-year students who have already obtained partial credit in second year but who must still undertake additional courses to complete the work of the first two years may register for courses to be credited to the third year.

3. In the third and fourth years a minimum total of 30 units is required. However, 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 work in each year.

4. 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.

5. Students may not receive University credit for high school courses passed for graduation on the Academic-Technical Programme, whether taken among the required credits or as extra subjects.

6. Students may not continue with work in a higher year, unless they take concurrently all courses required to clear conditions of 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 the prerequisites.

7. Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations.

8. Normally, all students must complete the final year at the University of Victoria.

9. 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, which in turn will notify the Faculty of Graduate Studies.

APPLICATION FOR ADMISSION

1. Students seeking admission for the first time must obtain an **Application for Admission** form from the Office of the Registrar. This form will be available after May 1, and must be returned, fully completed and accompanied by all official transcripts of academic records, to the Registrar on or before August 15.
2. Students who were registered in the session 1967-68 or earlier must apply for re-registration on or before July 2.
3. Students seeking admission to the Faculty of Graduate Studies should consult page 191.
4. Each applicant applying for the first time must submit official transcripts of secondary school records and of any higher studies taken. These statements must accompany the Application for Admission form. Every student 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. Applications not fully supported by all relevant documents by the dates stipulated above will be subject to a late fee. See page 44.
5. All applicants will be informed in writing of their acceptance or rejection.

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) Students 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. A student must have fulfilled these requirements **by the June** of the year in which he is seeking admission; no student with a deficiency in his academic qualifications will be admitted
- (b) Specifically, a student seeking admission must have completed the following courses:

English 11 and 12

Social Studies 11

Guidance and Physical and Health Education 11

Mathematics 11

One of: Biology 11, Chemistry 11, Physics 11

*One of: French 11, German 11, Latin 11, Spanish 11

* A course in a Vocational Specialty may be substituted if a Technical Specialty is chosen.

In addition, he must have completed one of the Arts, Sciences, or Technical Specialties as set forth below:

Arts (Humanities)	Sciences	Technical
Three courses selected from separate groups below, at least 2 courses of which must be numbered 12:	Three courses:	Three courses:
1. Lang. 12	1. Ma. 12	1. Ma. 12
2. Hi. 12 <i>or</i> Geo. 12	2. One of: Bi. 12	2. One of: Bi. 12
3. En. Lit. 12	Ch. 12	Ch. 12
4. Ma. 12	Ph. 12	Ph. 12
5. Another Lang. 11 <i>or</i> 12	3. One additional science chosen from:	3. Vocational Specialty 11 <i>or</i> 12 (not already chosen)
6. Hi. 12 <i>or</i> Geo. 12 <i>or</i> Ec. 11 <i>or</i> Law 11	Bi. 11, 12	
(not taken under 2 above)	Ch. 11, 12	
	Ph. 11, 12	

A student who completes the above requirements and subsequently registers in Grade 13 is subject to the regulations governing admission from Grade 13. See page 35.

- (c) In choosing degree programmes, students are strongly urged to consult the prescriptions for the degrees of B.A., B.Sc., B.Ed. In particular, students choosing the B.Sc. degree should normally take the Sciences Specialty in the senior secondary school. Students who register in the Faculty of Arts and Science and who intend to transfer at a later date into the Faculty of Education (five-year programme) should plan their programmes with this in mind. In particular, they should be careful to specialize in two teaching areas of the senior secondary school curriculum. B.A. or B.Sc. graduates who do not meet this requirement are not normally admissible to the one-year Diploma Programme for Graduates. See page 166.

These qualifications are approved by the Senate of the University. Grade 12 examinations are administered by the Board of Examiners of the Province on which are representatives of both the University and the Department of Education. Enquiries relating to Secondary School Graduation or to the Grade 12 and Grade 13 examinations should be addressed to the Executive Secretary of the Board of Examiners, Department of Education, Victoria, B.C.

2. **Graduates of Secondary Schools outside British Columbia.** Beginning in 1968, 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.

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 Registrar.

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

Alberta, Saskatchewan, Manitoba, Nova Scotia, Newfoundland — Grade 12.
— a language other than English is required to the Grade 12 level.

Ontario, New Brunswick — Grade 13.

Quebec — McGill Senior School Certificate or its equivalent.

Prince Edward Island — third year certificate from Prince of Wales College or 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.
- (vi) Students from India must, as a minimum requirement, possess a bachelor's degree, division I.

NOTE: Distinguished students who have completed high school graduation only may be admitted to the First Year of the University.

3. (a) Admission from Grade 13 (B.C.)

An applicant for admission who has been registered in Grade 13 (B.C.), will be granted admission and credit for courses passed, subject to the following provisions:

- (i) Admission and credit will normally be granted provided that the applicant has passed a minimum of three courses at one sitting of the examinations conducted by the Department of Education; such applicants will be admitted to the First Year of the Faculty of Arts and Science, the Faculty of Education, the School of Fine Arts, or the School of Nursing.
- (ii) Applicants presenting four courses (three of which must be passed at one sitting of the examinations conducted by the Department of Education) will be admitted to the Second Year of the Faculty of Arts and Science, the Faculty of Education, or the School of Nursing, and will normally receive credit for four first-year courses.
- (iii) Applicants presenting five courses (three of which must be passed at one sitting of the examinations conducted by the Department of Education) will be admitted to the Second Year of the Faculty of Arts and Science, the Faculty of Education, or the School of Nursing, and will normally receive credit for five first-year courses.

A student who cannot qualify for admission under the provisions stated above may appeal in writing through the Registrar to the Senate Committee on Admissions. Each such case will be judged separately by that Committee.

Adult students will be considered on an individual basis and may, if marks obtained are satisfactory, be given credit for Grade 13 subjects taken one at a time.

No student may receive credit through Grade 13 examinations after he has been granted 15 units of course credit, either as advanced standing on admission to the University or through completion of University courses or a combination of these.

(b) Distinguished students who, while regularly enrolled in a full programme of Grade 12 studies, undertake senior matriculation 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 Registrar.

(c) Credit for Grade 13 (B.C.) Courses Undertaken by Students who have already been Registered at University of Victoria

- (i) A student who has been admitted to the University and who has obtained at least 9 units of credit will not be given credit for any Grade 13 subjects passed subsequent to his attendance at the University, unless he can supply written evidence to the Registrar that he has undertaken a formal course of study and passed the examinations in the courses for which he is seeking credit. Authority from the Registrar is required before such students may undertake studies through Grade 13.
- (ii) A student who has failed his year at the University and received no credit for work undertaken may be given credit for Grade 13 courses taken subsequently, subject to provisions (i), (ii), and (iii) of 3(a) and the special regulations for adult students.

4. Admission from Other Universities and Colleges

Beginning in 1968, an applicant who meets the admission requirements and has successfully completed studies at another university or college may be granted admission with transfer credit, provided that courses completed are equivalent to courses offered in the University curriculum (or if not offered are recognized as reaching university standards), are appropriate to the degree programme elected by the applicant, are of sufficiently high standing and normally constitute the equivalent of at least a full year of study when considered individually or in combination. Transfer credit will be tentative only and is subject to review after the student has completed one or more sessions at the University.

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

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.

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.

Students 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.

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

5. Students from Other Countries: A student from a country where English is not the common language must satisfy the Registrar that his knowledge of English is adequate to permit the successful pursuit of his studies.

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

6. Limitation of Attendance:

- (a) 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.
- (b) 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.

REGISTRATION

1. Completion of Registration: In addition to completing the procedures mentioned on page 33 under the heading Application for Admission, 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. Assessed fees are payable at the time of registration. No registration will be complete until such fees have been paid.

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 University of Victoria, and of the Faculty or School 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. Registration in 3 units of credit courses: A student who wishes to register in 3 units or less of credit courses offered during the day or evening must do so by mail by September 7. Such students are designated as Extension students. See page 234.

Early registration is strongly advised. See page 33 for information on application for admission. Late registration may be permitted in exceptional cases but on penalty of a late registration fee of \$10.00. No registration, even on payment of the late fee, will be received after September 27.

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

4. **Change of Programme:** A student who wishes to transfer to another Faculty or School within the University should notify the Registrar of his intention as early as possible before his application is due. See page 33.

5. **Change in Registration:** A student desiring to make a change in the courses for which he has registered must apply to the Registrar's Office. Except in special circumstances, no change will be permitted after October 4.

All other pertinent changes, including those in address and telephone number, must be reported promptly to the Registrar's Office.

6. **One-Term Courses:** Students must register in September for all courses they intend to undertake during the session. This includes half courses which begin in January.

7. **Auditing a Course:** A student may register in a certain course as an auditor, upon the payment of an appropriate fee. Such a student may not write examinations and may not receive credit. A student may not normally register as an auditor in courses having laboratory or practical sessions.

8. **Student Responsibility:** 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 entered on his **course card** in the Registrar's Office.

A student may not take courses for which he has not registered, and may not drop courses without permission of the Registrar.

9. **Medical Examination:** Students registering for the first time in the Winter Session are required to take a medical examination. This examination may also be required of other full-time students who have not attended the University of Victoria for several years. The medical examination is not provided by the University; it must be obtained at the student's own expense. The necessary form is mailed to each applicant with the Notice of Admission, and it must be completed and mailed to the Student Health Service before registration can be completed.

The University, through the Director of the Student 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

1. **Regular:** A student proceeding to: (a) a degree in the Faculty of Arts and Science, the Faculty of Education, the School of Fine Arts, or the School of Nursing; (b) a diploma in the Faculty of Education.

2. **Special:** A student who has been granted permission to enrol in certain courses and attend classes on the understanding that he will not normally be entitled to credit towards a degree for any work taken.

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

Every candidate for a degree must make formal application for graduation. Application for graduation in the spring must be made not later than March 1. Special forms for this purpose are available in the Registrar's Office.

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.

2. **Absence Consequent on Illness:** Students who are absent because of illness or disability should report to their instructors on return to classes. Students who, because of illness, are absent from December or April examinations must submit a doctor's certificate to the Registrar.

EXAMINATIONS

1. Examinations in the winter session are held in December and April. In December they are held in all First and Second Year courses and in upper year courses at the discretion of the Department, Faculty or School concerned. In April they are held in all courses except those final at Christmas. These examinations are obligatory.

2. 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 cases of illness a medical certificate must be presented to the Registrar's Office.

3. In any course which involves both laboratory work and written examinations, students will be required to make satisfactory standing in both parts. **Results in laboratory work will be announced by the Department concerned prior to the final examination, and students who have not obtained a mark 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, no exemption will be granted from the work in either part. The same rules may, at the discretion of the departments concerned, apply to non-science courses with laboratory work.

4. 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.

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 in charge.
13. Candidates who fall ill or who suffer domestic affliction before an examination should report the circumstances immediately to the Registrar.
14. In cases of extreme misconduct, invigilators are empowered to expel candidates from an examination room. Under such circumstances, candidates may be required to withdraw from the University following an investigation of circumstances surrounding the misconduct.

EXAMINATION TIMETABLES

Preliminary drafts are posted on official University bulletin boards approximately three weeks before the dates announced for the beginning of Christmas and final examinations. The final versions are posted about one week before the first day of examinations. Students are required to inform the Registrar's Office immediately of any conflicts in the preliminary drafts of examination timetables.

EXAMINATION RESULTS

Results of the sessional examinations in April will be mailed to students in the graduating class and to other Arts and Science students about the end of May, following granting of authority by the Senate to release grades. Students in the Faculty of Education will receive their statements of grades early in June. The results of Christmas examinations are released by instructors, not by the Registrar's Office.

RE-READING OF EXAMINATION ANSWER PAPERS

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

Re-reading, where permitted by the Faculty or School concerned, are governed by the following regulations:

1. Any request for the re-reading of an answer paper other than for a supplemental examination (in which a request for a re-reading will not be granted) must reach the Registrar within two weeks after the announcement of examination results and must be accompanied by a fee for each paper of \$7.50, which will be refunded only if the grade is raised.

2. Each applicant for a re-reading must state clearly why he believes the content of his paper to deserve a grade higher than it received; pleas on compassionate grounds should not form part of this statement, and prospective applicants should remember that a paper with less than a passing grade has been read at least a second time before results are announced.

3. Re-readings will not be permitted in more than two papers (6 units) in the work of one academic year, and in one paper (3 units) in a partial course of 9 units or less or in the work of one Summer Session.

EVALUATION OF STUDENT ACHIEVEMENT

The following letter grades are used in evaluating student achievement:

Class	Letter Grade	Grade Point Value
First Class	A+, A, A-	9, 8, 7
Second Class	B+, B, B-	6, 5, 4
Pass	C+, C, D	3, 2, 1
Failure (conditional supplemental)	E	0
Failure (no supplemental)	F	0

The following abbreviations appear in student records, statements of marks, and transcripts wherever their use is required:

Aeg	Aegrotat
Com	Completed (where no grade is awarded)
Def	Deferred
Dr	Dropped officially
Inc	Incomplete
N	Did not write

In cases of illness or domestic affliction, an instructor may: (a) assign an Aegrotat grade, e.g. B+ (Aegrotat), or (b) grant a Deferred examination if he is unable to assign a grade. In all such cases a physician's certificate or other substantiating document must be submitted to the Registrar within two days of the close of the examination period.

Please note deferred examinations are granted only where final examinations are involved. Deferred examinations are normally held in August. The grade E is not granted in Summer Session nor in Extension Courses since students 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 AND CREDIT

1. Candidates 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;
- Passed**, a grade point average of 1 or higher.

2. (a) A student taking 9 or more units in the winter session will receive credit for a course only if, as a result of the final examinations of that session, he passes in courses totalling at least 9 units, including the course in question. The passing grade for a course is D. A student may be denied a passing grade, however, for unsatisfactory work during the session.

(b) A student taking fewer than 9 units in the winter session will receive credit for a course only if, as a result of the final examinations of that session, he passes in all his courses. The passing grade for a course is D. A student may be denied a passing grade, however, for unsatisfactory work during the session.

(c) A student in the Summer Session or in Evening Division courses will receive credit for each course in which he obtains a grade of at least D. A student may be denied a passing grade, however, for unsatisfactory work during the session.

3. Courses for which credit has not been obtained must be repeated, or permissible substitutes taken, in the next regular session attended. **Except in the case of English 100, 200 or 201, and those courses being taken to fulfill the language requirement, no course may be repeated more than once.** In the winter session the total of all courses may not exceed 18 units.

4. 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.

UNSATISFACTORY STANDING

1. 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 section under "Standing and Credit."

2. A student who, in the course of his academic career, receives no credit in any two academic years, whether they be consecutive or not, will normally be required to withdraw permanently. A student required to withdraw from another Faculty may be permitted to register only by special permission. A student with unsatisfactory standing from another institution will not normally be admitted.

3. Any student whose academic record, as determined by the tests and examinations of the first term, is unsatisfactory, may, upon the decision of the Faculty or School 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.

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 credit earned is determined on the results of the sessional examinations, a transcript will not include results of Christmas or mid-term examinations. Transcripts are not available for the results of Christmas examinations.

Student 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 Bursar's 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 a charge of 50¢ each. Free copies may not be accumulated.

WITHDRAWAL

Any student who after registration decides to withdraw from the University must report first to the Director of Counselling and Testing 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.

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.

In particular, any student who in the course of his academic career receives no credit in any two academic years, whether they be consecutive or not, will normally be required to withdraw permanently. Any student who wishes advice regarding the interpretation of this regulation is invited to consult the Registrar.

SUPPLEMENTALS

1. (a) In the winter session 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 held in April) at least 12 units of credit in that session. In any one session, no candidate will be granted supplementals in more than 3 units; accordingly, 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, at the discretion of the Faculty, be granted permission to 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 students registered in Summer Session or in Extension courses.**

2. 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.

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

4. 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.

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

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

7. 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 "Standing and Credit."

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 44 under "Refund of Fees."

FEES

General

1. The University reserves the right to change fees without notice.
2. Fees are not transferable from one session to another.
3. Fee amounts and methods of payment are listed in the following paragraphs. In general however, all fees, including those for student organizations, are payable at the time of registration.
4. Because it is the responsibility of the student to calculate and pay his fees in accordance with the following regulations, the University does not issue invoices.

SCHEDULE OF SESSIONAL FEES

Tuition Fees

1. Undergraduate Programmes:
Winter Session: 12 units or more — \$428.00 for the session
 less than 12 units — \$ 30.00 per unit.
Summer Session: \$30.00 per unit
La Maison Française: \$160.00
Internship programme: \$428.00
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

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 will pay one-half of regular tuition fees, but in certain courses of a practical nature where auditors participate in all aspects of the work (except the examinations), full fees must be paid.

Student Organizations — Fees Authorized by the Board of Governors

1. The Alma Mater Society fee of \$30.00 is required at the time of registration from all undergraduate students registered for more than 3 units in the Winter Session. Enquiries 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. Enquiries 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 final year of a course leading to a Bachelor's degree. This fee is for the support of graduating class activities, and enquiries with respect to the fee should be directed to the Alma Mater Society.
4. The Graduate Students' Society fee of \$30.00 is required once each year at the time of registration from all students registered full-time in the Faculty of Graduate Studies. Part-time graduate students may elect to pay a fee of \$10.00. 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. Enquiries with respect to the fee should be directed to the Graduate Students' Society.

Other Sessional Fees — Undergraduate

1. A late application fee of \$25.00 will be required of all students who fail to submit their applications for admission or re-admission together with all supporting documents at the time required. (See page 33). However, no student will be required to pay this fee if he also incurs the fee for late registration mentioned below.
2. A late registration fee will be charged when permission to register late is granted. This fee is \$25.00 on the day after registration was required, and \$25.00 plus \$5.00 a day thereafter.
3. A reinstatement fee of \$10.00, additional to all other fees, must be paid by students who wish reinstatement after the cancellation of their registration. Reinstatement will depend upon the approval of the student's Dean and the Registrar.
4. A registration fee of \$10.00 in each session is required from Students registered in the Faculty of Education Industrial Education Major programme.

Other Sessional Fees — Graduate

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. All fees are payable at the time of registration. However, students registering in the Winter Session and the Internship programme may pay one-half of their *tuition fees* at the commencement of the Spring Term. This privilege is not extended in respect of courses given in one term only.
2. Fees should be paid, in person or by mail, to the Accounting Office.
3. 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 charged a fee of \$3.00.
4. A late payment fee, additional to all other fees, will be charged when fees (or the current instalment thereof) are not paid in full by the following dates:

Winter Session:

First instalment — October 4, 1968

Second instalment — January 17, 1969

Internship programme:

First instalment — at the time of registration

Second instalment — January 17, 1969

This fee is 10% of the unpaid balance; minimum \$5.00, maximum \$20.00.

5. If first and second fee instalments, including late payment fees, are not paid in full by October 31, 1968, and January 31, 1969, respectively, the registration of students concerned may be cancelled by the Registrar on the request of the Bursar.
6. Students who claim that their fees will be paid 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. 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 withdraw from Winter Session courses will receive a refund of tuition fees paid, less the following charges:

On or before October 4, 1968	— \$10.00
October 11, 1968	— 20% of sessional fees
October 18, 1968	— 26% of sessional fees
October 25, 1968	— 32% of sessional fees
November 1, 1968	— 40% of sessional fees
December 31, 1968	— 50% of sessional fees
January 10, 1969	— 56% of sessional fees
January 17, 1969	— 63% of sessional fees
January 24, 1969	— 70% of sessional fees

No refunds of tuition fees will be made after January 24, 1969.

Students registered for more than 3 units in the Winter Session who withdraw from the University or reduce their programme to 3 units will receive a refund of Alma Mater Society fees paid, less the following charges:

On or before October 11, 1968	— \$3.00
October 18, 1968	— \$4.00
October 25, 1968	— \$5.00
November 1, 1968	— \$6.00

No refunds of these fees will be made after November 1, 1968.

4. Undergraduate students who withdraw from Summer Session courses will receive a refund of tuition fees paid, less the following charges:

On or before July 4, 1969	— \$10.00
July 11, 1969	— 20% of sessional fees

No refunds of tuition fees will be made after July 11, 1969.

Students who withdraw from the University on or before July 11, 1969, will receive a refund of the Student Union fee.

5. Students registered in the Faculty of Education Internship Programme who withdraw from the programme will receive a refund of fees paid, less the following charges:

Before the initial Summer Session	— \$ 90.00
Before the Spring Term of the Winter Session	— \$214.00 plus \$2.00 Student Union fee
Before the second Summer Session	— \$304.00 plus \$2.00 Student Union fee

No refunds will be made after the commencement of the second Summer Session in the programme.

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 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 enquiries to the Financial Aid Officer.

Other Fees and Charges

1. Students registered in Chemistry courses are required to purchase a laboratory ticket for \$3.00. 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 49.
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.

Re-reading, per paper, payable with application \$ 7.50

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 a charge of 50¢ each. Free copies may not be accumulated.

5. The following annual parking fees become effective September 1, 1968:

	<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

THE LIBRARY

Since good books are essential to sound learning, the Library is often referred to as the centre of academic life on the campus. To keep pace with the growth and expansion of the University of Victoria, its Library has undertaken an accelerated programme of development and service. By the spring of 1968, the book collection totalled approximately 325,000 volumes, and was growing at a rate of over 50,000 volumes annually. The Library regularly receives nearly 4,000 periodicals, and has, in addition, a substantial collection of long-playing records.

Under the Library's open-stack system, students have access to all books in the collection. Well-trained staff members are always available to help the student make the fullest use of the Library's collection. Regulations governing loan periods, fines and hours of service are displayed prominently in the Library and published in the *Guide to the McPherson Library*. Full Library privileges are extended to all University of Victoria students, faculty and staff, and may be granted to other persons upon application.

COUNSELLING, TESTING AND PLACEMENT OFFICES

COUNSELLING SERVICES

In order to help each student to obtain the maximum benefit from his University career and to develop his potentialities to the fullest extent, comprehensive counselling services are provided. The Counselling Office is staffed by fully qualified counsellors and is open throughout the year.

Pre-Admission Testing and Counselling:

University Aptitude Tests are administered to all prospective students. Testing Sessions are held during the spring months, both at the University and at district secondary schools for the convenience of all Vancouver Island students. Notices concerning testing dates and centres will be sent to district superintendents and principals in February. Additional testing sessions are held at the University during Registration Week in September for students coming from other areas and for those who missed the spring administration.

Students who plan to enter the University in September are urged to make an appointment to discuss choice of programmes and courses with the counsellors during July or August.

Educational Counselling:

In addition to the services of the Counselling Office, each student is assigned to a faculty adviser, with whom he may discuss academic or other problems. The student is urged to take the initiative in becoming acquainted with his adviser.

The Counselling Office also assists students to discover weaknesses in their academic work and to plan remedial measures. Seminars on study methods will be held during the first term, October and November. A reading-study improvement programme will provide both group and individual assistance for students having difficulty with the basic skills of reading or learning. Students wishing to avail themselves of either of these services should register at the Counselling Office as early as possible in the first term.

Information on professional schools and postgraduate education is provided in the Counselling Office. A file of university calendars is maintained and information on financial aid is available. The Graduate Record Examination, which is a prerequisite for admission to some Graduate schools, is administered twice yearly. Consult the Counselling Office for further information.

Vocational Counselling:

The Counselling Office assists students in self-appraisal of their interests and aptitudes, using vocational tests when necessary. A library of vocational information is maintained. Seminars on career planning and occupational choice will be held during the second term, February and March. Those students who wish to participate in these seminars are requested to inform the Counselling Office early in the second term.

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.

Notices 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

In 1967, the University of Victoria installed the largest computer in British Columbia—the IBM System/360 Model 44. The system provides rapid input (1000 cards/minute), rapid output (1100 lines/minute printer), large internal storage (131,000 bytes or 32,000 words), plus 4 magnetic tape drives, and three disk drives.

The Computing System is used extensively for Faculty research in many areas including Physics, Biology, Chemistry, Psychology, Education and others. This System is also used by students engaged in programming and Computer Science studies. Other activities include handling routine administrative work for the Office of the Registrar, the Accounting Office and the Library.

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.

Those who are planning a career in Computing may be eligible for further training by summer employment in the Computing Centre or by employment as Student Assistants to Faculty members.

MEDICAL, HOUSING AND FOOD SERVICES

UNIVERSITY ACCOMMODATION FOR WOMEN STUDENTS

The University provides accommodation for 141 women and 165 men students in four residences located adjacent to the Library and the Student Union Building: Emily Carr Hall and Margaret Newton Hall; David Thompson Hall and Sir Arthur Currie Hall.

Application forms for the residences can be obtained from the Housing Office (Office of the Co-ordinator of Women's Activities). Applications received later than June 30 will not be considered. Assignment of rooms will be completed July 31 for students who have returned their completed application forms (including a caution money deposit of \$25). All assignments are conditional upon acceptance of the student to this University by the Registrar.

Students are urged to note that the caution money deposit will be forfeited for any of the reasons listed below.

1. If the student leaves during either term.
2. If the student decides not to live on campus and fails to notify the Housing Office (Office of the Co-ordinator of Women's Activities) by August 25.
3. If first term payment for board and lodging is not received at the Accounting Office two weeks prior to the first day of lectures.
4. If the student has not arrived to occupy assigned accommodation within the first week of lectures. Exceptions can be made if the Housing Office (Office of the Co-ordinator of Women's Activities) is notified in writing before the first day of registration, although board and residence will be assessed from the opening of the term.
5. If the student is responsible for damage to buildings and equipment (over and above normal wear and tear), an assessment will be deducted from the \$25.

Assignment will be cancelled for failure to make first term board and lodging payment two weeks prior to the first day of lectures, or for failure to notify of late arrival. Notification must be received in writing by the first day of registration.

Students who have been assigned residence accommodation may occupy their rooms from the afternoon of the day before registration. Meal passes will be issued to 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.

During 1968-69 the rates for board and lodging in the University residences will be as follows:

Double room:	First term	\$286.00
	Second term	396.00
Single room:	First term	312.00
	Second term	432.00

Students are required to make their first term payments in full on or before September 9, 1968, and the second term payments before December 14, 1968.

Board and Residence

A list of private homes where students may obtain full board and room, or light housekeeping accommodation may be obtained from the Registrar's Office or the Housing Office (Office of the Co-ordinator of Women's Activities). While the University authorities make every effort to maintain an up-to-date listing of available homes, there is no guarantee that suitable accommodation will be found by the University for every student who applies. Students are discouraged from attempting to work for all or a portion of their board and room payment. Men and women students are not permitted to lodge in the same house, unless they are members of the same family. The cost of full board and room varies from about \$75 to \$90 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, one week's 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.

Students are urged to consult the University Housing Office (Office of the Coordinator of Women's Activities), before they accept accommodation obtained through newspaper advertisements.

Cafeteria

The University maintains a cafeteria and a coffee shop where meals may be obtained at nominal 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 a.m. to 5:00 p.m. Monday to Friday and 10:00 a.m. to 12 noon on Saturday. A doctor is in attendance for consultation 10:00 a.m. to 1:30 p.m., and 4:00 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. Consultative psychiatric service is available if required.

All students are advised to enrol in the B.C. Medical Plan. Students who have lived in British Columbia one year may be eligible for a subsidy of their premiums. Other students may purchase the plan at the full rates or a modified form of insurance under the University Health and Accident Plan. For further information consult the Health Service.

Routine Regarding Sickness and Injury:

1. Students developing any illness are expected to report to the Health Service on the first day of illness.
2. Students absent three days or more on account of illness are advised to report with a medical certificate.
3. Students unable to write an examination because of illness should be in touch with the Health Service; and if absent from a December or April examination they must submit a certificate obtained from a doctor during the illness.
4. Students are reminded that those suffering any injury while on the campus should report for first aid at the Health Service.

STUDENT AFFAIRS

OFFICE OF THE DEAN OF COLLEGE AND STUDENT AFFAIRS

The Dean of College and Student Affairs 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 at the University of Victoria. Through its executive arm, the Representative Assembly, it co-ordinates student activities, promotes student welfare, and represents students to the University and the community. Its aim is to ensure that students receive maximum benefit from university life by participation in academic, social, cultural, and recreational programmes.

The students are the Alma Mater Society. The Representative Assembly is elected on a campus-wide franchise. This Assembly consists of 41 elected members.

A. Within this Representative Assembly there are nine administrative positions which are:

1. *The President:*
 - (a) Presides at general meetings of the Students' Union.
 - (b) Presides at meetings of the Executive Council.
 - (c) Performs all other duties of a President as outlined in Roberts Rules of Order, latest edition.
 - (d) Acts as spokesman for the Alma Mater Society.
2. *The Vice-President:*
 - (a) Assumes all responsibilities of the President in the absence of the President.
 - (b) Assists the President in his duties.
 - (c) Assumes all other responsibilities that may be designated by the Executive Council and the Representative Assembly.
3. *The Treasurer:*
 - (a) Acts as Chairman of the Finance Committee.
 - (b) Prepares and presents to the Representative Assembly and the Annual Meeting a statement of the financial affairs of the Society during his term of office.
 - (c) Is empowered to request a full financial report from subsidiary organizations of the Society.
 - (d) Is responsible to the Representative Assembly for all vouchers, requisitions, petty cash payments and purchase orders issued in the name of the Society.
4. *The Communications Director:*
 - (a) Acts as Chairman of the Electoral Committee.
 - (b) Is responsible for the recording of the minutes of the Executive Council and the Representative Assembly, and for the distribution of appropriate minutes and documents to the Speaker and members of the Representative Assembly.
5. *The Academic Affairs Chairman:*
 - (a) Is responsible for the initiation and co-ordination of Society programmes of academic and curricular innovation.
6. *The Activities Co-ordinator:*
 - (a) Acts as Chairman of the Activities Council.
 - (b) Is responsible, through the Activities Council, for the co-ordination and booking of all major Society sponsored events.
7. *The Student Campus Development Director:*
 - (a) Officially represents the Alma Mater Society in all matters concerning the Student Union Building and the physical development of the University campus.

- (b) Acts as senior student representative on the Student Union Building Management Board.
8. & 9. The duties of the *Extramural Athletics Chairman* and *Intramural Athletics Chairman* shall be performed as defined in the Athletic Directorate Constitution.

B. There are 32 non-administrative members of the Representative Assembly. Sixteen members of the Representative Assembly shall be elected for one-year terms during the second or third week of February to take office March 1. There shall be an interval of at least fourteen days between the election of the administrative officers and the February elections. These representatives shall be elected according to the following formula:

- (a) 8 students registered in 1st year.
 (b) 4 students registered in 2nd year.
 (c) 4 students registered in 3rd year or above.

Sixteen members of the Representative Assembly shall be elected for one-year terms during the second or third week of October to take office October 20. These representatives shall be elected according to the following formula:

- (a) 4 students registered in 1st year.
 (b) 6 students registered in 2nd year.
 (c) 6 students registered in 3rd year or above.

President 1968-69: Mr. Frank Frketch
 1967-68: Mr. David McLean
 1966-67: Mr. Stephen Bigsby
 1965-66: Mr. Paul Williamson
 1964-65: Mrs. Olivia Barr
 1963-64: Mr. Laurence E. Devlin

GRADUATE STUDENTS' SOCIETY

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

President 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.

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.

Students may not bring liquor within the precincts of the University; they may not consume liquor within the precincts. They may not consume liquor at any function held under the name of the University.

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 AT THE UNIVERSITY

1. Regular Officer Training Plan

A number of young men who are interested in the Regular Force as a career, are accepted each year as ROTP officer cadets. They may be high school graduates or university students in any undergraduate year. Undergraduates enrolled in the Service of their choice continue in university until graduation. They take their summer training in their respective Services. Application for admission is normally made before July 1 in the year of entrance, but can be made any time during academic year. Under the ROTP, tuition and books are paid for plus an allowance of \$180.00 per month. The ROTP cadet must undertake to serve a minimum of five years in the Regular Force following graduation.

2. 45-month Subsidization Plans

In addition to the ROTP there are Canadian Forces 45-month Subsidization Plans for medical and dental undergraduates. Undergraduates who accept aid under these plans must serve in the Regular Force for three years for medical graduates and five years for dental graduates.

3. Selection Procedure

Prospective applicants and requests for information should be directed to the Canadian Forces Recruiting Centre, 1002 Wharf St., Victoria (phone 386-8021).

COLLEGE AFFAIRS

THE COLLEGE SYSTEM

The University is aware of the problems that frequently arise through rapid growth and expansion. It is anxious to provide an atmosphere in which students can derive maximum benefit from their studies and at the same time feel a sense of attachment to the academic community of which they are members.

In 1966, after conducting studies of systems used elsewhere in North America and Europe, the University decided to establish a college system. The college system is designed to give students a greater sense of identity through close association with a fairly small group of students and professors.

The strength of the college lies in its diversity. Because its members come from various years and disciplines within the University, it is hoped that both resident and non-resident members will have the opportunity of continuing their education outside the formal classroom through the informal exchange of ideas with professors and students.

The colleges are not separate teaching institutions: all teaching is carried on through the Departments, Schools 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 lectures, debates, discussions, symposia, concerts, dramatic performances and sports activities.

In general, each college will consist of approximately 1,000 students, with 300 residents and 700 non-residents. The internal affairs of each college will be managed and directed by a College Council consisting of the Master, the Fellows, and student representatives elected from and by members of the college.

By early January 1969, the University will have completed the first college — Craigdarroch College. It consists of a study office building and a commons block, together with the four residences already in operation. The central commons block will serve not only Craigdarroch College but also Lansdowne College when the University is in a position to begin building the latter.

Facilities in the first college include the following: dining rooms, coffee gardens, lounges, reading room, general recreation areas, seminar rooms and classrooms, student offices and studies for the Master and the Fellows. Both resident and non-resident members of Craigdarroch College have full access to these facilities, and they are encouraged to use them.

MEMBERSHIP IN CRAIGDARROCH COLLEGE

1. Resident Students

Students wishing accommodation in the residences of the first college should request application forms from the Housing Office (Office of the Co-ordinator of Women's Activities). The number of places available is limited: 160 men and 140 women. For that reason, students are advised to apply early. Applications received later than June 30, 1968 cannot be considered. 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.

All resident students will automatically be members of the College. For information concerning rates, please see page 49.

2. Non-Resident Students

Because the University is not able at this time to provide college facilities for all students in the University, students who wish to become members of the first college are invited to make application to the Office of the Dean of College and Student Affairs. Application forms will be mailed on request.

The completed application form must be returned by August 15, 1968. Successful candidates will be notified by letter and a membership card will be mailed to them. In selecting students for membership in the College, an attempt will be made to provide for a cross-section of the student body by Faculty or School and year.

Membership in the College is, of course, conditional upon the student being academically admissible to the University.

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.). All departments offer programmes leading to the degree with Honours.

Registration and Admission

1. Registration must be completed in accordance with regulations on page 36.
2. After October 4, except in very special circumstances and with the permission of Faculty, no student may change the programme for which he has registered.
3. All changes in registration must be made by the student at the Registrar's office. A student may not take courses for which he has not registered, and will be considered as having failed in all courses dropped without permission of the Registrar.

Summer Session and Other Credits

1. Although the degrees in this Faculty are normally granted on completion of the required units in the winter session, credits obtained in summer session may be combined with those 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. Extra-mural work done at other universities prior to registration at the University of Victoria may be accepted, if approved by Faculty, but may not exceed 3 units in respect of any one academic year or, normally, a maximum of 15 units subsequent to Senior Matriculation.
4. Students in attendance at the University may not register for extra-mural or correspondence work to be taken concurrently.
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.

COURSES LEADING TO THE DEGREE OF B.A.

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.

The Major and General programmes require the completion of a minimum of 60 units of course work chosen in conformity with Calendar regulations. The Honours programme is specified in the Calendar by the Department concerned.

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

Anthropology	Mathematics
Classics	Philosophy
Economics	Political Science
English	Psychology
French	Russian (Honours not available)
Geography	Social Welfare (see page 60)
German	Sociology
History	Spanish
Linguistics	

The General programme may also be chosen from one of the additional fields listed below:

Astronomy
Biology
Chemistry
Physics

Students proceeding to a B.A. degree who are not concentrating in a science field are urged to consider the inclusion of a science course at some time in their degree programme.

FIRST AND SECOND YEARS

The following tabulation shows the requirements for the first two years:

Course	Unit Value
English 100	3
English 200 or 201	3
Language 100 level	3
Language 200 level	3
Elective from Group A	3
Elective from Group B	3
*Electives from Group A or B	6
Elective at choice	3
Elective at choice	3
Honours course (if required)	3
Total units	30 or 33

*Science courses may be substituted.

The requirements for the first two years are the same for all B.A. programmes. The student should note, however, that in certain Honours programmes an additional 3 units of course work may be required in the Second Year. Depending on his previous training or on the results of a special examination, the student may be given advanced placement in a subject. Departmental requirements should be consulted in conjunction with the following regulations:

- (a) In the First Year a minimum of 15 units is required; and in the Second Year a minimum of 15 units (in the case of certain Honours programmes 18 units).
- (b) English 100 must be taken in the First Year and English 200 or 201 in the Second Year.
- (c) To fulfil the language requirement, a student must complete the study of one language (French, German, Greek, Italian, Latin, Russian, Spanish) to the 200 level. The language requirement may be waived provided that the student proves to the Department his competence at the 200 level in one of the languages just listed.
- (d) In addition to the above, in the combined First and Second Years, a student must take four courses chosen from Groups A and B; of these four courses, at least one must be taken from Group A and one from Group B. If, however, a

student plans to choose a science as one of the concentrations under the General programme, or if his final choice between the B.A. and B.Sc. degree is still undecided, he may substitute one science course for one of the four courses without affecting the regulation that he must still choose one course from Group A and one from Group B. In making this selection, a student must examine departmental prerequisites and requirements for Honours, Majors, and General programmes. Except where advanced placement in a subject has been granted or departmental permission has been obtained to take a course from Section II, all courses for First-Year credit must be chosen from Section I. Courses for Second-Year credit may be chosen from Section I or Section II.

GROUP A

Section I

Classical Studies 100
 French 140 or 180
 German 100 or 140
 Greek 100
 History 101, 102, 200,
 201, 204, 212
 Italian 100
 Japanese 100
 Latin 100 or 140, 240
 Mathematics 130, 140, 150
 Philosophy 100
 Russian 100
 Spanish 100 or 140

Section II

*Classical Studies 310, 315, 330, 340
 *English 202, 245
 English 203
 French 240 or 280, 290
 German 240 or 260, 290
 Greek 200
 *History 400
 Italian 200
 Latin 200, 320, 330, 340, 350
 Mathematics 230 or 231, 232 or 233, 240,
 249
 Philosophy 202, 212, 222, 302
 Russian 200
 Spanish 240 or 260, 290

*English 202 and 245 and History 400 are open only by special permission. For Classical Studies, a knowledge of Greek and Latin is not required.

The following courses, available through the School of Fine Arts, are acceptable for credit in the Faculty of Arts and Science as electives under Group A. For descriptions, see pages 212 to 225.

Art 120	Art 320
Music 100, 110	Music 200
Theatre 170	Theatre 270

GROUP B

Section I

Anthropology 100
 Economics 100
 Geography 101
 Linguistics 100
 Psychology 100
 Sociology 100

Section II

Anthropology 200 or 201
 *Commerce 151
 **Economics 200, 340
 Geography 201, 204
 Linguistics 250
 ***Political Science 200
 Psychology 200, 220
 Sociology 200 or 201

*Commerce 151 is open only to those students permitted to register in the Second Year.

**Economics 340 may be taken concurrently with Economics 200 with the permission of the Department.

***Political Science 200 is open to First Year students but departmental approval is required.

- (e) An additional 6 units to make up a total of 30 units (or 9 units in the case of certain Honours courses to make up a total of 33 units) of course work in the First and Second Years must be chosen from the courses listed in Groups A and B above or from the following: Astronomy 120; Bacteriology 200; Biology 150; Botany 205; Chemistry 120, 121, 124, 224, 230, 233; Geography 203; Geology 200; Physics 101, 103, 121, 211, 212, 213; Zoology 202. In making their selection, students must examine departmental prerequisites and requirements. Students are urged to consult the department as early as possible in their academic careers.

THIRD AND FOURTH YEARS

The following tabulation shows the requirements for the third and fourth years:

HONOURS	MAJOR		GENERAL	
	Course	Unit Value	Course	Unit Value
Sec	Courses		Courses	
Departmental	from one Department	15	from one Department	9
Prescriptions	Electives or co-requisites	9	Courses from another Department	9
			Electives	6
	Electives at choice	6	Electives at choice	6
	Total units	30	Total units	30

NOTE: Not more than nine units in courses numbered less than 300 may be counted for credit in the minimum 30 units required in the combined Third and Fourth Years; a minimum of 21 units numbered 300 or above is required.

Honours Programme

A student may proceed to the B.A. degree in the Honours programme in Anthropology, Classics, Economics, English, French, Geography, German, History, Linguistics, Mathematics, Philosophy, Political Science, Psychology, Sociology, Spanish.

The Honours programme of the B.A. degree requires the completion of the First and Second Years in conformity with the regulations above; the course work in the Third and Fourth Years must be selected to conform, after consultation with the Department with the requirements set out on pages 66 to 157. The number of units required for an Honours programme varies between 60 and 69, depending upon the requirements of the department concerned. Unless special permission is given to the contrary, a student must complete the requirements for an Honours programme in four academic years.

By special arrangement, a student may be permitted to fulfil 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 Head of the Department concerned, or his nominee, as early as possible in his academic career.

1. A student proposing to proceed in an Honours programme 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 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.
2. 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.

3. A candidate for Honours may be required at the end of his final year to take a comprehensive examination — oral, written, or both.
4. Honours are of two classes: First and Second. A student who passes all his courses but fails to obtain a Second Class standing 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

A student may proceed to the B.A. degree with a major in any one of the fields listed on page 57.

In the combined Third and Fourth Years, a minimum of 30 units is required. Courses must be selected to include the major, consisting of 15 units of courses numbered 300 and above, as specified by the various Departments; six units of free electives; and 9 units of electives which may, when desirable, be prescribed by the Departments as co-requisites.

General Programme

The General programme requires, in the Third and Fourth Years, a minimum of 30 units. Of these 30 units, nine must be taken in courses numbered 300 or higher as may be specified by the department in each of two fields listed on page 57. Twelve additional units are required of which six units must be selected outside the said fields (although they may, when desirable, include corequisites to the fields of concentration), and six units of free electives.

INTER-DEPARTMENTAL PROGRAMME

Bachelor of Arts with a Major in Social Welfare:

In December 1967 the Senate and the Faculty of Arts and Science approved the introduction of a B.A. with a Major in Social Welfare in the session 1968-69. This programme requires completion of a B.A. under the regulations governing the General programme. Specifically, the programme requires concentration in two of the social sciences (Anthropology, Economics, Political Science, Psychology, Sociology).

The third and fourth years consist of 33 units, including a course in human development (Psychology 335), a course in Social Welfare as a Social Institution (Sociology 350) and a 3 unit introductory course in the philosophy, concepts and practices of social work in modern society. The latter course, which will carry credit only in the Major in Social Welfare, had not been prepared at the time of publication of this Calendar. Students interested in the Major in Social Welfare should consult the departments concerned.

COURSES LEADING TO THE DEGREE OF B.Sc.

A student may proceed to the B.Sc. degree in one of three programmes: Honours, Major, and General. The Honours programme requires intensive specialization in a single field in the last two or three years, and it 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 studies 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 whether to proceed in Honours, Major, or General programmes. Students must consult departmental requirements and prerequisites.

Major and General programmes require the completion of a minimum of 60 units of course work chosen in conformity with Calendar regulations. The Honours programme is specified in the Calendar by the departments concerned.

A student may proceed to the B.Sc. degree in an Honours or Major programme in Astronomy, Bacteriology or Biochemistry (Honours only), Biology, Botany, Chemistry, Geography, Mathematics, Physics, Psychology and Zoology; or in a General programme involving two science fields selected from the offerings of the Faculty of Arts and Science. Any student wishing a double concentration in the Department of Biology must register under the Major Programme, and must consult the Department.

NOTE: All courses in the following fields, except where otherwise noted, are considered to be science courses; they cannot be selected as non-science electives: Astronomy, Bacteriology, Biochemistry, Biology, Botany, Chemistry, Geography (Physical Geography and Geology only), Mathematics, Physics, Psychology*, Zoology.

*Psychology 100 may be chosen as a science only by those students taking a B.Sc. degree in Psychology; other B.Sc. students may choose Psychology 100 as a non-science elective.

Students intending to do graduate work are advised to consider inclusion of a modern language, preferably to the 200 level, at some time during their degree programme.

FIRST AND SECOND YEARS

The following tabulation shows the requirements for the first two years:

Course	Unit Value
English 100	3
Mathematics 130 or 140	3
Science course (1)	3
Science course (2)	3
Science course (3)	3
Science course (4)	3
Science course (5)	3
Non-Science Elective	3
Electives	6
Honours course (if required)	3
Total units	*30 or 33

*Students electing Chemistry 121 and 120 or 124 will take 16 units in Science.

The requirements in the first two years are the same for the Major and General programmes. The student should note, however, that in certain Honours programmes an additional three units of course work are required in the Second Year. Depart-

mental requirements should be consulted in conjunction with the following general regulations:

- (a) In the First Year a minimum of 15 units is required, and in the Second Year a minimum of 15 units (in the case of certain Honours programmes 18 units).
- (b) English 100 must be taken in the First Year, and Mathematics 130 or 140 must normally be taken in the first year. However, in certain cases Mathematics 130 or 140 may be delayed to the second year.
- (c) **Five of the following courses must be taken in the combined First and Second years.** Except where advanced placement in a subject has been granted or departmental permission has been obtained to take a course from Section II, all courses for First Year credit must be chosen from Section I. Courses for Second Year credit may be chosen from Section I or Section II.

Section I

Astronomy 120
 Bacteriology 200
 Biology 150
 *Chemistry 120 or 124
 Geography 101
 Physics 101 or 103 or 121
 **Psychology 100

Section II

Botany 205
 Chemistry 224, 230 or 233
 Geography 203
 Geology 200
 Mathematics 230 or 231, 232 or 233, 249
 Physics 211, 212, 213
 Psychology 200
 Zoology 202

*Chemistry 121 must be taken in addition.

**Psychology 100 may be chosen as a science only by those students taking a B.Sc. degree with Honours in Psychology, a Major in Psychology or a General Programme provided one of the fields of concentration is Psychology.

- (d) **One of the following courses should be taken in the combined first two years** (although this requirement may be fulfilled at any time during the student's years of study). Except where advanced placement in a subject has been granted or departmental permission has been obtained to take a course from Section II, all courses for First Year credit must be chosen from Section I. Courses for Second Year credit may be chosen from Section I or Section II.

Section I

Anthropology 100
 Classical Studies 100
 Economics 100
 French 140 or 180
 *Geography 101
 German 100 or 140
 Greek 100
 History 101, 102, 200,
 201, 204, 212
 Italian 100
 Japanese 100
 Latin 100, 140, 240
 Linguistics 100
 Philosophy 100
 ***Psychology 100
 Russian 100
 Sociology 100
 Spanish 100 or 140

Section II

Anthropology 200 or 201
 Economics 200
 English 200, 201, 203
 French 240 or 280, 290
 Geography 201, 204
 German 240 or 260, 290
 Greek 200
 Italian 200
 Latin 200
 Linguistics 250
 Philosophy 202, 212, 222, 302
 **Political Science 200
 Psychology 220
 Russian 200
 Sociology 200 or 201
 Spanish 240 or 260, 290

*Only if Geography 101 has not been chosen under (c) above.

**Political Science 200 is open to First Year students but departmental approval is required.

***Except as noted under (c).

The following courses, available through the School of Fine Arts, are acceptable for credit in the Faculty of Arts and Science as electives. For descriptions, see pages 212 to 225.

Art 120	Art 320
Music 100, 110	Music 200
Theatre 170	Theatre 270

- (e) Six additional units, either as free electives or as specified in Departmental requirements for Honours or Major programmes.
- (f) For certain Honours programmes, three additional units as specified by some Departments.

THIRD AND FOURTH YEARS

The following tabulation shows the requirements for the third and fourth years:

HONOURS	MAJOR	Unit Value	GENERAL	Unit Value
See	Course		Course	
Departmental	Courses from one Department	15	Courses from one department	9
Prescriptions	Non-Science Electives	6	Courses from another Department	9
	Electives or co-requisites	9	Non-Science Electives	6
			Electives or co-requisites	6
	Total units	30	Total units	30

NOTE: Not more than nine units in courses numbered less than 300 may be counted for credit in the minimum 30 units required in the combined Third and Fourth Years; a minimum of 21 units numbered 300 or above is required.

Honours Programme

A student may proceed to the B.Sc. degree in the Honours programme in Astronomy, Bacteriology, Biochemistry, Botany, Chemistry, Geography, Mathematics, Physics, Psychology and Zoology.

The Honours programme for the B.Sc. requires the completion of the First and Second Years in conformity with the regulations above. The course work in the Third and Fourth Years must be selected after consultation with the Department to conform with Departmental requirements. The total number of units required for the four years of an Honours programme (which varies between 60 and 69 units) is specified in the Calendar by the Department concerned.

By special arrangement, a student may be permitted to fulfil 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 the Honours programme should consult the Head of the Department concerned, or his nominee, as early as possible in his academic career.

1. A student intending to proceed in an Honours programme 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 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 required to transfer to the Major or General programme.

2. A candidate for Honours may be required to present a graduating essay, to pursue a programme of directed research, 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.
3. A candidate for Honours may be required at the end of his final year to take a comprehensive examination — oral or written or both.
4. Honours are of two classes: First and Second. A student who passes all his courses but fails to obtain a Second Class standing 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

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

In the combined Third and Fourth Years a minimum of 30 units is required. Courses must be selected to include the Major, consisting of 15 units of courses numbered 300 and above in one of the fields listed on page 61, as specified by the various departments; six units of course work in non-science fields, although this requirement may be fulfilled at any time during the student's years of study; and at least nine units of course work in related fields corequisite to the Major or as free electives.

General Programme

The General programme requires, in the Third and Fourth years, a minimum of 30 units. Of these 30 units, nine must be taken in courses numbered 300 or higher as may be specified by the departments in each of two science fields. Twelve additional units are required, of which six must consist of course work in the Humanities and Social Sciences (although this requirement may be fulfilled at any time during the student's years of study), and six units may be chosen without restriction.

COURSES IN ARTS AND SCIENCE

The number of units assigned to a course is given in round brackets immediately following the course number. Thus 200 (3) under Anthropology indicates that Anthropology 200 is a three-unit course.

The hours assigned for lectures, laboratory and tutorials in a course are indicated as follows:

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

DEPARTMENT OF ANTHROPOLOGY AND SOCIOLOGY

- Roy E. L. Watson, M.A., Ph.D. (*Tor.*), Associate Professor and Chairman of the Department.
- Godwin C. Chu, B.A. (*Taiwan*), M.A., Ph.D. (*Stanford*), Associate Professor.
- Robert B. Lane, A.B., Ph.D. (*Wash.*), Associate Professor.
- David C. Pitt, B.A. (*N.Z.*), B.Litt., D.Phil. (*Oxon.*), Assistant Professor.
- Clyde R. Pope, B.A. (*Anderson College*), M.A. (*Chicago*), Ph.D. (*Oregon*), Assistant Professor.
- T. Rennie Warburton, B.A. (*Leeds*), Ph.D. (*London*), Assistant Professor.
- N. Ross Crumrine, B.A. (*Northwestern*), M.A. (*Arizona*), Instructor.
- Donald H. Mitchell, B.A., B.Com., M.A. (*Brit. Col.*), Instructor.
- Derek G. Smith, B.A. (*Brit. Col.*), A.M. (*Harvard*), Instructor.
- Donald W. Ball, M.A. (*Calif.*), M.S. (*Oregon*), Lecturer.
- David Stevenson, B.Sc., M.A. (*Brit. Col.*), Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

ANTHROPOLOGY

General — Second Year: Anthropology 200 or 201; Third and Fourth Years: nine additional units of Anthropology chosen from courses numbered 300 and above.

Major — Second Year: Anthropology 200 or 201; Third and Fourth Years: a total of 15 units in Anthropology including 300, 340, three units of Ethnology (courses numbered 320 to 339), and six units chosen from topical and theoretical courses.

Honours — Students who have achieved at least high Second Class standing in Anthropology 200 or 201 may be admitted to the Third Year with the permission of the Department; Third and Fourth Years: students will offer at least 33 units of which 21 must be in Anthropology and include Anthropology 300, 340, 499, 6 units in Ethnology, and 6 additional units. Honours students will be expected to achieve satisfactory standing in courses in Linguistics and in techniques of analysis chosen in consultation with the Department.

SOCIOLOGY

General — Second Year: Sociology 200 or 201; Third and Fourth Years: Nine additional units of Sociology chosen from courses numbered 300 and above.

Major — Second Year: Sociology 200 or 201; Third and Fourth Years: A total of 15 units in Sociology, including Sociology 400 and 430.

Honours — Students who have achieved at least high Second Class standing in Sociology 200 or 201 may be admitted to the Third Year with the permission of the Department; Third and Fourth Years: students will offer at least 33 units of which 21 must be in Sociology and include Sociology 400, 430, and 499. Honours students will be expected to achieve satisfactory standing in statistics courses to be chosen in consultation with the Department.

COURSES OFFERED

ANTHROPOLOGY

NOTE: Either Anthropology 100 or 200 is recommended for the general student as well as for those intending to major in Anthropology. Anthropology 100 is open only to First Year students; students in other years should choose Anthropology 200. Introductory Anthropology 100, 200 or 201 is prerequisite for all courses numbered 300 or above. However, Anthropology 200 or 201 may be taken concurrently with advanced courses.

100. (Sociology 100) (3) **Introduction to Anthropology and Sociology**

Man, culture and society; concepts common to Anthropology and Sociology illustrated from the literature of the two fields. Open to First Year students only.

(3-0; 3-0)

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. Not open to First Year students except by permission of the Department.

(3-0; 3-0)

201. (3) **Principles of Anthropology**

Examination of Physical Anthropology, Archeology and Ethnology; their contributions to the study of human physical and cultural variation. The comparative study of the major cultural institutions and of the operation of cultural systems.

Prerequisite: Anthropology 100 or by permission.

(3-0; 3-0)

300. (Sociology 300) (3) **Comparative Social Organizations**

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

(3-0; 3-0)

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. Fall term only.

(3-0; 0-0)

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. Spring term only.

(0-0; 3-0)

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

The study of religion as a social institution; an analysis of religious beliefs, acts, organizations, leadership and authority, with special reference to the social functions of religion and its relation to other elements of society.

(3-0; 3-0)

320. (3) **Ethnology of a Selected Area**

Students should consult the Department.

(3-0; 3-0)

322. (3) **Ethnology of North America**

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

(3-0; 3-0)

326. (3) **Ethnology of Oceania**

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

(3-0; 3-0)

328. (3) **Ethnology of South-East Asia and Indonesia**

The origins, development, and characteristics of the cultures of the major culture areas of the regions.

(3-0; 3-0)

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

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

(3-0; 3-0)

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.

Prerequisite: While an introductory course in Anthropology or Sociology is desirable, students who have obtained a B average in the preceding year will be admitted without the prerequisite.

(3-0; 3-0)

340. (3) **Evolution of Man and Culture**

First term: fossil man and his primate ancestors; the development of modern human populations; principles of evolutionary theory. Second term: survey of the main developments in world prehistory; introduction to problems of archaeological interpretation. (3-0; 3-0)

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)

401. (1 ½) **Cultural Ecology**

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

Prerequisite: an introductory course in Anthropology or by permission. (0-0; 3-0)

404. (1 ½) **Economic Anthropology: Traditional Societies**

A comparative and analytical survey of the social context of production, distribution and exchange in traditional societies. Fall term only. (3-0; 0-0)

405. (1 ½) **Economic Anthropology: Peasant Societies**

A comparative and analytical survey of the social context of production, distribution and exchange in peasant societies. An examination of the social aspects of economic development. Spring term only. (0-0; 3-0)

406. (1 ½) **Anthropology of Political and Legal Institutions**

A comparative and analytical survey of political and legal institutions. Spring term only. (0-0; 3-0)

414. (1 ½) **Cultural 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 idio-syncratic behaviour. Fall term only. (3-0; 0-0)

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. Spring term only. (0-0; 3-0)

422. (3) **Ethnology of Circum-Polar Region**

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

441. (3) **Archaeology of the Pacific Northwest**

The excavation, description and analysis of archeological materials; a survey of North American prehistory; intensive study of problems of interpreting Pacific Northwestern archaeological data. Field trips will be scheduled.

Prerequisite: an introductory course in Anthropology or by permission. (2-2; 2-2)

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

This course may be substituted for an elective course in Anthropology in the Fourth Year of the Honours Programme with the permission of the Department.

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

SOCIOLOGY

NOTE: Either Sociology 100 or 200 is recommended for the general student as well as for those intending to major in Sociology. Sociology 100 is open only to First Year students; other students must register in Sociology 200. Introductory Sociology 100, 200 or 201 is prerequisite for all courses numbered 300 or above. However, Sociology 200 or 201 may be taken concurrently with advanced courses.

100. (Anthropology 100) (3) **Introduction to Anthropology and Sociology**

Man, culture and society; concepts common to Anthropology and Sociology illustrated from the literature of the two fields. Open to First Year students only.

(3-0; 3-0)

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. Not open to First Year students except by permission. For students who have had no prior course in Sociology.

(3-0; 3-0)

201. (3) **Principles of Sociological Analysis**

Perspectives and methods of sociology as illustrated by a consideration of major monographs in the discipline; sociological analysis of selected aspects of Canadian society.

Prerequisite: Sociology 100 or by permission.

(3-0; 3-0)

300. (Anthropology 300) (3) **Comparative Social Organizations**

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

(3-0; 3-0)

301. (3) **Sociology of Deviance and Social Control**

Theories of deviant conduct; the social roles of deviants; the relationship between deviance and social control; agencies and mechanisms of control.

(3-0; 3-0)

305. (3) **Family, Socialization, and Interaction**

Structure and process in the family; the transmission and learning of sociocultural categories, norms, values, and roles; sociological aspects of child development; models of interaction relevant to the family.

(3-0; 3-0)

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

The study of religion as a social institution; an analysis of religious beliefs, acts, organizations, leadership and authority, with special reference to the social functions of religion and its relation to other elements of society.

(3-0; 3-0)

315. (3) **Social Stratification**

Systematic analysis of social class theory and research; consideration of the determinants and consequences of social class and social mobility.

(3-0; 3-0)

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.

(3-0; 3-0)

325. (3) **Small Groups**

Analysis and discussion of field studies and laboratory experiments on small groups in various settings; the contribution of this research to the development of theory.

(3-0; 3-0)

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)

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)

340. (3) **Demography and Human Ecology**

Study of the growth, distribution, and movement of human populations with special emphasis on the social causes and consequences and including the form and development of human communities, as adaptations to continuously changing conditions of life. (3-0; 3-0)

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. (3-0; 3-0)

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)

370. (3) **Quantitative Methods in Sociology**

Techniques for analyzing and presenting sociological data in numerical form; probability theory and sampling; selected parametric and nonparametric techniques of analysis.

Prerequisite: Mathematics 150 or by permission. (3-0; 3-0)

400. (3) **Sociological Theory**

A consideration of major sociological theories and theorists, the relation of earlier sociological thought to contemporary theory with special emphasis on recurrent problems and basic concepts. Open only to students registered in the Fourth Year. (3-0; 3-0)

430. (3) **Introduction to Social Research**

The nature of scientific enquiry; problems of research design including basic methods and techniques of research; examination of selected sociological studies.

Prerequisite: Fourth Year standing or permission of the Department. (3-0; 3-0)

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.

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

ASTRONOMY

(See Department of Physics)

DEPARTMENT OF BACTERIOLOGY AND BIOCHEMISTRY

Alex J. Wood, M.S.A. (*Brit. Col.*), Ph.D. (*Cornell*), Professor and Head of the Department.

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

Mrs. Anne Johnston, M.Sc. (*McGill*), Part-time Lecturer.

HONOURS PROGRAMME — BACTERIOLOGY

		First Year	Second Year	Third Year	Fourth Year
Humanities	English	100	—	—	—
	Language 1	100	200	—	—
	Language 2	—	100	—	—
	Mathematics	130	230	330	343
	Philosophy	—	—	202	—
Physical Science	Chemistry	124	224	233	344
	Chemistry	121	—	—	—
	Physics	101	—	212	—
Biosciences	Zoology	—	202	303	302
Bacteriology	Bacteriology	—	200	300	400
	Bacteriology	480	480	480	480
	Bacteriology	—	—	—	499
	Biochemistry	—	—	—	400
	Biochemistry	—	—	—	405

COURSES OFFERED

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. Prerequisites: Mathematics 130, Chemistry 121 and 124. With permission these courses may be taken concurrently.

Texts: A. J. Salle, *Fundamental Principles of Bacteriology*. Laboratory Manual; A. J. Salle, Laboratory Manual in *Fundamental Principles of Bacteriology*.

A. J. Wood. (2-3; 2-3)

300. (3) **Principles of Immunology and Immunochemistry**

A systematic study of the language and principles of immunology.

Text: To be announced. (1-3; 1-3)

400. (3) **The Physiology and Nutrition of the Bacteria**

Text: To be announced.

A. J. Wood. (1-3; 1-3)

(Not offered 1968-69.)

480. (0) **Seminar**

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

The Staff. (2-0; 2-0)

499. (2) **Undergraduate Thesis**

Research under the direction of a staff member.
The Staff.

HONOURS PROGRAMME — BIOCHEMISTRY

		First Year	Second Year	Third Year	Fourth Year
Humanities	English	100	—	—	—
	Language 1	100	200	—	—
	Language 2	—	100	—	—
	Mathematics	130	230	330	343
	Philosophy	—	—	202	—
Physical Science	Chemistry	124	224	233	344
	Chemistry	121	—	—	334
	Chemistry	—	—	—	331
	Physics	101	—	212	—
Biosciences	Biology	—	—	300	—
	Botany	—	—	—	331
	Zoology	—	202	303	—
Biochemistry	Bacteriology	—	200	—	—
	Biochemistry	—	—	—	400
	Biochemistry	—	—	—	405
	Biochemistry	—	—	—	499
	Biochemistry	480	480	480	480
	Biochemistry	—	—	470	—

COURSES OFFERED400. (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. Prerequisite: Chemistry 233.

T. D. D. Groves. (3-0; 3-0)

405. (1) **Laboratory Methods in Biochemistry**

Corequisite: Chemistry 344.

T. D. D. Groves and A. J. Wood. (0-2; 0-2)

470. (1-3) **Directed Studies in Biochemistry**

T. D. D. Groves and A. J. Wood.

480. (0) **Seminar**

Attendance and participation is desirable for all students in all years of the Biochemistry Honours programme.

The Staff. (2-0; 2-0)

499. (2) **Undergraduate Thesis**

Research under the direction of a staff member. Open to Biochemistry Honours students only.

DEPARTMENT OF BIOLOGY

- W. Gordon Fields, B.A. (*Brit. Col.*), A.M., Ph.D. (*Stanford*), Professor and Head of the Department.
- Arthur R. Fontaine, B.Sc. (*McGill*), D.Phil. (*Oxon.*), Professor.
- Franklin Thomas Algard, A.B. (*San Jose State*), Ph.D. (*Stanford*), Associate Professor.
- David J. Ballantyne, B.Com. (*Brit. Col.*), M.S. (*Wash. State*), Ph.D. (*Maryland*), Associate Professor.
- Derek Victor Ellis, B.Sc. (*Edin.*), M.Sc., Ph.D. (*McGill*), Associate Professor. (Leave of absence 1968-69.)
- Edwin M. Hagmeier, B.A. (*Queen's*), M.A., Ph.D. (*Brit. Col.*), Associate Professor. (Leave of absence 1968-69.)
- Alan Percival Austin, B.Sc., Ph.D. (*Wales*), Assistant Professor.
- Marcus A. M. Bell, B.S.F. (*Brit. Col.*), M.F. (*Yale*), Ph.D. (*Brit. Col.*), Assistant Professor.
- Jack L. Littlepage, B.A. (*San Diego*), Ph.D. (*Stanford*), Assistant Professor.
- John Edward McInerney, B.Sc. (*Ottawa*), M.Sc., Ph.D. (*Brit. Col.*), Assistant Professor.
- John N. Owens, B.S. (*Portland State*), M.S., Ph.D. (*Oregon State*), Assistant Professor.
- John W. Paden, B.S. (*Calif.*), M.S., Ph.D. (*Idaho*), Assistant Professor.
- Robert G. B. Reid, B.Sc., Ph.D. (*Glasgow*), Assistant Professor.
- Richard A. Ring, B.Sc., Ph.D. (*Glasgow*), Assistant Professor.
- E. Derek Styles, B.S.A. (*Brit. Col.*), Ph.D. (*Wisc.*), Assistant Professor.
- G. Clifford Carl, M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Part-time Lecturer.
- Wendy D. Armstrong, B.A. (*U. of Vic.*), M.Sc. (*Guelph*), Laboratory Instructor.
- Iain Y. A. Barr, B.Sc. (*U.N.B.*), M.F. (*Brit. Col.*), Laboratory Instructor.
- Diana Caleb (Mrs. P.), B.A. (*U. of Vic.*), Part-time Laboratory Instructor.
- Michael R. Corry, B.A. (*U. of Vic.*), Laboratory Instructor.
- Heather E. Crampton (Mrs. D.), B.Sc., M.Sc. (*Tor.*), Part-time Laboratory Instructor.
- Mary M. Dennis (Mrs. D. D.), M.S.A. (*Brit. Col.*), Laboratory Instructor.
- James M. Goddard, B.Sc. (*Salford*), Laboratory Instructor.
- Thorston W. Heinrich, A.B. (*Calif.*), M.A. (*S. Dakota*), Laboratory Instructor.
- Herbert R. Jacobson, A.B., M.A. (*Chico State*), Senior Laboratory Instructor.
- Barbara G. Knowles, B.Sc. (*Brit. Col.*), Laboratory Instructor.
- Richard L. Morley, B.Sc. (*U. of Vic.*), Laboratory Instructor.
- James E. Simpson, B.Sc.F. (*Tor.*), Laboratory Instructor.

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

All programmes in the Department are built on a *Basic Programme* made up of two components: (1) a *Biology Core* and (2) *Departmental Corequisites* in the physical sciences. To the *Basic Programme* other courses are added as required.

Biology Core:

1. Biology 150 (Principles of Modern Biology) or equivalent.
2. Botany 205 (The Science of Botany).
3. One of Zoology 202 (Chordate Zoology) or Zoology 301 (Invertebrate Zoology).
4. Biology 300 (Genetics — 1½ units) and Biology 306 (Ecology — 1½ units). Pre-professional students, or those not honouring, majoring or concentrating in the Department may elect Biology 436 (Human and Population Genetics — 1½ units) in place of Biology 306 (Ecology).

5. One of Botany 331 (Plant Physiology), Zoology 303 (Vertebrate Physiology), or Zoology 305 (General and Cellular Physiology).

Notes:

(a) Biology 150 is prerequisite to all other courses in the Department, but may be considered fulfilled by any one of: Biology 105, Botany 105, Zoology 105, Bacteriology 100 or 200, Grade XIII Biology, Botany or Zoology, or Biology 12. Where the Biology 150 requirement has been fulfilled prior to entry into the University, Botany 342 or Zoology 301 should be taken in the second year and one additional 300 or 400 level course in the fourth year.

(b) As a general rule, the Core programme should be completed as early as possible, with Botany 205 and Zoology 202 preferably taken before third year.

Departmental Corequisites:

6. Physics 103 or 101.
7. Chemistry 120 and 121 or equivalent.
8. Chemistry 230 or 233.

Notes:

(a) Physics 11 and 12 will be accepted as fulfilling the Physics requirement, although students planning graduate work in Biology should take at least one university level course in this subject.

(b) Students Honouring, Majoring, or concentrating in departments that require some training in biology may, with permission of the Biology Department, have certain of the usual departmental corequisites waived.

(c) Biochemistry 400 is recommended for Major and Honours programmes and may be counted as a Biology, Botany or Zoology course in any Departmental programme.

In all cases, students planning a programme in Biology, Botany or Zoology should consult with members of the Department.

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. in either Botany or Zoology, the Honours Programme being preferable. Students not planning to become professional biologists and not anticipating graduate work in this field may obtain basic instruction by taking a General B.Sc. or B.A. Programme with Biology as an area of concentration. Those selecting Biology courses for the B.Ed. (Secondary) degree should consult the Calendar regulations of the Faculty of Education. If students elect an Honours degree in preparation for training as secondary school teachers, they must fulfill all Departmental Honours requirements (see below).

Proficiency examinations in one or two modern languages are usually required in graduate studies; students planning graduate work are therefore advised to elect one or two courses in French, German, Russian or other modern languages on departmental recommendation. Such students are further advised of the usefulness of Mathematics in biological work, and should take extra Mathematics courses including courses in Computers where possible.

Students with a D grade in any Biology, Botany or Zoology course are 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.

BIOLOGY

B.Sc. General, with single concentration in Biology: the Basic Programme and one Biology, Botany or Zoology elective.

B.A. General, with single concentration in Biology: As for the B.Sc. General except that Physics 101 or 103 and Chemistry 230 or 233 are not required.

BOTANY

Major: the Basic Programme, together with Botany 342 (Plant Anatomy) and not less than nine additional units of Botany or Biology courses chosen in consultation with the Department.

EXAMPLES* OF PROGRAMMES IN THE BIOLOGY DEPARTMENT

	B.A. GENERAL in Biology	B.Sc. GENERAL in Biology	MAJOR in Botany or Zoology	HONOURS in Botany or Zoology
I	English 100 Biology 150 Language 100 1 in second area (Arts) 1 in Arts or Social Science	English 100 Biology 150 Mathematics 140 or 130 Chemistry 120 & 121, or equivalent 1 in second area (Science)	English 100 Biology 150 Mathematics 140 or 130 Chemistry 120 & 121, or equivalent 1 in Arts or Social Science	English 100 Biology 150 Mathematics 140 or 130 Chemistry 120 & 121, or equivalent 1 in Arts or Social Science
II	English 200, 201, or 203 Botany 205 or Zoology 202 1 in second area (Arts) Chemistry 120 & 121, or equivalent Language 200	Botany 205 or Zoology 202 Physics 101 or 103 1 in second area (Science) Chemistry 230 1 in Arts or Social Science	Botany 205 Zoology 202 Physics 101 or 103 Chemistry 230 1 in Arts or Social Science	Botany 205 Zoology 202 Physics 101 or 103 Chemistry 230 Elective or corequisite
III	Botany 205 or Zoology 202 or 301 1 in second area (Arts) Biology 300 and 306 2 Electives	Botany 205 or Zoology 202 or 301 1 in second area (Science) Biology 300 and 306 Zoology 305, 303 or Botany 331 1 in Arts or Social Science	Botany 342 or Zoology 301 Zoology 305, 303 or Botany 331 Biology 300 and 306 Biology, Botany or Zoology elective Elective or corequisite	Botany 342 or Zoology 301 Zoology 305, 303 or Botany 331 Biology 300 and 306 Biology 304 or second-year Mathematics Biology, Botany or Zoology Elective
IV	Biology, Botany or Zoology elective Zoology 305, 303 or Botany 331 2 in second area (Arts) Elective	Biology, Botany or Zoology elective 2 in second area (Science) 1 in Arts or Social Science Elective	2 Botany or Zoology electives 2 electives or corequisites 1 in Arts or Social Science	4 as specified by the Department Thesis or Tutorial

*These are typical examples only: students should consult the Department for the selection of suitable programme and course.

Honours: the Basic Programme, Botany 342 (Plant Anatomy); Botany 499 (Thesis or Tutorial), and course work to bring the total to at least 60 units, as determined by the Department, and including a second year Mathematics course and/or Biology 304 (Biometrics). 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.

ZOOLOGY

Major: the Basic Programme, together with Zoology 301 (Invertebrate Zoology) and not less than nine additional units of Zoology or Biology courses chosen in consultation with the Department.

Honours: the Basic Programme, Zoology 301 (Invertebrate Zoology); Zoology 499 (Thesis or Tutorial), and course work to bring the total to at least 60 units as determined by the Department, and including a second year Mathematics course and/or Biology 304 (Biometrics). 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.

COURSES OFFERED

BIOLOGY

150. (3) Principles of Modern Biology

A broad introduction to biology which covers cell biology, genetics, evolution and ecology, and which surveys the major plant and animal groups. Recent advances in the field, particularly those relating to the biology of man, are discussed.

Text: To be announced.

Staff.

(3-3; 3-3)

300. (1 ½) Genetics

An introduction to the principles, methods and applications of Genetics. Demonstration and discussion sections will be arranged. Should be taken in conjunction with Biology 306.

Texts: Srb, Owen and Edgar, *General Genetics*; Crow, *Genetics Notes*.

Dr. Styles. First term only.

(3-0; 3-0)

304. (3) Biometrics

Introduction to statistical analysis and design of biological experiments. Tests of significance, regression, and curve fitting, analysis of variance, experimental design. Prerequisite: Mathematics 120, 121, 130 or 140.

Texts: Li, *Statistical Inference, I*.

Dr. Ballantyne.

(2-2; 2-2)

306. (1 ½) Ecology

A survey of populations, communities and ecosystems. Should be taken in conjunction with Biology 300.

Texts: Smith, *Ecology and Field Biology*; Kormondy, *Readings in Ecology*.

Dr. Hagmeier. Second term only.

(0-0; 3-0)

400. (1 ½) Principles and History of Biology

Readings in the history of biology, and readings, seminars and discussions dealing with recent advances in the subject, and their social and economic consequences. Those registered will be expected to carry out considerable outside reading, and to present the results in seminar form.

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

Dr. Hagmeier. First term only.

(3-0; 0-0)

402. (3) **Cell Biology**

Structure and function of cells of micro-organisms, plants and animals, with particular emphasis on the synthesis, functions, and interactions of their various molecular components. Prerequisites or corequisites: Botany 331 or Zoology 305, Chemistry 230.

Texts: To be announced.

Dr. Fontaine.

(2-3; 2-3)

406. (3) **Marine Ecology**

A study of biotic associations in the marine environment and the causative mechanisms for association. Prerequisite: Biology 306 and Zoology 301. Pre- or co-requisite: Biology 304. Participation in three or four field trips is required.

Text: Moore, *Marine Ecology*.

Dr. Ellis.

(2-3; 2-3)

407. (3) **Oceanography**

An introduction to the principles of physical and biological oceanography. Primary productivity, physiology, ecology and distribution of planktonic organisms are emphasized. Students must be able to make periodic all-day (and occasional weekend) oceanographic cruises. Prerequisite: High academic standing and permission of the Instructor.

Text: Raymont, J. G., *Plankton and productivity in the Oceans*.

Dr. Littlepage.

(2-3; 2-3)

408. (1 ½) **Pollution Biology**

An introduction to some aspects of the biological implications of pollution. Emphasis will be on the biology of polluted waters, but aspects of air and terrestrial pollution will also be treated. Prerequisite: Botany 205, Zoology 301, or permission of Instructor; recommended: Bacteriology 200.

Texts: To be announced.

Dr. Austin. Second term only.

(0-0; 2-3)

410. (1 ½) **Evolution of Biological Systems**

A course primarily concerned with the origin and development of biological systems with special consideration given to the origin of life, the evolution of genetics systems, and present evolutionary trends.

Text: Assigned readings.

Dr. Styles. Second term only.

(0-0; 3-0)

413. (1 ½) **Natural Resource Management**

A seminar course considering the manner in which ecological systems interact with social systems in Natural Resource Management. Each year different topics will be considered from a variety of viewpoints. Guest lecturers from other departments and from outside the University will be invited.

Text: Assigned readings.

Dr. Bell and Staff. Second term only.

(0-0; 3-0)

420. (3) **Advanced Ecology**

A study of the literature, selected problems, and methods in terrestrial and fresh water ecology. Prerequisite: Permission of instructor.

Text: Assigned readings.

Dr. Hagmeier.

(2-3; 2-3)

436. (1 ½) **Human and Population Genetics**

Heredity and gene expression in man; the application of population studies to the genetics of man. Prerequisites: Biology 300 or 332 or permission of instructor.

Texts: Whittinghill, *Human Genetics*.

Dr. Styles. Second term only.

(0-0; 2-3)

437. (1 ½) **Molecular Genetics**

The physical and chemical nature of the gene; the role of the gene in the control of biochemical and developmental processes. Prerequisites: Chemistry 230 or 233; Biology 300 or 332, or permission of instructor.

Text: Watson, *Molecular Biology of the Gene*.

Dr. Styles. First term only.

(2-3; 0-0)

BOTANY

205. (3) **The Science of Botany**

A comprehensive study of Botany based largely upon morphology and phylogeny but incorporating fundamental principles of ecology, physiology and development. The course constitutes a background for the non botanist as well as an introduction to further courses in Botany.

Text: To be announced.

Drs. Bell, Austin, Owens.

(3-3; 3-3)

318. (1 ½) **Vascular Plant Taxonomy**

An introduction to plant systematics; principles of classification, identification, nomenclature; familiarization with selected vascular plant families of British Columbia; techniques of collection and preservation; considerable emphasis is given to seminars and class discussion.

NOTE: Students are expected to submit a collection of 25 properly collected and annotated vascular plants before completion of the course. These plants should be collected the summer preceding. See Instructor for details.

Texts: To be announced.

Dr. Bell. First term only.

(2-3; 0-0)

331. (3) **Introductory Plant Physiology**

Growth and flowering; dormancy; mechanisms of ion exchange and salt accumulation; water relations; respiration and photosynthesis, synthesis of carbohydrates, fats and proteins. Prerequisites: Chemistry 100 or 102, or Chemistry 121 and any of Chemistry 120, 124, or 324, and Botany 205, or permission of instructor.

Text: Devlin, *Plant Physiology*.

Dr. Ballantyne.

(2-3; 2-3)

342. (3) **Plant Anatomy and Microtechnique**

Study of the development and organization of plant tissues and organs. Techniques in the preparation of slides for anatomical study: photomicrography. Prerequisite: Botany 205.

Text: Esau, *Anatomy of Seed Plants*.

Dr. Owens.

(2-3; 2-3)

411. (3) **Phycology**

Introduction to most aspects of the biology of algae, with ecological work on the varied marine and freshwater communities of the Vancouver Island region. Laboratory work includes plankton techniques, photomicrography and algae microtechnique. Prerequisite: Botany 205.

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

Dr. Austin.

(1-4; 1-4)

415. (3) **Introductory Mycology**

Morphology and taxonomy of fungi. A study of all groups of fungi including techniques for isolation, culture and identification. Prerequisite: Botany 205.

Text: To be announced.

Dr. Paden.

(2-3; 2-3)

418. (1 ½) **Plant Ecology**

A consideration of vegetation as an ecosystem component; vegetation structure, composition, productivity; methods of community description, classification, mapping, environmental measurement; emphasis on seminars, discussions, projects. For those who can participate, a one week field research trip is held in early May in some part of southern British Columbia. The trip must be partially student financed. Prerequisite: Botany 318 or 404.

Text: To be announced.

Dr. Bell. Second term only.

(0-0; 2-3)

421. (3) **Plant Growth and Development**

A study of the morphological and physiological aspects of plant growth, differentiation, flowering and senescence. Prerequisites: Botany 331 or Zoology 305; Botany 342, or permission of instructors.

Text: Leopold, *Plant Growth and Development*.

Dr. Ballantyne and Dr. Owens.

(2-3; 2-3)

448. (1-3) **Directed Studies in Botany**

499. (3) **Thesis or Tutorial**

ZOOLOGY

202. (3) **Chordate Zoology**

A study of the structural and functional adaptations of Chordates in relation to their evolutionary history.

Text: Young, *The Life of Vertebrates*, 2nd ed.

Dr. McInerney.

(2-3; 2-3)

301. (3) **Invertebrate Zoology**

Biology of invertebrate animals with particular emphasis on modern concepts and contemporary research.

Texts: Relevant scientific literature.

Dr. Fontaine.

(2-3; 2-3)

302. (3) **Microanatomy**

Fundamentals of cell, tissue and organ form and functions; reproduction and introductory embryology. Prerequisite: Zoology 202 or permission of instructor.

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

Dr. Algard.

(2-3; 2-3)

303. (3) **Vertebrate Physiology**

Tissue and organ physiology of mammals, and experimental work on small and large vertebrates, including the students themselves. Weekly laboratory reports required. Prerequisite or corequisite: Chemistry 230 or 233; recommended: Physics 101 or 103 and Zoology 202.

Texts: To be announced.

(2-3; 2-3)

305. (3) **General and Cellular Physiology**

An introduction to such fundamental aspects of physiology as cell organelle function, energy exchange, biosynthesis and enzymology, together with a comparative treatment of the major areas of animal physiology. Corequisite: Chemistry 230.

Texts: To be announced.

Dr. Reid.

(2-3; 2-3)

403. (3) **Comparative and Experimental Embryology of Marine Organisms**
 A study of the embryonic development of representative marine organisms with experimental analysis of certain developmental phenomena.
 Texts: To be announced.
 Dr. Fields. (2-3; 2-3)
404. (3) **Advanced Physiology**
 Special topics in the field of physiology. Prerequisites: Chemistry 230 and Zoology 303 or 305.
 Texts: To be announced. (2-3; 2-3)
414. (3) **Marine Invertebrate Zoology**
 General problems in ecology, morphology, physiology and life histories of marine invertebrates. Prerequisites: Zoology 301 or equivalent and consent from the instructor.
 Text: To be announced.
 Dr. Fields. (2-3; 2-3)
416. (3) **Biology of the Vertebrates**
 The fishes, amphibians, reptiles, birds and mammals of British Columbia, with special emphasis on their form, evolution, distribution and natural history in general. The laboratory consists of classification and identification.
 Texts: To be announced.
 Dr. Carl. (2-3; 2-3)
417. (1½) **Zoological Microtechnique**
 Lectures and laboratories in the principles and practice of zoological microtechnique, including treatment of histo- and cytochemistry, advanced microscopic techniques and photomicrography. Prerequisites: Zoology 302 is advised as a prerequisite or corequisite.
 Texts: To be announced.
 Dr. Fontaine. First term only. (1-4; 0-0)
419. (1½) **Comparative Histology**
 Lectures and laboratories designed to show the progressive elaboration of cellular and tissue structure in animal phylogeny. Students will prepare their own microscopic material. Prerequisites: Zoology 417; Zoology 302 advised as a pre- or corequisite.
 Texts: To be announced.
 Dr. Fontaine. Second term only. (0-0; 2-3)
430. (3) **Physiology of Marine Animals**
 Experimental studies in specific topics. Prerequisite: Zoology 305 and permission of instructor.
 Text: Readings, to be announced.
 Dr. Reid. (2-3; 2-3)
431. (3) **Ichthyology**
 Selected topics on the morphological, physiological and behavioural adaptations of fishes. Prerequisite: Zoology 202.
 Text: Marshall, *The Life of Fishes*.
 Dr. McInerney. (2-3; 2-3)
433. (3) **Experimental Morphogenesis**
 Informal seminars, directed reading and lectures in the analysis of embryonic development by experimental methods, with consideration of mechanisms of differentiation of cells and tissues and their integration during morphogenesis. Prerequisites: Zoology 302 and permission of the instructor.
 Texts: To be announced.
 Dr. Algard. (1-4; 1-4)

434. (3) **Ethology**

A study of the phylogeny, functions and processes of animal behaviour from both field-descriptive and laboratory-experimental points of view. Pre- or corequisites: Biology 304 (Biometrics) and Psychology 100 or 201. (The course will be given in association with Psychology 434, Animal Behaviour, and students may not register for both courses.)

Text: To be announced.

Dr. Ellis.

(2-2; 2-2)

435. (3) **Entomology**

An introduction to the taxonomy, biology, anatomy and physiology of insects, and consideration of their economic importance. The arachnids will be discussed. Pre-requisite or corequisite: Zoology 301, or equivalent and consent of the instructor.

Text: To be announced.

Dr. Ring.

(2-3; 2-3)

448. (1-3) **Directed Studies in Zoology**

499. (3) **Thesis or Tutorial**

GRADUATE COURSES

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

510. (1-3) **Ichthyology**

511. (1-3) **Marine Invertebrate Zoology**

512. (1-3) **Ecology of Marine Benthos**

513. (1-3) **Topics in Vertebrate Anatomy and Embryology**

514. (1-3) **Zooplankton Ecology**

515. (1-3) **Physiology of Marine Animals**

516. (1-3) **Animal Ecology and Biogeography**

520. (1-3) **Mycology**

521. (1-3) **Phycology**

522. (1-3) **Plant Ecology**

523. (1-3) **Plant Physiology**

524. (1-3) **Plant Anatomy and Morphology**

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

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

599. (credit to be determined) **M.Sc. research and thesis**

699. (credit to be determined) **Ph.D. research and thesis**

All graduate students are expected to register for No. 560 - Seminar.

DEPARTMENT OF CHEMISTRY

A. C. Ridditord, B.Sc., Ph.D. (*Birmingham*), F.R.I.C., Professor and Head of Department.

Lewis J. Clark, B.A. (*Brit. Col.*), M.Sc. (*Wash.*), Ph.D. (*Oregon State*), Professor.

Robert N. O'Brien, B.A.Sc., M.A.Sc. (*Brit. Col.*), Ph.D. (*Manchester*), Professor.

Stephen A. Ryce, B.A., Ph.D. (*Brit. Col.*), Professor.

Wilma E. Elias, M.A. (*Sask.*), Ph.D. (*Brit. Col.*), Associate Professor.

Alexander D. Kirk, B.Sc., Ph.D. (*Edinburgh*), Associate Professor. (Leave of absence 1968-69.)

D. J. MacLaurin, B.A.Sc. (*Brit. Col.*), M.S. (*Lawrence*), P.Eng. (*Brit. Col.*), Associate Professor.

G. W. Bushnell, B.Sc., M.A. (*Oxon.*), Ph.D. (*West Indies*), Assistant Professor.

T. W. Dingle, B.Sc., Ph.D. (*Alta.*), Assistant Professor.

Sidney G. Gibbins, B.S. (*Cal. Inst. Tech.*), Ph.D. (*Wash.*), Assistant Professor.

Tikam C. Jain, B.Sc., M.Sc., Ph.D. (*Agra*), Assistant Professor.

Kenneth C. Moss, B.Sc., A.R.C.S., D.I.C., Ph.D. (*London*), Assistant Professor.

Frank P. Robinson, A.B. (*Fisk*), Ph.D. (*Alta.*), Assistant Professor.

Ian S. Walker, B.Sc., Ph.D. (*Adelaide*), Dip. Ed. (*Melbourne*), Assistant Professor.

Cominco Visiting Scholar

G. H. Turner, M.A. (*Brit. Col.*).

GRADUATE PROGRAMMES

The Department offers opportunities for study leading to the M.Sc. and Ph.D. degrees. For information on the requirements for these, see the section in this Calendar on the School of Graduate Studies.

UNDERGRADUATE PROGRAMMES

The Chemistry Department offers an Honours and a Major programme leading to the B.Sc. degree, and a concentration in Chemistry in the General programme of either the B.Sc. or B.A. degrees. Students are invited and advised to consult with the Department when considering any courses or programmes in Chemistry.

Those considering graduate work in Chemistry are advised to acquire a reading knowledge of German, Russian, French, or other appropriate language as a part of their undergraduate programme.

All students registering for any chemistry course(s) that include laboratory work are required to purchase a Chemistry Laboratory Credit Card (\$3.00) at registration. Any unused portion of this credit is refundable.

Courses required by the Chemistry Department for a concentration in Chemistry under the General Programme:

Chemistry 121, 124, 224, and 233, Physics 101 or 121 and 212, Mathematics 130, and 230 or 231, in their necessary sequence, together with nine units of Chemistry courses numbered 300 or above for which the required prerequisites have been taken.

Courses required by the Chemistry Department for the Major Programme:

First Year: Chemistry 121, 124, Physics 121 (or 101), Mathematics 130.

Second Year: Chemistry 224, 233, Physics 212, Mathematics 230 or 231.

Third Year: Chemistry 314, 326, 331, 334, 344
and one of Mathematics 232, 233, 330 or 331.

Fourth Year: At least one of Chemistry 424, 435 or 445.

Courses required by the Chemistry Department for the Honours Programme:

First Year: Chemistry 121, 124, Physics 121 (or 101), Mathematics 130.

Second Year: Chemistry 224, 233, Physics 212, Mathematics 230 or 231.

Third Year: Chemistry 314, 326, 331, 334, 344, 399
and one of Mathematics 232, 233, 330 or 331.

Fourth Year: Chemistry 424, 435, 445, 499.

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 each year, 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.

Students who have fulfilled the requirements given in this Calendar for admission to a B.Sc. Honours programme will be admitted to the Third Year of the Chemistry Honours programme. With almost no exception, 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.

COURSES OFFERED

FIRST YEAR CHEMISTRY

The first year chemistry courses (Chemistry 120, 121 and 124) are designed and arranged to provide maximum flexibility in accommodating the differing backgrounds and needs of students. While the specific details of each course as given below should be carefully studied, the following general notes may be helpful.

Two lecture courses (no laboratory), Chemistry 120 and Chemistry 124, are offered. A laboratory course, Chemistry 121, is also offered. Any student planning any further chemistry course(s) either at this University or elsewhere, and students planning to enter certain professional schools (see pp. 236 - 237), should take the laboratory course as well as a lecture course. In certain cases though, a lecture course only may be completely suitable to the student's academic plans.

120. (3) **General Chemistry**

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules and states of matter. Stoichiometry. Equilibrium in chemical systems, acid base theory, redox, periodic chemistry, organic, surface and nuclear chemistry.

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

Prerequisites: Mathematics 12, Chemistry 11 or 12 or their equivalents. Students desiring to register in Chemistry 120, but who do not have these prerequisites, should consult the Department for permission to register well prior to registration. If permission to enter Chemistry 120 is granted, then registration must be in Lecture Section number 1 which has five lectures per week.

Text: To be announced.

(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 programmes except those which include either Chemistry 224 or 223.
2. Chemistry 121 may be a necessary course to accompany Chemistry 120, depending upon a student's interests and academic plans. It will be noted that Chemistry 121 is prerequisite to each of Chemistry 224, 230 and 233. The student should review his need for Chemistry 121 in terms of his probable academic programme.
3. During the first term only, the Department will counsel concerning, and consider applications for, transfer from Chemistry 120 to Chemistry 124, with the purpose of assisting students to re-assess their selection of the First Year chemistry course best suited to their academic needs.

121. (1) **Introductory Analytical Laboratory**

A one-term intensive laboratory course in the basic operations and calculations used in quantitative chemical analysis with emphasis on technique, precision and accuracy.

Pre- or corequisite: Chemistry 120 or 124.

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

(0-4; 0-0) or (0-0; 0-4)

NOTES: 1. Registration and fitting into individual timetables for this course must take place in September. The Department will then divide each section into sub-sections by terms.

2. Chemistry 121 is a prerequisite for each of Chemistry 224, 230 and 233.

124. (3) **Introductory Physical and Inorganic Chemistry — Part I**

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules and states of matter. Stoichiometry. Equilibrium in chemical systems with detailed consideration of the quantitative aspects of solution equilibria.

Prerequisites: Mathematics 12 and Chemistry 12 or their equivalents (Chemistry 11 with permission of the Department).

Pre- or corequisite: Chemistry 121.

Text: Mahan, *University Chemistry*.

(3-0; 3-0)

NOTES: 1. Chemistry 124 is the first part of a Chemistry 124-224 sequence and is thus an essential first course in chemistry for students planning a further programme in chemistry in this Department which includes either Chemistry 224 or 233.

2. During the first term only, the Department will counsel concerning, and consider applications for, transfer from Chemistry 124 to Chemistry 120 with the purpose of assisting students to re-assess their selection of the First Year chemistry course best suited to their academic needs.

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 permission of the Department. It should be noted that in the section of this calendar on supplemental examinations, provision exists for writing a supplemental examination to improve a course grade.

224. (3) **Introductory Physical and Inorganic Chemistry — Part II**

Application of solution equilibria, acid base theory and redox systems to chemical analysis. Introduction to thermodynamics and reaction kinetics. Chemical bonding and periodic chemistry.

Prerequisites: Chemistry 121 and 124, Mathematics 130, Physics 121 (or 101).

Texts: Skoog and West, *Fundamentals of Analytical Chemistry*; Cotton and Wilkinson, *Advanced Inorganic Chemistry*.

(3-4; 3-4)

230. (3) **General Organic Chemistry**

A systematic study of the main principles of organic chemistry based on modern theory and the descriptive chemistry of aliphatic, aromatic and heterocyclic compounds.

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

Prerequisites: Chemistry 120 or 124, and 121.

Text: Roberts and Caserio, *Modern Organic Chemistry*.

Laboratory Manual: To be announced.

(3-3; 3-3)

233. (3) **Introductory Organic Chemistry**

An introduction to theoretical, physical and descriptive organic chemistry as exemplified by a study of the properties of aliphatic and simple aromatic compounds.

Prerequisite: Chemistry 121 and 124.

Text: To be announced.

Laboratory Manual: To be announced.

(3-3; 3-3)

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

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

Prerequisite: Chemistry 224.

(2-4; 2-4)

324. (3) **Modern General Chemistry**

The modern theory of atomic structure and its relation to chemical bonding, molecules and states of matter. Stoichiometry. Equilibrium in chemical systems with detailed consideration of the quantitative aspects of solution equilibria. Other selected topics.

Prerequisite: At least one course in Chemistry at the University level or permission of the Department. Credit will not be given for both Chemistry 124 and Chemistry 324.

Text: To be announced.

(3-0-2; 3-0-2)

(Not offered 1968-69.)

(Offered in Summer Session 1968 — 10 hours lecture and 4 hours seminar per week.)

NOTE: Chemistry 324 is designed as a rigorous refresher course based on lectures and seminars, but no laboratory. The Seminars will involve several Faculty members of the Chemistry Department. This course should be of interest to some graduate degree programmes in the Faculty of Education.

326. (3) **Inorganic Chemistry**

Theories of chemical bonding, including valence bond, molecular orbital and ligand field theories. The chemistry of the 'd block' elements.

Prerequisite: Chemistry 224.

Texts: Coulson, *Valence*; Cotton and Wilkinson, *Advanced Inorganic Chemistry; Semi-Micro Qualitative Inorganic Analysis — Advanced Scheme; Semi-Micro Qualitative Analysis — Reactions of the Commoner Cations and Anions.*

(3-4; 3-4)

331. (1) **Organic Qualitative Analysis**

The identification of organic compounds by chemical and spectroscopic methods.

Prerequisite: Chemistry 233 (Chemistry 230 with permission of the Department).

Texts: Shriner, Fuson and Curtin, *The Systematic Identification of Organic Compounds*, Fifth Edition; Williams and Fleming, *Spectroscopic Methods in Organic Chemistry.*

(1-2; 0-2)

334. (2) **Physical Organic Chemistry**

Modern theories of organic chemistry, general principles of physical organic chemistry, electronic and steric factors in organic compounds; chemical, kinetic, steric, and isotopic criteria of organic reaction mechanisms.

Prerequisites: Chemistry 224 and 233 (Chemistry 230 with permission of the Department).

Texts: Hine, *Physical Organic Chemistry*, Second Edition; Hallas, *Organic Stereochemistry.*

(2-0; 3-0)

344. (3) **Physical Chemistry**

Kinetic theory of gases, thermodynamics, thermochemistry, chemical kinetics, solutions, phase equilibria, electro-chemistry.

Prerequisites: Chemistry 224, Physics 212, Mathematics 230 or 231.

Text: To be announced.

Laboratory Manual: Crockford and Nowell, *Laboratory Manual of Physical Chemistry.*

(3-3; 3-3)

399. (1) **Research Participation and Seminar**

Introduction to departmental research. Seminar report. For Chemistry Honours students only.

(0-2; 2-0)

424. (3) **Advanced Inorganic Chemistry**

Selected topics in modern inorganic chemistry, including the chemistry of coordination compounds, organometallic compounds and metal hydrides. Solid state chemistry.

Prerequisites: Chemistry 326 and 344.

Texts: Cotton and Wilkinson, *Advanced Inorganic Chemistry*, and as to be announced. (3-4; 3-4)*

435. (3) **Advanced Organic Chemistry**

Current topics in organic chemistry including natural products, cyclic systems, molecular rearrangements and photochemistry. In addition, general methods for the syntheses of organic compounds and applications of spectroscopy in structural and synthetic chemistry will be treated.

Prerequisite: Chemistry 334.

(3-4; 3-4)*

445. (3) **Advanced Physical Chemistry**

Quantum mechanics, atomic and molecular spectroscopy, thermodynamics, statistical mechanics, chemical kinetics, electrochemistry and surface chemistry.

Prerequisites: Chemistry 344, Mathematics 230 or 231 or 330 or 331. (3-4; 3-4)*

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

499. (3) **Thesis**

Experimental research under the direction of Faculty. For Chemistry Honours students only. (0-6; 0-6)

* Chemistry 424, 435, and 445 share a total of two 4-hour laboratory periods per week. A student will be required to take appropriate laboratory work in the course or courses elected.

GRADUATE COURSES

Students should consult the Department to determine the graduate courses offered in any particular year.

500. (1-2) **Research Methods and Techniques**

504. (2) **Surface and Colloid Chemistry**

509. (1) **Seminar**

522. (1) **Current Topics In Inorganic Chemistry**

524. (2) **Theoretical Inorganic Chemistry**

526. (2) **Topics in Advanced Inorganic Chemistry**

530. (1) **Wood Chemistry**

536. (2) **Organometallic Chemistry**

538. (1) **Biogenesis of Natural Products**

539. (2) **Carbohydrate Chemistry**

545. (1) **Reaction Kinetics and Reaction Rate Theory**

546. (1) **Spectroscopy and the Chemistry of Excited States**

550. (1) **Elementary Applications of Group Theory**

554. (2) **Quantum Mechanics**

555. (2) **Statistical Mechanics**

556. (2) **Topics in Advanced Physical Chemistry.**

565. (2) **Theories and Applications of Nuclear Magnetic Resonances in Spectroscopy**

566. (2) **Chemical Crystallography**

- 577. (2) **Nuclear and Radio Chemistry**
- 583. (2) **Organic Syntheses**
- 590. (1-3) **Directed Studies**
- 599. **M.Sc. Thesis (Credit to be determined but normally 6 units in this Department.)**
- 630. (1) **Aromatic Compounds**
- 633. (2) **Chemistry of Natural Products**
- 634. (2) **Enzyme and Protein Chemistry**
- 636. (2) **Chemistry of Heterocyclic Compounds**
- 645. (1) **Advanced Electrochemistry**
- 663. (2) **Topics in Advanced Organic Chemistry**
- 699. **Ph.D. Thesis (Credit to be determined)**

DEPARTMENT OF CLASSICS

Peter L. Smith, B.A. (*Brit. Col.*), M.A., Ph.D. (*Yale*), Associate Professor and Chairman of Department.

Herbert H. Huxley, M.A. (*Cantab.*), F.I.A.L., Professor.

John Carson, M.A. (*Oxon.*), Associate Professor.

Geoffrey J. D. Archbold, B.A. (*Brit. Col.*), M.A. (*Cincinnati*), Assistant Professor.

Gordon S. Shrimpton, M.A. (*Brit. Col.*), Instructor.

Derek A. Tumber, B.A. (*Liverpool*), M.A. (*Alta.*), Instructor.

Mrs. Barbara S. Efrat, B.A. (*Pembroke Coll.*), M.A. (*Brown*), Part-time Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

General — (concentration in Classics): *First and Second Years*: the completion of a course at the 200 level in one or more of the three areas (Latin, Greek, or Classical Studies). *Third and Fourth Years*: 9 units in Departmental offerings numbered above 300.

Major (Classics) — *First and Second Years*: at least two courses in the Department, with the study of either Latin or Greek carried (if possible) to the 200 level; *Third and Fourth Years*: 15 units in Departmental offerings numbered above 300, of which 9 units must be in a single area (Latin, Greek, or Classical Studies).

Honours (Classics) — 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. Interested students should consult the Chairman of the Department as early as possible in their first two years.

Individual Honours programmes in Classics may have an emphasis on either Latin or Greek, and on literary, historical, or philosophical enquiry. Although individual requirements will vary, students will take 30-36 units in their last two years, of which 18 units will be chosen from general upper-year courses in Classical Studies, Greek, and Latin, and 6 units from the special Honours courses. At least 6 units must be chosen from outside the Department of Classics.

If so advised by the Department, an Honours student may elect not more than one course each year in Latin or Greek for *double credit* (i.e., 6 units). In this event, he will be expected to study the subject in much greater depth than general students, and will be required to submit a considerable amount of written work.

Prerequisites for admission to Third Year: two courses in Latin and at least one in Greek; or two courses in Greek and at least one in Latin. Classical Studies 100 is recommended but not required.

NOTE: Graduating Honours students will be expected to demonstrate a reading knowledge of French or German.

COURSES OFFERED

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. Second year students who have completed Classical Studies 100 and wish further work in classics are strongly advised to study Greek and/or Latin. 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.

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.

Members of the Department.

(3-0; 3-0)

310. (3) Classical Epic and Lyric Poetry

A study of the Greco-Roman poetic tradition, with an emphasis on the non-dramatic genres of epic and lyric. Poets studied in translation will include Homer, Hesiod, Pindar, Catullus, Horace, and Vergil.

Mr. Huxley.

(2-0; 2-0)

315. (3) Greek and Roman Drama

The origins and development of drama in ancient Greece and Rome. The study, in English translation, of representative plays of Aeschylus, Sophocles, Euripides, Aristophanes, Menander, Plautus, Terence, and Seneca. Problems of ancient theatre production will receive consideration.

(Not offered 1968-69.)

(2-0; 2-0)

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.

(Not offered 1968-69.)

(3-0; 3-0)

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.

Mr. Archbold.

(3-0; 3-0)

350. (3) Classical Archaeology

An introduction to the discipline of classical archaeology, with an emphasis upon the art and architecture of ancient Greece and Rome.

(Not offered 1968-69.)

(3-0; 3-0)

460. (3) Seminar in Ancient History

Intensive study of selected topics in Greco-Roman civilization. Prerequisite or co-requisite: Classical Studies 330 or 340.

Mr. Shrimpton, Mr. Tumber.

(2-0; 2-0)

CLASSICS (Honours)

463. (3) Third Year Seminar

(2-0; 2-0)

464. (3) Fourth Year Seminar

(2-0; 2-0)

499. (1-3) Graduating Essay

(0-0; 0-0)

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.

100. (3) **Beginners' Greek**

An introductory study of the ancient Greek language, and a consideration of some of the main facets of Greek civilization.

Mr. Carson. (4-0; 4-0)

200. (3) **Introduction to Greek Literature**

Review and further study of the Greek language; selected readings in classical Greek literature, including a complete dialogue by Plato.

Mr. Shrimpton. (4-0; 4-0)

320. (3) **Homer**

An examination of the Greek epic tradition, and a careful reading of portions of the *Iliad* and the *Odyssey*. (3-0; 3-0)

330. (3) **Greek Drama**

The historical development of the Greek theatre; study of selected plays of Aeschylus, Sophocles, Euripides, and Aristophanes.

(Not offered 1968-69.) (3-0; 3-0)

340. (3) **Greek Philosophy**

A study of selected texts in Greek philosophy, with major emphasis on Plato's *Republic* and Aristotle's *Nicomachean Ethics*. (3-0; 3-0)

350. (3) **Greek Historians**

The development of Greek historical enquiry, with emphasis on Herodotus and Thucydides.

(Not offered 1968-69.) (3-0; 3-0)

480. (1-3) **Greek Composition**

490. (1-3) **Directed Reading in Greek**

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 240 is a prerequisite or co-requisite 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.

100. (3) **Beginners' Latin**

For students with no previous knowledge of Latin. A basic introduction to the Latin language, with elementary readings in Roman literature. Additional language laboratory sessions may be required.

Members of the Department. (4-0; 4-0)

140. (3) **Intermediate Latin**

Prerequisite: Latin 10 or 11 or Latin 100. Review of basic Latin grammar; practice in prose composition; selected readings in Latin literature and an introduction to Roman civilization.

Mr. Archbold. (4-0; 4-0)

200. (3) **Second Year Latin**

Prerequisite: Latin 100 or equivalent; not open to students who have completed Latin 140. A second course in the Latin language, with readings in Latin literature and a study of some aspects of Roman civilization. (4-0; 4-0)

240. (3) **Introduction to Latin Literature**

Prerequisite: Latin 12 or Latin 140 or First Class in Latin 100. A survey of the major types of Latin literature with readings in Latin prose and poetry from Plautus to Saint Augustine. Prose composition and sight translation by special assignment.

Mr. Tumber.

(4-0; 4-0)

320. (3) **Vergil**

A study of the *Eclogues*, *Georgics*, and *Aeneid*; an evaluation of Vergil's place in the classical tradition.

Dr. Smith.

(3-0; 3-0)

330. (3) **Roman Philosophy**

A study of the development of philosophy at Rome, with an emphasis upon Lucretius' *De Rerum Natura* and Cicero's philosophical works.

Mr. Carson.

(3-0; 3-0)

340. (3) **Lyric and Elegy**

A critical reading of the major Latin lyric and elegiac poets, including Catullus, Horace, Tibullus, Propertius, and Ovid.

(Not offered 1968-69.)

(3-0; 3-0)

350. (3) **Roman Historians**

A study of Latin historiography; readings from Cicero, Sallust, Livy, and Tacitus.

(Not offered 1968-69.)

(3-0; 3-0)

360. (3) **Roman Drama**

A study of the development of classical Roman drama from its Greek and native origins; major emphasis upon the comedies of Plautus and Terence; the tragedies of Seneca; the physical theatre of the Roman world.

(Not offered 1968-69.)

(3-0; 3-0)

370. (3) **Roman Satire**

A survey of Roman satire from its origins, with an emphasis on Horace and Juvenal; study of Seneca's *Apocolocyntosis* and Petronius' *Satyricon*.

(Not offered 1968-69.)

(3-0; 3-0)

390. (3) **History of the Latin Language**

The development of the Latin language, both literary and colloquial, from the period of earliest evidence until the emergence of the Romance languages. Study of morphology, phonology, vocabulary, syntax; Vulgar and Christian Latin.

Mrs. Efrat.

(3-0; 3-0)

480. (1-3) **Latin Composition**

490. (1-3) **Directed Reading in Latin**

DEPARTMENT OF ECONOMICS

- Gordon W. Bertram, B.A. (*Brit. Col.*), Ph.D. (*Calif.*), Professor and Chairman of the Department.
- Leo I. Bakony, B.A. (*Brit. Col.*), Ph.D. (*Wash.*), Professor.
- G. Reid Elliott, B.A. (*Sask.*), Ph.D. (*Tor.*), Professor Emeritus.
- Leonard Laudadio, B.A. (*Puget Sound*), M.A., Ph.D. (*Wash.*), Associate Professor.
- Izzud-Din Pal, M.A. (*Panjab*), M.Sc.Econ. (*London*), Ph.D. (*McGill*), Associate Professor. (Leave of absence 1968-69.)
- W. R. Derrick Sewell, B.Sc. (*London*), M.A., Ph.D. (*Wash.*), Associate Professor of Geography and Economics.
- K. Arnold Frenzel, B.A. (*Pacific Lutheran*), M.A. (*Wash.*), Assistant Professor.
- J. Colin H. Jones, B.A. (*Univ. Coll. of Wales*), M.A. (*Montana State*), Ph.D. (*Queen's*), Assistant Professor.
- Gerald L. Lassen, B.A. (*Texas*), M.A. (*Wis.*), Assistant Professor.
- R. A. L. Carter, B.A. (*R.M.C.*), M.A. (*Queen's*), Instructor.
- Robert V. Cherneff, B.A. (*U. of Vic.*), M.A. (*Wash.*), Visiting Instructor.
- Robert W. McQueen, B.Com. (*Brit. Col.*), C.A., Part-time Lecturer in Commerce.
- J. Trevor Matthews, B.A. (*Brit. Col.*), M.B.A. (*Stanford*), Part-time Lecturer.

INDIVIDUAL COURSES

Students who wish to take only one or two courses in Economics may be interested in the following two courses. Economics 100 deals with the basic concepts of Economics; it is recommended as an introductory course in Economics. Economics 200, Group I and Group II, is recommended to all students who wish to take an advanced lower division course in the techniques of economic analysis. Upper division courses may also be taken subject to the regulations governing the prerequisite courses.

GENERAL, MAJOR AND HONOURS PROGRAMMES

Requirements:

(i) For General Programme with 9 units in Economics:

- | | | |
|---|---|--|
| (a) Economics 100 | } | or, Economics 200, Group II, for all those students who have no credit in Economics 100. |
| (b) Economics 200, Group I | | |
| (c) One of Economics 300 or 305 and 6 additional units in Economics courses numbered 300 or above. However, students in this programme who are planning a more intensive background in Economics are advised to include Economics 300 as one of their upper division courses. | | |

(ii) For Major:

- | | | |
|--|---|---|
| (a) Economics 100 | } | or, Economics 200, Group II, for all those students who have no credit in Economics 100. Second class standing will be required in Economics 200, Group II. |
| (b) Economics 200, Group I, with at least a second class standing | | |
| (c) Economics 300, 321, 340, and 6 additional units in Economics courses numbered above 300 of which at least 3 units must be in a course numbered 400 or above. | | |
| (d) Mathematics 130 or Mathematics 150 unless permitted by the Department to omit this requirement. | | |

(iii) For Honours:

- (a) Mathematics 130 or Mathematics 150 unless permitted by the Department to omit this requirement in special circumstances;
- (b) Economics 100
- (c) Economics 200, Group I, with at least a high second class standing
- (d) Economics 300, 321, 340, 400, 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.

or, Economics 200, Group II, for all those students who have no credit in Economics 100. High second class standing will be required in Economics 200, Group II.

Recommended: Commerce 151, Mathematics 230, Political Science 200 or 410.

- (e) 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 OFFERED

Economics 200 is a prerequisite for all Third Year courses but, in special cases, it may be taken concurrently with Economics 340 with the permission of the Department. Economics 300 is a prerequisite for all courses numbered 400 and above. Permission to take Economics 300 concurrently with a course numbered 400 and above may be granted under exceptional circumstances.

Although at present Economics 100 is not a prerequisite for Economics 200, it is recommended to all students who are planning to take a Major or Honours in Economics, or to take courses in Economics under the General programme, leading to the degree of B.A.

100. (3) Introduction to Economics

Basic economic concepts with reference to the main features of the Canadian economy. Attention will be given to the evolution of institutions and processes involved in the production and distribution of wealth; special emphasis will be placed on basic determinants of prices and costs and determinants of income and employment.

Text: To be announced.

Staff.

(3-0; 3-0)

NOTE: This course is not a prerequisite for Economics 200, but it is recommended to all students who are planning to take Economics 200. Students with Economics 200 standing will not be permitted in this course, nor will they be permitted to register in the two courses concurrently.

200. (3) Principles of Economics

An introduction to 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, international trade and foreign exchanges, economic growth; related topics.

Text: To be announced.

Staff.

Group I: for students who have obtained credit in Economics 100:

(3-0; 3-0)

Group II: for students with no credit in Economics 100: (3-0-2; 3-0-2)

Prerequisite: First Year standing.

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)

305. (3) **Money and Economic Activity**

The influence of money on economic activity in closed and open economies; function of financial institutions; problems of instability; monetary policy; international payments and liquidity.

Text: To be announced.

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

310. (3) **Industrial Organization and Public Policy**

Problems of competition and monopoly; relevant public policy, with special reference to Canada.

Text: To be announced.

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

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.

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

320. (3) **Comparative Economic Development**

Selected topics in economic history and long-run economic growth, examining the experience of economic development in advanced and developing countries.

Text: To be announced.

(Not offered in 1968-69.) (3-0; 3-0)

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.

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

323. (3) **Comparative Economic Systems**

A study of the theories and doctrines underlying the economic system of capitalistic and socialistic countries, including a detailed analysis of Marxian economics. An examination of how the theoretical under-pinnings affect economic institutions and policies of representative countries (e.g. Canada, U.S.A., U.S.S.R., China).

Text: To be announced.

(Not offered in 1968-69.) (3-0; 3-0)

325. (3) **Public Finance and Fiscal Policy**

Theory of public finance; Canadian public finances at the federal, provincial and municipal levels; fluctuations in income and employment; role of fiscal policy in maintaining economic growth and stability.

Text: To be announced.

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

340. (3) **Quantitative Economic Analysis**

Descriptive statistics, probability theory, theoretical distribution, sampling distribution, hypothesis testing, decision theory, regression and correlation, time-series analysis and index numbers.

Text: To be announced.

Mr. Carter.

(3-0; 3-0)

NOTES: 1. Prerequisite: Mathematics 130 or Mathematics 150 or permission of the Department.

2. This course may be taken concurrently with Economics 200 only with the permission of the Department.

350. (1 ½) **Soviet Economics**

An examination of the theory of economic planning, the Soviet method of determining economic ends, and the development and practice of consequent economic institutions. Some time will be given to the unique problems of the Soviet economy and its current directions of change.

Text: To be announced.

(Not offered 1968-69.)

(3-0; 3-0)

NOTE: Admission to this course only with the permission of the Department.

400. (3) **Macroeconomic Theory**

Theories of income and employment with special reference to the classical and the Keynesian models; the dynamics of the aggregate supply and demand; theory of inflation; economic growth.

Text: To be announced.

Dr. Bakony.

(3-0; 3-0)

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.

Mr. Lassen.

(3-0; 3-0)

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.

Mr. Cherneff.

(3-0; 3-0)

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)

412. (3) **Urban and Regional Economic Analysis**

The analysis of the economics of urban and regional areas. Topics to be discussed include location theory, regional accounting, urban and regional growth methods, application of input-output models and associated public policies.

Prerequisite: Economics 300.

Text: To be announced.

(3-0; 3-0)

415. (1-½) **Industrial Relations**

An examination of the development and nature of contemporary union-management relations including collective bargaining, and related public policy.

Text: To be announced.

(Not offered 1968-69.)

(3-0; 0-0)

416. (1-½) **Special Topics in Labour Economics**

Several topics, varying from year to year, will be the focus of lecture and student research, e.g., wage and employment theory, labour mobility, labour history, the theory of the labour movement, comparative industrial relations systems, the theory of bargaining, the public interest in collective bargaining, labour law, labour productivity, automation, etc.

Texts: To be announced.

(Not offered in 1968-69.) (0-0; 3-0)

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.

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

421. (1-½) **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.

(Not offered 1968-69.) (3-0; 0-0)

422. (1-½) **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.

(Not offered 1968-69.) (0-0; 3-0)

430. (3) **Economics of Natural Resources**

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. Special emphasis will be placed on resource development problems in Canada and in British Columbia.

Text: To be announced.

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

440. (3) **Mathematical Economics**

Utility and preference, theory of consumer demand, theory of the firm, aggregation, input-output analysis and linear programming.

Text: To be announced.

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

445. (3) **Econometrics**

The concept of an econometric model; the linear regression model applied to problems of economic analysis; linear programming; input-output analysis. Laboratory sessions will be devoted to preparation of data and the use of the computer. Prerequisites: Economics 340, Mathematics 222.

Text: To be announced.

Dr. Bakony. (3-1; 2-2)

NOTE: Admission to this course only with the permission of the Department.

470. (3) **Honours Seminar**

NOTE: For Honours students only.

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.

COMMERCE

Commerce 151 is open only to those students who are permitted to register in the Second Year.

151. (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.

Text: To be announced.

Mr. McQueen.

(3-0; 3-0)

DEPARTMENT OF ENGLISH

- Roy F. Leslie, M.A., Ph.D. (*Manchester*), Professor and Head of the Department.
Roger J. Bishop, B.A. (*Brit. Col.*), B.L.S., M.A. (*Tor.*), Professor.
John D. Peter, M.A. (*Cantab.*), B.A., LL.B., D.Litt. (*South Africa*), Professor.
Miss Ann Saddlemyer, B.A. (*Sask.*), M.A. (*Queen's*), Ph.D. (*London*), Professor.
(Leave of absence 1968-69.)
Robin Skelton, M.A. (*Leeds*), F.R.S.L., Professor.
Burton O. Kurth, B.A. (*Brit. Col.*), Ph.D. (*Calif.*), Associate Professor.
Chester L. Lambertson, M.A. (*New Brunswick*), Ph.D. (*Harvard*), Associate Professor.
(Leave of absence 1968-69.)
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.
Lionel Adey, 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 and Director
of Freshman English.
Michael R. Best, B.A., Ph.D. (*Adelaide*), Assistant Professor.
Miss Joan Coldwell, M.A. (*London*), Ph.D. (*Harvard*), Assistant Professor.
Melvyn D. Faber, B.A. (*Chicago*), M.A., Ph.D. (*U.C.L.A.*), Assistant Professor.
William J. Goede, B.A. (*Wis.*), Ph.D. (*Calif.*), Assistant Professor.
Bryan N. S. Gooch, M.A. (*Brit. Col.*), A.R.C.T. (*Tor.*), F.T.C.L. (*London*), Assistant
Professor.
Patrick Grant, B.A. (*Queen's, Belfast*), D.Phil. (*Sussex*), Assistant Professor.
John G. Hayman, M.A. (*Oxon.*), M.A. (*Cornell*), Ph.D. (*Northwestern*), Assistant
Professor.
Anthony W. Jenkins, M.A. (*Cantab.*), Ph.D. (*Calif.*), Assistant Professor.
Mrs. Patricia Köster, B.A. (*Brit. Col.*), M.A. (*Calif.*), Ph.D. (*London*), Assistant
Professor.
Samuel L. Macey, B.A. (*Brit. Col.*), Ph.D. (*Wash.*), Assistant Professor.
Colin J. Partridge, B.A., Ph.D. (*Nottingham*), Assistant Professor.
Nelson C. Smith, A.B. (*Princeton*), M.A.T. (*Oberlin*), Ph.D. (*Wash.*), Assistant
Professor.
Henry Summerfield, M.A. (*Oxon.*), M.Litt. (*Durham*), Assistant Professor.
David S. Thatcher, B.A. (*Cantab.*), M.A. (*McMaster*), Ph.D. (*Alta.*), Assistant
Professor.
Edward R. Zietlow, M.A. (*Boston*), Ph.D. (*Wash.*), Assistant Professor.
David J. Barron, M.A. (*Aberdeen*), Instructor. (Leave of absence 1968-69.)
Mrs. Carole Berger, B.A. (*Wells Coll.*), M.A. (*Calif.*), Instructor.
Dennis E. Brown, M.A. (*London*), Instructor. (Leave of absence 1968-69.)
Christopher J. Bullock, B.A. (*Leeds*), Instructor.
Peter G. Christmas, B.A. (*Swansea*), Instructor.
Alan F. Dilnot, B.A., B.Phil. (*Oxon.*), Instructor.
Miss Margaret Doody, B.A. (*Dalhousie*), B.A. (*Oxon.*), Instructor.
Timothy L. Evans, B.A. (*Cantab.*), Instructor.
Mrs. Thelma A. Hurst, B.A. (*West. Ont.*), Instructor.
George H. Forbes, B.A. (*Brit. Col.*), Instructor.
Alexander N. Hutchison, M.A. (*Aberdeen*), Instructor. (Leave of absence 1968-69.)
David L. Jeffrey, B.A. (*Wheaton*), Instructor.
Mrs. Marjorie R. Menhenett, B.A. (*Wellesley*), M.A. (*Calif.*), Instructor.
Victor A. Neufeldt, B.A. (*Brit. Col.*), Instructor.
Illtyd L. T. Perkins, B.A. (*Sussex*), Instructor.
Miss Donna E. Smyth, B.A. (*U. of Vic.*), M.A. (*Tor.*), Instructor.

Reginald C. Terry, M.A. (*Bristol*), Instructor. (Leave of absence 1968-69.)
 Miss Gillian M. V. Thomas, M.A. (*Sussex*), Instructor.
 Sean R. Virgo, B.A. (*Nottingham*), Instructor.
 Gordon A. J. Watt, M.A. (*Aberdeen*), Instructor. (Leave of absence 1968-69.)
 Trevor L. Williams, M.A. (*Manchester*), Instructor. (Leave of absence 1968-69.)
 Miss Carol Wootton, B.A. (*U. of Vic.*), A.R.T.C. (*Tor.*), L.R.S.M. (*London*),
 Instructor. (Leave of absence 1968-69.)
 Mrs. Margaret N. Cutt, M.A. (*Alta.*), Lecturer.
 Mrs. Velma Gooch, M.A. (*Alta.*), Lecturer.
 Mrs. Sheila M. Hogg, B.A. (*U. of Vic.*), M.A. (*Wash.*), Lecturer.
 Mrs. Eugenie L. Myles, M.A. (*Alta.*), Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

General — Students wishing to take English as one of the fields of concentration in their general programme should take in their First Year: English 100 (Literature and Composition); Second Year: English 200; Third and Fourth Years: a total of nine units in English courses numbered 400 and above.*

Major — Students wishing to Major in English should take in their First Year: English 100; Second Year: English 200; Third and Fourth Years: total of fifteen units in English courses numbered 400 and above.*

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, Honours work is controlled and closely supervised, but it also makes greater demands on a student's initiative and judgment than work in a General or Major course. Students who take a special interest in Language or Literature 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 approval of the Head of the Department. In the last three years candidates will offer at least 48 units of credit. Students are advised to take English 245 in their Second Year. In the Third and Fourth Years students are required to take English 441, 443, 446, 447, and 499 (Graduating Essay). Students are also required to select 15 units from the general course offerings of the Department in an approved field.* With approval, an additional three units may be taken outside the Department. Candidates will present evidence by the end of the Fourth Year of a reading knowledge of Italian, French, German, Spanish, Russian, Latin or Greek. At the end of the Fourth Year there will be an interview at which the student may be required to defend his Graduating Essay.

*Students who wish to major or honour in English, or who choose English as one of their fields of concentration in the General Programmes, may take Linguistics 390 as part of their English programme with the consent of the Head of the Department of English.

PREREQUISITES

All students in the First Year are required to take English 100 (Literature and Composition). This course or its equivalent is prerequisite to all other English courses.

English 200 or English 201 is prerequisite for all English courses above 300.

English 201 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 be taken for additional credit by students who must enrol in English 200.

From 1969-70 English 203 will be a prerequisite for English 426, 427, 428 and 429.

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*.

COURSES OFFERED

FIRST YEAR

100. (3) Literature and Composition

A study of literature and of the principles of composition. Themes and exercises are required.

Texts: *Modern Poetry*, ed., Maynard Mack et al., 2nd ed.; *31 Stories*, eds. M. R. Booth and C. S. Burhans; Guth, *Concise English Handbook* (2nd edition).

Two or three novels will be selected by individual instructors from the following: Hardy, *Tess of the d'Ubervilles*; Lawrence, *Sons and Lovers*; Hemingway, *For Whom the Bell Tolls*; Faulkner, *Light in August*; Orwell, *Nineteen Eighty-Four*; Greene, *Brighton Rock*.

Drama texts will be announced before the second term.

Approved editions of the above texts will be available in the University Bookstore. Members of the Department. (4-0; 4-0)

SECOND YEAR

200. (3) A survey of British Literature from the Elizabethan to the Romantic period.

Essays will be required.

This course is prerequisite for all students 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.); Swift, *Gulliver's Travels*; Shakespeare, *Hamlet*; Austen, *Pride and Prejudice*; Fielding, *Joseph Andrews*.

Members of the Department. (3-0; 3-0)

201. (3) Studies in Literature giving insight into the ideas and attitudes of the modern world. The forms of drama and narrative will be emphasized. Essays will be required.

Texts: Shakespeare, *Measure for Measure*; Golding, *The Inheritors*; Forster, *Passage to India*; Fitzgerald, *The Great Gatsby*; Hardy, *The Mayor of Casterbridge*; Eliot, *Selected Poems*; Hemingway, *The Snows of Kilimanjaro, and Other Stories*; Crane, *The Red Badge of Courage*; Styron, *The Long March*; Camus, *The Plague*; Cary, *The Horse's Mouth*; Beckett, *Endgame*; Lawrence, *Complete Short Stories*, Vol. 1; Brecht, *The Caucasian Chalk Circle*; Conrad, *Heart of Darkness*; Background Reading — Barrett, *Irrational Man*. In addition to the above materials, another selection of poems will be chosen by the instructor.

Members of the Department. (3-0; 3-0)

202. (3) Writing

Practice in imaginative writing, with particular attention to the short story, the novel, the one-act play, and to contemporary verse forms. Permission of the Department is required.

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

203. (3) An Introduction to American Literature

A survey of American literature from colonial times to the present.

Texts: *The American Tradition in Literature* (3rd Edition, Norton Anthology — shorter ed.); other texts to be announced.

Members of the Department. (3-0; 3-0)

245. (3) Practical Criticism

A seminar giving practice in individual judgment of literary forms, with some introduction to the principles of criticism. Students will be allowed to select this course only if they have the approval of the Head of the Department.

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

THIRD AND FOURTH YEARS

300. (3) **English Composition**

A study of the principles and practice of good writing. *For credit in the Faculty of Education only.*

Texts: *Webster's New Collegiate Dictionary*; *Roget's Thesaurus*; A. H. Hoole, *The Fundamentals of Clear Writing*; Perrine, *Sound and Sense*; *An Introduction to Poetry*. Other texts to be announced.

Members of the Department.

(3-0; 3-0)

301. (3) **Children's Literature**

A survey of children's literature from early sources to recent books. A historical approach to the appraisal of books and authors for children. *For credit only in the Faculty of Education.*

Text: Johnson et al., eds., *Anthology of Children's Literature*.

(3-0; 3-0)

390. (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 linguistic 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.

Texts: See Linguistics 390.

Dr. Scargill and Dr. Kess.

(3-0; 3-0)

400. (3) **Advanced English Composition**

This course offers students practice in the writing and criticism of essays and prose composition in general. Principles and practice of rhetoric are also covered. Competent use of the English language is prerequisite.

Texts: A good dictionary (*Webster's Collegiate*, *The Concise Oxford*); *Roget's Thesaurus*; Read, *English Prose Style*.

(3-0; 3-0)

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 Department.

(3-0; 3-0)

402. (3) **The Theory and Practice of Fiction**

A Creative Writing course which includes the study of prose structures and the forms of the novel, conte, and short story.

Prerequisite: Consent of the Department.

(3-0; 3-0)

403. (3) **The Theory and Practice of Drama**

A Creative Writing course which includes the study of the various dramatic forms and conventions.

Prerequisite: Consent of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

404. (3) **The Writing of Poetry**

A Creative Writing course for advanced students.

Prerequisite: English 401 or the consent of the Department.

(3-0; 3-0)

405. (3) **The Writing of Fiction**

A Creative Writing course for advanced students.

Prerequisite: English 402 or the consent of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

406. (3) **The Writing of Drama**
 A Creative Writing course for advanced students.
 Prerequisite: English 403 or the consent of the Department.
 (Not offered 1968-69.) (3-0; 3-0)
408. (3) **Skelton to Donne**
 Tudor literature with emphasis on non-dramatic forms.
 Texts: To be announced. (3-0; 3-0)
410. (3) **The Renaissance Background of Ideas: Boethius to Bacon**
 A study of the main currents of thought contributing to late medieval and Renaissance literature.
 Texts: To be announced. (3-0; 3-0)
411. (3) **The Development of English Drama to 1642**
 Main emphasis upon the major Elizabethan dramatists, including Shakespeare; some attention is given to the influence of Greek and Roman dramatic theory and practice.
 Texts: Brooke and Partridge, *English Drama, 1580-1642; Medieval and Tudor Drama*, John Gassner, ed., Bantam edition. (3-0; 3-0)
413. (3) **Shakespeare Survey**
 Lectures on the development of Shakespeare's art in the histories, comedies and tragedies.
 Text: To be announced. (3-0; 3-0)
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 Department is necessary.
 Texts: To be announced. (3-0; 3-0)
418. (3) **Poetry and Prose of the 17th Century excluding Milton and Dryden**
 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.
 Texts: To be announced. (3-0; 3-0)
419. (3) **Milton and some related figures**
 The emphasis will be on Milton's poetry.
 Text: *Milton, Complete Poetry and Major Prose*, ed. N. Y. Hughes. (3-0; 3-0)
420. (3) **Non-dramatic Literature of the Restoration and the Augustan Periods**
 Particular emphasis will be placed on Restoration Comedy, Dryden, Pope, Swift and Dr. Johnson.
 Texts: To be announced. (3-0; 3-0)
421. (3) **Literature of the Mid and Late 18th Century**
 Poetry and criticism of the period. (3-0; 3-0)
422. (3) **British Drama from the Restoration to the end of the 19th Century**
 Texts: To be announced. (3-0; 3-0)
423. (3) **The beginning of the British Novel in the 17th and 18th centuries**
 Texts: To be announced. (3-0; 3-0)
424. (3) **The British Novel in the 19th Century**
 Texts: To be announced. (3-0; 3-0)

426. (3) **Problems in American Literature**
 A seminar concentrating on a single area or on a major figure of American literature.
 Prerequisite: English 203 or consent of the Department.
 Texts: To be announced.
 (Not offered 1968-69.) (3-0; 3-0)
427. (3) **American Poetry**
 An historical survey of American poetry from its beginnings to the early twentieth century.
 Texts: To be announced. (3-0; 3-0)
428. (3) **American Prose Literature to 1890**
 A study of the major American prose writers with emphasis on the development of the novel and short story. Emerson, Thoreau, Poe, Hawthorne, Melville, Twain and James are closely examined.
 Texts: To be announced. (3-0; 3-0)
429. (3) **American Fiction since 1890**
 An intensive examination of major American fiction from Henry James to writers of contemporary works, especially Hemingway, Fitzgerald and Faulkner.
 Texts: To be announced. (3-0; 3-0)
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. (3-0; 3-0)
431. (3) **Victorian Poetry (1830-1890)**
 Chiefly Tennyson, Browning, Arnold and Hopkins. Some time is spent on Fitzgerald, D. G. Rossetti, Swinburne, E. B. Browning, Clough, and Morris.
 Text: *Victorian and Later English Poets*, Stephens, Beck and Snow, ed. Further texts to be announced. (3-0; 3-0)
432. (3) **Victorian Prose**
 A survey of currents of thought in 19th Century Literature.
 Texts: To be announced. (3-0; 3-0)
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, Hopkins, 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*. (3-0; 3-0)
434. (3) **Major Modern Poets of Britain and America**
 Texts: To be announced. (3-0; 3-0)
436. (3) **20th Century British Fiction**
 Texts: To be announced. (3-0; 3-0)
437. (3) **British and American Drama Since World War I**
 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 Dumb Waiter*, *The Caretaker*; Bolt, *A Man for All Seasons*; Mortimer, *Two Stars for Comfort*; Arden, *Sergeant Musgrave's Dance*; Shaffer, *The Royal Hunt of the Sun*; O'Neill, *The Iceman Cometh*, *The Emperor Jones*; Odets, *Awake and Sing*; Steinbeck, *Of Mice and Men*; Rice, *The Adding Machine*; Wilder, *Our Town*; Connelly, *Green Pastures*; Maxwell Anderson, *Winter-set*; 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*; N. F. Simpson, *One Wall Pendulum*, *A Resounding Tinkle*. Further texts to be announced. (3-0; 3-0)

438. (3) **Canadian Literature**

A survey of the literature in the English tongue, with some attention to major French-Canadian works in translation. Emphasis will be placed on achievements within the past 75 years, with reference to influential movements in the United States and Britain.

(Not offered in 1968-69.) (3-0; 3-0)

439. (3) **Commonwealth Literature**

(Not offered 1968-69.) (3-0; 3-0)

HONOURS COURSES

With the consent of the Department these courses are open to interested students not registered in Honours.

441. (3) **Old English Literature and the Development of the Language**

An elementary study of Old English language and literature and the history of the language up to modern English.

Texts: Sweet's *Anglo Saxon Reader*, 1967 edition, revised by Dorothy L. Whitlock; G. L. Brook, *Introduction to Old English*. (3-0; 3-0)

443. (3) **Introduction to Chaucer**

A study of Chaucer with emphasis on the *Canterbury Tales*.

Prerequisite: Consent of the Department.

Texts: *Chaucer's Major Poetry*, ed. A. C. Baugh; *The Age of Chaucer* (Pelican Guide to English Literature), ed. Boris Ford. Other texts to be announced. (3-0; 3-0)

444. (3) **Middle English Literature**

A study of Chaucer's *Troilus* and his other major works (excluding the *Canterbury Tales*) in relation to fourteenth and fifteenth century literature. Other works such as *Piers Plowman*, *Gawain*, *Pearl* will also be studied.

Prerequisite: Consent of the Department.

Texts: *Pearl and Sir Gawain* (Everyman's Library), ed. A. C. Cawley; Robert Henryson, *Poems*, ed. Charles Elliott. Other texts to be announced. (3-0; 3-0)

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: Twenty Major Statements*, ed. Charles Kaplan. (3-0; 3-0)

447. (3) **Fourth Year Honours Seminar, History of Ideas**

A seminar in the influence of the main currents of European thought on English literature.

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

499. (3) **Graduating Essay in Honours**

DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

- David A. Griffiths, M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Associate Professor and Acting Head of the Department.
- Miss Gwladys V. Downes, M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Professor.
- W. Harry Hickman, M.A. (*Brit. Col.*), Docteur de l'Université de Paris, Professor. (Leave of absence 1968-69.)
- 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.C.S., Professor.
- Ralph W. Baldner, A.B. (*Miami, Ohio*), M.A. (*Vanderbilt*), Ph.D. (*Calif.*), Associate Professor. (Leave of absence 1968-69.)
- 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. (*Univ. of Penn.*), Associate Professor.
- Ronald R. Jeffels, C.D., B.A., B.Ed. (*Alta.*), M.A. (*Cantab.*), Associate Professor.
- Miss Jeanne E. Bourguès, L. ès L. (*Toulouse*), Visiting 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, M.A. (*Laval*), Docteur de l'Université de Poitiers, Assistant Professor.
- Kôji Nishimoto, B.A., M.A. (*Tokyo*), Doct. (*Laval*), Docteur de l'Université de Paris, Visiting Assistant Professor.
- Mrs. Bérange B. Steel, L. ès L. (*Paris*), Assistant Professor.
- Jean-Claude Vilquin, L. ès L. (*Paris*), C.A.P.E.S., Visiting Assistant Professor.
- Barrington, F. Beardsmore, B.A. (*Liverpool*), M.A. (*McMaster*), Instructor.
- John C. E. Greene, B.A., M.A. (*Alta.*), Instructor.
- Kenneth R. Prior, B.A. (*London*), Instructor.
- Neil V. J. Thompson, B.A. (*London*), Instructor.
- Keith Q. Warner, L. ès L. (*Caen*), D.E.S. (*Caen*), Instructor.
- Mrs. Marie-Paule Vinay, docteur en psychologie, docteur en sciences politiques, économiques et sociales (*Paris*), part-time Lecturer.
- Claude P. Bouygues, L. ès L., C.A.P.E.S., D.E.S. (*Paris*), Visiting Lecturer.

GENERAL, MAJOR AND HONOURS PROGRAMMES

NOTE: All students planning to take a concentration in a General Programme or a Major or Honours in the Department must take English 200 and Linguistics 100.

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 French normally requires a total of 66 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 280 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 280 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 92 has not been passed in high school); Second Year: French 280 and 290; Third and Fourth Years: French 302 and 320/420 and at least four other French courses numbered above 400, selected after consultation with the Head of the Department.

COURSES OFFERED

Students from secondary schools with credit in French 12, 110 or 120 will be placed in French 180, 240 or 280 according to their previous record and to their academic plans.

140. (3) Elementary French

(Prerequisite: French 11) — Study of French texts, grammar, pronunciation, oral practice.

Text: *En France comme si vous y étiez* (Students' handbook). (2-2; 2-2)

150. (3) First year University French offered by the Voix et Images de France method

Prerequisite: secondary school French.

NOTE: In 1968, offered in Summer Session only, 25 hours per week. (5-1; 5-1)

180. (3) French Language and Literature

(Prerequisite: French 12) — Study of French texts, grammar, pronunciation.

Texts: *Contes modernes* (ed. H. Peyre); Molière, *Le Bourgeois gentilhomme*; Camus, *L'Etranger*; and others to be announced. (4-0; 4-0)

240. (3) Intermediate French

(Prerequisite: French 140.)

Texts: Carlut and Meiden, *French for Oral and Written Review* (Holt, Rinehart and Winston); Camus, *L'Etranger* (Appleton-Century-Crofts); and others to be announced. (4-0; 4-0)

280. (3) French Language and Literature

(Prerequisite: French 180) — For students taking this as a terminal course.

Texts: Voltaire, *Candide*; Gide, *La Symphonie pastorale*; Mauriac, *Thérèse Desqueyroux*; Anouilh, *Antigone*; Gide, *L'Ecole des femmes* (Bordas); another to be announced. (4-0; 4-0)

280. (3) French Language and Literature, Sections 1 and 2

(Prerequisite: French 180) — For students taking this course, in conjunction with French 290, as prerequisite for a major or an Honours programme.

Texts: Sanders et Creighton, *A travers les siècles*, (Macmillan, Canada); François Mauriac, *Thérèse Desqueyroux* (Livres de Poche Université Hachette). (3-0; 3-0)

290. (3) French Oral and Written Practice

(Corequisite: French 280).

Texts: O'Brien, Lafrance, Brachfeld, *Advanced French* (Blaisdell Publishing Co.); Marguerite Dubois, *Dictionnaire Moderne*, Français/Anglais, Anglais/Français (Dictionnaire Larousse); *Vocabulaire d'Initiation à la critique et à l'explication littéraire* (Chilton Books); and others to be announced. (4-0; 4-0)

NOTE: French 290 by itself does not fulfil the 200 level language requirement for the B.A. degree.

302. (3) Advanced Composition and Stylistics

Texts: Whitmarsh, *Cours supérieur*; Gide, *L'Ecole des femmes*; Maurois, *Le Cercle de famille*; and others to be announced. (2-2; 2-2)

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. (5-1; 5-1)

NOTE: In 1968, offered in Summer Session only, 25 hours per week.

401. (3) **Literature of the Eighteenth Century**

Texts: Havens, *The Age of Ideas*, and principal writings of Prévost, Marivaux, Voltaire, Rousseau, Diderot, Laclous. (3-0; 3-0)

409. (3) **Literature of the Seventeenth Century**

Texts: Lagarde et Michard, *XVIIe. Siècle*; *La Princesse de Clèves* (ed. Ashton); and the following in Bordas edition: *Le Cid*; *Polyeucte*; *Britannicus*; *Phèdre*; *L'Ecole des Femmes*; *Tartuffe*; *Le Misanthrope*. (3-0; 3-0)

411. (3) **Nineteenth Century Part I (Romanticism)**

(Not offered 1968-69). (3-0; 3-0)

412. (3) **Nineteenth Century Part II**

Parnassian and symbolist poetry; realism, naturalism and idealism in the novel and theatre.

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

415. (3) **Modern French Theatre**

Texts: Representative plays of Jarry, Claudel, Giraudoux, Anouilh, Montherlant, Sartre, Camus, Beckett, Ionesco, etc. (3-0; 3-0)

416. (3) **Modern French Novel**

(Not offered 1968-69.) (3-0; 3-0)

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

(Not offered 1968-69.) (3-0; 3-0)

- 320/420. (3) **Honours Seminar**

To be taken in both Third and Fourth Years.

Under the direction of members of the Department an Honours candidate, in both Third and Fourth Years, will read widely in the literature of the various centuries, particularly in those in which he has not taken a lecture course. He will also write at least four major essays during the two-year period. The final examination in this course will consist of a comprehensive written and a comprehensive oral test.

(3-0; 3-0)

425. (3) **History of the Language**

(Not offered 1968-69). (3-0; 3-0)

426. (3) **Comparative Stylistics of French and English**

A contrastive study of the stylistic resources of French and English at the structural and cultural levels.

Texts: Vinay & Darbelnet, *Stylistique comparée du français et de l'anglais* (Montréal, Beauchemin); *Cahier d'exercices No 1* (Montréal, Beauchemin). (3-0; 3-0)

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

(3-0; 3-0)

DEPARTMENT OF GEOGRAPHY

Bryan H. Farrell, M.A. (*Wash.*), B.A., Ph.D. (*N.Z.*), Professor and Head of the Department.

Charles N. Forward, M.A. (*Brit. Col.*), Ph.D. (*Clark*), Associate Professor.

Charles H. Howatson, M.A. (*Brit. Col.*), Associate Professor.

D. Richard Lycan, B.S. (*Idaho*), A.M. (*George Washington*), Ph.D. (*Wash.*), Associate Professor.

W. R. Derrick Sewell, B.Sc. (*London*), M.A., Ph.D. (*Wash.*), Associate Professor.

W. John Maunder, M.Sc. (*N.Z.*), Ph.D. (*Otago*), Assistant Professor.

Eric D. Ross, M.A. (*New Brunswick*), Ph.D. (*Edinburgh*), Assistant Professor.

Harold D. Foster, B.Sc. (*London*), Instructor.

Elizabeth A. M. Forrester, B.Sc. (*Glasgow*), M.A. (*Brit. Col.*), Senior Laboratory Instructor.

Paul H. Juncker, B.Sc., M.S. (*Calif.*), Instructor.

Stephen K. Newsom, B.A. (*Oregon*), M.A. (*Wash.*), Instructor.

Hilary B. Thomas, B.Sc. (*Wales*), Laboratory Instructor.

John F. Bryant, Senior Academic Assistant.

Geography may be offered for the B.A. or B.Sc. degrees in the Honours, Major, or General programmes, and for the M.A. degree in accordance with University regulations.

Students expecting to enter either the Honours or Major programmes are advised to take Mathematics 130 or 140; all students are advised to select French, Russian or German in fulfilment of general University requirements.

Specific information concerning particular combinations of courses leading to specific objectives in professional Geography is available from the Department.

GENERAL, MAJOR AND HONOURS PROGRAMMES

B.A. Programme

General—In the first two years courses must include Geography 101 and one of Geography 201, 203 or 204. In the third and fourth years three courses numbered 300 or above must be selected one of which must be a regional course (marked R).

Major—First and Second Years: Geography 101, 201, and 203. Except with the permission of the Department, a student's programme must normally include Mathematics 140. A student who has not taken all of these courses by the end of his second year may complete the requirement as part of his third-year programme, in accordance with general University regulations. Third and Fourth Years: Geography 300 and at least four other courses numbered 300 or above. At least one regional course (marked R) must be taken.

Honours—First and Second Years as for Majors: Third and Fourth Years: Geography 300 and 499, and at least 18 other units in Geography or appropriate related fields, the choice of which must be made in consultation with members of the Department of Geography. At the end of the Fourth Year, a candidate shall submit to a general examination in his main field.

B.Sc. Programme

General—In the first two years courses must include Geography 101 and 203. In the third and fourth years three courses numbered 300 or above must be selected from 300, 302, 306, 401, 402, 412, 441.

Major—First Year: Geography 101 and one course in science normally chosen from courses offered by the Departments of Biology, Chemistry and Physics. Second

Year: Geography 201, 203, Mathematics 220 or 221, and at least one other science course not yet taken. A student who has not taken all of these courses by the end of his second year may complete the requirement as part of his third-year programme, in accordance with general University regulations. Third and Fourth Years: fifteen units of Geography must be taken, to include Geography 300, 302, 306 and 412.

Honours — First and Second Years: as for Major, but prospective candidates are advised to consult the Department at the end of the First Year. Third and Fourth Years: Geography 499 and at least twenty-one units of Geography chosen in consultation with the Department from Geography 300, 302, 306, 401, 402, 410, 441, 445, or from other courses in geography or related fields which the Department considers appropriate to an individual course of study. At the end of the Fourth Year, a candidate shall submit to a general examination in his major field.

For each year, in all programmes, a field trip may be organized which students of certain courses will be expected to attend and for which a moderate fee will be charged. Ample notice of field trips will be given to the students in the courses concerned. A materials fee will be charged students enrolled in Geography 300 and 401.

COURSES OFFERED

Geography 101 is prerequisite to all other geography courses except Geography 303. This prerequisite may be waived by the Department in certain circumstances.

101. (3) **Introduction to Geography**

An introduction to the viewpoint of Geography, to the geographic study of the physical and human elements in area; to regional interpretation and world patterns and to maps and elementary methods of cartographic analysis. (2-2; 2-2)

201. (3) **Economic Geography**

An analytical survey of the areal distribution of economic activity, regional economies, world patterns of production and exchange, and sources and uses of energy. A study of demographic and cultural phenomena as they relate to economic activity is included.

Dr. Sewell.

(2-2; 2-2)

203. (3) **Physical Geography**

A study of the elements of climate, the origin and distribution of landforms, soils and vegetation, and the inter-relationships of these four major physical elements.

(2-2; 2-2)

204. (3) **Canada and the United States**

A regional approach to the study of Canada and the United States which will include consideration of landforms, climate, soils, vegetation, national resources, population characteristics and the distribution of economic activities. (3-0; 3-0)

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.

Prerequisite: Mathematics 130 or 140 or permission.

(2-2; 2-2)

302. (3) **Climatology**

Basic meteorological processes, interpretation of weather maps, weather forecasting, selected topics in physical, economic, and applied climatology.

Prerequisite: Geography 203 or permission.

Dr. Maunder.

(2-2; 2-2)

303. (3) **General Geography**

A survey of various aspects of the field of geography including physical, human and regional. This course with the consent of the Department may be substituted for Geography 101 as a prerequisite to other third and fourth year courses. Not open to students credited with Geography 101. (2-2; 2-2)

304. (3) **The Geography of Population and Settlement**

Population distribution and patterns of settlement; population problems; physical and cultural factors affecting settlement; emphasis placed on map and aerial photograph interpretation. (3-0; 3-0)

305. (3) **Urban Geography**

The rise and growth of cities; the process of urbanization; economic base of cities; cities as central places; urban land use mapping; commercial, residential and industrial structure of cities and the urban-rural fringe.

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

306. (3) **Biogeography**

An analysis of the areal distribution of plant, soil and animal communities. Historical aspects of plant and animal dispersal and migration, and their relation to present day distribution patterns will be considered. Major emphasis will be placed upon distribution in relation to present environmental factors, both physical and cultural, with particular attention to vegetation-soil relationships. Geography 203 or Biology 320 strongly recommended.

Mr. Juncker. (2-2; 2-2)

307. (3) **Historical Geography**

The geographical significance of the discovery, exploration and colonization of North America with special emphasis given to Canada. Geographical settings will be reconstructed for periods of particular historical significance. History 102 is recommended.

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

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. (3-0; 3-0)

309. (3) (R.) **East Asia**

A geographic survey of East Asia which will include China, Japan, Korea and Mongolia. Emphasis will be placed on the basic cultural and physical factors and underlying contemporary problems faced by these countries and the measure of success they have achieved in building viable national states. (3-0; 3-0)

310. (3) **Industrial Geography**

(Not offered 1968-69.) (2-1; 2-1)

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 inter-action 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 instructors.

Staff. (3-0; 3-0)

312. (3) (R.) **Geography of the Southwest Pacific**

A study of Australia, New Zealand, and the island territories of the Southwest Pacific. Attention will be paid to the geographic implications of the agricultural economy and limited markets of New Zealand, problems associated with the use of Australia's more varied resources, and the difficulties that must be faced in the development of poorly endowed island territories supporting numerous ethnic groups and a wide variety of political administrations.

Dr. Farrell, Mr. Foster.

(3-0; 3-0)

401 (3) **Cartography and Air Photo Interpretation**

A course intended to develop skill and judgment in the design and execution of maps and other graphics frequently used by geographers; the uses of specialized equipment and materials including map reproductions; the uses of aerial photographs and maps as sources of data and photo mensuration techniques. Field trips may include visits to governmental mapping agencies and use of aerial photographs in the field.

Prerequisite: Geography 300.

Mr. Newsom.

(2-2; 2-2)

402. (3) **Quantitative Methods in Geography**

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

Mr. Newsom.

(1-2; 1-2)

403. (3) **Agricultural Geography**

Crop and livestock combinations, farm labour and techniques, land tenure, disposal of products and associated features as they contribute to the individuality of areas, together with a study of the variable character of major agricultural regions. Consent of the instructor.

(3-0; 3-0)

405. (3) **Geography of Transport**

(3-0; 3-0)

406. (3) **Geography of Resources: Management and Conservation**

A study of factors conditioning the management and conservation of natural resources in various parts of the world. Attention will be focussed on problems of the disparate world distribution of resources, their relations with rapidly-growing populations and their role in raising the standards of living of less-developed parts of the world. Past approaches to the management of resources will be examined and factors that have led to changes in such approaches will be suggested.

Dr. Sewell.

(3-0; 3-0)

408. (3) (R.) **Geography of Europe**

(Not offered 1968-69.)

(3-0; 3-0)

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)

411. (3) **Political Geography**

(Not offered 1968-69.)

(3-0; 3-0)

412. (3) **Geomorphology**

A geography of landforms including a study of the processes and principles concerned with the development of landscape, types of landforms and their distribution.

Prerequisite: Geography 203.

Mr. Foster.

(2-2; 2-2)

441. (3) **Seminar in Physical Geography**

Section 1. Problems in weather modification, climatic change, economic climatology, agroclimatology, soil and vegetation classification, tropical soils, biological and physical aspects of resource use.

Prerequisite: Consent of instructor.

Dr. Maunder, Mr. Foster, Mr. Juncker.

(0-0-3; 0-0-3)

443. (3) **Seminar in Regional Geography**

Problems in Historical Geography.

Prerequisite: Consent of the instructor.

Dr. Ross.

(0-0-3; 0-0-3)

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)

499. (3) **Honours Essay**

GEOLOGY

200. (3) **General Geology**

Physical and historical geology. Origin and structure of the earth, materials of the earth, diastrophism, erosion, landforms, mineral deposits, history of the earth and the development of life.

Mr. Howatson.

(2-2; 2-2)

GRADUATE COURSES

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

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

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

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

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

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

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

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

599. (credit to be determined) **M.A. Thesis**

DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURE

J. Beattie MacLean, B.A. (*Brit. Col.*), M.A., Ph.D. (*Wash.*), Professor and Head of the Department.
Miss Herta M. Hartmanshenn, Ph.D. (*Marburg*), Associate Professor.
Frederick Kriegel, 2nd State Certificate (*Vienna*), Assistant Professor.
Walter E. Riedel, B.Ed., M.A. (*Alta.*), Ph.D. (*McGill*), Assistant Professor.
Rodney T. K. Symington, B.A. (*Leeds*), Instructor.

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 Germanic Languages and Literature must take English 200 and Linguistics 100.

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 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—First Year: German 100 or 140; Second Year: German 260 and 290; Third and Fourth Years: Nine units of German courses chosen from 302 and those numbered 400 or above.

Major—First Year: German 100 or 140; Second Year: German 260 and German 290; Third and Fourth Years: German 302 and at least twelve units in German courses numbered 400 or above.

Honours—First Year: German 100 or 140; Second Year: German 260 and German 290; Third and Fourth Years: German 302, 410 and at least four other courses numbered 400 or above.

COURSES OFFERED

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.

* Credit cannot be granted for these courses taken in 1st and 2nd year in the Major and Honours programme.

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.); MacLean, Hartmanshenn, Kriegel, *2000 Jahre deutsches Leben* (selected readings); Hagboldt, *Allerlei*. (4-1; 4-1)

140. (3) **Elementary German**

Survey of grammar; readings in German literature. (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*.

(4-1; 4-1)

190. (1½) **German Reading Course**

Reading of journals, and general and scientific articles, designed to meet the needs of students entering graduate school or of those who want practice in reading comprehension. Each student will be assigned readings in his special field. Limited normally to students in 3rd or 4th year or in graduate studies. (Prerequisite: German 100 or 140.)

Texts: Bithell and Dunstan, *A German Course for Science Students*. (2-0; 2-0)

240. (3) **Intermediate German**

Literary reading, grammar and composition, conversational practice. (Normally intended as a terminal course in German.)

Texts: Heller & Ehrlich, *German Fiction and Poetry*; MacLean, Hartmanshenn, Kriegel, *2000 Jahre deutsches Leben* (selected readings); Russon, *Complete German Course*; Cassell, *Compact German Dictionary*. (3-1; 3-1)

260. (3) **Introduction to German Literature**

Literary readings; grammar and composition; conversational practice. (Open to students with a high standing in German 100 or 140, or equivalent.)

Texts: Brecht, *Das Leben des Galilei*; Frisch, *Andorra*; Dürrenmatt, *Besuch der alten Dame*; Marla Rado, ed., *Begegnungen von A bis Z*; Lehmann, Rehder et al., *Review and Progress in German*; Cassell, *Compact German Dictionary*. (3-1; 3-1)

290. (3) **German Composition and Conversation**

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

Texts: Müller, *Deutsch* (Erstes Buch); Steinhauer, *Kulturlesebuch für Anfänger* (rev. ed.). (3-1; 3-1)

NOTE: German 290 by itself does not fulfil the 200-level language required for the B.A. degree.

302. (3) **Advanced Composition and Stylistics**

Intensive training in oral and written composition.

Texts: Neuse, *Deutscher Sprachgebrauch*; de Haar, *Im Zeichen der Hoffnung* (This text is provided by the Department). (3-1; 3-1)

400. (3) **Nineteenth-Century German Literature**

(Emphasis on the Drama.)

Representative works of Grabbe, Büchner, Grillparzer, Nestroy, Hebbel, Kleist, Hauptmann, Fontane and Raabe. (3-0; 3-0)

401. (3) **Twentieth-Century German Literature**

Texts: Hauptmann, *Bahnwärter Thiel*; Kafka, *Verwandlung*; T. Mann, *Tonio Kröger*, *Tod in Venedig*; Bergengruen, *Feuerprobe*; Hesse, *Steppenwolf*; and others, especially dramas, to be announced. (3-0; 3-0)

404. (3) **The Romantic Movement**

(Not offered in 1968-69).

(3-0; 3-0)

408. (3) **German Poetry from 1830 to the Present**
 (Not offered in 1968-69.) (3-0; 3-0)
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, *Minna von Barnhelm*, *Nathan der Weise*; Schiller, *Maria Stuart*; Goethe, *Poems* (Boyd), *Iphigenie auf Tauris*, *Faust (Pt. I)*, *Goethe erzählt sein Leben* (Fisher, 136). (3-0; 3-0)
412. (3) **Reformation and Baroque**
 (Not offered in 1968-69.) (3-0; 3-0)
414. (3) **German Literature from Aufklärung to Sturm und Drang**
 (Not offered in 1968-69.) (3-0; 3-0)
417. (3) **The German Novelle**
 A study of the development of the German Novelle from Goethe to the present day.
 Texts: To be announced.
430. (3) **Directed Reading Course**
 (By permission, for Honours or Major students.) (3-0; 3-0)
490. (3) **Honours Seminar**
 (The Seminar may include a graduating essay.) (3-0; 3-0)

DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

- Pablo Cabañas, Licenciado (*Madrid*), 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 in Spanish.
- Ross E. Butler, Jr., B.A., M.A. (*Oregon*), Instructor in Spanish.
- Miss Josefa Guerrero, Licenciada en Filosofía y Letras (*Seville*), B.A. (*London*), Instructor in Spanish. (Leave of absence 1968-69.)
- Miss Caroline Monahan, B.A., M.A. (*Brit. Col.*), Instructor in Spanish.

GENERAL, MAJOR AND HONOURS PROGRAMMES

NOTE: All students planning to take a concentration in a General Programme or Majors or Honours in the Department of Hispanic and Italian Studies must take English 200 and Linguistics 100.

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. The course numbered 302 must be taken in the 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.

100. (3) **Beginners' Spanish**

Intensive oral method with grammar, composition, translation, and work in the language laboratory.

Texts: The Modern Language Association, *Modern Spanish, Second Edition*, and *Writing Modern Spanish*; supplementary material to be announced. (3-2; 3-2)

140. (3) **Elementary Spanish**

Review of grammar; translation, composition, oral work in language laboratory.

Texts: To be announced. (4-1; 4-1)

240. (3) **Intermediate Spanish**

(Normally intended as a terminal course in Spanish). Intensive review of grammar; translation, composition, oral work.

Texts: The Modern Language Association, *Continuing Spanish I*; Work Book, and other texts to be announced. (3-1; 3-1)

260. (3) **Introduction to the Literature of Spain and Spanish America**

(For students who intend to do major or honours work in Spanish). Must be taken in conjunction with Spanish 290. May be taken without Spanish 290 as an elective.

Study of modern authors, composition, and assigned themes.

Texts: Marín, *La civilización española*; V. Blasco Ibáñez, *La barraca*; Güiraldes, *Don Segundo Sombra*; García Lorca, *Yerma*; Blecua, *Floresta lirica española*, 2nd edition, Vol. 2 only. (4-0; 4-0)

290. (3) **Review Grammar and Conversation**

(For students who intend to do major or honours work in Spanish). Must be taken in conjunction with Spanish 260. May be taken without Spanish 260 as an elective.

Intensive review of grammar. Detailed study of the Spanish language.

Texts: Tarr and Centeno, *A Graded Spanish Review Grammar with Composition*; other texts to be announced. (3-0; 3-0)

NOTE: Spanish 290 by itself does not fulfil the 200-level language requirement for the B.A. degree.

302. (3) **Advanced Composition and Stylistics**

Intensive training in oral and written composition.

Texts: Ayllón & Smith, *Spanish Composition through Literature*; and Harmer & Norton, *A Manual of Modern Spanish*. (4-0; 4-0)

400. (3) **The Spanish Realist Novel of the Nineteenth Century**

Texts: Juan Valera, *Pepita Jiménez*; Galdós, *Marianela*, *La de Bringas*, *Miau*, *Misericordia*; Pereda, *Sotileza*; Emilia Pardo Bazán, *Los Pazos de Ulloa*; Clarín; *La Regenta*. (3-0; 3-0)

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.

Texts: Unamuno, *En torno al casticismo*, *Andanzas y visiones españolas*, *San Manuel Bueno, Mártir*; Azorín, *Visión de España*; Baroja, *El Mayorazgo de Labraz*, *El árbol de la ciencia*; Antonio Machado, *Poesías completas*. (3-0; 3-0)

402. (3) **Cervantes**

The life and works of Cervantes, with emphasis on *Don Quijote* and selected *Novelas ejemplares*.

Texts: Miguel de Cervantes, *Don Quijote de la Mancha*; and others to be announced. (3-0; 3-0)

403. (3) **Introduction to the Golden Age**

Spanish literature of the sixteenth and seventeenth centuries, with the exception of the novel.

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

404. (3) **The Literature of Spanish America**

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

405. (3) **The Golden Age Novel, Excepting Cervantes**

Development of the Spanish novel from its beginnings to the end of the seventeenth century.

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

406. (3) **Medieval Literature**

Study of Spanish language and literature from 1140 to 1500.

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

410. (3) **Spanish Literature, 1700-1898**

Main currents of the eighteenth and nineteenth centuries: Neo-Classicism, Romanticism, Realism.

Texts: Meléndez Valdés, *Poesías*; Moratín, *La comedia nueva*, *El sí de las niñas*; Espronceda, *Poesías*, *El estudiante de Salamanca*; Zorrilla, *Don Juan Tenorio*; Galdós, *Fortunata y Jacinta*. (3-0; 3-0)

430. (3) **Directed Reading Course** (3-0; 3-0)

490. (3) **Honours Seminar, or Graduating Essay** (3-0; 3-0)

ITALIAN

100. (3) **First Year Italian**

Text: Speroni & Golino, *Panorama Italiano*. (4-1; 4-1)

200. (3) **Second Year Italian**

Texts: Cioffari, Vincenzo, *Spoken Italian* (Holt, Rinehart & Winston); Cantarella, Michele, *Narratori Italiani del Novecento* (Holt, Rinehart & Winston); Italo Calvino, *Il Visconte Dimezzato* (ed. Olken) (Appleton-Century-Crofts). (3-1; 3-1)

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.

Prerequisites: Competence to the 200-level in a second language other than Italian.

Texts: Speroni & Golino, *Basic Italian*; Dante, *Inferno* (ed. Sinclair) (Galaxy); Dante, *Purgatorio* (ed. Sinclair) (Galaxy); Cantarella, Michelle, *Italian Heritage*; *Penguin Book of Italian Verse*; Fogazzaro, *Piccolo Mondo Antico*. (3-0; 3-0)

430. (3) **Directed Reading Course** (3-0; 3-0)

DEPARTMENT OF HISTORY

- Sydney G. Pettit, M.A. (*Brit. Col.*), Professor and Head of the Department.
J. M. S. Careless, A.M., Ph.D. (*Harvard*), Visiting Professor.
Sydney W. Jackman, Ph.D. (*Harvard*), F.S.A., F.R.Hist.S., Professor.
James E. Hendrickson, B.A. (*Sask.*), B.Ed. (*Alta.*), M.A., Ph.D. (*Oregon*), Associate Professor.
Reginald H. Roy, C.D., M.A. (*Brit. Col.*), Ph.D. (*Wash.*), F.R.Hist.S., Associate Professor.
W. George Shelton, M.A. (*Man.*), Ph.D. (*Penn.*), Associate Professor. (Leave of absence 1968-69.)
Miss Charlotte S. M. Girard, B.A. (*Brit. Col.*), M.A., Ph.D. (*Bryn Mawr*), Assistant Professor.
Alfred E. Loft, B.A. (*Brit. Col.*), Assistant Professor.
John Money, B.A., Ph.D. (*Cantab.*), Assistant Professor.
Donald F. Chard, M.A. (*Dalhousie*), Instructor.
Robert J. McCue, B.A., B.Ed. (*Alta.*), Instructor.
Christopher Rowe, B.A. (*Liverpool*), Instructor.
Miss Patricia E. Roy, B.A. (*Brit. Col.*), M.A. (*Tor.*), Instructor.
Wesley T. Wooley, A.B. (*Ill.*), A.M. (*Chicago*), Instructor.
Don C. McGowan, B.A. (*Sask.*), Lecturer.
Miss Helen K. Wright, M.A. (*Man.*), Lecturer.
Mrs. Stella Higgins, B.A. (*U. of Vic.*), Part-time Lecturer.
Brian R. D. Smith, B.A., LL.B. (*Brit. Col.*), M.A. (*Queen's*), Part-time Lecturer.
John A. Munro, M.A. (*Brit. Col.*), Honorary Research Associate.

GENERAL, MAJOR AND HONOURS PROGRAMMES

History 200, 201, 204, 212 are open to First Year students: First Year students are advised, however, that second-year level of performance will be required.

General — In the Third and Fourth Years a minimum of 9 units (three courses) taken in courses numbered 300 or above. These courses are to be selected from *two* of the following areas of interest: American, British, Canadian, Colonial, European. Prerequisites for these areas of interest are as follows: *American*: History 212; *British*: History 201; *Canadian*: History 102; *Colonial*: History 200 and/or 201; *European*: one of History 200 or 204.

Major — In the Third and Fourth Years a minimum of 15 units (five courses) in courses accepted for credit in History which are numbered 300 or above. Of the remaining 15 units, 9 units should be selected in consultation with members of the Department. At least 4 of the 5 courses in History in the Third and Fourth Years should be selected from any *two* of the following areas of interest: American, British, Canadian, Colonial, European. Prerequisites for these areas of interest are as follows: *American*: History 212; *British*: History 201; *Canadian*: History 102; *Colonial*: History 200 and/or 201; *European*: one of History 200 or 204.

Honours — Prerequisites for admission to the Third Year include a First or high Second Class standing in one of History 200 or 204, one of History 102, 201 and 212, and a reading knowledge of French, German, Russian or Spanish. In the last three years candidates will offer at least 51 units. Second Year: 15 units (recommended courses are English 200 or English 201, French 240 or 280 or the equivalent in German, Russian or Spanish, one of History 200 or 204, and one of History 102, 201, or 212, if not already taken in the First Year). Third and Fourth Years: Four required courses: History 400 (if already taken an additional History course is required), 333, 433, 499; three courses in an area of special interest as approved by the Department; two other courses in the Department and two outside the Department (36 units).

Students whose standing in Honours History during the Third Year is inadequate may, at the discretion of the Department, be required to discontinue the Honours Course.

There will be an oral examination on the field covered in the graduating essay.

NOTES: (1) Students who intend to specialize in History are advised to include in their programme some of the following related courses: Anthropology 200; Economics 100, 200, 321; Geography 201, 303, 307, 410; Linguistics 100, 200; Philosophy 100; Political Science 200, 300; Sociology 200. (2) A reading knowledge of French, German, Russian or Spanish is useful. (3) All courses numbered above 300 are open to both Third and Fourth Year students. (4) Students undertaking the Honours, Major or General Programme in the Department of History may count one history course in another department as part of the requirement. Classical Studies 330 or 340 are recommended. Students must receive permission to do so from the Head of the Department of History.

COURSES OFFERED

101. (3) **Main Currents in Twentieth-Century History**

This course offers a background for contemporary world problems. Essays will be assigned throughout the Session. (History 101 is not a prerequisite for a general or major course in European History.)

Texts: Chambers, *This Age of Conflict*, Third ed.; Brison D. Gooch, *Interpreting European History*, Vol. II.

Staff.

(3-0; 3-0)

102. (3) **History of Canada**

An introductory general course. Essays will be assigned throughout the Session.

Texts: Either J. M. S. Careless, *Canada: A Story of Challenge* and D. C. G. Kerr, *A Historical Atlas of Canada* OR P. G. Cornell, Jean Hamelin, Fernand Ouellet and Mareel Trudel, *Canada: Unity in Diversity*. Additional readings will be assigned.

Staff.

(3-0; 3-0)

200. (3) **History of Modern Europe**

A survey of European history from the Renaissance to the First World War. Essays will be assigned throughout the Session.

Text: Palmer, *History of the Modern World*, Second Edition.

Staff.

(3-0; 3-0)

201. (3) **History of England**

A survey of British history from the late Anglo-Saxon period to modern times. Essays will be assigned throughout the Session.

Texts: Selected paperback books.

Dr. Jackman.

(3-0; 3-0)

204. (3) **Medieval Europe**

A survey of medieval history from the fall of the Roman Empire to the thirteenth century.

Text: To be announced.

Dr. Money.

(3-0; 3-0)

212. (3) **History of the United States**

A general survey of the history of the United States from the colonial period to the present. Essays will be assigned throughout the Session.

Text: To be announced.

Mr. Wooley.

(3-0; 3-0)

303. (3) **History of the Canadian West**
 A survey of Canadian history west of the Great Lakes. One essay is required during the Session.
 Texts: To be announced.
 Miss P. E. Roy. (3-0; 3-0)
305. (3) **Latin America: The Colonial Period**
 A study of the Spanish and Portuguese in the New World and their struggle against British, French and Dutch penetration.
 Text: W. L. Schurz, *This New World*.
 Mr. Rowe. (3-0; 3-0)
311. (3) **The Discovery and Settlement of North America**
 Colonial North America from the Age of Reconnaissance to 1783.
 Text: J. H. Parry, *The Age of Reconnaissance*.
 Mr. Rowe. (3-0; 3-0)
312. (3) **The United States in the Nineteenth Century**
 Intensive study of problems and interpretation of the history of the United States from the Revolution to the Spanish-American War. Extensive reading is required.
 (Not offered 1968-69.) (3-0; 3-0)
313. (3) **The Rise of Modern Europe, 1300-1648**
 A survey of the economic, social, political and cultural development of Europe from the late Middle Ages to the Peace of Westphalia. One essay will be assigned during the Session.
 Text: To be announced.
 Mr. McCue. (3-0; 3-0)
314. (3) **Europe from Westphalia to Waterloo**
 A history of Europe from 1648 to 1815, with special emphasis on the political, economic and social thought of the period.
 Text: To be announced.
 (Not offered 1968-69.) (3-0; 3-0)
318. (3) **Tudor and Stuart England, 1485-1688**
 An intensive study of England during the sixteenth and seventeenth centuries. One essay will be assigned during the Session.
 Texts: To be announced.
 (Not offered 1968-69.) (3-0; 3-0)
326. (3) **History of Canada, 1763-1867**
 The British colonies in North America from the Peace of Paris to Confederation. One essay will be assigned during the Session.
 Texts: Kerr, *A Historical Atlas of Canada*, 1961; Dunham, *Political Unrest in Upper Canada*, 1815-1836; Craig, *Lord Durham's Report*; Waite, *The Confederation Debates*; Glazebrook, *A History of Transportation*; and other assigned readings.
 Dr. Careless. (3-0; 3-0)
333. (3) **Third Year Honours Seminar**
 Bibliography, methodology, and the philosophy of history.
 Text: Walsh, *Philosophy of History: An Introduction*.
 Dr. Girard. (3-0; 3-0)
339. (3) **War in the Modern World, 1755 to the Present**
 Survey of war and its impact on society and national policies.
 Dr. Roy. (3-0; 3-0)

400. (3) **Intellectual History of Europe**

A study of movements of thought in Europe. Extensive reading is required. May be taken by Second Year students with special permission of the Head of the Department.

Text: To be announced.

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

403. (3) **The American West**

The frontier in American history; the Trans-Mississippi West with emphasis on the Far West. One essay will be assigned during the Session.

Text: To be announced.

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

406. (3) **History of France, 1789-1945**

A study of the economic, social, political and cultural development of France, 1789-1945. One essay will be assigned during the Session.

Text: To be announced.

(Not offered 1968-69.) (3-0; 3-0)

411. (3) **Empire and Commonwealth**

A study of British Imperial evolution from the disruption of the First British Empire to the present. Reports will be assigned during the Session.

Text: To be announced.

(Not offered 1968-69.) (3-0; 3-0)

412. (3) **History of the United States in the Twentieth Century**

The economic, social, political, diplomatic and cultural developments in the United States during the present century. One essay will be assigned during the Session.

Text: Selected paperback books.

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

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. One essay will be assigned during the Session.

Text: To be announced.

(Not offered 1968-69.) (3-0; 3-0)

419. (3) **Great Britain Since 1688**

A survey of British history from the Glorious Revolution to the outbreak of the First World War. One essay will be assigned during the Session.

Texts: To be announced.

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

420. (3) **The Evolution of the Canadian Constitution**

A study of constitutional development from 1763 to the present. One essay will be assigned during the Session.

Text: To be announced.

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

426. (3) **Canada Since Confederation**

A history of the economic, social and political development of Canada since 1867. Dominion autonomy and Canada's position as a middle power. One essay will be assigned during the Session.

Text: To be announced.

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

428. (3) **Intellectual History of the United States**
A study of the evolution of American institutions and ideas.
Text: To be announced.
(Not offered 1968-69.) (3-0; 3-0)
430. (3) **American Diplomatic History**
A study of American Foreign Relations from the Revolution to the present.
Mr. Wooley. (3-0; 3-0)
433. (3) **Fourth Year Honours Seminar**
Historiography.
Text: To be announced.
Dr. Money. (3-0; 3-0)
499. (6) **Graduating Essay in Honours**
Staff.

GRADUATE SEMINARS

501. (3) **British History**
503. (3) **Western Canadian History**
505. (3) **Intellectual History**
512. (3) **American History**
526. (3) **Canadian History**
599. (6) **M.A. Thesis**

DEPARTMENT OF LINGUISTICS

M. H. Scargill, B.A., Ph.D. (*Leeds*), Professor and Head of the Department.

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.C.S., Professor.

Geoffrey Noel O'Grady, B.A. (*Univ. of Sydney*), Ph.D. (*Indiana*), Associate Professor.

T. M. Hess, B.A. (*Colo.*), Ph.D. (*Wash.*), Assistant Professor.

J. F. Kess, B.Sc. (*Georgetown*), M.A. (*Hawaii*), Assistant Professor.

H. J. Warkentyne, B.A. (*West Ont.*), M.A. (*London*), Instructor.

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 400 and 460 should be of interest to certain students in Anthropology who wish to have some training in the techniques of analysing and recording languages they may meet in the field. Linguistics 481 should be of interest to mathematicians. Linguistics 250 is of special concern to students with an interest in phonetics.

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 years 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 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 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
<i>Year</i>	
I. Linguistics 100 English 100 A language Elective (Philosophy 202 recommended) Elective (A Science course recommended)	Linguistics 100 Mathematics 130 English 100 Philosophy 202 A language
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.) Elective	Linguistics 250 Mathematics 230 The language of first year Elective (If Linguistics 100 has not been taken, it must be taken here.)
III. Linguistics 390 Linguistics 370 or 380 Linguistics 460 English 405 Elective (If no previous Linguistics courses have been taken, Lin- guistics 360 will be taken here.)	Linguistics 370 recommended; another senior linguistics course allowed. Linguistics 380 recommended; another senior linguistics course allowed. Mathematics 222 (if not already taken.) Mathematics 249 An elective (If no previous courses in linguistics have been taken Linguistics 360 will be taken here.)
IV. Linguistics 420 or elective Linguistics 430 A Senior Linguistics course English 427 A senior English course	Linguistics 481 Linguistics 460 Mathematics 332 Mathematics 330 or a course selected in consultation with the Mathematics Department.

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 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 481. Students in Mathematics who wish to begin the study of Linguistics as an area of concentration in their third year should take Linguistics 360 and two other senior Linguistics Courses, including Linguistics 481.

COURSES OFFERED

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 from various languages.

Texts: Hughes, *The Science of Language*; Gleason, *Workbook*; *Introductory Essays*.
 J.-P. Vinay and members of the Department. (2-0-1; 2-0-1)

250. (3) **Phonetics and Phonemics**

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.

Prerequisite: Linguistics 100 or permission of the Department.

Texts: Smalley, *Manual of Articulatory Phonetics and Workbook*; Pike, *Phonemics*.
Dr. O'Grady. (3-0; 3-0)

320. (3) **Seminar in Linguistics**

A special programme of study to be arranged to meet the needs of individual students. (3-0; 3-0)

350. (3) **Seminar in Languages**

An elementary analysis of one or two languages to be selected by students from the following list: Old Norse, Estonian, Finnish, Hungarian, Welsh, Japanese, Norwegian, etc.

Members of the Department. (3-0; 3-0)

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 or 200 or 210.

Texts: Gleason, *Introduction to Descriptive Linguistics and Workbook*; Dineen, *General Linguistics*.

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

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. Prerequisite: permission of both Departments.

Texts: To be announced.

J. F. Kess and O. Spreen. (3-0; 3-0)

380. (3) **Acoustic Phonetics**

The study of the acoustic properties of speech sound, as determined by the actual use of such instruments as the Electronic Vocal Analog, the Sound Spectrograph.

Prerequisite: Linguistics 250 or permission of the Department.

Texts: To be announced.

H. J. Warkentyne. (3-0; 3-0)

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.

Texts: Baugh, *History of the English Language*; Fries, *Structure of English*; Thomas, *Transformational Grammar*.

Dr. Scargill and Dr. Kess. (3-0; 3-0)

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. Prerequisite: permission of the Department.

Texts: Samarin, *Field Methods in Linguistics*.

Dr. O'Grady.

(3-0; 3-0)

420. (3) **Historical and Comparative Linguistics**

The historical and comparative method in the study of languages, both Indo-European and non-Indo-European.

Texts: Lehmann, *Historical Linguistics and Workbook*; Pedersen, *The Discovery of Language*.

(Not offered 1968-69.)

(3-0; 3-0)

430. (3) **Dialectology and Lexicography**

The study of regional dialects with emphasis on Canada. The principle of lexicography, national, regional, historical, bilingual, technical.

Prerequisites: Linguistics 100 or 360 or permission of the Department.

Texts: Kurath, *Handbook of the Linguistic Geography of New England*; Malstrom, and Ashley, *Dialects — U.S.A.*; Hulbert, *Dictionaries: British and American*; McIntosh, *Introduction to a Survey of Scottish Dialects*.

Dr. Scargill and H. J. Warkentyne.

(3-0; 3-0)

448. (3) **Directed Reading in Linguistics**

(3-0; 3-0)

460. (3) **Morphology and Syntax**

The theory of the descriptive analysis of words (morphology). Grammatical analysis at the sentence level (syntax), based on several contemporary models of grammar.

Prerequisite: Linguistics 100 or 210 or 360 or permission of the Department.

Texts: Nida, *Morphology*; Bach, *An Introduction to Transformational Grammars*.

Dr. O'Grady.

(3-0; 3-0)

470. (Psychology 470) (3) **Seminar in Psycholinguistics**

Discussion of recent research and conduction of experiments in specific areas of psycholinguistics, e.g., investigations of verbal parameters, grammatical transformations, language perception and language pathology.

Prerequisite: Psychology/Linguistics 370 or consent of instructor.

Drs. Vinay and Spreen.

(3-0; 3-0)

480. (3) **Contrastive Linguistics**

A comparison of the structures of two languages to show their similarities and differences. Students may elect one of the following groups: (1) French-English; (2) Russian-English; (3) German-English.

Prerequisite: permission of the Departments.

Text: To be announced.

Members of the Departments of Linguistics and Modern Languages.

(Not offered 1968-69.)

(3-0; 3-0)

481. (3) **Introduction to Computer Linguistics**

Principles of computer analysis and synthesis of language data. The design and use of automatic dictionaries. Exercises in mechanical translation.

Prerequisite: permission of the Department.

Text: Garvin, *Natural Language and the Computer*.

J.-P. Vinay.

(3-0; 3-0)

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.

GRADUATE COURSES

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

501. (3) **Seminar in Canadian English**
Dr. Scargill. (3-0; 3-0)
502. (3) **Seminar in Descriptive Linguistics**
Dr. O'Grady. (3-0; 3-0)
503. (3) **Seminar in Grammatical Theory**
Members of the Department. (3-0; 3-0)
504. (3) **Seminar in Machine Translation**
J.-P. Vinay. (3-0; 3-0)
599. **Thesis.** (Credit to be determined).

DEPARTMENT OF MATHEMATICS

- Stephen A. Jennings, M.A., Ph.D. (*Tor.*), Professor and Head of the Department.
Robert T. D. Wallace, M.A. (*Brit. Col.*), Professor.
Fernand E. Deloume, B.A. (*Brit. Col.*), M.A. (*Tor.*), Ph.D. (*U.S.C.*), P. Eng. (*Brit. Col.*), Associate Professor.
Lowell A. Hinrichs, B.A., M.A., Ph.D. (*Oregon*), Associate Professor.
D. Elizabeth Kennedy, M.A. (*Brit. Col.*), Associate Professor.
O. Phoebe Noble, B.A. (*Brit. Col.*), Associate Professor.
Robert E. Odeh, M.S., Ph.D. (*Carnegie Inst. of Tech.*), Associate Professor.
Arne P. Baartz, M.A., Ph.D. (*Oregon*), Assistant Professor.
Ian Barrodale, B.Sc. (*Wales*), M.A. (*Brit. Col.*), Ph.D. (*Liverpool*), Assistant Professor.
Leon Bowden, B.Sc. (*London*), B.Litt. (*Oxon.*), Assistant Professor.
Robert A. Christiansen, B.A., M.S., Ph.D. (*Iowa*), 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 St.*), Assistant Professor.
William R. Gordon, M.A. (*Brit. Col.*), Ph.D. (*Calif.*), Assistant Professor.
Walter P. Kotorynski, B.A. (*West. Ont.*), M.A., Ph.D. (*Tor.*), Assistant Professor.
Robert A. MacLeod, B.Sc. (*Alta.*), M.S. (*Cal. Tech.*), Ph.D. (*Alta.*), Assistant Professor.
James Riddell, M.Sc., Ph.D. (*Alta.*), Assistant Professor.
Earl D. Rogak, B.Ch.E. (*Cooper Union*), M.S.E., Ph.D. (*Michigan*), Assistant Professor.
H. Paul Smith, B.A., M.Ed. (*Brit. Col.*), M.A. (*U. of Wash.*), Assistant Professor.
Elizabeth M. Strohmeier, B.A. (*So. Dakota*), M.A., Ph.D. (*Wash. St.*), Assistant Professor.
Pauline van den Driessche, M.Sc., D.I.C. (*Imp. Coll.*), Ph.D. (*Wales*), Assistant Professor.
Virginia E. Walsh, B.A. (*DePauw*), M.A., Ph.D. (*Oregon*), Assistant Professor.
Byron L. Ehle, A.B. (*Whitman*), M.S. (*Stanford*), Instructor. (Leave of absence 1968-69.)
David J. Leeming, B.Sc. (*Brit. Col.*), M.A. (*Oregon*), Instructor.
F. D. K. Roberts, B.A. (*Cantab.*), M.Sc. (*Liverpool*), Instructor.
James L. Tyler, B.A. (*Whitman*), M.A. (*Oregon*), Lecturer.
Susan Beth Christiansen, B.A., M.S. (*Iowa*), Part-time Lecturer.
Diane Gisel, B.A. (*U. of Vic.*), M.A. (*McGill*), Part-time Lecturer.
Zulette Gordon, B.A. (*Brit. Col.*), M.A. (*Calif.*), Part-time Lecturer.
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 — Mathematics 120 or 121 or 130; Mathematics 220 or 221 or 230 or 231; Mathematics 222 or 223 or 232; and 9 units of Mathematics courses numbered 300 or higher.

Major — Mathematics 120 or 121 or 130; Mathematics 220 or 221 or 230; Mathematics 222 or 223 or 232; Mathematics 330 or 331; Mathematics 332 or 333; and at least 9 additional units of Mathematics courses numbered 300 or higher, chosen in consultation with the Department. Major students planning to proceed to Graduate work in Mathematics are urged to enrol in Mathematics 332 (or in Mathematics

333 with permission of the Department) and in Mathematics 330 in their third year and Mathematics 335 in their fourth year. Because of the increasing importance of computing and data processing, students taking a Major in Mathematics are advised to include a course on computing before they graduate. In particular, students wishing to major with a concentration in computing science are urged to take Mathematics 249 in their second year. Students who are considering teaching Mathematics in Secondary School are urged to take Mathematics 337.

Honours — Mathematics 120 or 121 or 130; Mathematics 221 or 230; Mathematics 223 or 232; Mathematics 331, 333 and 335; Mathematics 433 and 441; and 6 additional units of Mathematics at least 3 of which must be from courses numbered 400 or higher, chosen in consultation with the Department. Students with outstanding records in Mathematics 220 and 222 or their equivalents may be permitted to transfer into Honours at the Third Year level. 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 Mathematics 221 or 230 and 223 or 232. All courses must be chosen in consultation with 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: First Year students who can demonstrate to the Department that they have mastery of the material normally covered in Mathematics 130 or 140 may be granted advanced placement and may be permitted to enrol directly into Second Year Mathematics courses.

NOTE 3: First Year students who have obtained at least 80% in Mathematics 12, may, with the consent of the Department, enrol in Mathematics 130 and Mathematics 232 concurrently. (See also note 2 above.)

NOTE 4: Students wishing to enrol in Mathematics 130 or 140 who have no credit for Mathematics 12 are warned that their preparation is probably inadequate and they are strongly advised to complete Mathematics 12 through high school studies for adults, through the Department of Education correspondence course or through private study. Such students are advised to consult the Department of Mathematics as soon as possible.

NOTE 5: (a) Students who have obtained credit for Mathematics 113 or 120 (taken in Senior Matriculation, at the University of British Columbia or at this University) and who wish to enrol for Mathematics 230 are strongly urged to master the materials in Chapters 5, 6 and 7 of Thomas: *Calculus and Analytic Geometry*. Students whose grades in Mathematics 113, 120 or 121 are below B- are strongly advised to enrol in Mathematics 130 (for no credit).

(b) Students entering the University with Grade 13 standing from outside the province of British Columbia will not normally be permitted to enrol in Mathematics 230. Such students should consult the Department for placement, and may be required to take Mathematics 130.

(c) Students entering the University with credit from other universities should consult the Department for placement.

NOTE 6: Students who have obtained a D grade in First Year Mathematics will normally be granted permission to enrol in Mathematics 230, 231, 232 or 240 only if they write the regular supplemental examination in Mathematics 130 or 140 and obtain a grade higher than D.

NOTE 7: 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 220 or 230 and 222 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.

REQUIREMENTS IN THE DEPARTMENT OF MATHEMATICS

YEAR	GENERAL	MAJOR	HONOURS
1 and II	Mathematics 120*, 121* or 130 Mathematics 220, 221, 230 or 231 Mathematics 222, 223 or 232	Mathematics 120*, 121* or 130 Mathematics 220, 221 or 230 Mathematics 222, 223 or 232	Mathematics 121* or 130 Mathematics 221 or 230 Mathematics 223 or 232
III and IV	9 units of Mathematics in courses numbered 300 or higher	Mathematics 330 or 331 Mathematics 332 or 333 9 additional units of Mathematics in courses numbered 300 or higher.	Mathematics 331 Mathematics 333 Mathematics 335 Mathematics 433 Mathematics 441 6 additional units of Mathematics courses at least 3 of which must be at the 400 level.

*NOTE: 1. Mathematics 120 or 121 were the available freshman courses at the University of Victoria in 1966-67 and previous years.

2. Students who have taken Mathematics at post-secondary level should consult the department for placement.

COURSES OFFERED

FIRST YEAR

130. (3) **Calculus I**
Calculus of functions of one variable with applications.
Prerequisite: Mathematics 12 or Mathematics 91.
See note 4 above. (4-0; 4-0)
140. (3) **Mathematics for Social Science Students I**
Probability for finite and infinite sample spaces; calculus of one variable.
Prerequisite: Mathematics 12 (or Mathematics 91. See note 4 above). (4-0; 4-0)
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 with credit in Mathematics 12. (3-0; 3-0)
160. (3) **Fundamental aspects of Mathematics for the Elementary Teacher**
For credit only in the Faculty of Education. (3-0; 3-0)

SECOND YEAR

Students who have obtained a D grade in Mathematics 120, 121, 130 or 140 may not register for Mathematics 230, 231, 232, or 240 without the consent of the Department.

See note 6 above.

203. (3) **Elementary Mathematics for Teachers**
For credit only in the Faculty of Education. (3-0; 3-0)
230. (3) **Calculus II**
Calculus of functions of several variables with applications, infinite series; introduction to linear algebra, vectors.
Prerequisite: Mathematics 120, 121 or 130. See notes 2, 5, 6 above. (3-0; 3-0)
Corequisite: Mathematics 232.
231. (3) **Calculus II**
Calculus of functions of several variables with applications, infinite series; introduction to differential equations, vectors.
This course may not in general be included as part of Mathematics Department's requirement for the major or honours programme.
Prerequisite: Mathematics 130. See notes 2, 5 and 6 above. (3-0; 3-0)
232. (3) **Algebra I**
Introduction to Linear Algebra.
Prerequisite: Mathematics 130 or First Class standing in Mathematics 12. See note 3 above. (3-0; 3-0)
233. (3) **Algebra I**
Introduction to Linear Algebra.
Prerequisites: At least Second Class standing in Mathematics 130 or First Class standing in Mathematics 12. Students require the consent of the department. See note 3 above.
(Not offered 1968-69.) (3-0; 3-0)

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

Linear algebra; probability; multi-variable calculus; difference and differential equations.

Prerequisites: Mathematics 120 or 121 or 130 (Mathematics 140 in 1969-70 and subsequent years). (3-0; 3-0)

249. (3) **Introduction to Computing Science**

The nature of computers; machine languages; compiler languages, especially FORTRAN IV. An introduction to the study of algorithms, with applications to problems of interest to natural and social sciences. In the laboratory the student will write programmes in FORTRAN IV using the IBM 360 - Model 44.

Prerequisites: Mathematics 120 or 121 or 130 or 140. (2-2; 2-2)

THIRD AND FOURTH YEARS

Students with a D grade in Mathematics 220, 221, 222 or 223 are advised not to register for further courses in Mathematics.

330. (3) **Calculus II**

Partial differentiation, vectors and vector fields, curves and surfaces, line and surface integrals including Green's, Stokes' and the divergence theorems; infinite series.

Prerequisites: Mathematics 220 or 221 or 230.

In 1969-70 and subsequent years, Mathematics 222 or 223 or 232 will be a prerequisite. In special circumstances, with the permission of the instructor, students may be permitted to take Mathematics 232 concurrently with Mathematics 330. (3-0; 3-0)

331. (3) **Calculus II**

Topics in infinite series of functions, differentiation and integration of functions of several variables, vector field theory. Primarily for Honours students.

Prerequisites: B or higher in each of Mathematics 221 or 230 and Mathematics 223 or 232 and the consent of the Department. See note 7 above. (3-0; 3-0)

332. (3) **Algebra II**

Linear algebra and an introduction to abstract algebra.

Prerequisites: Mathematics 222 or 223 or 232.

NOTE: Students majoring or honouring in Physics should enrol in Section 1 of Mathematics 332. (3-0; 3-0)

333. (3) **Algebra II**

Linear algebra and an introduction to abstract algebra. Primarily for Honours students.

Prerequisites: B or higher in each of Mathematics 221 or 230 and Mathematics 223 or 232 and the consent of the Department.

See note 7 above. (3-0; 3-0)

335. (3) **Real Analysis I**

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

Prerequisites: B or higher in each of Mathematics 221 or 230 and Mathematics 223 or 232 and the consent of the Department.

See note 7 above. (3-0; 3-0)

337. (3) **Modern Geometry**

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

Prerequisites: Mathematics 220 or 221 or 230 and Mathematics 222 or 223 or 232. (3-0; 3-0)

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 222 or 223 or 232. (3-0; 3-0)

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 220 or 221 or 230 and Mathematics 222 or 223 or 232. (3-0; 3-0)

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 220 or 221 or 230 or 240. (3-1; 3-1)

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 220 or 221 or 230 and 222 or 223 or 232 and Mathematics 330 or 331 which may be taken concurrently. (3-0; 3-0)

349. (3) Numerical Computation

Analysis of truncation and roundoff errors. Error propagation. Approximations to functions. Roots of equations. Numerical evaluation of integrals. Simultaneous linear algebraic equations. Ordinary differential equations. In the laboratory the student will write programmes in FORTRAN IV using the IBM 360 - Model 44.

Prerequisites: Mathematics 220 or 221 or 230, Mathematics 222 or 223 or 232, Mathematics 249 and Mathematics 330 or 331 which may be taken concurrently. (2-2; 2-2)

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)

Note: Admission to the following courses is by permission of the Instructor or of the Department.

411. (3) Introduction to Topology

Basic concepts of pointset 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)

433. (3) **Algebra iii**
Algebraic structures. Primarily for Honours students.
Prerequisite: Mathematics 333. (3-0; 3-0)
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)
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)
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.
Prerequisite: Mathematics 330 or 331, Mathematics 332 or 333 or the consent of the department. (3-0; 3-0)
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.
Prerequisites: Mathematics 223 or 232 and Mathematics 331. (3-0; 3-0)
449. (3) **Numerical Analysis**
Error analysis; roots of equations; solution of systems of equations; matrix inversion; calculation of eigenvalues; difference and differential equations; approximation theory. Students will write programmes in FORTRAN IV using the IBM 360 - Model 44.
Prerequisite: Mathematics 349. (3-0; 3-0)
470. (3) **Directed Studies in Mathematics**
Students must consult the department before registering.
480. (3) **Seminar in Mathematics**
Students must consult the department before registering.
481. (1-3) **Computing Science Seminar**
Two coding languages chosen from ALGOL, PL1, and COBOL; selected topics from operations research (e.g. linear programming, PERT).
Prerequisite: Mathematics 349.

GRADUATE COURSES

Certain of the following courses will be offered each year. Interested students should consult the Department.

510. (4) **Abstract Algebra**
A detailed study of basic algebraic systems.
Prerequisite: Mathematics 433 or equivalent. (3-0-1)
511. (4) **Topics in Matrix Theory and Linear Algebra**
Prerequisite: Mathematics 333 or equivalent. (3-0-1)

520. (4) **Number Theory**
Advanced topics in Number Theory.
Prerequisite: Mathematics 339, 441 or equivalent. (3-0-1)
530. (4) **Analysis**
Selected topics from real and complex analysis.
Prerequisite: Mathematics 441, 435 or equivalent. (3-0-1)
531. (4) **Functional Analysis**
Prerequisite: Mathematics 435, 411 or equivalent. (3-0-1)
540. (4) **Topology**
Advanced topics in point-set topology, introduction to algebraic topology.
Prerequisite: Mathematics 411, 433 or equivalent. (3-0-1)
550. (4) **Topics in Applied Mathematics**
Boundary value problems with selected applications.
Prerequisite: Consent of the instructor. (3-0-1)
551. (4) **Differential and integral equations**
Prerequisite: Mathematics 435 or equivalent. (3-0-1)
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)
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)
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)
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)
570. (4) **Topics in numerical analysis**
Prerequisite: Mathematics 449 or equivalent. (2-2-0)
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)
581. (4) **Directed Studies** (3-0-1)
585. (4) **Seminar** (3-0-1)
599. (4-6) **Master's thesis**

DEPARTMENT OF PHILOSOPHY

Juan C. D'Alessio, B.A., M.A. (*Buenos Aires*), D.Phil. (*Oxon.*), Assistant Professor.
Alan R. Drengson, B.A., M.A. (*Wash.*), Instructor.
John Paul Graff, A.B. (*Yale*), M.A. (*Calif.*), Instructor.
Richard K. Martin, B.A. (*Lehigh Univ.*) Instructor.
John M. Michelsen, M.A. (*Wash.*), Instructor.

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, 330, 412 or 432, and three additional units in a course numbered 400 or above.

Honours — Philosophy 100, 202, 300, 302, 330, 412 or 432, 447, 449, and six additional units in courses numbered above 300 of which at least three units must be in a course numbered 400 or above.

Honours candidates must maintain at least a B average in their courses in Philosophy.

COURSES OFFERED

NOTE: Philosophy 100, 202, 212, 222, and 302 are recommended for the general student as well as for those intending to major in philosophy. Any of these courses may be taken by all students in the Faculty of Arts and Science in the first and second years without special permission. Other courses in philosophy may be taken either by satisfying the stated prerequisites *or* with the permission of the Department.

100. (3) Introduction to Philosophy

A discussion of some fundamental problems of philosophy, such as "Is it possible to establish objective moral standards?", "Can an examination of the nature of men establish what is the good life?", "What sorts of political and social structures are moral?", and "To what extent, if at all, is knowledge possible?". The answers of such philosophers as Plato, Descartes, Hume, Kierkegaard, Russell and Sartre will be considered.

Staff.

(3-0; 3-0)

202. (3) Elementary Logic

Students will be placed in Section 1 or 2 in accordance with their backgrounds and interests. Section 1 is designed for students in the humanities, and Section 2 for students in mathematics and the sciences.

Section 1: Topics covered will include the theory of meaning and definition, and informal and formal fallacies. Symbolic logic will be developed primarily in order to assess arguments drawn from everyday discourse rather than to investigate mathematical and scientific theories.

Section 2: Topics covered will include propositional logic and Boolean algebra, predicate logic and set theory, and the axiomatic method. Symbolic systems of logic will be developed primarily for the manipulation of such standard mathematical systems as groups, rings, fields, simple order, and for analysis of the structure of scientific theory.

(3-0; 3-0)

212. (3) Philosophy of Religion

An inquiry into the nature of religious experience; the relation between faith and reason; proofs for the existence of God; immortality; and the problem of evil.

(3-0; 3-0)

222. (3) **Introduction to Philosophy of Science**

An introductory analysis of the presuppositions, methods and some philosophical problems raised by science. Discussion of the patterns of scientific explanation, the nature of scientific method, and the logical character of scientific laws and theories. (3-0; 3-0)

300. (3) **Ancient Philosophy**

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 Department. (3-0; 3-0)

302. (3) **Ethics**

An inquiry into the nature of morality and the function of moral philosophy. The major ethical systems of Western philosophy will be examined. Some of the basic questions discussed include: What is the nature of virtue? What is the connection between virtue and happiness? Is it possible to establish absolute, objective standards of morality? How can one rationally choose between competing moral codes?

Readings will be from such philosophers as Aristotle, Kant, Hume, Mill, Moore, and Prichard. (3-0; 3-0)

305. (3) **Medieval Philosophy**

Survey of the principal doctrines of Augustine, Boethius, Erigena, Anselm, Aquinas, Scotus, Ockham, and Eckhart. Prerequisite: Philosophy 300, or permission of the Department.

(Not offered 1968-69.) (3-0; 3-0)

310. (3) **Renaissance Philosophy**

A study of some of the doctrines of important Renaissance thinkers, including Petrarch, Ficino, Cusanus, Pico, Machiavelli, Montaigne, Vives, Grotius, Boehme, and Bruno. Prerequisite: Philosophy 300, or permission of the Department.

(Not offered 1968-69.) (3-0; 3-0)

312. (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 Department. (3-0; 3-0)

330. (3) **Modern Philosophy**

A study of Descartes, Spinoza, Leibniz, Locke, Berkeley, and Hume. Prerequisite: Philosophy 100, or permission of the Department. (3-0; 3-0)

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 Department.

(Not offered 1968-69.) (3-0; 3-0)

400. (3) **Kant**

Intensive study of *The Critique of Pure Reason* and other epistemological works. Prerequisites: Philosophy 300 and 330, or permission of the Department.

(Not offered 1968-69.) (3-0; 3-0)

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 Department. (3-0; 3-0)

405. (3) **Nineteenth-Century Philosophy**

Post-Kantian developments in philosophy through the nineteenth century, including Fichte, Hegel, Schopenhauer, Mill, Comte, and Spencer. Prerequisite: Philosophy 400, or permission of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

410. (3) **Analytic Philosophy**

A study of the development of analytic philosophy from 1900 to the present. Prerequisites: Philosophy 202 and 6 additional units in philosophy, or permission of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

412. (3) **Epistemology**

An inquiry into the nature, scope, and limits of human knowledge; diverse conceptions and treatments of problems of cognition, meaning, and truth. Prerequisite: 9 units in philosophy, or permission of the Department.

(3-0; 3-0)

420. (3) **Existentialism**

Selected readings from the works of leading existentialist thinkers: Kierkegaard, Jaspers, Heidegger, Sartre, Marcel, and Buber. Prerequisite: 9 units in philosophy, or permission of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

422. (3) **Contemporary Philosophy**

Detailed examination and discussion of some recent philosophical writings, mainly of the last two decades. Prerequisite: 9 units in philosophy, or permission of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

432. (3) **Metaphysics**

An analysis of fundamental metaphysical concepts, including substance, quality, relation, causality, space, time, and the self. Prerequisite: 9 units in philosophy, or permission of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

447. (3) **Seminar in Philosophy**

Topic(s) to be selected by the instructor. Prerequisites: 9 units in philosophy, or permission of the Department.

(Not offered 1968-69.)

(3-0; 3-0)

448. (3) **Directed Studies**

Intensive reading on a specific topic under the direction of a staff member and with the approval of the Chairman of the Department.

499. (3) **Honours Essay**

DEPARTMENT OF PHYSICS

- John L. Climenhaga, M.A. (*Sask.*), Ph.D. (*Michigan*), Professor and Head of the Department.
- R. Michael Pearce, B.Sc. (*McGill*), M.A., Ph.D. (*Brit. Col.*), Professor.
- Kenneth O. Wright, M.A. (*Tor.*), Ph.D. (*Michigan*), Honorary Professor, Astronomy.
- Walter M. Barss, M.A. (*Brit. Col.*), Ph.D. (*Purdue*), Associate Professor.
- John M. Dewey, B.Sc., Ph.D. (*London*), Associate Professor.
- Harry W. Dosso, B.A., M.Sc., 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, M.A., Ph.D. (*Brit. Col.*), Associate Professor.
- John T. Weaver, B.Sc. (*Bristol*), M.Sc., Ph.D. (*Sask.*), Associate Professor.
- Fred I. Cooperstock, B.Sc. (*Man.*), Ph.D. (*Brown*), Assistant Professor.
- Gerhart B. Friedmann, B.Sc., M.A. (*Madras*), Ph.D. (*Brit. Col.*), Assistant Professor.
- F. David A. Hartwick, B.Eng. (*McGill*), M.A., Ph.D. (*Tor.*), Assistant Professor, Astronomy.
- Donald E. Lobb, M.Sc., Ph.D. (*Sask.*), Assistant Professor.
- Harbhajan S. Sandhu, M.Sc. (*Panjab*), Ph.D. (*Brit. Col.*), Assistant Professor.
- Colin D. Scarfe, M.Sc. (*Brit. Col.*), Ph.D. (*Cantab.*), Assistant Professor, Astronomy.
- Harry M. Sullivan, M.Sc. (*McGill*), Ph.D. (*Sask.*), Assistant Professor.
- Chi-Shiang Wu, B.S. (*Nat. Taiwan U.*), M.S., Ph.D. (*Western Reserve U.*), Assistant Professor.
- Clarence C. Cook, B.A. (*Tor.*), M.Sc. (*Mich.*), LL.D. (*R.M.C.*), Part-time Lecturer.
- Mrs. Bernadette Harris, B.S. (*Ill.*), M.S. (*San Diego State*), Part-time Lecturer, Astronomy.
- Karl H. Hesse, M.Sc. (*Queen's*), Part-time Lecturer, Astronomy.
- Kenneth C. Maclure, M.Sc., Ph.D. (*McGill*), Part-time Lecturer.
- Donald E. Stenton, B.Sc. (*Brit. Col.*), Laboratory Supervisor.
- F. Michael Connor, B.Sc. (*Newcastle*), Laboratory Instructor.
- Neil K. Gillespie, B.Sc. (*U. of Vic.*), Laboratory Instructor.
- Robert D. Hannay, B.Sc. (*U. of Vic.*), Laboratory Instructor.
- Donald G. Ingham, B.Sc. (*U. of Vic.*), Laboratory Instructor.
- Lawrence A. Lambert, B.Sc. (*U. of Vic.*), Laboratory Instructor.
- Allan D. Reimer, B.Sc. (*U. of Vic.*), Laboratory Instructor.
- Mrs. Elizabeth M. Turner, B.Sc. (*Alta.*), Laboratory Instructor.
- Glenn G. Vickers, B.Sc. (*U. of Vic.*), Laboratory Instructor.

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 other programmes.

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 the calendar requirements for a science or to acquire some knowledge 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.

B.Sc. students contemplating graduate studies in Physics 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. Other courses selected must satisfy the 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 121 is restricted to those students who have obtained at least Second Class standing in B.C. Secondary School Physics 12 and Mathematics 12. Students who obtain credit for Physics 121 in their first year will be able to omit Physics 211 and take Physics 212 and 213 in their second year. Students who obtain credit for Physics 101 in their first year will normally register for Physics 211 and 212 in their second year and defer Physics 213 to their third year.

Students registering in Physics 101, who have not obtained credit for B.C. Secondary School Physics 11, or equivalent, must register in Section 1 (5 lectures per week).

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

SECOND YEAR

General	Major	Honours
(Physics 211)	(Physics 211)	(Physics 211)
Physics 212	Physics 212	Physics 212
Physics 213	Physics 213	Physics 213
Mathematics 230 or 231	Mathematics 230 or 231	Mathematics 230 or 231
	Mathematics 232 or 233	Mathematics 232 or 233

Physics 211 is required by students who have not obtained credit for Physics 121 in their first year. They will normally defer Physics 213 to the third year.

In the General Programme only, Physics 212 may be deferred to the third year, but only if Physics 213 is also deferred to the third year.

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

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 312	Physics 312	Physics 312
Physics 322	Physics 322	Physics 321
Mathematics 330 or 331	Mathematics 330 or 331	Physics 322
	Mathematics 345	Physics 413
		Mathematics 330 or 331
		Mathematics 345

For 1968-69 only, Physics 312 is required in the third year of all three programmes. [After 1968-69, Physics 312 will be replaced by Physics 213, taken in second or third year, and Physics 412†, taken in fourth year.]

In the General Programme, Physics 322 must be deferred to the fourth year if Physics 212 is taken in the third year.

[In the Major Programme, beginning in 1969-70, students who have received credit for Physics 213 may be permitted to take, in their third year, one of the 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 413	Physics 411† Physics 413 Physics electives	Physics 411† and 421† Physics 422† Physics 423† Physics 429 Physics electives Mathematics 332 (Sect. 1)

† 1½ units.

The Physics electives are to be chosen in consultation with the Department. Astronomy courses or, in some instances, courses in related fields outside the Department may be accepted by the Department as Physics electives.

[In the General Programme, starting in 1970-71, students will register for the first-term course Physics 412† and a second-term Physics elective†, in addition to Physics 413. The Physics elective† may be any course for which the student qualifies and obtains the consent of the Department.]

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.) [Starting in 1970-71, students will register for Physics 412† rather than Physics 411†.]

In the Honours Programme, the Physics electives comprise 6 units. They normally include: (a) Physics 410† and 420† or Mathematics 441; and (b) two second-term courses chosen from Physics 424†, 425†, 426† and 427†, and either Astronomy 400† or 401†. [Starting in 1970-71, students will register for Physics 412† rather than Physics 411†.]

Fourth-year Honours students are required to participate in Physics 460, Physics seminar.

PHYSICS COURSES OFFERED

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 120, 121, or 130 (may be taken concurrently). Students planning to take no physics courses other than Physics 101 and 212 may be permitted by the Department to substitute Mathematics 140 for Mathematics 130.

Text: To be announced.

(3-3; 3-3)

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 acquire some knowledge of a physical science as part of their cultural background. Although

Physics 103 is not intended as a prerequisite for any other Physics courses, it may be accepted by the Department in lieu of Physics 101 for students with high standing. Credit cannot be obtained for both Physics 101 and Physics 103.

Text: To be announced. (3-3; 3-3)

121. (3) **Mechanics**

Vectors, statics, dynamics, relative motion, energy, momentum, rotation, rigid body motion, gravitation, harmonic motion and oscillation. Laboratories on alternative weeks. Prerequisites: At least second-class standing in B.C. Secondary School Mathematics 12 and Physics 12, Mathematics 130 (may be taken concurrently).

Text: Alonso and Finn, *Fundamental University Physics*, Volume 1. (3-3*; 3-3*)

211. (3) **Mechanics and Properties of Matter**

Vectors, statics, dynamics, energy, momentum, rotation, rigid body motion, gravitation, harmonic motion, oscillation, wave motion and properties of matter. Laboratories on alternate weeks. Prerequisites: Physics 101, Mathematics 220, 221, 230 or 231 (may be taken concurrently). Credit cannot be obtained for both Physics 121 and Physics 211.

Text: Alonso and Finn, *Fundamental University Physics*, Volume 1. (3-3*; 3-3*)

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 220, 221, 230 or 231 (may be taken concurrently) or consent of the Department.

Text: To be announced. (3-3*; 3-3*)

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 220, 221, 230 or 231 (may be taken concurrently).

Text: To be announced. (3-3*; 3-3*)

312. (3) **Optics**

Geometrical and physical optics; lenses, optical instruments, interference, diffraction, polarization, spectroscopy. Laboratories on alternate weeks. Prerequisites: Physics 121 or 211, Mathematics 220, 221, 230 or 231 (may be taken concurrently).

Text: Morgan, *Introduction to Geometrical and Physical Optics*.

(Not to be offered in 1969-70.) (3-3*; 3-3*)

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 330 or 331, and 345 (both may be taken concurrently), and consent of the Department.

Text: Symon, *Mechanics*. (3-0; 3-0)

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. Laboratories on alternate weeks. Prerequisites: Physics 121 or 211, and 212, Mathematics 330 or 331 (may be taken concurrently).

Text: To be announced. (3-3*; 3-3*)

410. (1½) **Topics in Mathematical Physics I**

Cartesian tensors, with applications; elementary topics in functions of a complex variable applied to physical problems. First term only. Prerequisites: Physics 121 or 211, Mathematics 330 or 331, and 345.

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

*Laboratories on alternate weeks.

411. (1 ½) **Thermodynamics**

The fundamental laws of thermodynamics, with applications. First term only. Prerequisites: Physics 121 or 211, Mathematics 330 or 331, and 345 (both may be taken concurrently).

Text: Lee and Sears, *Thermodynamics*.

(Not to be offered after 1969-70.)

(3-0; 0-0)

412. (1 ½) **Advanced Optics**

Advanced geometrical and physical optics; lenses, optical instruments, interference, diffraction, polarization, spectroscopy. First term only. Prerequisites: Physics 213, Mathematics 230 or 231, Mathematics 330 or 331 (may be taken concurrently).

Text: To be announced.

(To be offered in 1970-71.)

(3-0; 3-0)

413. (3) **Introductory Modern Physics**

The major phenomena in the field of atomic and nuclear physics. Prerequisites: Physics 211 and 212 [after 1968-69, Physics 212 and 213 (the latter may be taken concurrently)]; Mathematics 330 or 331 (may be taken concurrently).

Text: Weidner and Sells, *Elementary Modern Physics*.

(3-3; 3-3)

420. (1 ½) **Topics in Mathematical Physics II**

Mathematical methods with applications to physics, including contour integration, integral transforms, Green's functions and the solution of boundary value problems. Second term only. Prerequisites: Physics 410 and consent of the Department.

Text: To be announced.

(0-0; 3-0)

421. (1 ½) **Statistical Mechanics**

Boltzman, Bose-Einstein and Fermi-Dirac statistics. Second term only. Prerequisites: Physics 411 or 213, and 321, Mathematics 330 or 331, and 345, and consent of the Department.

Text: To be announced.

(0-0; 3-0)

422. (1 ½) **Electromagnetic Theory**

Potential theory, Maxwell's equations, electromagnetic waves. First term only. Prerequisites: Physics 322, Mathematics 330 or 331, and 345, and consent of the Department.

Text: Corson and Lorrain, *Electromagnetic Fields and Waves*.

(3-0; 0-0)

423. (1 ½) **Introductory Quantum Mechanics**

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin. First term only. Prerequisites: Physics 321 and 413, Mathematics 330 or 331, 332 (may be taken concurrently), and 345, and consent of Department.

Text: Eisberg, *Modern Physics*.

(3-0; 0-0)

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. Second term only. Prerequisites: Physics 423, and consent of the Department.

Text: Eisberg, *Modern Physics*.

(0-0; 3-0)

425. (1 ½) **Electronics**

Electronic circuit theory with applications. Second term only. Prerequisites: Physics 322, Mathematics 330 or 331.

Text: Brophy, *Basic Electronics for Scientists*.

(0-0; 3-0)

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. Second term only. Prerequisites: Physics 121 or 211, Mathematics 330 or 331 (may be taken concurrently) and 345 (may be taken concurrently).

Text: Li and Lam, *Principles of Fluid Mechanics*.

(0-0; 3-0)

427. (1 ½) **Geophysics**

Physics of the earth; including atmospheric studies and extra-terrestrial effects. Structure and composition of the earth, geo-thermometry, elementary seismology, and geomagnetism. Second term only.

Prerequisites: Physics 322 (may be taken concurrently), Mathematics 330 or 331 (may be taken concurrently), and 345 (may be taken concurrently).

Text: To be announced.

(0-0; 3-0)

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: To be announced.

(0-6; 0-6)

460. (0) **Physics Seminar**

Talks by students, faculty, and outside speakers.

(2-0; 2-0)

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.

500. (2) **Quantum Mechanics**

501. (2) **Nuclear Physics**

502. (2) **Electromagnetic Theory**

503. (2) **Theory of Relativity**

504. (2) **Atomic and Molecular Spectroscopy**

505. (2) **Advanced Classical Mechanics**

511. (2) **Applied Topics In Nuclear Physics**

512. (2) **Upper Atmosphere Physics**

513. (2) **Cosmic Ray Physics**

514. (2) **Fluid Mechanics**

515. (2) **Geophysics**

516. (2) **Acoustics**

517. (2) **Magnetism**

560. (2) **Seminar**

580. (2) **Directed Studies**

599. **M.Sc. Thesis**

(Credit to be determined but normally in this Department 6 units.)

600. (2) **Advanced Quantum Mechanics**

699. **Ph.D. Thesis**

(Credit to be determined.)

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 contemplating graduate studies in Astronomy 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 120 in either year.

THIRD AND FOURTH YEARS

Major

Mathematics 330 or 331
Mathematics 345
Physics 213 or 312 (through 1968-69)
Physics 322
Physics 411† or 412† (after 1969-70)
Physics 413
Astronomy 300
Astronomy 400† or 401†
Astronomy 402

Honours

Mathematics 330 or 331
Mathematics 345
Physics 213 or 312 (through 1968-69)
Physics 321
Physics 322
Physics 410† and 420†
Physics 411† or 412† (after 1969-70)
Physics 413
Physics 422† or 423†
Astronomy 300
Astronomy 402
Astronomy 470
Electives

† 1½ units

Physics 213 is to be offered to both second- and third-year students in 1969-70. It can be taken no later than the third year. Together with Physics 412† it will replace Physics 312 after 1968-69.

Students wishing to take senior Astronomy courses without having completed Astronomy 120 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 Mathematics 330 or 331, Mathematics 345, Physics 213 or 312, and Physics 321, 322 and 413 in the third year.

The electives are to be chosen in consultation with the Physics Department. They are normally two of Astronomy 400†, Astronomy 401†, Physics 421† and Physics 424†, including at least one of these Astronomy courses.

ASTRONOMY COURSES OFFERED

120. (3) Elementary Astronomy

Basic ideas concerning astronomical co-ordinate systems; the nature of light; astronomical instruments; the solar system; stars and stellar systems; historical and philosophical implications of astronomy; current astronomical ideas and discoveries; practical work in observation and computation. Prerequisites: Mathematics 12, Physics 12 or 101 (may be taken concurrently).

Text: Abell, *Exploration of the Universe*.

(3-2; 3-2)

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; the two-body prob-

lem and its application to the motions of planets, binary stars, and space vehicles; perturbations and precession; stellar motions and galactic rotation. Prerequisites: Astronomy 120 or the consent of the Department, Physics 121 or 211, Mathematics 330 or 331 (may be taken concurrently); Mathematics 345 and Physics 321 are recommended.

Texts: Smart, *Spherical Astronomy*; van de Kamp, *Elements of Astromechanics*; Berman, *The Physical Principles of Astronautics*. (3-0; 3-0)

400. (1 ½) **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. Second term only. Prerequisites: Astronomy 120 or the consent of the Department, Physics 322, 413 (may be taken concurrently), Mathematics 330 or 331.

Text: Steinberg and Legueux, *Radio Astronomy* (translated by Bracewell).

(0-0; 3-0)

401. (1 ½) **Modern Astronomy**

A variety of modern topics, such as solar physics, cosmology, rocket and satellite astronomy, radar astronomy. Second term only. Prerequisites: Astronomy 120 or the consent of the Department, Physics 422 and 413 (both may be taken concurrently), Mathematics 330 or 331, 345.

Text: To be announced.

(0-0; 3-0)

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 120 or the consent of the Department. Physics 213 or 312, 411† or 412† and 413 (all Physics courses numbered above 400 may be taken concurrently), Mathematics 330 or 331, and 345.

Texts: To be announced.

(3-0; 3-0)

470. (3) **Directed Studies in Astronomy**

Observational and practical work, directed reading. Normally open to Honours students only. Others by consent of the Department.

ASTRONOMY GRADUATE COURSES

500. (2) **Stellar Atmospheres**

501. (2) **Stellar Structure and Evolution**

502. (2) **Binary and Variable Stars**

DEPARTMENT OF POLITICAL SCIENCE

Ronald I. Cheffins, B.A., LL.B. (*Brit. Col.*), LL.M. (*Yale*), Professor and Chairman of the Department.

Malcolm G. Taylor, M.A., Ph.D. (*Calif.*), LL.D. (*Alta.*), Professor. (Leave of absence 1968-69.)

Neil A. Swainson, B.A., B.Ed., M.A. (*Brit. Col.*), Associate Professor.

Edgar S. Efrat, B.A. (*Reed Coll.*), M.A., Ph.D. (*Texas*), 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. (*London*), M.A. (*Indiana*), Instructor.

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 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 — The Major programme in Political Science requires the completion of Political Science 200 and 300. In addition, four other courses are to be chosen from any three of the Group I-VI. Political Science 200 is generally considered to be a prerequisite for courses in the 300 and 400 series, although in some cases the Department may modify this requirement.

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. 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 the Departmental programme of directed study and research (Political Science 490).

During the Third and Fourth Years, Honours students must take at least 21 units in Political Science, nine of which must be Political Science 300, 307, and 490.

COURSES OFFERED

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. Efrat.

(3-0; 3-0)

GROUP I — POLITICAL THEORY

300. (3) Introduction to Political Theory

Analysis and interpretation of the major writings of western Political Theory from the Greeks to the Modern period.

Dr. Robbins.

(3-0; 3-0)

307. (3) **Scope and Method in Political Science**

An examination of the range of political problems and of various approaches to their explication. Not recommended as a general elective.

Mr. Sproule-Jones.

(3-0; 3-0)

400. (3) **19th Century Political Thought**

An analysis of the major contributions to modern political development based on an intensive examination of 19th and early 20th Century social and political thought.

Dr. Robbins.

(3-0; 3-0)

407. (3) **Contemporary Political Thought**

An examination of the major political thought of the present day and the recent past. Attention will be directed to the interaction of social, psychological and political thought and to recent developments in philosophy, bearing on the study of politics.

Dr. Robbins.

(3-0; 3-0)

GROUP II — COMPARATIVE GOVERNMENT

310. (3) **The Governments of the United States and the United Kingdom**

Studies of the American and British Governments — comparative analyses of the presidential and parliamentary systems, federal and unitary structures and related problems.

Dr. Efrat.

(3-0; 3-0)

311. (3) **Western Europe and the Soviet Union**

Comparative analysis of the governmental forms and political processes in major countries of western Europe and in the Soviet Union.

Dr. Efrat.

(3-0; 3-0)

410. (3) **The Government of Canada**

Analysis of the structure of government and the main features of political life in Canada. Attention will be given to the development of institutions and to the interaction of social, economic, and political factors.

Mr. Swainson.

(3-0; 3-0)

411. (3) **Politics of Developing Nations**

Seminar in comparative studies of governmental problems and political cultures in the developing nations of Asia, Africa and Latin-America.

(Not offered 1968-69.)

(3-0; 3-0)

GROUP III — PUBLIC LAW

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.

Mr. Cheffins.

(3-0; 3-0)

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 425, or the permission of the instructor.

Dr. Gow.

(3-0; 3-0)

425. (3) **Law and Public Policy**

Studies in the theory of law; the development of legal concepts; the role of law in the field of public policy; social, political, philosophical and cultural factors in the development of legal thought.

Mr. Cheffins.

(3-0; 3-0)

GROUP IV — POLITICAL BEHAVIOUR

430. (3) **Parties, Pressure Groups and Public Opinion**

An introduction into the role of political parties, interest groups, opinion formulation and voting behaviour in the electoral and legislative process.

Mr. Sproule-Jones. (3-0; 3-0)

431. (3) **Executive and Legislative Politics**

The nature of the executive function and the legislative process, provincial and federal, including the organization and functions of executives and legislatures, direct legislation and the relationship between the legislative and executive branches and other organs of government.

Mr. Sproule-Jones. (3-0; 3-0)

GROUP V — INTERNATIONAL RELATIONS

340. (3) **International Studies**

Seminar in the theory and practice of relations among modern states. The first term will focus on traditional patterns of international politics. The second term will be devoted to a comprehensive examination of the theory of international relations.

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

341. (3) **International Law and Organization**

An introductory seminar in the theory and practice of international law, followed by an examination of the role of international organizations in the modern period.

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

445. (3) **Comparative Foreign Policy**

Seminar in the formulation, execution and evaluation of foreign policy conducted by the modern nation state. Emphasis will be placed upon the foreign relations of the major international political units.

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

GROUP VI — PUBLIC ADMINISTRATION

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 powers and responsibility.

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

454. (3) **Local and Regional Government**

A comparative study of the evolution of the political process and political institutions at the local and regional level; the locus of power, political participation, fiscal viability, the politics of reform, governmental co-operation and integration in the metropolitan world.

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

GROUP VII — HONOURS

490. (3) **Fourth Year Honours**

Individual directed reading and research.

Staff.

DEPARTMENT OF PSYCHOLOGY

- William H. Gaddes, B.A., M.A. (*Brit. Col.*), Ph.D. (*Claremont*), Professor.
Otfried Spreen, B.A. (*Bonn*), Dipl.-Psych., Ph.D. (*Freiburg*), Professor.
Gordon Neville Hobson, M.A., Ph.D. (*Alta.*), Associate Professor.
Charles W. Tolman, B.S. (*Wash.*), M.S., Ph.D. (*Wash.*), Associate Professor.
Pam Duncan, B.A. (*Wisconsin State*), M.A. (*U. of Chicago*), Ph.D. (*U. of Wisconsin*), Assistant Professor.
Jay Hewitt, B.A. (*Calif.-Santa Barbara*), M.A., Ph.D. (*Iowa*), Assistant Professor.
Richard B. May, B.A. (*Whitman*), M.A., Ph.D. (*Claremont*), Assistant Professor.
Howard J. Simmons, B.Sc. (*M.I.T.*), Ph.D. (*Illinois*), Assistant Professor.
H. Edward Tryk, B.A. (*San Jose State*), M.A., Ph.D. (*Oregon*), Assistant Professor.
R. Leslie D. Wright, M.A. (*Brit. Col.*), Ph.D. (*Tor.*), Assistant Professor.
Fouad A. Hamdi, M.D. (*Alexandria*), Ph.D. (*Edin.*), Part-time Lecturer.
James A. Johnson, C.D., M.A. (*Dalhousie*), Part-time Lecturer.
Robert M. Peet, B.A., M.B., B.Ch., B.A., M.D. (*Trinity College, Dublin*), F.R.C.P.I., M.S. (*Minn.*), F.R.C.P.(C), Part-time Lecturer.
Charles A. Simpson, M.B., Ch.B. M.R.C.P. (*Edin.*), F.R.C.P.(C), Part-time Lecturer.

Honorary Research Associates

- Malcolm Graham, B.S., M.D., C.M. (*McGill*), M.S. (*Iowa*), F.A.C.S.
Douglas Muir, M.R.C.S., L.R.C.P., D.M.R.D. (*Eng.*), D.M.R.D. (*London*), L.M.C.C., Cert.R.C.P.S. (*Can.*).
Kenneth R. Thornton, B.Sc., M.B., Ch.B. (*Leeds*).

GENERAL, MAJOR AND HONOURS PROGRAMMES

Students planning a major or concentration in Psychology are strongly urged to seek preparation in Biology, Mathematics, Philosophy and the Social Sciences during the first and second years.

FIRST AND SECOND YEARS

Ordinarily, Psychology 100 will be taken in the first year and either Psychology 200 or Psychology 220 will be taken in the second year. Psychology 100 and 200 or 220, are normally required as prerequisites for all upper level courses.

THIRD AND FOURTH YEARS

General — Students seeking a General degree must complete a minimum of three Psychology courses (9 units) numbered 300 and above during their third and fourth years.

Major — Students seeking a Major must complete a minimum of five Psychology courses (15 units) numbered 300 and above during their third and fourth years. These courses must include Psychology 300.

Honours — Students seeking Honours in Psychology should make application to the Head of the Department. The programme requires a minimum of six Psychology courses (18 units) numbered 300 and above during the third and fourth years. These courses must include Psychology 300 (unless taken in the second year), 400 or 401, and 499.

COURSES OFFERED

100. (3) Contemporary 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.

Staff.

(3-0; 3-0)

200. (3) **General Psychology**

An examination of the subject matter, methods and attitudes of modern psychology in light of their historical development.

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

220. (3) **Dynamics of Behaviour**

A study of empirical approaches to the understanding of human behaviour and some methods of its control. Prerequisite: Psychology 100 or permission of the instructor. (3-0; 3-0)

300. (3) **Experimental Psychology**

Intensive development of statistical reasoning and methodology in the application of experimental procedure to various areas of psychology. Emphasis upon meaningful actual usage of such techniques in the planning, conduct, analysis, interpretation, and reporting of experiments by the class and individual students. Prerequisites: Psychology 200 or Psychology 220; or acceptable alternative qualifications as decided by instructor.

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

311. (3) **Learning**

A critical survey of the basic experimental findings and theories of the learning process. Group experiments will be conducted.

Dr. May. (2-2; 2-2)

314. (3) **Motivation**

A study of the principles and theories of motivation and emotion, including physiological and social factors, theoretical and experimental developments, and behavioural implications.

Dr. Hobson. (2-2; 2-2)

330. (3) **Personality**

An examination of the theories and research dealing with individual differences in behaviour. The topics to be studied will include authoritarianism, anxiety, self-esteem, need for achievement, intelligence, creativity, socialization, the antecedents of personality change, national character, and the ideas of Freud, Jung, Horney, Miller. Prerequisite: Psychology 200 or 220.

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

331. (3) **Social Psychology**

An examination of the theories and research in the area of social behaviour. The topics to be studied will include socialization, persuasion, aggression, interpersonal attraction, conformity, group dynamics, and cross-cultural social psychology.

Dr. Hewitt. (2-2; 2-2)

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 and executive development will be studied.

Mr. Johnson. Evening Division. (3-0; 3-0)

335. (3) **Developmental Psychology**

Psychological development, pre-natal through adolescence; determiners of psychological growth; motor, emotional, social, intellectual, language and personality development. Implications for the guidance of psychological development are indicated.

Dr. Duncan. (2-2; 2-2)

370. (3) **Psycholinguistics**

Offered in collaboration with the Department of Linguistics. 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 linguistics be-

haviour, language and cognition. Students may be admitted at the discretion of the instructors and/or their Departments.

Dr. Spreen, Dr. Vinay. (2-2; 2-2)

400. (3) Advanced Research Methods

Experimental design and statistical techniques are applied to problems of psychological research. Individual research is conducted. Prerequisite: Psychology 300 or equivalent.

Dr. May. (2-2; 2-2)

401. (3) Psychometrics

A critical evaluation of principles and issues in psychological assessment; fundamentals of bivariate correlation; introduction to scaling and test theory, multivariate correlational analysis, test and questionnaire construction. Prerequisite: Psychology 300 or equivalent.

Dr. Tryk. (2-2; 2-2)

411. (3) Perception

The experimental study of visual and auditory perception.

Dr. Spreen. (2-2; 2-2)

412. (3) Special Problems in Psychology

Independent study for the advanced student. Complete arrangements must be made with an instructor in the Department before registering.

415. (3) Human Neuropsychology

The study of brain-behaviour relationships. The first term of the course meets jointly with Psychology 423 and is primarily concerned with the neurophysiological and neuroanatomical basis 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. Students may not register for both Psychology 423 and this course. Biology 150 is recommended.

Dr. Spreen, Dr. Gaddes, Dr. Simmons,
Dr. Peet, Dr. Hamdi, Dr. Simpson. (2-2; 2-2)

423. (3) Physiological Psychology

The study of the physiological bases of normal and disordered behaviour. The first term of this course, meeting jointly with Psychology 415, is concerned with the neurophysiological and neuroanatomical organization of the body. The second term is primarily concerned with experimental studies of the role of the nervous system and other organ system in determining behaviour. Students may not register for both Psychology 415 and this course. Biology 150 is recommended.

Dr. Simmons, Dr. Peet. (2-2; 2-2)

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.

Dr. Tryk. (2-2; 2-2)

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 Zoology 434 and students may not register for both courses. Prerequisite: Biology 150. Recommended: Psychology 300 or Biology 304.

Dr. Tolman. (2-2; 2-2)

499. (3) Honours Thesis

Prerequisite: Honours standing.

GRADUATE COURSES

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

503. (1-6) **Practicum in Methods of Psychology**

Practical experience and instruction under the close supervision of a Faculty member of the department will be received in one or more of the following areas: Applied Experimental Psychology, Clinical Psychology, Neuropsychology, or Teaching of Psychology. Students taking practicum in Clinical Psychology will register for 6 units of credit.

504. (1-3) **Individual Study**

Directed study of current specialized problems in psychology will be conducted under the supervision of a member of the faculty of the department. The focus of this study will be theoretical.

505. (1 ½) **Animal Learning** (First term only)

506. (1 ½) **Human Learning** (Second term only)

507. (1 ½) **Personality** (First term only)

508. (1 ½) **Motivation** (Second term only)

509. (1 ½) **History of Psychology** (First term only)

510. (1 ½) **Theories of Psychology** (Second term only)

511. (1 ½) **Comparative Psychology** (First term only)

512. (1 ½) **Physiological Psychology** (Second term only)

513. (1 ½) **Sensory Psychology** (First term only)

514. (1 ½) **Perception** (Second term only)

515. (1 ½) **Human Neuropsychology** (First term only)

516. (1 ½) **Psychotherapy** (First term only)

517. (1 ½) **Quantitative Methods** (Second term only)

518. (1 ½) **Psychometric Methods** (Second term only)

519. (1 ½) **Social Psychology** (First term only)

520. (1 ½) **Developmental Psychology** (Second term only)

521. (1 ½) **Human Factors** (First term only)

522. (1 ½) **Personnel Psychology** (Second term only)

523. (1 ½) **Abnormal Psychology** (First term only)

524. (1 ½) **Diagnostic Testing** (First term only)

599. (3-6) **Independent Research**

Research into current problems of psychology will be conducted under the sponsorship of a member of the faculty of the department. This work will usually be directed toward the completion of the Master's Thesis.

699. (3-15) **Doctoral Dissertation**

DEPARTMENT OF SLAVONIC AND ORIENTAL STUDIES

Terence M. Rickwood, B.A. (*Liverpool*), Visiting Lecturer and Acting Head of the Department.

Michael M. Dane, B.A. (*Wash.*), M.A. (*Harvard*), Assistant Professor of Russian. (Leave of absence 1968-69.)

Kôji Nishimoto, B.A., M.A. (*Tokyo*), Doct. (*Laval*), Docteur de l'Université de Paris, Visiting Assistant Professor of Japanese.

Zelimir Juricic, M.A. (*Brit. Col.*), Instructor of Russian.

GENERAL AND MAJOR PROGRAMMES

NOTE: All students planning to take a concentration in a General Programme or a Major in the Department of Slavonic and Oriental Studies must take English 200 and Linguistics 100.

Students wishing to take language 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 language courses to meet requirements for a B.A. degree 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.

Students specializing in Russian 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.

General — First Year: Russian 100; Second Year: Russian 200; Third and Fourth Years: Russian 300, 302 and 400.

Major — First Year: Russian 100; Second Year: Russian 200; Third and Fourth Years: Russian 302 and at least twelve units in Russian courses numbered 300 or above including Russian 300 and Russian 400.

Honours — Consult Head of the Department.

100. (3) **Basic Russian**

First introductory course in the Russian language.

Text: Stilman and Harkins, *Introductory Russian Grammar*. (4-1; 4-1)

190. (1½) **Russian Reading**

(Not offered 1968-69.) (2-0; 2-0)

200. (3) **Second Year Russian**

Second course in the Russian language.

Texts: Stilman and Harkins, *Introductory Russian Grammar*. Additional material to be announced. (4-1; 4-1)

300. (3) **Third Year Russian**

Selected readings in Russian literature and literary criticism.

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

302. (3) **Advanced Composition and Stylistics**

Texts: Borras and Christian, *Russian Syntax*; Borras and Christian, *Russian Prose Composition*. (3-0; 3-0)

306. (3) **Russian Literature in Translation**

History of Russian literature from the eleventh century to the Soviet Period.

Text: Mirski, *A History of Russian Literature*. (3-0; 3-0)

400. (3) **History of the Russian Language**

Lectures on the cultural history of the Russian language and its linguistic evolution. This course will be conducted in Russian.

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

*401. (3) **Russian Literature since 1917**

(Not offered 1968-69.) (3-0; 3-0)

*402. 3) **History of Russian Drama**

(Not offered 1968-69.) (3-0; 3-0)

*403. (3) **Dostoevsky and Tolstoy**

The major works of both authors will be studied against the background of their lives and times.

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

*NOTE: Students taking one of these courses as part of a major in Russian must have Russian 200 as a prerequisite and must take a fourth lecture hour (in Russian).

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

(3-0; 3-0)

SERBO-CROATIAN

300. (3) **Introduction to Serbo-Croatian language and literature**

Rapid survey of the grammar and syntax, together with the reading of scholarly and literary Yugoslav texts.

Prerequisites: Completion of 200 level course in foreign language or equivalent.

Texts: Javarek, Vera, *Serbo-Croatian Prose and Verse*; Javarek & Sudjic, *Serbo-Croat*. (3-0; 3-0)

JAPANESE

100. (3) **A first course in Japanese**

Texts: To be announced. (4-1; 4-1)

NOTE: Students electing to take this course should note that in the foreseeable future, a 200-level course in Japanese will not be available.

Faculty of Education

FACULTY OF EDUCATION

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FACULTY OF EDUCATION

- Fred T. Tyler, B.Sc., M.A., M.Ed. (*Alta.*), Ph.D. (*Calif.*), Professor and Dean of the Faculty.
- George A. Brand, B.A., M.Ed. (*Brit. Col.*), Professor, Director of Student Teaching.
- Hugh E. Farquhar, M.A. (*Brit. Col.*), Ph.D. (*Alta.*), Professor.
- Arthur Kratzmann, M.Ed. (*Alta.*), Ph.D. (*Chicago*), Professor and Director of Teacher Education.
- Geoffrey P. Mason, M.A. (*Brit. Col.*), Ph.D. (*Wash. State*), Professor.
- David J. Chabassol, B.A., B.Ed. (*Acadia*), M.Ed. (*Tor.*), Ph.D. (*Alta.*), Associate Professor. (Leave of absence 1968-69.)
- Miss Jean D. Dey, M.Ed. (*Alta.*), Associate Professor.
- Cary F. Goulson, M.A. (*Brit. Col.*), Ed.D. (*Tor.*), Associate Professor, Assistant Director of Student Teaching (Secondary).
- Edgar B. Horne, B.A.Sc., M.A. (*Brit. Col.*), Ph.D. (*Illinois*), Associate Professor.
- A. Wilfrid Johns, B.A. (*Wash.*), Associate Professor.
- Fred L. Martens, B.A., B.Ed. (*Brit. Col.*), M.Sc. in P.E. (*Wash.*), Associate Professor.
- Richard H. J. Monk, B.A. (*Brit. Col.*), M.Ed., Ph.D. (*Wash.*), Associate Professor. (Leave of absence 1968-69.)
- Mrs. Kathleen M. Christie, B.A. (*Brit. Col.*), M.A. (*Calif.*), Assistant Professor.
- Leslie W. Crawford, M.S. (*E. Montana Coll.*), Ed.D. (*Calif.*), Assistant Professor.
- William K. Cross, B.Ed. (*Brit. Col.*), Assistant Professor, Assistant Director of Student Teaching (Elementary).
- J. Kent Davis, B.A., M.S. (*Wyoming*), Ph.D. (*Wisconsin*), Assistant Professor.
- Winston H. Eshleman, M.A. (*Stanford*), Ed.D. (*Arizona*), Assistant Professor.
- Charles G. Galloway, B.A. (*Cent. Wash. State Coll.*), M.A. (*Harvard*), Ph.D. (*Calif.*), Assistant Professor.
- John F. Hall, A.M. (*Stanford*), M.S. (*Oregon State*), Assistant Professor.
- Mrs. Maurcen C. Hibberson, B.P.E. (*Brit. Col.*), M.A. (*Oregon*), Assistant Professor.
- Valdimar K. Johnson, B.A. (*Pacific Luth.*), M.A. (*Calif.*), Assistant Professor.
- Donald W. Knowles, B.A., B.Ed., M.Ed., Ph.D. (*Alta.*), Assistant Professor.
- Mrs. Norma I. Mickelson, B.Ed. (*Brit. Col.*), Assistant Professor.
- Alan R. Morton, M.S., D.Ed. (*Oregon*), Assistant Professor.
- Edward E. Owen, M.A. (*Auckland*), Assistant Professor.
- R. Vance Peavy, M.A. (*Colorado State Coll.*), D.Ed. (*Oregon*), Assistant Professor.
- Roger A. Ruth, M.S. (*Emporia State Coll.*), Assistant Professor.
- John J. Sheppy, B.A., M.Ed. (*Brit. Col.*), Assistant Professor.
- Mrs. Marion A. Small, B.Ed. (*Brit. Col.*), M.Ed. (*West. Wash. St. Coll.*), Assistant Professor.
- Robert Swailes, B.S.A. (*Man.*), M.Ed. (*Brit. Col.*), Assistant Professor.
- David C. Thomas, B.Ed. (*Brit. Col.*), M.A., Ph.D. (*Oregon*), Assistant Professor.
- Joseph W. Thomson, B.A. (*Trenton State Coll.*), M.A. (*Illinois*), Assistant Professor.
- Henry G. Timko, B.S. (*Kutztown State Coll.*), M.A. (*Illinois*), Assistant Professor.
- Robert D. Bell, B.A. (P.E.) (*Sask.*), M.A. (*Oregon*), Instructor and Co-ordinator of Athletics.
- Gerald A. Carr, B.A., M.S. (*U.C.L.A.*), Instructor.
- David Docherty, M.Sc. (*Oregon*), Lecturer.
- Mrs. R. Anne McLaughlin, B.Com. (*Brit. Col.*), Lecturer.
- Ronald T. F. Thompson, B.A., B.Ed., M.Ed. (*Man.*), Sessional Lecturer.
- Miss Margery M. Vaughan, L.R.S.M. (*Royal Schools of Music*), Mus.G. (*West. Ont.*), Mus.Bac. (*Tor.*), M.Litt. (*Durham*), Lecturer.

From Counselling:

Miss Esme N. Foord, M.A. (*Queen's*), B.Paed., Ed.D. (*Tor.*), Associate Professor,
Director of Counselling and Testing.

From the Department of Modern Languages:

J. Beattie MacLean, B.A. (*Brit. Col.*), M.A., Ph.D. (*Wash.*), Professor of German.

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. Two degrees are approved in the Faculty of Education: (a) a five-year Bachelor of Education, preparing both elementary and secondary teachers, and (b) a four-year Bachelor of Education (Elementary), preparing elementary teachers only. The Master of Arts degree with specialization in Education is offered through the Faculty of Graduate Studies; information about the degree may be found on pages 192 - 196 of this Calendar; inquiries concerning graduate study in Education should be directed to the Chairman of the Faculty or to the Dean of Education.

A. THE FIVE-YEAR BACHELOR OF EDUCATION DEGREE:

A five-year programme (normally requiring 75 units of course work) following completion of Grade 12 on the Academic-Technical programme, and leading to the interim Professional Basic teaching certificate.

A1. Bachelor of Education (Elementary Curriculum) (See A1, p. 168)

On this programme the professional year is Year Three. A student beginning this programme and wishing to take the professional year in his second year will take Year Two outlined for the four-year Bachelor of Education (Elementary) degree.

A2. Bachelor of Education (Secondary Curriculum) (See A2, p. 172)

On this programme the professional year is Year Five and therefore the student must complete the full programme before being eligible to apply for a teacher's certificate.

Students who hold an elementary teaching certificate may enter this programme. They will be required to take from 76½ to 82½ units of course work (see p. 174).

B. THE FOUR-YEAR BACHELOR OF EDUCATION (ELEMENTARY) DEGREE:

A four-year programme (normally requiring 66-69 units of course work) following completion of Grade 12 on the Academic-Technical programme, and leading to the interim Professional C teaching certificate (see B, p. 177).

On this programme the professional year is Year Two and the student may begin teaching on an interim basis after successfully completing this year, or he may continue with further work leading to higher certification, and also towards the degree, before beginning to teach.

Upon completion of two years on this programme, the student may request permission to move into Year Three of the five-year Bachelor of Education degree programme (Elementary Curriculum) which is usually possible without loss of credit. However, once having transferred to the five-year programme and having obtained teacher certification based on work completed in Year Three, *he must remain on the five-year programme.*

Similarly, the student may request permission to transfer into the five-year Bachelor of Education degree programme (Secondary Curriculum). If the courses of Year One have been carefully chosen, this may be done without loss of credit. *Students who have failed their previous year's work may not transfer to this programme.*

C. TRANSFER PROGRAMME (ELEMENTARY CURRICULUM) FOR UNDERGRADUATES:

A one-year professional programme (elementary) for students with full First Year in Arts and Science, or its equivalent, or one or more years' acceptable credit in

another faculty (see C, p. 178). Successful completion of this professional year with full First Year or its equivalent fulfils course requirements for the interim Elementary Basic Certificate (two years of approved credit), or higher interim certification depending upon the advanced standing of the student on admission to this professional year (see Teacher Certification, below). Students having completed this programme may elect to work towards one of the Bachelor of Education degrees.

D. DIPLOMA PROGRAMMES FOR GRADUATES:

D1. Diploma Programme (Elementary Curriculum) for Graduates: (See D1, p. 179)

A one-year professional programme for graduates of a faculty other than Education who are interested in elementary school teaching. Successful completion of this professional year fulfils course requirements for an interim Professional Basic Certificate.

D2. Diploma Programme (Secondary Curriculum) for Graduates: (See D2, p. 179)

A one-year professional programme for graduates of a faculty other than Education who are interested in secondary school teaching and who can meet the requirements for admission. Successful completion of this professional year fulfils course requirements for an interim Professional Basic Certificate.

E. INTERNSHIP PROGRAMME:

A Teaching Internship Programme for the preparation of secondary teachers will be offered on a continuing basis provided that a minimum of twenty acceptable applications are received. This programme is designed for and open only to graduates from other faculties or universities who are twenty-eight years of age or older. The academic admission requirements are those for the Diploma Programme, D2 (see p. 179).

Instruction will begin in May and June each year in schools in the Victoria area. Following a further two months of preparation at the University in July and August, successful candidates will be employed as full-time, paid intern teachers and will be supervised by University instructors. Upon successful completion of a further summer session of work at the University candidates will be granted Professional Basic certification by the Department of Education.

Prospective candidates may write to the Registrar for further information and application forms.

F. POST-BACHELOR OF EDUCATION (ELEMENTARY) DEGREE PROGRAMME:

A fifth-year programme following the Bachelor of Education (Elementary) degree. Successful completion of an appropriate fifth-year programme, approved in advance by the Dean of Education fulfils requirements for the interim Professional Basic Certificate. Normally, this will require completion of a second teaching area or speciality (see Teaching Areas, p. 174).

In this year a minimum grade point average of 3.00 is required on the 15 units of course work.

Before beginning this fifth-year, a student should obtain from the Counselling Office of the Faculty of Education a form for use in planning his programme for prior approval by the Dean of Education. On the back of this form information is given concerning the general requirements of the programme.

TEACHER CERTIFICATION

Sole authority to issue teaching certificates rests with the Provincial Department of Education, Victoria, B.C.; a degree or a transcript of credit from the University is not a licence to teach. The records of candidates who successfully complete any of the teacher-education programmes described above are reported by the University to the Department of Education.

The following types of teaching certificates are issued, depending in general upon the number of years of preparation completed, one of which must be the professional year:

Elementary Basic	(EB) — full Second Year
Elementary Advanced	(EA) — full Third Year
Professional C	(PC) — full Fourth Year
Professional Basic	(PB) — full Fifth Year
Professional Advanced	(PA) — an acceptable Master's degree

The first certification is interim in nature and valid normally for a period of four years. Only the Elementary Advanced or higher certificates can be made permanent. The requirements for permanent certification include completion of two years of satisfactory teaching in the Province, recommendations from District Superintendents and approval by the Department of Education.

Teachers in elementary schools are expected to hold Elementary Basic or higher certification. Students may complete the four- or the five-year degree programme indicated above before accepting a teaching position, or they may begin teaching after the professional year has been completed. Students who are admitted directly from Grade 13 or who transfer from other faculties and universities may be given credit for those courses already completed provided they meet the requirements of the Education programme selected and the Committee on Admissions (see Admission Requirements, below).

Teachers in secondary schools are expected to hold Professional Basic or higher certification and to have completed a secondary teacher-education programme. Normally, they will have completed five years of approved university study as outlined above. If, after at least one successful year on this programme, for financial or other reasons students decide to transfer to the elementary programme and teach in the elementary schools prior to satisfying all requirements for the Professional Basic Certificate, they may qualify for a lower certificate by completing the elementary professional year as outlined above (see Programme C). If they wish, they may resume the secondary programme at a later date but some loss of course credits may be expected under these circumstances.

ADMISSION REQUIREMENTS

Applicants for admission to the Faculty must meet the general requirements outlined on pages 33 - 36. The University reserves the right, however, to reject applications to this Faculty on the grounds of physical or health disabilities, or for other reasons, including unsatisfactory academic records. *Normally, persons who have failed the last year attempted in another faculty or university are not admissible.*

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.

Subject to the general regulations of the University governing admission with advanced standing and transfer credit, and to the decision of the Faculty Committee on Admissions, 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 programme in Education. Normally, such transfer students will be granted 15 units of transfer credit for the work of the "professional year" on a Bachelor of Education degree programme. However, they will be required to complete one course from the following groups before being granted full standing in Year Two:

- (a) English 200 or 201 or 203 (unless an equivalent second-year English course has been completed),
- or
- (b) Art Education 100 or Music Education 105 or Physical Education 149.

To qualify for a Bachelor of Education degree, candidates normally must complete the final two years of the degree programme at the University of Victoria.

Minimum Requirements for Admission to the Undergraduate Professional Year:

Five-Year Bachelor of Education (Elementary Curriculum) Degree Programme: (See p. 168).

Twenty-seven units of appropriate course work of the first two years with an overall grade point average of 2.00.

Four-Year Bachelor of Education (Elementary) Degree Programme: (See p. 177).
Complete Year One on this programme with a grade point average of 2.00.

Transfer Programme: (See p. 178).

(a) Complete Grade 13 standing with an average of 60% ; or

(b) Complete First Year Arts and Science with a grade point average of 2.00.

Students who do not meet any of the above minimum conditions will be required, in order to become admissible, to complete further satisfactory work.

Minimum Requirements for Admission to the Graduate Professional Year:

Diploma Programme D1: (See p. 179).

An acceptable undergraduate degree from a recognized university.

Diploma Programme D2: (See p. 179).

(a) Candidates will be admitted if they hold a degree from a recognized university and have completed the equivalent of at least 9 units of work in Years Three and Four in *each of two* of the following subjects: art, biology or botany or zoology, chemistry, English, French, geography, German, history, Latin, mathematics, music, physical education, physics, Spanish, theatre, and have obtained a minimum grade point average of 3.00 in the senior courses which constitute each of these teaching subjects.

(b) Candidates will be admitted who have completed an Honours or a Master's degree in one of the above subjects.

Candidates who do not meet the above requirements, as well as those holding other degrees, such as B.A.Sc., B.Comm., B.H.E., B.Mus., B.P.E., B.S.A., B.S.F., B.S.P., LL.B., should apply in writing to the Registrar, requesting that their cases be reviewed by the Senate Committee on Admissions. Applications of this type should be received by the Registrar as early as possible and certainly before August 15 of the year in which they wish to enrol.

INQUIRIES CONCERNING ADMISSION

Students enrolling in the Faculty of Education for the first time should read the general statement on Academic Affairs on pages 31 - 46. of this Calendar. Note that a completed application form and official transcripts must be submitted to the Registrar by August 15. In addition, if the applicant holds a B.C. Teacher's Certificate, he must request the Registrar of the Provincial Department of Education, Victoria, B.C. to send a statement of "transfer of credit" to the Registrar of the University. In all cases, students should state the particular course or programme desired and the teaching areas or specialties they wish to complete.

N.B. Students will not be allowed to register or transfer after the fifth day of instruction.

For information concerning fees and general expenses, see pages 43-46 of this Calendar. Students in Education who will be undertaking Education 297, 797, 398, or 798 (Student Teaching) should allow an additional \$50 to \$100 for travel to local schools. Where a post-session practicum is required, students are reminded that their year is not completed until the middle of May. Only those students resident in the Victoria area may normally expect to take their post session practicum in School Districts 62 or 63.

For information about financial assistance see pages 240 - 277 of this Calendar. Work in the Library and Cafeteria may be available for students in good standing who require financial assistance. Applications should be made to the Student Placement Officer.

ACADEMIC ADVICE

Students wishing advice about any of the courses or programmes offered in the Faculty of Education should consult the Counselling Office of the Faculty or write to that office for information; this office is located in the Education Arts Building.

SEPTEMBER EXPERIENCE

Any student accepted for registration in the Faculty of Education may, at his option, elect to participate in "September Experience." In this programme, interested students will be assigned to a public school in the Victoria area for a period between the opening of public schools, September 2, and the beginning of classes at the University, September 23. During this time students will act as teacher-aides. They will take part in all the daily routine of getting a new year started except for actual preparation and teaching of lessons.

In exchange for "service to the school" it is hoped students will gain valuable experience with the kinds of problems teachers face at the beginning of a school year and how they go about solving them. Perhaps the most important part of the experience will simply be the opportunity to observe classrooms in action at this time of year.

Participation is on a voluntary basis without credit. There are no fees.

Interested students must return application forms received with registration materials by August 15.

Transfer students should give serious consideration to enrolling for this experience.

POST-PROFESSIONAL YEAR EXPERIENCE, ELEMENTARY

Depending upon the exigencies of the time-table, students in post-professional years, elementary, may request to have school experience at regular intervals during the session, usually one half-day each week.

Students who wish this experience should indicate their desire to the Director of Student Teaching at registration.

STANDING AND CREDIT

Students should refer to the general statements under this heading in Academic Affairs on page 40 of this Calendar.

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 grade point average of not less than 3.00 in the senior courses of each of the teaching areas which constitute the candidate's programme.

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 his probationary year he may be reinstated or, if there has been insufficient improvement, he will not be permitted to proceed to the next higher year.

No credit will be granted for any of the courses passed in the elementary or secondary professional year unless the student receives a passing grade in Education 797 or 798 respectively.

Once a student is registered in the Faculty of Education, credit will not be given for work undertaken elsewhere unless prior written permission has been obtained from the Dean.

SUMMER SESSIONS AND OTHER CREDITS

Under certain circumstances credit will be granted for work taken in other institutions, at Summer Session, or by Evening Division. The following special regulations apply:

1. The maximum credit for summer session work in any one calendar year is six units.
2. Students who plan to undertake work at other universities in the same year during which work has been attempted at the University of Victoria must receive prior written approval from the Dean of Education if they wish such courses to be credited towards a degree at the University of Victoria. Extra-mural work done at other universities prior to registration at the University of Victoria may be accepted if approved by the Faculty.

3. Students in attendance at the University may not register concurrently for extra-mural or correspondence work.
4. Candidates for degrees are advised to attend a winter session of the University of Victoria for the final year of their programme.

PHYSICAL EDUCATION

1. Students planning to enter the Physical Education teaching area are required to provide a medical certificate based upon a full medical examination taken within three months prior to registration. Medical cards must be sent in by September 10 and marked "P.E. Teaching Area" in the line headed "Faculty" on the card. Enrolment in Physical Education 140 is limited.
2. Students are required to demonstrate a reasonable degree of proficiency in physical skills and a high level of physical fitness in a pre-test scheduled in the first week of the session.
3. Students specializing in physical education should have secondary school chemistry.
4. Regulation uniforms, obtainable at the University Bookstore, are required by students specializing in physical education.
5. The practical part of each physical education course is regarded as laboratory work. Before a degree with a Physical Education teaching area can be granted, all the activities required in Physical Education 140, 240, 340, and 440, must be completed satisfactorily. Physical Education 440 is required only in the Five-Year Bachelor of Education degree.

A. THE FIVE-YEAR BACHELOR OF EDUCATION DEGREE

A1. ELEMENTARY CURRICULUM

This is the recommended programme for the preparation of elementary school teachers. Every candidate for this degree is required to complete 75 units of course work as outlined below which will include either two teaching areas; or one teaching area and the series of courses, "Teachers of Special Classes"; or the Remedial Specialty for Elementary Schools.

This programme for elementary teachers ordinarily requires five calendar years to complete. Permission to accelerate may be granted by the Dean of Education at the end of Year Two. Normally, the professional year is taken as a unit. This degree qualifies the holder for the interim Professional Basic Certificate.

The degree and the teaching certificate require successful completion of the following:

Education, including student teaching	24 units
Core Courses	21 units
Teaching Areas, Professional Specialties, Electives	30 units
<u>Total</u>	<u>75 units</u>

For completion of the degree, the candidate is required to obtain a minimum grade point average of 3.00 in the 12 units of course work beyond Year One contained in each professional teaching area, or special education area, or the 30 units of work in the remedial specialty. If the candidate elects a subject area as prescribed by the Faculty of Arts and Science (General Programme), he must obtain a minimum average of 3.00 in the 9 units of senior courses comprising this academic teaching area.

Students entering this programme with advanced standing from British Columbia Grade 13 or University:

Any deficiency in the Core Courses normally taken in the first two years must be removed. In some instances, therefore, students may need work beyond the minimum degree requirement of 75 units. Those students who enter the programme from Grade 13 or the Faculty of Arts and Science will need at least 78 units of course work for the degree.

Course Requirements:

All students complete the courses listed below in columns A and B and those in either C or D.

	A	B	C	D
Education	Core	Teaching Areas	Teaching Area and Professional Specialty or Remedial Specialty	
Education 200	(3)	English 100 and one of 200, 201, 203, 300	1 Teaching Area (12-15)	
Education 305	(3)	History 102 or 101	2 Teaching Areas and Electives (30)	and "Teachers of Special Classes" (9)
Education 340 or 342	(3)	Geography 303 or 101		Electives (12-3)
Education 420 or 423 or 427	(3)	Mathematics 130 or 160		or Remedial Specialty (30)
Education 301	(1½)	*Intermediate option: Biology or Physics		
Education 401	(1½)	Primary option: Education 245 (General Science)		
Curriculum and Instruction, 700 Series	(6)	Art Education 100 or Music Education 105 or Physical Education 149		
Education 797	(3)			
	24	21	30	30

* In order to meet the degree requirement for the Intermediate Option the student must offer secondary school or University laboratory courses in at least two of Biological Science, Chemistry, or Physics; or, with permission, Education 345.

Programme by Years:

Year One:

- *Education 197 or 297 (0)
 - English 100 (3)
 - History 102 or 101 or Geography 101 (3)
 - **A first year course in Biology or Physics, or, with permission, Education 345 for the Intermediate Option; Education 245 for the Primary Option (3)
 - ***One of Art Education 100, Music Education 105, or Physical Education 149 (3)
 - Mathematics 130 for those who select Mathematics as a Teaching Area; or prerequisite for Teaching Area****, or elective (3).....15
- *Students planning to take the professional year in Year Two must take Education 297 in Year One. They then take the professional year of the four-year Bachelor of Education (Elementary) programme.
- **Students who have credit in Biology 12 should take a physical science; those with credit in Physics 12 or Chemistry 12 should take Biology 150.
- ***Students planning a Physical Education teaching area and taking PE 140, 141, 142 in Year One must take either Art Education 100 or Music Education 105.
- ****Students planning to take the professional year in their second year with a Physical Education teaching area should seek counselling concerning their selection of this course.

Year Two: Pre-Professional Year

- Education 297 (0)
- Education 200 (3)
- One of English 200, 201, 203, 300 (3)
- Geography 303 or 101, or History 102 or 101 (3)
- Mathematics 130 or 160, or prerequisite for teaching area or elective (3)
- Prerequisite for teaching area, or elective (3).....15

Year Three: Professional Year

***Primary Option**

- Education 797 (3)
- **Two of Education 701, 705, 747 (2)
- Education 742 (Primary) (2)
- Education 744 (1)
- Education 746 (1)
- Education 305 (3)
- Education 301 (1½)
- Education 401 (1½).....15

Intermediate Option

- Education 797 (3)
- **One of Education 701, 705, 747 (1)
- Education 742 (Intermediate) (2)
- Education 744 (1)
- Education 745 (1)
- Education 746 (1)
- Education 305 (3)
- Education 301 (1½)
- Education 401 (1½).....15

- *Students who have not obtained credit for Education 245 must take Education 745 (1 unit) in the professional year, for a total of 16 units.
- **Students must not elect Education 701 if they have credit in Art Education 100; nor Education 705 if they have credit in Music Education 105; nor Education 747 if they have credit in Physical Education 149.

Years Four and Five:

- *Education 340 or 342 (3)
- One of Education 420, 423, or 427 (3)
- Teaching areas, professional specialty, remedial specialty,
electives (24).....30

*Students completing the primary option must take Education 340.

Teaching Areas and Professional Specialties:

Art: 15 units
Art 100 or 120; Art Education 300, 301, 400; Art elective in Fine Arts. Students electing this area must include Art Education 100 as one of the Core Courses.

Early Childhood Education: 12 units
Education 407, 412, 440, 441; an approved sociology course.

Language Arts: 12 units
English 301; Linguistics 390; one of: Education 415 and 442, Education 343 and 344, Theatre 481 or 381, Library Education 430 or 431; Primary Option: Education 342, or Intermediate Option: Education 415 and 442, or Education 343 and 344.

Library Education: 12 units
English 301; Library Education 430, 431; Primary Option: Education 342, or Intermediate Option: Education 415 and 442, or Theatre 481 or 381.

Mathematics: 12 units
Twelve units of mathematics in addition to Mathematics 130 are required. The following courses are listed in order of preference: Mathematics 232, 339, 337*, 249, 230, 332. With prior permission from the Dean of Education a mathematics course not listed above may be included in this programme. Students are reminded that certain science courses have specific mathematics courses as prerequisites.

* The prerequisite, Mathematics 230, will be waived with permission of the Department of Mathematics.

Mathematics/Science: 15 units
Mathematics 130 and a first-year laboratory science included among the Core Courses. Fifteen additional units are required:

Mathematics 232 or 230

A sequence of at least two courses (6 units) in a given subject

Six units elected from mathematics or the sciences.

(For the preferred sequence of mathematics courses, see the Mathematics Teaching Area above.) Within the teaching area and the core must be included at least one 3-unit course from chemistry, physics, or astronomy and at least one 3-unit course from bacteriology, biology, botany or zoology.

Science electives may include Education 445; Geography 203 or 302; Geology 200; or Physical Education 241. Students are reminded that certain science courses have specific mathematics courses as prerequisites.

Music: 15 units
Music 100, 110, 130, 140 or 240; two of Music 150, 151, 152, 153, 154; Music 360; Music Education 305. Students electing a Music Teaching Area must include Music Education 105 as part of the Core.

Physical Education: 15 units

Physical Education 140, 141, 142, 240, 241, 340, 341, 342, 440*, 441, 443, 444, and one of 343, 344, or 445.

Corequisite: Biology 150. Students who have completed Biology 12 in secondary school are not required to take Biology 150. Others must pass Biology 150 before proceeding beyond the second year of the Physical Education Teaching Area.

* Physical Education 440 is possible only in the five-year programme.

Science: 15 units

Fifteen units in addition to the laboratory science in the Core Course are required

- i. Education 445 and at least one 3-unit course from astronomy, chemistry or physics and at least one 3-unit course from bacteriology, biology, botany, or zoology.
- ii. A sequence of at least two courses (6 units) in a given subject.
- iii. Additional courses selected from any of the following to bring the total to 15 units; astronomy, bacteriology, biology, botany, chemistry, Geography 203, or 302, geology, Physical Education 241, physics, zoology.

Students on the four-year Bachelor of Education (Elementary) degree programme will substitute an elective for Education 345 in Year Four. Students who have completed Education 309 (old numbering given to Education 345) will be required to take only 12 units of science courses outside the Core.

Social Studies: 12 units

Twelve units to consist of two senior geography courses and one senior history course, or two senior history courses and one senior geography course; Anthropology 100 or 200 or, with permission, 339.

Academic Subject Areas: 9 units

With the approval of the Dean of Education, students may elect as a teaching area a General Programme in one subject area as prescribed by the Faculty of Arts and Science or the School of Fine Arts.

Teachers of Special Classes: 9 units

Education 407; 415; 416 or 442; one of 402, 408, 409, 410*, 411; and any other two of the courses listed.

* Education 496 is also required for students specializing in the teaching of the mentally retarded.

Remedial Specialty for Elementary Schools: 30 units

Sociology 200 and 301; nine units of psychology selected in consultation with the Faculty of Education and Department of Psychology; and Education 402, 403, 407, 412, 413, 414, 415, 416 or 442, 417.

NOTE: 1. Admission to this Specialty requires the approval of the Dean of Education.

2. Students admitted to this Specialty must take Biology 150 and 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 subjects normally taught in secondary schools. In each of these, including prerequisite courses, students must complete no fewer than 15 units and not more than 24 units. For graduation, an average of at least 3.00 must be attained in the senior courses of each subject.

In this programme a maximum of 24 units in Education courses is permitted and

Education 750 and 798 must be taken in Year Five. The programme ordinarily requires attendance at five winter sessions with the professional year being taken as a unit in Year Five. Permission to accelerate may be granted by the Dean of Education after Year Two if the student has achieved an average of at least 4.00 in the work of the first two years.

Course Requirements:

Education, including student teaching	21 units
Academic courses, chosen from two teaching areas (including prerequisites and corequisites)	45-42 units
*Electives	9-12 units
	<hr/>
Total	75 units
	<hr/>

*Where mathematics and physics are the two teaching areas a total of 12 units of electives may be taken.

Programme by Years:

Year One:

Education 198	(0)	
English 100	(3)	
Prerequisites	(6)	
Corequisites	(0-6)	
Electives	(6-0)	15

Year Two:

Education 298	(0)	
Teaching Areas	(3-6)	
Prerequisites	(6-3)	
Corequisites	(0-6)	
Electives	(6-0)	15

Year Three:

Education 301	(1½)	
Education 303	(1½)	
Education 398	(0)	
Teaching Areas	(9-12)	
Electives	(3-0)	15

Year Four:

Education 406	(3)	
Education 498	(0)	
Teaching Areas	(12-9)	
Electives	(0-3)	15

Year Five: Professional Year

Education 401	(1½)	
Education 420, 423, or 427	(3)	
Education 430 (or alternate*)	(1½)	
Education 750 (first area)	(1½)	
Education 750 (second area)	(1½)	
Education 798	(3)	
Approved Education elective**	(3)	15

*Students choosing an alternate course will in addition be required to pass a written examination on school law and school organization; this examination will not carry any units of credit.

**All students and particularly those planning to proceed to a Master's degree in Education are advised to seek guidance from the Dean of Education concerning the choice of elective.

During each of the five years of the Bachelor of Education programme for secondary school teachers a seminar and professional experience or student teaching will be required.

Programme for Holders of Elementary Teaching Certificates:

Students who have completed two or three years of university work and who hold the Elementary Basic teaching certificate may transfer to the secondary programme and complete the degree and requirements for teaching in the secondary schools. The following specific conditions will apply:

- (i) Students will be required to complete 76½ to 82½ units, depending on the teaching areas selected, to complete the requirements for the Bachelor of Education degree.
- (ii) Students must complete Year Three on this programme in order to qualify for the elementary Advanced Certificate; they must complete Year Four on this programme for Professional C certification; and they must complete Year Five (16½ additional units) and the requirements for the degree for Professional Basic certification. The requirement of a 3.00 average in the senior courses of each of the teaching areas will apply. Should a student be required to complete one extra course, 3 units, for a total of 79½ units, this extra course will be considered as part of Year Four and will be required for Professional C certification. In case a student must complete two extra courses, 6 units, for a total of 82½ units, Years Three and Four must each contain six courses, 18 units, for Elementary Advanced and for Professional C certification respectively.
- (iii) Details for each of the three years follow:

Year Three	Year Four	Year Five
Education 398* (0)	Education 498* (0)	Education 798*† (0)
Teaching Areas (15)	Education 406 (3)	Education 420, 423, or 427 (3)
Additional Course (if required) (3)	Teaching Areas (12)	Education 750 (first area) (1½)
	Additional Course (if required) (3)	Education 750 (second area) (1½)
		Education 401** (1½)
		Teaching Areas (9)
<hr style="width: 20%; margin: 0 auto;"/> 15-18	<hr style="width: 20%; margin: 0 auto;"/> 15-18	<hr style="width: 20%; margin: 0 auto;"/> 16½

* Students will arrange a special assignment with the instructor.

** Students with credit in Education 401 will take an Education elective.

† Teaching practicums are not required for this programme.

Teaching Areas and Required Courses:

Normally, in addition to 21 units of course work in Education and 9 units of electives, a total of 45 units must be devoted to courses in two secondary school teaching areas and their corequisites. The specific teaching subjects and courses which may be chosen are shown below. Some freedom is possible in dividing the 45 units into the two teaching areas, but in no case may fewer than 15 units be taken in one nor more than 24 units in the other. For instance, if English and Geography are chosen, the 45 units may be divided as follows: English 24 units, Geography 15 units, and Linguistics (the corequisite) 6 units; or English 21 units, Geography 18 units and Linguistics 6 units; or the number of units devoted to English and Geography may be reversed. In some science combinations where up to 15 units of corequisites are required only 15 units in each teaching area may be possible.

Only with the prior permission of the Dean of Education may exceptions be permitted to any of the following subjects and course requirements. Normally courses numbered 100 and 200 are taken in Years One or Two, and not more than nine units of courses numbered below 300 may be taken in Years Three and Four.

Art:

Years One and Two: Art 100 or 120, Art 109, Art 115, English 100, English 200 or 201.

Senior Years: One of Art 201, 205, 325, or 337; Art 360. Up to nine additional units may be selected as follows: three to six units from one of the following pairs — Art 209 and 309, Art 305 and 495, Art 315 and 491, Art 326 and 493, Art 338 and 497; three additional units from another of these pairs.

Biological Sciences:

Years One and Two: Biology 150*; Chemistry 121, Chemistry 120 or 124; English 100; Mathematics 130; Physics 101 or 121.

Senior Years: Biology 300, Biology 301; Botany 331 or Zoology 305; two of Zoology 202, Zoology 301, or Botany 205; up to six additional units may be taken from the biological science courses listed above or from senior courses for which prerequisites are held.

* Students who have fulfilled the Biology 150 requirement by completing Biology 12 prior to entry to the University must complete all three of Zoology 202, Zoology 301 and Botany 205.

Chemistry:

Years One and Two: Chemistry 121 and 124; Chemistry 224, 233; English 100; Mathematics 130, 230 or 231; Physics 101 or 121, and 212.

Senior Years: Chemistry 344; Chemistry 326 or 331 and 334. If 18 units of chemistry are elected, Chemistry 326, 331 and 334 must all be taken.

English:

Years One and Two: English 100, 200; Linguistics 100 and 390 (not concurrently).

Senior Years: English 400, 434, 437; up to nine additional units selected from English 413, 423 or 424, 433, 430 or 431, 429 or 438.

NOTE: English 413 is recommended in a sequence of 18 units or more. In a 21- or 24-unit sequence English 203 may be included in Year Two and no other course in American literature may then be taken.

French:

Years One and Two: English 100, 200; French 180, 280, 290.

Senior Years: French 302 and three to twelve units numbered 400 or above. French 350 may be taken in place of a course numbered 400 or above in a 21- or 24-unit sequence.

Geography:

Years One and Two: English 100, 200 or 201; Geography 101, 201 or 203, 204.

Senior Years: Six to fifteen units of senior courses one of which must be a regional course. In a 21- or 24-unit sequence up to six units of senior courses in Economics and/or Anthropology for which prerequisites are held may be taken.

German:

Years One and Two: English 100, 200; German 100 or 140, 260, 290.

Senior Years: German 302 and three to twelve units from courses numbered 400 or higher.

Guidance:

Years One and Two: Economics 100; English 100; Psychology 100 or equivalent, 220; Sociology 200.

Senior Years: Education 417; a senior psychology* course and a senior sociology course (both chosen in consultation with a Faculty adviser). A further three units of Education 418 and 419 may be taken.

* Psychology 335 excepted.

History:

Years One and Two: English 100, 200 or 201; History 101 or 200, 102, 201.

Senior Years: Six to fifteen units of senior courses. (Political Science 410 may be elected in place of one senior history course.)

Industrial Education:

Year One: Chemistry 121, 120 or 124; English 100; Mathematics 130; Physics 101 or 121; an academic elective or prerequisite.

Years Two and Three: Education 750 (IE), 798; twenty-seven to thirty-three units of Industrial Education in consultation with the Director of Industrial Education, B.C. Vocational School, Burnaby. (These courses are offered at this school.)

Years Four and Five: Education 303 and 401 or alternatives, 301, 406, 420 or 423 or 427, 430, 750 (in a second teaching area), 798 (in a second teaching area); courses to make up a second teaching area.

Students specializing in Industrial Education may complete Years Four and Five by summer and/or winter sessions. Those on the accelerated programme must complete Education 220 or alternative and Education 406 by summer session prior to completing Years Two and Three at the Burnaby school.

Transfer students seeking the degree of Bachelor of Education in Industrial Education need complete only 24 units rather than 30 units in Years Four and Five as normally required by Senate. At least twelve such units must be in Education and twelve in an academic subject.

Students planning to enter Industrial Education must be acceptable to the Division of Technical and Vocational Education, Department of Education. An interview with officials in the Department should be arranged by November 15 prior to undertaking course work at Burnaby.

Latin:

Years One and Two: English 100, 200; six units of junior Latin courses in sequence including Latin 240; Classical Studies 100 or Greek 100.

Senior Years: Nine to twelve units of senior Latin courses. An additional three to six units of Classical Studies may be taken.

Mathematics:

Years One and Two: English 100; Mathematics 130, 230 or 231, 232 or 233.

Senior Years: Mathematics 332 or 333, 337. Up to nine additional units of senior courses may be taken. Students are urged to seek advice in selecting senior courses.

Music:

Years One and Two: English 100, 200 or 201; Music 100, 110, 130, 140 or 240 (preferably piano for the student electing the choral option); two of Music 150, 151, 152, 153, 154.

Senior Years: Either the following choral or instrumental option.

- (1) *Choral Option*: Music 360, 460. Up to nine additional units may be chosen from senior music history electives and Music 200, 205, 240, 300, 340, 356, 365, 400, 440.
- (2) *Instrumental Option*: Music 330, 331, 332. Up to nine additional units may be chosen from senior music history electives and from Music 200, 205, 240, 300, 335, 340, 356, 365, 400, 440.

Physical Education:

Years One and Two: Biology 150*; English 100; Physical Education 140, 141, 142, 240, 241.

Senior Years: Physical Education 340, 341, 342, 344, 440, 441, 443, 444. A further three units: Physical Education 343 and 445, may be taken.

* Students who have fulfilled the Biology 150 requirement by completing Biology 12 prior to entering the University may take an elective in its place.

Physics:

Years One and Two: English 100; Mathematics 130, 230 or 231; Physics 101 or 121, 211*, 212.

Senior Years: Mathematics 330 or 331; Physics 213* or 312, 322, 413. Up to nine additional units of Physics may be taken; students are urged to seek advice regarding any of these courses.

* Students who take Physics 121 will take Physics 213 instead of Physics 211 in Year Two.

Social Studies:

A 24-unit teaching area for students wishing to take geography and history as one teaching area.

Years One and Two: English 100, 200 or 201; Geography 101, 201 or 203, 204; History 101 or 200, 102, 201.

Senior Years: Six units of senior geography and/or history courses.

Theatre:

Years One and Two: English 100, 200 or 201; Theatre 120, 140, 170, 180, 280.

Senior Years: Theatre 380, 480, 381 or 481. In an 18-unit sequence both Theatre 381 and 481 must be taken. A further six units may be selected from Theatre 310, 311 and 312.

B. THE FOUR-YEAR BACHELOR OF EDUCATION (ELEMENTARY) DEGREE

This is an alternative programme designed for the preparation of elementary school teachers. This degree qualifies the holder for the interim Professional C Certificate.

The degree and the teaching certificate require successful completion of the following:

Education, including student teaching	21 units
Required courses	24 units
*Teaching Area, electives	21 units
	Total 66 units

* In this degree programme, students are required to complete only one of the teaching areas listed on pages 171 - 172. In the process of meeting requirements for PC certification, some students may be able to complete a second area.

Course Requirements:

Education Courses		Core Courses		Teaching Area
Education 200	(3)	English 100; one of		Teaching Area (9-15)
Education 305	(3)	200, 201, 203;		Electives (12-6)
Education 345	(3)	and 300 or 400	(9)	
One of Education		History 102 or 101	(3)	
420, 423, 427	(3)	Geography 303	(3)	
Curriculum and		Art Education 100 or		
Instruction		Music Education		
(700 series)	(6)	105 or Physical		
Education 797	(3)	Education 149	(3)	
Education 297	(0)	First Year Labora-		
		tory Science	(3)	
		Mathematics 203	(3)	
	21		24	21

Programme by Years:

Year One: Pre-Professional Year

English 100	(3)
History 102 or 101, or Geography 101	(3)
*Any First Year Laboratory Science such as Astronomy 120**, Biology 150, Chemistry 121, and 120 or 124, Physics 101**, or 121	(3-4)
One of Art Education 100, Music Education 105, Physical Education 149	(3)
Prerequisite to Teaching Area	(3)
Education 297	(0)..... 15-16

*Students who have credit in Biology 12 should take a physical science; those with credit in Physics 12 or Chemistry 12 should take Biology 150.

**Students who take Astronomy 120 or Physics 101 must take Mathematics 130 concurrently.

Year Two: Professional Year

Education 200	(3)
*Two of Education 701, 705, 747	(2)
Education 742	(2)
Education 745	(1)
Education 746	(1)
Education 797	(3)
Mathematics 203	(3).....15

*Students must not elect Education 701 if they have credit in Art Education 100; nor Education 705 if they have credit in Music Education 105; nor Education 747 if they have credit in Physical Education 149.

Year Three:

Education 305	(3)
English 200 or 201 or 203	(3)
Geography 303 or History 102 or 101	(3)
*Teaching Area or approved electives or a combination of both	(9).....18

*Students taking the Primary Option must include Education 340 in either Year Three or Year Four. Students taking the Intermediate Option with a Language Arts or Library Education teaching area must include Education 342 in Year Three or Year Four.

Year Four:

Education 420 or 423 or 427	(3)
*Education 345	(3)
English 300 or 400	(3)
Teaching Area or approved electives or a combination of both	(9).....18

*Students electing a Science teaching area will choose an elective in place of Education 345. Those electing the Primary Option in any teaching area (with Education 340) and who have completed a laboratory science in Year One, will take an elective in place of Education 345.

C. TRANSFER PROGRAMME (ELEMENTARY CURRICULUM] FOR UNDERGRADUATES

The teaching certificate for which a student will be qualified depends upon the amount of academic work completed (see Teacher Certification, page 164).

An academic course may not be taken during the professional year.

Professional Year:

One of Art Education 100, Music Education 105,	
Physical Education 149	(3)
Education 200	(3)
*Two of Education 701, 705, 747	(2)
Education 742	(2)
Education 745	(1)
Education 746	(1)
Education 797	(3)
Mathematics 203	(3).....18

*Students must not elect Education 701 if they are taking Art Education 100; nor Education 705 if they are taking Music Education 105; nor Education 747 if they are taking Physical Education 149.

Students in the professional year should note that to receive any credit they must receive passing grades in Education 797.

D. DIPLOMA PROGRAMMES FOR GRADUATES

D1. Diploma Programme (Elementary Curriculum) for Graduates

Graduates from other faculties or universities who have an acceptable bachelor's degree and who are interested in elementary school teaching may be admitted to this programme. Successful completion of the following programme leads to the interim Professional Basic Certificate.

An academic course may not be taken during the professional year.

Professional Year:

Education 200	(3)
Education 301	(1½)
Education 401	(1½)
Two of Education 701, 705, 747	(2)
Education 742	(2)
Education 745	(1)
Education 746	(1)
Education 797	(3)
Mathematics 203	(3).....18

Students in the professional year should note that to receive any credit they must receive passing grades in Education 797.

D2. Diploma Programme (Secondary Curriculum) for Graduates

Graduates from other faculties or universities who are admissible to this programme (see p.) will undertake the following courses for interim Professional Basic certification.

An academic course may not be taken during the professional year.

Professional Year:

Education 301	(1½)
Education 303	(1½)
Education 406	(3)
Education 420, 423, or 427	(3)
Education 401	(1½)
Education 430	(1½)
Education 750 (first teaching area)	(1½)
*Education 750 (second teaching area)	(1½)
Education 798	(3).....18

*Honours students presenting only one teaching area will be required to complete Education 495 in place of this requirement.

Students in the professional year should note that to receive any credit they must receive passing grades in Education 798.

COURSES IN THE FACULTY OF EDUCATION

UNDERGRADUATE COURSES

197. (0) **First-Year Elementary Seminar and School Experience**
198. (0) **First-Year Secondary Seminar**
200. (3) **Introduction to Educational Psychology**
The application of psychological principles to elementary classroom practice.
(3-0; 3-0)
220. (3) **Introduction to the Social Foundations of Education**
An introduction to Educational Foundations, and to the contribution of the field to an understanding of perennial problems in Education.
(Not offered in 1968-69.) (3-0; 3-0)
245. (3) **General Science for Primary Teachers**
The processes of scientific inquiry; observation, classification, measurement and inference and their application to teaching. Selected topics in the natural sciences to provide a pertinent background for teaching primary grade curricula. Laboratory exercises integrating process, content, and method. (2-2; 2-2)
297. (0) **Pre-Professional Year Elementary Seminar and School Experience**
Included in this course is a post-session practicum of two weeks.
298. (0) **Second-Year Secondary Seminar**
301. (1 ½) **Introduction to Measurement in Education**
Elementary statistics, test validity and reliability, marking and grading.
(3-0; 0-0) or (0-0; 3-0)
303. (1 ½) **Introduction to Psychology of Classroom Learning**
An introduction to the psychology of learning in the secondary school.
(3-0; 0-0) or (0-0; 3-0)
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.
(3-0; 3-0)
340. (3) **Curriculum and Instruction in the Kindergarten and Primary Grades**
Trends, issues and research in kindergarten and primary education as the basis for curriculum development, organization, and instruction.
(3-0; 3-0)
342. (3) **Developmental Reading**
The problems of teaching reading, grades 1 to 7; the nature and psychology of reading; the basic skills and abilities; evaluating reading, remedial reading.
(3-0; 3-0)
343. (1 ½) **Language in Elementary Education**
A study of the literature and research on the teachings of spelling, handwriting, oral and written language, and listening.
Prerequisite: Education 742; English 200 or 201.
Second term only. (0-0; 3-0)
344. (1 ½) **Speech Development in the Elementary School**
(Not offered in 1968-69.)

345. (3) **Science for Intermediate Teachers**

Selected topics in the physical and biological sciences designed to provide teachers with a broad background for teaching in the intermediate grades. Laboratory work related to understanding and teaching the concepts. (2-2; 2-2)

350. (1 ½) **Audio-Visual Technology in Education**

Basic principles and use of materials, equipment, and resources for instruction. Laboratory experiences. (2-2; 0-0) or (0-0; 2-2)

398. (0) **Third-Year Secondary Seminar and School Experience**

401. (1 ½) **Evaluation of Learning**

The measurement of educational objectives, test item construction and improvement, reporting pupil progress.

Prerequisite: Education 301. (0-0; 3-0) or (3-0; 0-0)

402. (1 ½) **Individual Testing**

Theory and practice in the use of individual tests in education.

Prerequisite: Education 301.

(Not offered in 1968-69.) (0-0; 3-0)

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. (3-0; 0-0) or (0-0; 3-0)

406. (3) **Psychology of Adolescence**

The physiological, psychological, social, and educational aspects of adolescence. (3-0; 3-0)

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 408, 409, 410, 411.

First term only. (3-0; 0-0)

408. (1 ½) **Education of the Gifted**

Identification procedures; early school admission and acceleration; setting goals for instruction; effective teaching methods; currently operating programmes.

Prerequisite: Education 407.

Second term only. (0-0; 3-0)

409. (1 ½) **Education of the Slow Learner**

Developing a philosophy for educating the slow learner; an examination of the current research; interpretation, diagnosis and remediation techniques; evaluating programme effectiveness.

Prerequisite: Education 407.

(Not offered in 1968-69.) (0-0; 3-0)

410. (1 ½) **Education of the Mentally Retarded**

Selection procedures; curriculum modifications; effective teaching methods; currently operating programmes; evaluating programme effectiveness.

Prerequisite: Education 407.

Second term only. (0-0; 3-0)

411. (1 ½) **Education of the Disadvantaged**

The effect of cultural disadvantages on school performance; special curricula for the disadvantaged; evaluating the effectiveness of the programme.

Prerequisite: Education 407.

(Not offered in 1968-69.)

412. (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. This course is prerequisite to Education 414.
 Second term only. (0-0; 3-0)
413. (1 ½) **Mental Health**
 An examination of the principles of mental health and their application to the classroom.
 Prerequisite: Education 412.
414. (1 ½) **Problems of Speech and Hearing**
 An introduction to the problems of educating children with speech or hearing difficulties.
 Prerequisite: Education 412.
 (Not offered in 1968-69.)
415. (1 ½) **Diagnosis of Learning Difficulties**
 A consideration of the common tests used; the interpretation of test results; types of curriculum modification.
 First term only. (3-0; 0-0)
416. (1 ½) **Remedial Instruction**
 A consideration of the general principles of remedial instruction.
 Prerequisite: Education 415.
 Second term only. (0-0; 3-0)
417. (3) **Introduction to Counselling in the Schools**
 An introduction to the principles and practices of counselling. (3-0; 3-0)
418. (1 ½) **Vocational Development and Occupational Choice**
 Theories of career development. Sources and interpretation of educational and occupational data; job and educational placement; survey of relevant appraisal techniques.
 Prerequisite: Education 417 (may be taken concurrently).
 First term only. (3-0; 0-0)
419. (1 ½) **Individual and Group Counselling Procedures**
 Basic counselling orientations; essentials of interviewing, group process analysis; advantages and limitations of group counselling.
 Prerequisites: Education 417 and 418 (may be taken concurrently).
 Second term only. (0-0; 2-2)
420. (3) **Philosophy of Education**
 An introductory course dealing with the philosophical foundations of education and their implications for curriculum and instruction in the schools. (3-0; 3-0)
423. (3) **History of Education**
 Development of educational theory and practice from the time of ancient Greece to the present. (3-0; 3-0)
427. (3) **Sociology of Education**
 The social structure of western civilization and its significance for education.
 (Not offered in 1968-69.) (3-0; 3-0)

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.

First term only. (3-0; 0-0)

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.

Second term only. (0-0; 3-0)

440. (3) **Early Childhood Education**

Selection of curriculum content, experiences, and materials based on analysis of the developmental needs and behaviour of young children.

Prerequisite: Education 305 and 340. (3-0; 3-0)

441. (3) **Curriculum Subject Areas in Pre-School Education**

(3-0; 3-0)

442. (1 ½) **Remedial Reading**

Identification of retarded readers; analysis and treatment of reading disabilities; selection of materials; organization of remedial instruction in the regular and remedial class.

Prerequisite: Education 415 or equivalent.
Second term only. (0-0; 3-0)

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 in 1969-70 and alternate years.) (2-2; 2-2)

450. (3) **Individualizing Instruction for Continuous Progress**

(Not offered in 1968-69.)

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.
This course is open for credit to students in the Faculty of Arts and Science. (3-0; 3-0)

495. (1 ½) **Directed Studies**

Research projects, directed reading, or additional course work as approved by the Dean of Education.

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 410 (may be taken concurrently). (0-3; 0-3)

497. (3) **Practicum in Individualizing Instruction**

Opportunities will be provided for team teaching and for the use of teacher aides. (Not offered in 1968-69.)

701. (1) **Curriculum and Instruction in Art**
 A study of the curriculum organization and techniques of instruction in elementary art. (2-0; 2-0)
705. (1) **Curriculum and Instruction in Music**
 A study of the curriculum organization and techniques of instruction in elementary music. (2-0; 0-0) or (0-0; 2-0)
742. (2) **Curriculum and Instruction in the Language Arts (Primary or Intermediate Grade Emphasis)**
 A study of the curriculum organization and techniques and materials of instruction in language arts. (3-0; 3-0)
744. (1) **Curriculum and Instruction in Elementary Mathematics**
 A study of the curriculum organization and techniques of instruction in elementary mathematics. (1-0; 1-0)
745. (1) **Curriculum and Instruction in Elementary Science**
 A study of the curriculum organization and techniques of instruction in elementary science. (2-2; 0-0) or (0-0; 2-2)
746. (1) **Curriculum and Instruction in Elementary Social Studies**
 A study of the curriculum organization and techniques of instruction in elementary social studies. (2-2; 0-0) or (0-0; 2-2)
747. (1) **Curriculum and Instruction in Elementary Physical Education**
 A study of the curriculum organization and techniques of instruction in elementary physical education. (2-0; 2-0)
750. (1½, 1½) **Curriculum and Instruction in Two Secondary School Subjects**
 General programme diploma students are required to take the two Education 750 courses corresponding to their two teaching subjects. Honours programme diploma students are required to take only the one appropriate Education 750 course. In addition they must complete Education 495 which consists of 1½ units of further appropriate course work or a special research project, directed reading, etc. as approved by the Dean of Education. (2-0; 2-0) or (4-0; 4-0)
797. (3) **Seminar and Elementary Student Teaching**
 For students registered in the professional year, elementary programme. Included in this course is a post-session practicum of three weeks.
798. (3) **Seminar and Secondary Student Teaching**
 For students registered in the professional year, secondary programme. Included in this course is a post-session practicum of three weeks.

ART EDUCATION

100. (3) **Art Education in the Elementary Schools**
 A study of the growth and development of Art Education, classroom management, teaching techniques in Art as related to elementary grades. (3-0; 3-0)
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 level. (3-0; 3-0)
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. (3-0; 3-0)

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. (3-0; 3-0)

MUSIC EDUCATION

105. (3) **Music Education In Elementary Schools**

Introduction to music education; a study of the music curriculum and methods for the elementary grades. (3-0; 3-0)

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. (3-0; 3-0)

LIBRARY EDUCATION

430. (3) **Selection and Organization of Library Materials**

The library as a resource centre; collecting, evaluating, and organizing materials; cataloguing books, etc.

(Not offered in 1968-69.) (3-0; 3-0)

431. (3) **School Library Services**

The role of the school library, programmes and services, administering the library, staffing, supervision, etc.

(Not offered in 1968-69.) (3-0; 3-0)

PHYSICAL EDUCATION

140. (0) **Physical Education Activities I**

Gymnastics I, Swimming, Rhythmics, Basic Activities; membership on a University team is considered important.

(0-3; 0-3)

141. (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. (3-0; 0-0)

142. (1 ½) **Introduction to Health Education**

Assessment of student attitude towards health education; significance of health education today; unique problems of health today. (0-0; 3-0)

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 required. (2-2; 2-2)

240. (0) **Physical Education Activities II**

Track and Field I, Softball, Badminton and Basketball. Participation as player, coach, or official is recommended and may be assigned. (0-3; 0-3)

241. (3) **Human Physiology and Anatomy**

Gross anatomy; skeletal and muscular systems; circulatory, respiratory, digestive and neural systems, their structure and function in relation to vigorous physical activities.

(2-2; 2-2)

340. (0) **Physical Education Activities III**

Gymnastics II, Soccer (men) or Field Hockey (women), Volleyball, Tennis. Extra class teaching is assigned at the Y.M.-Y.W.C.A. (0-3; 0-3)

341. (1 1/2) **Kinesiology**

Action of muscles in gymnastics and athletics; science of muscular movement.

Prerequisite: Physical Education 241 or permission. (3-0; 0-0)

342. (1 1/2) **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.

(0-0; 3-0)

343. (1 1/2) **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.

(Not offered in 1968-69.)

(3-0; 0-0)

344. (1 1/2) **Care and Prevention of Athletic Injuries**

Training techniques, diet, 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.

(3-0; 0-0)

440. (0) **Physical Education Activities IV**

Track and Field II.

Elective A: One of curling, golf, archery, bowling, fencing.

Elective B: (Women take two of these and men take one). Advanced work in basketball or soccer or field hockey or dance.

Elective C: (Men only), rugby or wrestling.

(0-3; 0-3)

441. (1 1/2) **Physiology of Exercise**

Effects of exercise on muscle and organic systems; energy cost of activities; the role of oxygen; fatigue and staleness; tests of physical fitness.

Prerequisite: Physical Education 241 or permission.

(0-0; 3-0)

443. (1 1/2) **Organization and Administration of Physical Education**

Budget and finance; personnel; facilities, equipment and supplies; scheduling; public relations; improvement of instruction; organization and management of sports.

(0-0; 3-0)

444. (1 1/2) **Evaluation in Health and Physical Education**

Use of tests and measurements in physical education; principles of test construction; test administration and interpretation of results; use of evaluating equipment in a variety of physical education tests.

(3-0; 0-0)

445. (1 1/2) **Developmental and Adaptive Physical Education**

Methods of identifying and evaluating the atypical child and application of a physical education programme to his needs; case-study techniques, developmental programmes; basic therapeutic exercise techniques.

(Not offered in 1968-69.)

(0-0; 3-0)

INDUSTRIAL EDUCATION

*These courses are offered only at the British Columbia Vocational School, Burnaby.

250. (3) **Technology of Woodworking I**

Fundamentals of bench and machine woodwork; design and layout; hand and machine tool maintenance.

(2-4; 2-4)

251. (3) **Technology of Metalworking I**

An introduction to bench metalwork and light machine work; lathe and shaper operations; heat treatment of carbon steel; forging; founding; welding and related metallurgy; project planning; teaching aids and shop management. (2-4; 2-4)

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)

254. (1 ½) **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)

255. (3) **Electricity in Industrial Education I**

D.C. fundamentals and circuits; D.C. motors and generators; signal circuits; electro-chemical devices; D.C. measurement; residential wiring circuits. (3-3; 3-3)

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)

257. (1 ½) **Industrial Coatings**

Theory and practice of applying industrial finishing materials; manual and mechanical application to wood, metal and synthetic surfaces.

Prerequisites: Industrial Education 250, 251. (1-2; 1-2)

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)

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)

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)

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)

353. (3) **Design in Industrial Education**

Functional structural and aesthetic aspects of design applied to Industrial Education projects. (2-4; 2-4)

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)

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)
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)
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)
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)
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)
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)
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)
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)
453. (1 ½) **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)
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.
 Prerequisites: Industrial Education 255, 256. (3-3; 3-3)
456. (3) **Electronics in Industrial Education III**
 Transducers; Processors; Transmission; Deprocessing; Transducers for Readout and Display.
 Prerequisite: Industrial Education 256. (3-3; 3-3)

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.

Prerequisites: Industrial Education 250, 251. (2-4; 2-4)

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)

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

501. (1 ½) **Theory of Measurement**

502. (1 ½) **Seminar in Educational Evaluation**

503. (1 ½) **Verbal Learning**

504. (1 ½) **Psychology of Cognition**

505. (1 ½) **Basic Concepts in Human Development**

506. (1 ½) **Selected Topics in Human Development**

507. (1 ½) **Psychology of Individual Differences**

509. (1 ½) **Psychology of Classroom Learning**

510. (1 ½) **Psychology of Group Differences**

517. (1-3) **Practicum in Counselling**

520. (3) **Seminar in the Philosophy of Education**
(Not offered in 1968-69.)

521. (3) **Educational Classics**

531. (1 ½) **Administration of Public Education in Canada**

532. (1 ½) **Administration of the Educational Programme**

533. (3) **Concepts in Administrative and Supervisory Behaviour in Education**

540. (1 ½) **Research in Curriculum and Instruction in the Elementary Grades**

Section 1	Reading	Section 4	Arithmetic
Section 2	Language	Section 5	Science
Section 3	Social Studies		

542. (1 ½) **Seminar in Remedial Reading: Diagnosis and Remediation**

560. (1 ½) **Statistical Methods in Education**

561. (1 ½) **Methods in Educational Research**

562. (1 ½) **Advanced Statistical Methods in Education**

590. (3) **Special Problems**

599. (Credit to be determined) **Thesis**

Faculty of Graduate Studies

FACULTY OF GRADUATE STUDIES

The Faculty of Graduate Studies of the University of Victoria administers programmes leading to the degrees of:

- Master of Arts
- Master of Science
- Doctor of Philosophy

Degrees may be taken in one Department, School or Faculty, or in a combination of them.

Members of the Executive Committee of the Faculty of Graduate Studies are:

Chairman, (Ex-officio)

M. H. Scargill, Dean of the Faculty of Graduate Studies.

Representing Education

E. B. Horne, Faculty of Education

Representing the Humanities

S. W. Jackman, Department of History

Representing the Sciences

R. M. Pearce, Department of Physics

Representing the Social Sciences

O. Spreen, Department of Psychology

Secretary, (Ex-officio)

R. G. Napier, Administrative Assistant

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.

The Faculty of Graduate Studies of the University of Victoria administers, through its Executive Committee, programmes leading to the degrees of Master of Arts, Master of Science, Master of Education,* and Doctor of Philosophy. Degrees may be taken in one Department, School or Faculty, or in a combination of them.

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 School 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.

NOTE 2: Students who do not qualify for admission and who intend to register at the University of Victoria as unclassified students to make up deficiencies should

*The degree of Master of Education is not offered at the present time.

consult with the Faculty of Graduate Studies about their proposed programmes of studies as unclassified students.

NOTE 3: 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 6 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.

NOTE 1: Except as specified in item 2 above, it is the student's responsibility to request the Faculty of Graduate Studies to change his category.

NOTE 2: No part-time graduate student may offer for credit more than six units of course work at the graduate level (courses numbered 500 and higher) in any one winter session; nor may he offer more than nine units of course work or thesis or both for credit in any twelve-month period.

NOTE 3: No graduate student may take more than three units of course work at the graduate level in any one summer; moreover, he may not take an undergraduate level course in the same summer in which he does take 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.

Application for Admission

Applications for admission must be submitted as early as possible on forms obtained from the Faculty of Graduate Studies. No assurance can be given that applications received after May 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.

Students registering for the first time are required to take a medical examination. This examination may also be required of other full-time students who have not attended the University of Victoria for several years. The medical examination is not provided by the University; it must be obtained at the student's own expense. The necessary form is mailed to each applicant with the Notice of Admission, and must be completed and mailed to the Student Health Service before registration can be completed.

The University, through the Director of Student 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.

Academic Standards

Students registered in the Faculty of Graduate Studies must maintain at least a B- in each course.

Students failing to meet this standard can be required to withdraw from the Faculty of Graduate Studies.

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 School 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 School 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 may conduct other examinations; it shall recommend to the Faculty of Graduate Studies that a degree be awarded to a successful candidate.

7. *Examiner from Outside the Department or School or Faculty*

The Faculty of Graduate Studies shall appoint an examiner from outside the Department or School or Faculty, who may be the outside member of the Supervisory Committee (see item 6 above). Examinations for the Master's degree are open to interested members of Faculty as observers.

Special Regulations for the Degree of Doctor of Philosophy

The doctoral programme requires the planning and completion of independent and original work leading to an advance in knowledge in the student's chosen field or fields of study. In addition, a broad knowledge of the field or fields of study must be demonstrated.

1. *Time Limit*

Normally, a student proceeding to the degree of Doctor of Philosophy will be required to complete all the requirements within seven years (eight-four months) from the date of his first registration in the doctoral programme. A degree will not be awarded in less than two years (twenty-four months) from the time of that registration.

2. *Residence Requirements*

A student proceeding to the degree of Doctor of Philosophy must spend at least two winter sessions at the University of Victoria, except that a student entering the doctoral programme with a Master's degree may have this residence requirement reduced to one winter session.

3. *Course and Programme Requirements*

The minimum requirement for the degree of Doctor of Philosophy is the equivalent of two full winter sessions of 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. *Supervisory Committee*

A student's programme shall be under the direction of a Supervisory Committee of at least three 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. One or more members of the Committee shall be chosen by the Faculty of Graduate Studies from outside the Department or School or Faculty in which the major research is being carried out. The Committee shall recommend the programme to the Faculty of Graduate Studies.

5. *Language Other Than English*

A student will normally be required to demonstrate to the satisfaction of the Department or School or Faculty concerned a reading knowledge of at least one language other than his own.

6. *Candidacy Examinations*

Within two years of registration as a doctoral student and at least six months before the final examination, a provisional 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.

7. *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.

8. *Examining Committee*

The dissertation shall be assessed by an Examining Committee which will consist of the Supervisory Committee and at least two other examiners, one of whom shall be an external examiner selected by the Faculty of Graduate Studies in consultation with the Department or School 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. The 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.

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 BIOLOGY

The Department of Biology offers courses of studies leading towards the degree of Master of Science. Facilities are available for programmes in the following botanical and zoological fields:

- Marine Biological Sciences
- Ecology
- Physiology
- Morphology
- Cellular and Developmental Biology
- Systematic Biology

Candidates may also be accepted for programmes leading towards the degree of Doctor of Philosophy in the same fields.

DEPARTMENT OF CHEMISTRY

In addition to the general regulations governing the granting of advanced degrees, as stated on pages 192 - 196, the following special regulations are applicable:

1. *Orientation Examinations*

These examinations are held each year at the beginning of the academic year. All students proposing a graduate programme in the Department of Chemistry will be required to take this examination, on the results of which will be based the Department's recommendation as to which courses are required. 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- may lead to a recommendation that the student be asked to withdraw.

2. *Lecture Courses*

All graduate students will be required to take Chemistry 500 (Research Techniques) in their first year, and Chemistry 509 (Seminar) throughout their period of registration. Other courses will be prescribed by the Department according to the needs of the candidate, either from courses offered by the Department of Chemistry, or from courses offered by other departments.

3. *Language Requirement*

Every candidate for the M.Sc. will be required to demonstrate to the Department of Chemistry his ability to translate into English scientific papers in one of the following languages: German, Russian, French or other as approved by the Department. Candidates for the Ph.D. will be required to demonstrate this ability in two languages other than English, as approved by the Department.

4. *Research*

Successful completion of a research study is an essential part of the programme required for an advanced degree in Chemistry. The research project may form the major requirement. The candidate is advised to choose carefully his area of greatest interest before expressing a desire to work with a particular faculty member.

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, historical, 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

In the year 1968-69 the Department is offering studies in the one-year and two-year programmes for the Master of Arts degree. Facilities are available for programmes in the following areas:

American History
British History
Canadian History
European Intellectual History
Western Canadian 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.

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 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.

Astronomy and Astrophysics

Stellar Spectroscopy — Spectroscopic investigations of the cooler stars and binary stars in co-operation with, and using the facilities of, the Dominion Astrophysical Observatory.

Theoretical Studies — Investigations in relativistic astrophysics and in stellar structure and evolution.

Physics of Fluids

Steady and Unsteady Flow — Experimental and theoretical studies of shock waves and flows in shock tubes.

Underwater Acoustics — Model studies of reverberation and other acoustic problems.

Geophysics

Geomagnetism — Experimental and theoretical investigation of geomagnetic variations and related topics.

Upper Atmospheric Physics — Study of the airglow and related phenomena.

Nuclear Studies

Cosmic Rays — Continuous monitoring of low energy nucleonic component for IQSY and atmospheric correlations using a digital computer.

Nuclear Magnetic Resonance — Nuclear spin relaxation in liquids and solids.

TRIUMF (Tri-University Meson Facility) — Joint design study of 500 MeV, 100 μ a sector-focussed cyclotron with University of British Columbia, Simon Fraser University and University of Alberta.

Theoretical Nuclear Physics — Studies of nuclear many-body problems relating to low-energy nuclear structure.

Close contact is maintained with the Defense Research Establishment Pacific, the Victoria Magnetic Observatory, and the Dominion Astrophysical Observatory.

DEPARTMENT OF PSYCHOLOGY

The Department of Psychology offers programmes of study leading to the degrees of M.A. and M.Sc. in the following areas: general-experimental psychology, personality-social psychology, clinical psychology, neuropsychology. 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 Departmental secretary.

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

School of Fine Arts

SCHOOL OF FINE ARTS

Peter Garvie, M.A. (*Cantab.*), Professor and Director of the School.

Division of Art and Art History

Alan Gowans, M.A. (*Tor.*), M.F.A., Ph.D. (*Princeton*), Professor of Art History and Chairman of the Division.

Peter Kahn, B.S., M.A. (*N.Y.U.*), Professor of Graphics.

C. Anthony Emery, M.A. (*Oxon.*), Associate Professor of Art History (on partial leave 1968-69).

Richard H. Grooms, Sp. Dip. (*Paris*), B.Sc., M.Sc. (*Wisconsin*), Associate Professor of Design & Drawing.

Donald Harvey, A.T.D. (*Britain*), Associate Professor of Painting & Design.

John Philip Dobereiner, Dip. V.S.A., B.Ed. (*Brit. Col.*), M.F.A. (*Wash.*), Assistant Professor of Drawing and Painting.

John Crosby Freeman, B.A. (*Harpur*), M.A. (*Delaware*), Curator of the Maltwood Museum and Instructor in Art History.

Division of Music

Gerald M. Hendrie, M.A., Mus.B., Ph.D. (*Cantab.*), F.R.C.O., A.R.C.M., Associate Professor and Chairman of the Division.

Howard B. Barnett, B.A., Mus.B. (*Tor.*), M.A., Ph.D. (*S. Calif.*), A.R.C.T. (*Tor.*), Associate Professor.

Hugh J. McLean, M.A., Mus.B. (*Cantab.*), F.R.C.O., F.R.C.C.O., A.R.C.M., L.R.S.M., A.M.M. (*Man.*), Assistant Professor.

Roger W. Bray, B.A. (*Oxon.*), Instructor.

John Avison, C.D., B.A. (*Brit. Col.*), B.Mus. (*Wash.*), Part-time Lecturer.

Howard Denike, B.Mus. (*Wash.*), Part-time Lecturer and Conductor of the University Concert Band.

Jack Kessler, Graduate of the Royal Academy, Budapest, Director of Instrumental Ensembles.

Charles Palmer, M.A., B.Mus. (*Oxon.*), A.R.C.M., A.R.C.O., Conductor of the University Choir.

Division of Theatre

Ralph G. Allen, B.A. (*Amherst*), D.F.A. (*Yale*), Associate Professor, and Chairman of the Division.

Carl R. D. Hare, M.A. (*Alta.*), Dip. R.A.D.A., Associate Professor.

Richard Courtney, B.A. (*Leeds*), Dip. Ed. (*Leeds*), F.R.S.A., Associate Professor.

Frederick Edell, M.F.A. (*Yale*), Assistant Professor (Leave of absence 1968-69).

Keith Johnstone, Visiting Lecturer.

Edward B. Shoffner, A.D. (*San Diego*), Technical Supervisor and Part-time Lecturer in Stagecraft and Design.

Mrs. Raymond Ovens, Dip. R.A.M. (*London*), L.R.A.M., Part-time Lecturer in Voice.

Mrs. Michael Sears, Part-time Lecturer in Movement.

The School of Fine Arts comprises the Divisions of Art and Art History, Music and Theatre, and offers courses leading to the degree of Bachelor of Arts, in Art History; Bachelor of Music; Bachelor of Fine Arts with majors in Theatre and in the Studio Arts. Certain courses offered in the School of Fine Arts have been approved for credit in the Faculty of Arts and Science and in the Faculty of Education.

General Requirements

Calendar regulations governing admission, fees, and academic advancement (See pages 32-46), apply to all students registered in the School of Fine Arts. Special regulations are set out under the Divisional offerings.

Qualifications for Admission

See pages 33-36 inclusive of the University Calendar.

DIVISION OF ART AND ART HISTORY

The Division offers two distinct programmes leading to different degrees: an Art History programme leading to the B.A., and a Studio Visual Arts programme leading to the B.F.A. Within each programme there are areas of major specialization, described in the curricula listed below. From 1968-69, the Diploma in Fine Arts programme described in earlier calendars may no longer be elected; provision is made instead for mature students lacking some academic entrance requirements but showing extraordinary promise in the practice of visual arts to be admitted to the B.F.A. programme upon approval of application by the Director of the School of Fine Arts and the Registrar. Students enrolled as majors in the department prior to September 1968 may proceed to the B.F.A. degree by completing the requirements specified in earlier calendars—viz., 6 units English, 6 units art history, 6 units non-studio academic elective, and 42 units studio course work.

PROGRAMMES LEADING TO THE DEGREE OF B.F.A. IN STUDIO VISUAL ARTS

The programme described below, initiated in September 1968 after intensive study of current and projected programmes in British, American, and European art schools, has two main objectives. First, to ensure that students are exposed to the broad liberal-arts education available in the University; second, to equip students with at least the necessary fundamentals for a professional career in some particular area of the visual arts—knowledge of techniques and principles, exercise of imaginative and creative faculties, and development of visual and tactile awareness. Accordingly, all students begin with a basic two years developing visual vocabulary. In the third year, they take twelve units of formal course work in a specialized area. In the fourth year, they take twelve units of unstructured independent work, as a “free form-giving” seminar designed to provide opportunity for creative expression in the area of their choice, to culminate in presentation of a visual thesis.

The basic principle behind this sequence is that what has traditionally been known as the “aesthetic experience” of spectators or the “creative act” of artists is not the *cause* but the *result* of artistic activity; that wherever it may end, artistic activity begins in a context of social reference, in relationship to needs and demands of society; and that consequently students, having acquired a sound knowledge of the practice of art, may then develop in their own chosen area of future professional activity.

Note for Students entering First Year:

Members of the faculty of Studio Visual Arts courses will be available to conduct interviews during the period of Summer Session 1968, and requests for appointments should be sent to the Chairman of the Division of Art and Art History, School of Fine Arts, University of Victoria. Students will be expected to present a portfolio of work at such interviews. While interviews are not mandatory for enrolment in Studio Visual Arts courses towards a B.F.A. degree, in the extreme event of limiting enrolment, students who have shown considerable potential in the interview will be given priority of place.

YEARS 1 AND 2			
<i>Year 1</i>	<i>Units</i>	<i>Year 2</i>	<i>Units</i>
Art 105	(3)	Art 207	(3)
Art 109	(3)	Art 211	(1½)
Art 115	(3)	Art 215	(3)
*two of: Art History 100		Art 225	(3)
Art History 120		*two of: Art History 360	
Psychology 100		History of Theatre 310,	
Philosophy 100		311, 312	
a modern language		Theatre 240	
Theatre 140		Music 313, 314	
Music 110		a modern language or	
or equivalent, with		equivalent, with	
advisor's approval.	(6)	advisor's approval.	(6)
	15		16½

*At least one of these two electives must be outside the School of Fine Arts.

YEAR 3

In this year students will be expected to choose an area of specialization; twelve units of work (four courses) are required in it, chosen in consultation with advisor, plus one course in a non-visual-arts area. Areas in which the Division proposes to offer specialized work are as follows:

1. Painting and Drawing.
2. Sculpture (including Ceramics and 3-dimensional Environmental Design generally).
3. Graphics (including Prints, Photography, Typography, Illustrations, Architectural Drawing).
4. Film and Photography (technical and design aspects of the area, including documentary, television, press photography. History and theory of the film in collaboration with the Theatre Division).
5. Environmental Design, to include Industrial Design (Furniture and Appliance Design, Metalwork, Plastics), Interior Design (Textiles, Fashion, Weaving, rendering and presentation techniques), and Pre-architectural areas.
6. Theatre Design (including Costume, Stage Sets, Lighting, etc. This area will be a joint major with the Theatre Division).

YEAR 4

Senior students will take one course (three units) of work in a non-studio area, and will spend the rest of their time on Art 499, Free Form-Giving seminar (12) in the area of their choice. For description, see introductory statement and course list.

N.B.: The Division wishes to emphasize that not all these areas of specialization will be in formal operation during 1968-69 or in subsequent years, but will be introduced as resources and circumstances warrant; entering students are advised to consult the Division before registering. For instruction presently available in the areas above, see the course list following.

PROGRAMMES LEADING TO THE DEGREE OF B.A. IN ART HISTORY

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 art history 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 Art History 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 Division'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.

In their first two years, students begin learning the specialized language of art history 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, art history 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 art history 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 Art History 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.

YEARS 1 AND 2

Subject	Year 1	Units	Year 2	Units
Art History	Art 120	3	Art 320	3
English	Eng. 100	3	Eng. 200 or 201	3
Language	100 level *	3	200 level	3
Historical study background	one of: Clas. 100, Hist. 101, 102	3	two** of: Anth. 305, 306, 310 Clas. 100, 330 340 Hist. 204	
Social study background	one of: Anth. 100, Geog. 101, 303 Phil. 100	3	Ling. 100, 210 Phil. 300, 305 Theatre 310	6
		15		15

* Students intending to elect the North American museum emphasis should take French or Spanish; for the area of emphasis leading to graduate school, a language other than that presented for university admission (preferably German, Italian, or Latin).

**Students may not take more than one elective in a given field in any one year — i.e., students may not take both Philosophy 300 and 305 in Year 2, for example.

YEARS 3 AND 4 — Museum and North American studies Emphasis

Subject	Year 3	Units	Year 4	Units
Art History	Art 340 Art 481	6	Art 360 Art 380 Art 490	9
Special North American background	one of: Geog. 307 Anth. 441	3	one of: Geog. 307 Anth. 441	3
Historical background	one of: Hist. 212 Hist. 303 Hist. 305 Hist. 311 Hist. 312	3	one of: Econ. 321 Eng. 203 Hist. 212, 303, 305, 311, 312 Pol. Sc. 310	3
Background for Museum techniques	one of: Art 125, 205, 305 Art 303 Art 307, 407, 417	3		
		15		15

YEARS 3 AND 4 — Pre-Graduate School Emphasis

Subject	Year 3	Units	Year 4	Units
Art History	Art 340		Art 360	
	Art 441	6	Art 380	
			Art 490	9
Historical, social, comparative disciplines elective	three of:		two of:	
	Clas. Latin lit. in transl.		Hist. 200	
	Hist. 200		Psych. 100	
	Eng. 410 or 413 or 418 or 424 or 425		Pol. Sc. 300	
	Music 110		Econ. 101	
	Phil. 310 or 312 or 330		Music 110 or 210 Theatre 311 or 312	6
Theatre 310 or 311	9			
	<hr/>		<hr/>	
	15			15

COURSES OFFERED

Art History Courses

†ART 100. (3) **Survey of World Art**
(Summer Session 1968 only.)

†*ART 120. (3) **Language of Art History**

A theoretical course designed to provide an introduction to the understanding and appreciation of painting, sculpture and architecture, and to prepare the student for qualified judgment of traditional and contemporary art forms. Open to First and Second Year students only. In 1968-69 this course will be offered in two sections: the first concentrating on the historic language of painting; the second, sculpture and architecture.

*ART 320. (3) **Ancient, Medieval, and Non-Western Art History**

A basic course introducing students to the principles and basic material of Art History in Western civilization from the 10th to the 15th century, as well as the civilization of Egypt, Mesopotamia, Greece and Rome.

Some study will also be made, as occasion allows, of pre-historic and primitive Art History, the arts of the Levant from ancient Persian to Islamic times, India and the Far East. (3-0; 3-0)

*ART 340. (3) **Renaissance and Baroque Art in Western Europe**

The evolution of art and architecture as the expression of ideas from ca. 1400-1750, with special emphasis on the art of "Old Masters" such as van Eyck, Ghiberti, Donatello, van der Weyden, Leonardo, Raphael, Michelangelo, Titian, Bernini, Rembrandt, etc. (3-0; 3-0)

†*ART 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. (3-0; 3-0)

*ART 380. (3) **Architecture since 1750**

Basic developments in the theory and practice of architecture in Western Europe, Canada and U.S.A. over the last 200 years, with special emphasis on architecture as the expression of social, economic and religious ideas. (3-0; 3-0)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

***ART 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. (3-0; 3-0)

***ART 481. (3) History of Architecture in North America**

Study of architectural developments in Canada and U.S.A. from the 17th century to the present, with special emphasis on interiors and furniture, and the expression of distinctively North American cultural attitudes. (3-0; 3-0)

***ART 490. (3) Directed Studies**

This course may be taken more than once, in different fields, at the discretion of the Division.

Studio Courses

(Open without credit to all students in the University with appropriate pre-requisites, if space permits. Permission of Registrar and instructor required.)

†ART 105. (3) Basic Design

Introduction to elements of design; experience with mixed media and materials, including ceramics. (1-3; 1-3)

†ART 109. (3) Drawing I

An introduction to drawing as a mode of expression. A course designed to introduce the student to the free manipulation of various drawing media, basic graphic values such as the calligraphic nature of drawing as a medium of personal communication, and drawing as an exciting vehicle of invention and exploration. (0-3; 0-3)

†ART 115. (3) Introduction to Environmental Design

Techniques and tools of Man the Designer: colour, theory, proportion, space, motion. (1-3; 1-3)

†ART 201. (3) Painting I

This is essentially an introductory course, designed primarily to encourage personal expression. It will keep concern with technical discipline to a minimum and will emphasize a variety of drawing and painting media, along with individual experimentation and discovery. (Prerequisite to all other painting courses) (Offered Summer Session 1968 only.) (0-4; 0-4)

†ART 205. (3) Design I

A course designed to give a grounding in design fundamentals in two-dimensional materials through the assignment of problems. Exploration of elements, line, tone, colour, etc. Application of principles of design and composition, rhythm, balance, emphasis, etc. (Offered Summer Session 1968 only.) (0-3; 0-3)

†ART 207. (3) Advanced Two-dimensional Design

Problems in the areas of photography, graphics, lettering, textiles, and painting
Prerequisite: Art 105 and 115. (0-4; 0-4)

†ART 209. (3) Drawing II

A course designed to preserve and expand the values established in 109, while introducing processes of form analysis and the use of drawing as a vehicle of descriptive power through the examination of traditional and contemporary modes of rendering.

(Offered Summer Session 1968 only.) (0-3; 0-3)

†211. (1 ½) Drawing in Relation to Design.

Prerequisite: Art 109. (0-2; 0-2)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

†ART 215. (3) **Advanced Three-dimensional Design**

Problems in the areas of sculpture, interior design, architecture, stage design, industrial design. Prerequisites: Art 105, 115. (0-4; 0-4)

†ART 225. (3) **Advanced Motion Design**

Problems in the areas of mobiles, kinetics, stroboscopic photography, films. Prerequisites: Art 105, 115.

†ART 305. (3) **Design II**

A course designed to teach the application of design fundamentals to a variety of three-dimensional materials. Prerequisite: Art 205. (Offered Summer Session 1968 only.) (0-3; 0-3)

†ART 309. (3) **Drawing III**

A course designed to include a concentrated study of human anatomy and its extensive application to the drawing of the human figure. Included in the year's programme is a period of intensive drawing in five-hour sessions designed to establish the validity of drawing as a serious and fundamental activity and to establish a high degree of fluency in graphic terms. (0-3; 0-5)

†ART 315. (3) **Painting II**

An introduction to oil and new plastic media; methods of priming, framing, etc.; painting problems in Still Life, Figure and Landscape. Composition and pictorial structure will be emphasized. Prerequisite: Art 201. (0-4; 0-4)

†ART 316. (3) **Painting III**

This course will place primary emphasis on personal expression within the disciplines of painting. Abstraction and non-figurative painting will be stressed although individual interpretation will always be the major consideration. Prerequisite: Art 315. (0-4; 0-4)

†ART 325. (3) **Ceramics I**

An introduction to ceramics with emphasis upon preparation of clays, etc. Hand processes, coil, slab. Pottery design and construction, glazing, packing, firing. (0-4; 0-4)

†ART 326. (3) **Ceramics II**

A course designed to give practical experience in wheel thrown pottery; the various methods of decoration, including underglaze and overglaze formulae; and firing. There is a laboratory fee of \$5.00. Prerequisite: Art 325. (0-4; 0-4)

†ART 327. (3) **Ceramics III**

Prerequisite: Art 326.

†ART 335. (3) **Advanced Graphic Design**

Special studies in designated areas. Prerequisite: Art 305. (0-3; 0-3)

ART 336. (3) **Typographic Design**

†ART 337. (3) **Intaglio**

The history, techniques and methods of etching, drypoint and engraving. (0-5; 0-5)

†ART 338. (3) **Planographic**

The history, techniques and methods of stone and metal plate lithography and an introduction to a commercial offset process. (0-5; 0-5)

†ART 339. (3) **Relief**

The history, techniques and methods of linocut, woodcut, wood engraving, relief etching and introduction to typesetting and letterpress printing. (0-5; 0-5)

† Approved for credit in the Faculty of Education.

†ART 345. (3) **Drawing IV**

A course in drawing in which the student will have opportunities to expand his graphic vocabulary on the basis of his previous courses and to make special study of the application of drawing to his major field of study. (0-3; 0-3)

ART 335. (3) **Industrial Design**

(Not offered 1968-69.)

ART 491. (3) **Directed Studies in Painting**

ART 493. (3) **Directed Studies in Ceramics**

ART 495. (3) **Directed Studies in Design**

May be taken more than once in different areas, as industrial design, theatre design, interior design.

ART 497. (3) **Directed Studies in Graphics**

ART 499. (12) **Free Form-Giving Seminar**

(Not offered in 1968-69.)

†Approved for credit in the Faculty of Education.

DIVISION OF MUSIC

GENERAL REQUIREMENTS

In addition to fulfilling general requirements for the School 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 Division of Music (477-6911, Local 361). This must be done during the first two days of registration, before registering for any music courses.

THE BACHELOR OF MUSIC DEGREE

For students who wish to prepare themselves for careers as professional musicians, teachers, or for graduate study, the following programmes are offered:

Major in Music Theory and Composition

Major in Music History

General Programme in Music

PROGRAMME OF COURSES

All B.Mus. students, regardless of their choice of Major, will take a common first-year programme. Instruction in voice or in an instrument will be provided by the faculty of the Victoria School of Music, with whom the University is in affiliation.

<i>Year 1</i>	
Music 100	3
Music 110	3
Music 130	2
One of: Music 140, 240, 340, 440	1
One of: Music 150, 151, 152, 153, 154	0
English 100	3
*Arts or Fine Arts elective	3
	15

*To be chosen in consultation with the Division 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).

Major in Theory and Composition

<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
Music 200	Music 300	Music 400
Music History elective	Music 305	Music 405
Music 205	Music History elective	Music 406
One of:	Music 335	Senior Music elective
English 200, 201, 203	Arts or Fine Arts elective	Arts or Fine Arts elective
Arts or Fine Arts elective	One of: Music 150, 151, 152, 153, 154, 354	Music 355
One of: Music 150, 151, 152, 153, 154	One of: Music 140, 240, 340, 440	
One of: Music 140, 240, 340, 440		
16	16	16

Major in Music History

<i>Year 2</i>		<i>Year 3</i>		<i>Year 4</i>	
One of: English 200, 201, 203	3	Two Music History electives	6	Two Music History electives	6
Two Music History electives	6	Music 300	3	Music 426	3
Music 200	3	Music elective	3	Music 354	0
Arts or Fine Arts elective	3	Arts or Fine Arts elective	3	One of: Music 140, 240, 340, 440	1
One of: Music 150, 151, 152, 153, 154	0	One of: Music 150, 151, 152, 153, 154, 354	0	Arts or Fine Arts electives	6
One of: Music 140, 240, 340, 440	1	One of: Music 140, 240, 340, 440	1		
	<hr/> 16		<hr/> 16		<hr/> 16

General Programme in Music

<i>Year 2</i>		<i>Year 3</i>		<i>Year 4</i>	
Music 200	3	Music 300	3	Music 460	3
Music History elective	3	Music 360	3	Music 335	3
One of: English 200, 201, 203	3	Arts or Fine Arts elective	3	Music 356	2
Arts or Fine Arts elective	3	*Music Education 305 or Arts or Fine Arts elective	3	†One or two Music electives	} 8 or 9
One of: Music 330, 331, 332	2	One of: Music 330, 331, 332	2	One or two Arts or Fine Arts electives	
One of: Music 150, 151, 152, 153, 154	0	One of: Music 150, 151, 152, 153, 154, 354	0	One of: Music 140, 240, 340, 440	
One of: Music 140, 240, 340, 440	1	One of: Music 140, 240, 340, 440	1		
	<hr/> 15		<hr/> 15		<hr/> 17 or 18

*Music Education 305 is mandatory for all B.Ed. majors in music in the elementary programmes.

†Students intending to proceed to the Faculty of Education for teacher training are advised to elect the third instrumental techniques course (Music 330, 331, 332) not already taken.

COURSES OFFERED

LANGUAGE OF MUSIC

***†100. (3) Language of Music I**

General musicianship and the study, analysis and practice of elementary choral and instrumental harmony.

Prerequisite: Evidence of music training acceptable to the Division. (3-2; 3-2)

***†200. (3) Language of Music II**

A study of harmonic and contrapuntal practices with special reference to the music of Bach, Mozart, and their contemporaries.

Prerequisite: Mu. 100. (3-2; 3-2)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

*†300. (3) **Languoge of Music III**
A study of harmonic and contrapuntal practices from c.1500 to c.1900.
Prerequisite: Mu. 200. (3-0; 3-0)

*†400. (3) **Languoge of Music IV**
Advanced study of harmonic and contrapuntal practices and an introduction to the melodic, rhythmic and harmonic practices of 20th century composers. (3-0; 3-0)

COMPOSITION

†205. (3) **Music Composition I**
Introduction to the art of composition.
Prerequisite: Mu. 100. (3-0; 3-0)

305. (3) **Music Composition II**
Prerequisite: Mu. 205. (3-0; 3-0)

355. (1) **Composers' Lob.** (0-2; 0-2)

405. (3) **Music Composition III**
Prerequisite: Mu. 305. (3-0; 3-0)

406. (3) **Directed Studies**
Tutorial or seminar studies and graduating composition.
Prerequisite: Mu. 305. (3-0; 3-0)

MUSIC HISTORY

*†110. (3) **Introduction to Music History and Literoture**
A survey of music literature in the changing cultural patterns of Western civilization from antiquity to the present day. (3-0; 3-0)

*†310. (3) **Music of the Ancient ond Medieval Periods**
A study of ancient and medieval music up to c.1450.
Prerequisite: Mu. 110 or FA. 101. (3-0; 3-0)

*†311. (3) **Music of the Renoissance**
A study of music from c.1400 - c.1600.
Prerequisite: Mu. 110 or FA. 101. (3-0; 3-0)

*†312. (3) **Music of the Baroque Era**
A study of music from c.1600 - c.1750.
Prerequisite: Mu. 110 or FA. 101. (3-0; 3-0)

*†313. (3) **Music of the Clossical Era**
A study of music from c.1730 - c.1830.
Prerequisite: Mu. 110 or FA. 101. (3-0; 3-0)

*†314. (3) **Music of the Romontic Ero**
A study of styles and trends in nineteenth-century music.
Prerequisite: Mu. 110 or FA. 101. (3-0; 3-0)

*†315. (3) **Music of the Twentieth Century**
A study of music from c.1900 to the present day.
Prerequisite: Mu. 110 or FA. 101. (3-0; 3-0)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

*†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: Mu. 110 or FA. 101. (3-0; 3-0)

NOTE: If the prerequisite has been fulfilled, students may enrol in one of Mu. 310 to 316 in their second year.

390. (3) **Special Studies**

This may vary from year to year and be either a course of lectures on some detailed aspect of music history or a study of special topics in consultation with the Division of Music.

Prerequisite: Mu. 110. (3-0; 3-0)

490. (3) **Special Studies**

This may vary from year to year and be either a course of lectures on some detailed aspect of music history or a study of special topics in consultation with the Music Division.

Prerequisite: Mu. 110. (3-0; 3-0)

426. (3) **Seminar in Musicology**

For Music History majors only. Seminar will include the graduating essay.

(3-0; 3-0)

INSTRUMENTAL TECHNIQUES

†130. (2) **Introduction to Performance and Orchestration**

An introduction to musical instruments, their history, their individual characteristics and use in ensemble, and to performance practice. (1-2; 1-2)

†330. (2) **Strings**

Group instruction in playing all orchestral stringed instruments. (1-3; 1-3)

†331. (2) **Brasses**

Group instruction in playing all orchestral brass instruments. (1-3; 1-3)

†332. (2) **Woodwinds**

Group instruction in playing all orchestral woodwind instruments. (1-3; 1-3)

†335. (3) **Orchestration**

Advanced study of instruments and orchestration.

Prerequisites: Mu. 130 and 200. (3-0; 3-0)

†356. (2) **Conductors' Lab.**

(0-2; 0-2)

CHORAL TECHNIQUES

†360. (3) **Introduction to Choral Music**

An introduction to choral conducting and choir training, with survey and analysis of set works. (1-2; 1-2)

†460. (3) **Advanced Choral Music**

A continuation of Mu. 360, with special attention to analytical and performance techniques.

Prerequisite: Mu. 360. (1-2; 1-2)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

††SOLO PERFORMANCE

- †140. (1) **Individual Tuition**
Lessons in piano, orchestral instrument or voice. Elementary level. (0-1; 0-1)
- †240. (1) **Individual Tuition**
Lessons in piano, orchestral instrument or voice. Intermediate level. (0-1; 0-1)
- †340. (1) **Individual Tuition**
Lessons in piano, orchestral instrument or voice. Senior level. (0-1; 0-1)
- †440. (1) **Individual Tuition**
Lessons in piano, orchestral instrument or voice. Advanced level. (0-1; 0-1)

††The above courses may be repeated in a different medium with the permission of the Division of Music. Examinations in all years may include sight-reading. Third and fourth year examinations may also include harmonization of a tune at sight, playing from a figured bass, from a string quartet score or from a straightforward orchestral score.

PERFORMANCE GROUPS

- †150. (0) **University Choir** (0-2; 0-2)
- †151. (0) **University Orchestra** (0-2; 0-2)
- †152. (0) **University Concert Band** (0-2; 0-2)
- †153. (0) **Instrumental Ensemble** (0-2; 0-2)
- †154. (0) **Madrigal Singers** (0-2; 0-2)
354. (0) **Collegium Musicum** (0-2; 0-2)
- †356. (2) **Conductors' Lab.** (0-2; 0-2)
- †365. (3) **Music Theatre I**

An introduction to Music Theatre; a study (with practice) of relationships between music and theatre, with particular reference to contemporary developments. (3-3; 3-3)

†Approved for credit in the Faculty of Education.

‡Admission by permission of the Division of Music.

DIVISION OF THEATRE

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 those students who wish to continue their studies in graduate or professional schools, or who wish to prepare for a career in community or professional theatre. As well as obtaining a broad general education in the arts, the student must specialize in one of the following areas: acting, directing, or design and production. 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 Division, and all students must consult the Chairman of the Theatre Division during the first two days of registration.

Students will be required to take part in rehearsals and performances associated with divisional projects. They must consult the Division before accepting major commitments not related directly to their course of study.

Each season, the Theatre Division and the Players Club present major productions in the Phoenix Theatre. As well, a season of noontime experimental productions is presented in the Workshop Theatre.

Programme of Courses Required for the Degree of B.F.A. with a Major in Theatre

With the permission of the Division, a student may proceed to the B.F.A. degree with specialization in acting, directing, or design and production. Courses in these areas will be available at the first, second and third year levels only during the 1968-69 session. Students must complete 60 units of prescribed course work, of which at least 9 units must be taken in the area of specialization.

COURSES OFFERED

HISTORY OF THEATRE

†*310. (3) The History of the Theatre to 1642

An examination of the western theatre in relation to society from the beginnings in primitive ritual to the close of the English playhouses in 1642. The amount of assigned reading will be determined by the time spent in the laboratory period, in which students will explore aspects of performance related to their texts.

(Not offered 1968-69.)

(3-2; 3-2)

†*311. (3) The History of the Theatre from 1642 to the Rise of Naturalism

First term — Baroque and Restoration Theatre: an examination of the French neo-classical theatre, Italian Commedia dell'Arte and English Restoration theatre in relation to the age.

Second term — Pre-Naturalism from the 18th Century to late 19th Century: a study of the theatre in England and Europe during the 18th and 19th Centuries with particular reference to the German, French and English theatrical development.

The amount of assigned reading will be determined by the time spent in the laboratory period, in which students will explore aspects of performance related to their texts.

(3-2; 3-2)

†*312. (3) Modern World Drama

First term — Naturalism and Realism from the 19th Century until the present day: a study of naturalism and realism in the theatre from Buchner and Hebbel to the present day in Europe and America.

Second term — Modern Non-Representational theatre: an examination of Symbolism and Expressionism in the theatre including Avant Garde, Dadaist, Surrealism and

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>	<i>Fourth Year</i>
English 100	(3) English 200 or 201	(3) One of Theatre 310, 311 or 312	(3) One of Theatre 310, 311 or 312
Theatre 170	(3) One of Theatre 310, 311 or 312	(3) Theatre 399*	(3) Theatre 490*
Theatre 120	(3) Theatre 220 or 299	(3) Theatre 320,* or 340*	(3) Theatre 420,* or 440*
Theatre 140	(3) Theatre 240	(3) Two Electives	(6) Two Non-Theatre Electives
Elective	(3) One Non-Theatre Elective	(3)	(3)
UNITS	15	15	15

*These courses are related to a theatre workshop in which students will be required to do projects in performance and research.

NOTE: At least one elective must be taken outside the School of Fine Arts.

Theatre of Alienation, of the Absurd, of Cruelty, of Today, (Ibsen, Strindberg, Jarry, Kaiser, Toller — the French Avant Garde, Brecht, German Expressionist theatre, French Absurdist, etc.)

The amount of assigned reading will be determined by the time spent in the laboratory period, in which students will explore aspects of performance related to their texts.

(Not offered 1968-69.)

(3-2;3-2)

ACTING

†‡120. (3) Acting I

First stages in acting, movement and voice; improvisation, mime, including the use of masks; muscular control, endurance, flexibility, response to imagery, awareness of spatial relationships, styles of sword play; breath control, tonal development, range of pitch, relation of voice to body in action, phonetics. (2-4; 2-4)

†‡220. (3) Acting II

Internal technique and theory, advanced work in improvisation and mime; continuing work in movement, styles of sword play; phonetics and work in rhythm. Studio work will be required.

Prerequisite: Theatre 120 or permission of the instructor.

(2-8; 2-8)

†‡320. (3) Acting Workshop I

Work in acting under performance conditions; advanced work in movement and speech. Prerequisite: Theatre 220 or permission of the instructor. (2-8; 2-8)

†‡420. (3) Acting Workshop II

Advanced work in acting under performance conditions; advanced work in movement and speech. Prerequisite: Theatre 320 or permission of the instructor.

(Not offered 1968-69.)

(2-8; 2-8)

DIRECTING

330. (3) Directing I

The role of the director as a unifying force in the theatre. Fundamental analysis of the text and its realization in character, composition, movement and rhythm; methods of rehearsal procedure and basic techniques of working with the actor. Studio work will be required. Prerequisite: Theatre 220 or permission of the instructor. (3-3; 3-3)

430. (3) Directing II

Further exploration of the director's media, including setting, light and sound. Analysis of the text, advanced work with the actor, stylistic considerations and exploration of staging for various stage forms. Studio work will be required. Prerequisite: Theatre 330 or permission of the instructor.

(Not offered 1968-69.)

(3-3; 3-3)

DESIGN AND PRODUCTION

†140. (3) Elementary Stagecraft and Costume

Introduction to stage lighting; workshop techniques; costume construction and costume history. (3-3; 3-3)

†240. (3) Stagecraft and Costume

Stage management and decor; costume design; make-up.

(3-3; 3-3)

†Approved for credit in the Faculty of Education.

‡To reach the required level of competence in voice and movement, students may be asked to take additional tuition in these areas at the discretion of the Division.

†340. (3) **Production Workshop I**

Work under production conditions in design, stagecraft and costume. (3-3; 3-3)

†440. (3) **Production Workshop II**

Advanced work under production conditions in design, stagecraft and costume.
(Not offered 1968-69.) (3-3; 3-3)

CRITICISM

†*170. (3) **An Introduction to the Theatre**

An introduction to the study of dramatic form and the principles of dramatic criticism. A brief survey of the development of western theatre will require the study of representative plays in order to provide a broad historical background. The amount of assigned reading will be determined by the time spent in the laboratory period, in which students will explore aspects of performance related to their texts. (3-2; 3-2)

*270. (3) **The History of Theatrical Criticism**

A detailed examination of major dramatic theories and critical works from Plato to the present day.

(Not offered 1968-69.) (2-0; 2-0)

*370. (3) **Advanced Theatre Aesthetics**

Advanced 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 170 and 270 or consent of the instructor.

(Not offered 1968-69.) (3-0; 3-0)

*470. (3) **Analysis and Criticism**

Detailed examination of contemporary dramatic forms and criticism. Students will be required to write criticisms of current productions.

Prerequisite: Theatre 270 or consent of the instructor.

(Not offered 1968-69.) (3-0; 3-0)

CHILDREN'S DRAMA

NOTE: Students taking a theatre major for the Bachelor of Education degree are required to take the four seminars in Creative Drama, in which the following material will be examined:

An examination of children's natural dramatic play in theory and practice. The nature of creative drama and its use within the school situation through improvisation, creative movement, creative speech, creative language, the theatre, and the dramatic method of teaching other subjects. Studio work will be required and there will also be practical work with children.

The first year seminar, Theatre 180, will be related to the work done in Theatre 120, and receives no credit.

†180. (0) **First Year Seminar in Creative Drama**

Texts: Richard Courtney, *Teaching Drama*; Peter Slade, *Child Drama*. (0-2; 0-2)

†280. (1) **Second Year Seminar in Creative Drama**

Prerequisite: Theatre 180 or permission of the instructor.

Texts: E. J. Burton, *Drama in Schools*; Rudolf Laban, *Modern Educational Dance*. (0-2; 0-2)

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

†380. (1) **Third Year Seminar in Creative Drama**

Prerequisite: Theatre 280 or permission of the instructor.

Texts: Hodgson and Richards, *Improvisation*; John Wiles and Alan Garrard, *Leap to Life!*

(Not offered 1968-69.) (0-2; 0-2)

†480. (1) **Fourth Year Seminar in Creative Drama**

Prerequisite: Theatre 380 or permission of the instructor.

Texts: Richard Courtney, *The School Play*; E. J. Burton, *Teaching English Through Self-Expression*.

(Not offered 1968-69.) (0-2; 0-2)

†381. (3) **Children's Theatre**

A survey of the development of Children's Theatre and a study of a variety of approaches to the form. An examination of the plays and materials suitable for Children's Theatre, as well as the architecture and equipment necessary. Studio work will be required.

Texts: Richard Courtney, *The School Play*; Richard Courtney, *The Drama Studio*; Geraldine Brain Siks and Hazel Brain Dunnington, *Children's Theatre and Creative Dramatics*; Brian Way, *Development through Drama*. (3-3; 3-3)

†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.

Texts: E. J. Burton, *Students' Guide to World Theatre*; Richard Courtney, *Play, Drama and Thought: The Intellectual Background to Dramatic Education*; T. H. Gaster, *Thespis*; S. J. Parnes and H. F. Harding, *A Source Book for Creative Thinking*; Philip Weissman, *Creativity in the Theatre*. (3-0; 3-0)

DIRECTED STUDIES

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. (1-2; 1-2)

*390. (3) **Directed Studies in Theatre** (3-0; 3-0)

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. (1-2; 1-2)

490. (3) **Graduating Project**

*Approved for credit in the Faculty of Arts and Science.

†Approved for credit in the Faculty of Education.

COURSE OFFERED JOINTLY BY ALL DIVISIONS

Fine Arts 103 (3) Language of the Arts

An examination of perception and the language of the arts; an exploration of the creative process. Open only to students enrolled in the School of Fine Arts. (3-0; 3-0)

School of Nursing

SCHOOL OF NURSING

The Board of Governors and the Senate of the University authorized the establishment of a School of Nursing beginning in September 1967.

Students who wish to undertake nursing education may enter the first year of the course, registering in the Faculty of Arts and Science. The second year will be added in the fall of 1968, and the third and fourth years in subsequent sessions. Students wishing to register for the second year should seek advice from the Registrar's Office.

The Senate has authorized the following courses for first-year nursing.

English 100

Chemistry 120 and 121

Mathematics 130

*Biology 150

One of: Psychology 100 (recommended),
Anthropology 100, Sociology 100

*Students who have completed Biology 11 and 12 should register in Zoology 202.

No provision exists yet for the training of persons with the R.N.

The University is seeking a Director of the School of Nursing. An appointment had not been made at the time of publication of this calendar. In the interval, inquiries should be sent to the Registrar, University of Victoria.

School of Social Welfare

SCHOOL OF SOCIAL WELFARE

The Board of Governors and the Senate has authorized the establishment of a School of Social Welfare beginning in September 1969.

The University is seeking a chief officer of the School of Social Welfare. An appointment had not been made at the time of publication of this calendar. In the interval, inquiries should be sent to the Registrar.

Evening Division

(NON-CREDIT COURSES)

EVENING DIVISION

(Non-Credit Courses)

Director: ROBERT T. D. WALLACE, M.A.

Assistant to the Director: CORA E. BROWNE, B.A.

The University of Victoria offers non-credit courses of general interest through the Evening Division. The courses to be offered in September 1968 and in January 1969 will be announced during the late summer and early winter respectively. Registration by mail or in person must be completed by the dates indicated in the Announcement.

Inquiries regarding non-credit courses should be addressed to: Director of Evening Division, University of Victoria.

Persons interested in credit courses offered in the afternoon or evening should refer to Extension on page 234.

Extension

EXTENSION

University of Victoria offers certain credit courses in the late afternoon and evening during the winter session for the benefits of persons who are unable to attend during the day. Registration, however, is restricted to one course or not more than three units of credit. The term is the same as that for the regular day students and classes are conducted for the same number of hours per week. Late afternoon credit courses normally begin at 4:30 p.m., two days a week; evening credit courses begin at 7:30 p.m., two days a week.

Application for Admission

Persons wishing to enrol as Extension students must apply for admission by the due dates given on page 33 under Application for Admission.

Registration

Extension students who register in courses offered on campus are classified as *Intramural* students, those who register in courses offered at other centres on Vancouver Island as *Extramural* students.

Courses offered in 1968-69 and the dates for registration will be published in the early summer in a supplement to this Calendar, after the time table for the winter session has been prepared.

Inquiries regarding credit courses should be directed to the Registrar.

Correspondence courses are not offered.

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 Registrar or the Director of Counselling and Testing, University of Victoria.

Please note that the courses suggested are shown with the course numbers used at the University of Victoria. Note too that course programmes for First Year students only are outlined.

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 150
Chemistry 120 or 124, and 121
English 100
Mathematics 130 or 140
An Arts elective

APPLIED SCIENCE

Suggested courses:

English 100
Mathematics 130
Chemistry 120 or 124, and 121
Physics 101
An Arts elective

ARCHITECTURE

Suggested courses:

English 100
Mathematics 130
Art 120 or 100
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 100 and Mathematics 130 or 140).

DENTISTRY

Completion of at least three years of study in Arts and Science including English 100, Mathematics 130, Chemistry 124 and 121, Chemistry 224, Chemistry 230 or 233, Biology 150, Physics 101 or 103.

HOME ECONOMICS

Suggested courses:

English 100
Chemistry 120 or 124, and 121
Physics 101 or 103
Mathematics 130 or 140
Biology 150 or a Social Science

FORESTRY

Suggested courses:

Biology 150 or Physics 101
Chemistry 120 or 124, and 121
English 100
Mathematics 130
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 100, Mathematics 130, Chemistry 124 and 121, Chemistry 224, Chemistry 230 or 233, Biology 150, Physics 101 or 103.

NURSING (BSN)

Suggested courses:

English 100
Chemistry 120 or 124, and 121
Mathematics 130
Biology 150
Approved elective

PHARMACY

Chemistry 120 or 124, and 121
English 100
Mathematics 130
Physics 101 or 103, or Biology 150
An Arts elective

**REHABILITATION
MEDICINE**

English 100
Mathematics 130 or 140
Chemistry 120 or 124, and 121
Biology 150
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 100
Mathematics 130
Biology 150
Chemistry 120 or 124, and 121
An elective

Awards and Financial Aid

AWARDS AND FINANCIAL AID

GENERAL REGULATIONS

All inquiries concerning material in this section should be directed to the Financial Aid Officer, Registrar's Office.

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 or Director of the School 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 is a monetary award based on academic merit or excellence in the area to which the award pertains. It is normally offered at the undergraduate level.
- (c) A fellowship is a monetary award based on academic merit. It is normally offered at the graduate level.
- (d) A bursary is a monetary award based on need and reasonable academic standing.
- (e) A medal is an award based on academic merit or excellence in the area to which the award pertains.
- (f) 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 pages 240 - 252.

Section 2: Government of British Columbia awards. See page 253.

Section 3: University bursaries requiring application. See page 254.

Section 4: Awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See pages 255 - 261.

Section 5: Undergraduate awards for which application must be made to the Senate Committee on Awards. See pages 262 - 264.

Section 6: Undergraduate awards administered by other institutions and organizations. See pages 265 - 269.

Section 7: Awards for graduate study. See pages 270 - 275.

Section 8: Loan funds. See pages 276 - 277.

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

Applications for the following five awards may be obtained from the Registrar's 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 1967. Awards will be based upon high standing in the matriculation record of students in June 1967. 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.

THE HARBORD INSURANCE LTD. SCHOLARSHIP — Five hundred dollars (\$500) awarded annually to the most promising scholar leaving School District No. 61, entering the School 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.

***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.

UNIVERSITY OF VICTORIA ALUMNI SCHOLARSHIPS — Contributions to the Alumni Annual Giving Campaign and other funds have made possible the institution of five Municipal Scholarships, in the amount of \$300 each. These scholarships are available to students, 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.

One scholarship will normally be awarded in each of the municipalities of School District No. 61 (Greater Victoria). One scholarship will normally be awarded in the area included in School Districts Nos. 62 and 63 (Saanich and Sooke).

Winners will be selected by a special Alumni Screening Committee representing the University of Victoria and the Alumni Association.

ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

THE BOBBY BAUER MEMORIAL AWARD — Beginning with the academic year 1966-67, the Bobby Bauer Memorial Foundation will make 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.

* Administered by the University of Victoria Foundation.

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.

BRITISH COLUMBIA FOREST PRODUCTS LIMITED ENTRANCE SCHOLARSHIPS — Eight 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 eight candidates obtaining highest standing. No award will be made, however, to an applicant with an overall average of less than 70%. Applicants for these scholarships must complete the "General Application for Scholarship" form, which may be obtained from the Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver 8, B.C. This application 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.

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 Dean of Inter-Faculty Affairs, University of British Columbia. 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 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. Applicants must be from the Vancouver Island Indian Educational District and be planning to enter the University of British Columbia, the University of Victoria, Simon Fraser University, 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 in consultation with the Superintendent of Indian Education on Vancouver Island. Correspondence regarding the above is to be addressed to: The Honorary Secretary, B.C. Indian Arts and Welfare Society, c/o Provincial Museum, Victoria, B.C.

THE BRITISH COLUMBIA TEACHERS' FEDERATION SCHOLARSHIP IN TEACHER TRAINING — The following scholarships, the gift of the British Columbia Teachers' Federation, are offered annually to students proceeding to a degree or certificate in the field of elementary or secondary school teaching.

- (1) Two scholarships of \$250 each, available to students continuing in the Faculty of Education, either in Vancouver or Victoria, from Grades XIII or First Year University.

- (2) Two scholarships of \$250 each, available to students continuing in the Third Year in the Faculty of Education, Vancouver or Victoria.

All awards will be made on the basis of academic standing, personal qualities, and aptitude for and interest in teaching. To be eligible for the scholarships in (2) above, students must have achieved First Class standing in practice teaching. Applications, on forms available from the Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver 8, B.C., must be submitted to the University of British Columbia, not later than May 15.

THE BRITISH COLUMBIA TEACHERS' FEDERATION UNDERGRADUATE SCHOLARSHIPS FOR TEACHERS — The British Columbia Teachers' Federation offers annually six scholarships tenable at the University of British Columbia, at the University of Victoria, or at Simon Fraser University. An applicant must be actively engaged in teaching in the Province, must hold a B.C. Teaching Certificate, must have at least a second class average (or its equivalent) in his previous work and first class standing (or its equivalent) in the particular area or areas in which he proposes to major, and must give assurance of returning to educational service in British Columbia on completion of his University studies. The awards are of two types: (a) two scholarships of \$1500 each for teachers taking leave of absence to proceed in a full programme of studies in the regular winter session toward a B.Ed. degree. One scholarship is for the elementary field, the other for the secondary field. (b) Four scholarships of \$250 each for teachers proceeding in a full programme of studies in the summer session toward the B.Ed. degree. Two of the scholarships are for the elementary field and two for the secondary field. The completed application form and all necessary documents must be received by the Scholarships & Awards Committee, B.C. Teachers' Federation, 2235 Burrard Street, Vancouver 9, not later than March 15.

THE CANADIAN OFFICERS' TRAINING CORPS (C.O.T.C.) BURSARIES — Bursaries to the total of \$300, each ranging in value from \$50 to \$100, are available to members of the Corps continuing their training in the fall with the C.O.T.C. on the campus. These awards are provided to give a measure of encouragement to students deserving of assistance who have good standing, not only in their academic studies but also in the Corps programme. In selecting winners consideration will therefore be given to financial need, academic standing, and record of achievement in the C.O.T.C. Selection will be made by the University of British Columbia, in consultation with the Commanding Officer. Applications, on forms available from the Dean of Inter-Faculty Affairs, must be submitted to the University of British Columbia not later than July 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.

THE COLUMBIA CELLULOSE COMPANY, LIMITED, ENTRANCE SCHOLARSHIPS — Seven scholarships, each of the value of \$250 per year and renewable annually for a maximum of five years (\$1,250), are offered to students completing Grade XII in the following British Columbia communities: two are offered to students attending in Prince Rupert and Castlegar; one each to those attending in Terrace, Nakusp-Needles, and Revelstoke. Grade XII students in these communities intending to proceed to a degree or teaching certificate in any field at the University of British Columbia or the University of Victoria may apply. Programmes at other Canadian universities will be considered on their merits. Grade XIII attendance in British Columbia will be accepted in lieu of attendance at first year University. All candidates for these awards must notify the Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver 8, B.C. not later than May 15 of their intention to compete by submitting the "General Application for Scholarship" form. These forms may be obtained from the University of British Columbia or the Industrial Relations Department of Columbia Cellulose Company, Limited. All candidates must write the full set of scholarship examinations for High School Graduation (University Programme), conducted in June by the B.C. Department of Education. The scholarships will normally be awarded to the candidates obtaining the highest standing in the June Departmental Examinations. However, they may be awarded to other candidates if those with the higher standing win other awards (Government Scholarships excluded), or they may be withheld if candidates do not obtain sufficiently high standing. To be eligible for annual renewal, students must obtain a pass in all subjects without supplementals.

THE COLUMBIA CELLULOSE COMPANY, LIMITED, ROBERT S. STACEY MEMORIAL SCHOLARSHIP — Established as a memorial to the late Robert S. Stacey, Co-ordinator of Industrial Relations for Columbia Cellulose Company, Limited, this scholarship is open to sons, daughters and legal dependents of full-time employees, of retired employees and of deceased employees who died while in the service of the Company. These are eligible if attending Grade XII with the intent to proceed to a degree or teaching certificate in any field at the University of British Columbia or the University of Victoria. Programmes at other Canadian Universities will be considered on their merits. The award to the value of \$250 annually is renewable to a maximum of five years (\$1,250). Grade XIII attendance in British Columbia will be accepted in lieu of attendance at first year University. All candidates for this award must notify the Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver 8, B.C. not later than May 15 of their intention to compete by submitting the "General Application for Scholarship" form. These forms may be obtained from the University of British Columbia or the Industrial Relations Department of Columbia Cellulose Company, Limited. All candidates must write the full set of scholarship examinations for High School Graduation (University Programme), conducted in June by the B.C. Department of Education. The scholarship will normally be awarded to the candidate obtaining the highest standing in the June Departmental Examinations. However, it may be awarded to another candidate if the one with the higher standing wins other awards (Government Scholarships excluded), or it may be withheld if candidates do not obtain sufficiently high standing. To be eligible for annual renewal, students must obtain a pass in all subjects without supplementals.

CROWN ZELLERBACH CANADA LIMITED SCHOLARSHIPS FOR TEACHER TRAINING — Seven scholarships of \$2,000 each, payable in yearly instalments of \$400 for five years, are offered annually by Crown Zellerbach Canada Limited to high school graduates beginning studies at the University of British Columbia or the University of Victoria, and planning to enter the secondary teaching profession. One award will be available in each of the following school districts: Courtenay-Comox; Campbell River; Ladysmith (Ladysmith High School only); Nanaimo; Ocean Falls; Richmond School District No. 38; and the combined areas of New Westminster School District No. 40, Coquitlam School District No. 43, and Surrey School District No. 36. Selection of the winners of the scholarships, which are open to students whose parents reside in these districts, will be made by the School Boards concerned, on the basis of scholastic standing, leadership, citizenship, and suitability for the teaching profession. Application to compete should be made to the high school principal. Yearly renewals to winners will be dependent upon maintenance of good academic standing.

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 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 Dean of Inter-Faculty and Student Affairs, University of British Columbia, Vancouver 8, B.C. Applications should contain details of family service with the Federation and other pertinent information.

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, or the University of Victoria in a full programme leading to a degree in any field. In order to be considered, a candidate must obtain from the office of the Dean of Inter-Faculty Affairs, 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 giving the name and address and details of the lodge with which the applicant's immediate family is or has been associated.

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 INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION ENTRANCE SCHOLARSHIPS — Three 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 the 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 office of the Dean of Inter-Faculty Affairs,

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 re-award scholarships if winners receive other scholarships of substantial value.

THE I.W.A. LOCAL 1-80, SCHOLARSHIP — I.W.A., Local 1-80, offers a scholarship in the amount of \$300, open in competition to I.W.A. members (Local 1-80), or the wife, son or daughter of a member. The scholarship will be awarded to the candidate obtaining the highest standing in the written examinations for Grade XII (University Programme) conducted in June by the Department of Education, B.C. All applicants must write the required examinations, details of which may be obtained from the principal of any high school offering Grade XII work, or from the Department of Education, Victoria, B.C. The scholarship will be open to those proceeding in the fall to university studies at the University of British Columbia or the University of Victoria. Those who wish to compete must notify Mr. Ed. Linder, Financial Secretary, I.W.A. Local 1-80, P.O. Box 430, Duncan, B.C., by letter not later than June 3. They must also consult the school principal before this date about the arrangements to write the examinations and apply to write the departmental scholarship examinations. The I.W.A. reserves the right to withhold the scholarship if no candidate makes sufficiently high standing, or to award it to another candidate if the winner receives another award of higher monetary value.

MacMILLAN BLOEDEL LIMITED COMMUNITY SCHOLARSHIPS — Nine scholarships of \$500 each, one in each of School Districts 65 (Duncan-Cowichan), 67 (Ladysmith-Chemainus), 68 (Nanaimo), 69 (Qualicum), 70 (Alberni), 79 (Ucluelet-Tofino), and 48 (Howe Sound); and two in School District 47 (Powell River), are offered by MacMillan Bloedel Limited. These scholarships are open to students beginning their studies at the University of British Columbia or affiliated Theological Colleges on the Campus or at the University of Victoria. 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, 1199 West Pender Street, Vancouver, B.C.

MEDICINE HAT NEWS SCHOLARSHIPS — Four scholarships, each valued at \$150 are offered annually. Two are available to carriers and former carriers of the *News*; two, to children of employees of the *News*. In each case, one is tenable at a university or accredited junior college, and one at an 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.

THE RETAIL WHOLESALE & DEPARTMENT STORE UNION LOCAL 535 BURSARY — This bursary of \$250 is offered by the Retail Wholesale & Department Store Union Local 535 to sons, daughters, and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade XII 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 winner, the basic factor will be the financial need of the candidates and their families. Those who wish to apply for this bursary must obtain the University Bursary Form from Dean Walter H. Gage, University of British Columbia, Vancouver 8, B.C. The completed application must be received by him not later than July 15. The winner will be selected in consultation with the Union.

THE ROYAL ARCH SCHOLARSHIP — Three 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 to a full programme of studies in the First Year at the University of British Columbia or the University of Victoria. 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 Dean of Inter-Faculty Affairs, 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. 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.

ROYAL CANADIAN LEGION (PACIFIC COMMAND) SCHOLARSHIPS — The Canadian Legion (British Columbia 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 The Provincial Secretary, Royal Canadian Legion, 1531 West Pender Street, Vancouver 5, B.C.

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 the 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. 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 Dean Walter H. Gage, 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 the 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. 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 Dean Walter H. Gage, 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 STRY CREDIT UNION BURSARY — A bursary of \$300 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 \$200 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 Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver 8, B.C., must be received at the University of British Columbia not later than July 15.

TRANS MOUNTAIN OIL PIPELINE CO. HIGHER EDUCATION AWARDS —

Up to five Higher Education Awards will be offered annually by the Trans Mountain Oil Pipe Line Company to sons, daughters and legal wards of regular employees and annuitants, deceased employees, and deceased annuitants. To be eligible a student must attain a minimum standing of 70% in the appropriate secondary examinations in the subjects required for admittance to approved institutions. Each award is tenable for a maximum of four academic years. Selection of winners will be made by the University of British Columbia from applicants who are entering a full programme of studies at the University of Victoria, the University of British Columbia, Simon Fraser University, or the British Columbia Institute of Technology. The value of award payments shall equal the tuition and other compulsory fees for the academic year. No portion of an eligible fee which is paid by a government shall be included in the amount paid as awards by the company. Further information and application forms may be obtained from Division Offices or the Personnel Dept. and forwarded to: The Trans Mountain Higher Education Awards Committee, c/o The Royal Trust Company, 626 West Pender Street, Vancouver 2, B.C.

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 the 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 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. 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 Dean Walter H. Gage, 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, 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.

tion, not exceeding a total of five payments in all. All candidates must complete the "General Application for Scholarship" form, obtainable from Dean Walter H. Gage, University of British Columbia, Vancouver 8, B.C. The completed application, accompanied by the service certificate of the Vancouver *Sun* must be received by the University of British Columbia not later than May 15. Candidates will be judged on the basis of their examination grades, their personal letters (see application form for details), and letters of recommendation from their references. The winner of this scholarship, while not also permitted to hold one of the Vancouver *Sun* Scholarships for Carriers, may accept other awards offered to him.

VICTORIA MECHANICAL TRADE PROMOTION FUND SCHOLARSHIP — Provides a scholarship of three hundred dollars (\$300) each year for the session 1967-68 and 1968-69. The award is to be 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 Fund 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.

WHITE SPOT RESTAURANTS LIMITED BURSARIES — Two bursaries, having a total value of \$1,000 each, are provided by White Spot Restaurants Limited for their employees, and sons and daughters of their employees who are below the rank of manager and 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 or the University of Victoria. For purposes of qualification, "employees" shall include students having part-time employment with the Company while attending secondary school. 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 1 from the Dean of Inter-Faculty and Student Affairs, 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.

HON. W. C. WOODWARD UNIVERSITY MEMORIAL SCHOLARSHIPS — Two scholarships, each of the value of \$500 and renewable annually in the same amount at the beginning of each undergraduate year (up to a maximum of five payments in all) are offered in competition to sons, daughters, and legal dependents of full-time employees, of retired employees, and of deceased employees (who died while in the service of the Company) of Woodward Stores. These scholarships are open to applicants beginning University attendance for the first time and entering the University of British Columbia or the University of Victoria from Grade XII or XIII of secondary school (or from any other source, provided they are qualified for admission). The writing of the Examinations conducted in June by the Department of Education, B.C., is required. Applicants must be proceeding, in any faculty, to a full course leading to a degree. Candidates, who must apply not later than May 30 on special forms obtainable from the Personnel Department of any Woodward store, will be considered on the basis of (a) academic standing; (b) activity and interest in youth programmes and organizations (within the school and community); and (c) personal qualities, character, and demonstration, during attendance at school, of citizenship, leadership, and service. Renewals are subject to maintenance of satisfactory standing, progress, and conduct.

THE YARROWS LIMITED ENTRANCE SCHOLARSHIP — A scholarship of \$1,000 for sons, daughters, or legal dependents of employees of Yarrows Limited, Victoria is offered annually under terms and conditions identical to those of the Burrard Dry Dock Company Limited Scholarship. If the winner so desires, however, attendance at the University of Victoria will be accepted in lieu of attendance at the University of British Columbia. Candidates must apply on special forms which may be obtained from, and must be returned to, Yarrows Limited before May 30. Selection of the winner will be made by the University of British Columbia in consultation with the University of Victoria.

SECTION 2

GOVERNMENT OF BRITISH COLUMBIA AWARDS

NOTE: Both these awards are subject to change after the Calendar goes to press.

GOVERNMENT SCHOLARSHIPS — These awards are available to students of the Province of British Columbia who are beginning or continuing a full programme of undergraduate studies at the University of British Columbia or the University of Victoria, or in Grade XIII in a public high school of the Province. Students taking the one-year teacher-training course for graduates, the one-year course in Librarianship, and the First Year of Social Work are also eligible. Awards are not available for graduate study or for students registered as unclassified. Candidates for awards applicable to the session 1968-69 will be considered on the basis of standing received in the final examinations (excluding supplements) in a full programme for the session 1967-68 in a full year's work. Candidates in the University of British Columbia or the University of Victoria must take the final written examinations conducted by the University concerned in April; those in Grade XII or XIII must write the examinations conducted in June by the Department of Education, B.C. Candidates will be considered only if they fulfil requirements of being domiciled in British Columbia, to the satisfaction of the Government Awards Committee. All candidates must submit applications on special forms. Fuller and more precise details concerning these awards are available in a special circular issued by the Department of Education, B.C. Students at the University of Victoria must apply before *July 1*. High School students must apply before June 1.

Students already registered at the University of Victoria must request application forms from the Registrar's Office; these forms are not mailed automatically with statements of marks.

GOVERNMENT BURSARIES — The Government of the Province of British Columbia (with a contribution also from the Federal Government) provides funds annually for the award of bursary assistance to selected capable persons who can show financial need and who fulfil certain requirements of being domiciled in British Columbia. These awards will be made primarily to assist students entering their first year of undergraduate studies at the University of British Columbia or the University of Victoria, from Grade XII or Grade XIII. If funds permit, however, awards may be made for undergraduate studies in higher years (including the one-year teacher-training course, the one-year Librarianship course, and the First Year of Social Work), or for acceptable university studies at a recognized institution outside the Province in fields for which training is not available at the University of British Columbia or the University of Victoria (e.g. veterinary science, etc.). Awards are normally in the range of \$100-\$200. Applications must be submitted to the Department of Education, Victoria, B.C., by *August 4*. Application forms may be obtained from the Department of Education, Victoria, B.C., from the University of Victoria, or, where the student is attending school, from the principals of senior high schools.

SECTION 3

UNIVERSITY BURSARIES REQUIRING APPLICATION

TUITION ASSISTANCE BURSARY FUND

(University of Victoria)

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 in the range \$8,000-\$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 in the Registrar's Office.

Completed application forms should be returned to:

Financial Aid Officer,
Registrar's Office,
University of Victoria,
Victoria, B.C.

SECTION 4

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 1967-68 regular session.

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 degree average.

DR. MAXWELL A. CAMERON MEMORIAL MEDALS AND PRIZES — The British Columbia Teachers' Federation annually offers a silver medal and a prize of one hundred dollars (\$100) 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 PRIZE — 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.

BETA SIGMA PHI SORORITY CITY COUNCIL SCHOLARSHIP — 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.

THE BRITISH AMERICA PAINT COMPANY SCHOLARSHIP — One hundred dollars (\$100) awarded annually to the leader of second year Chemistry.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY SCHOLARSHIPS — Eight scholarships of two hundred and fifty dollars (\$250) each to be awarded for the 1967-68 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 1958 CENTENNIAL SCHOLARSHIP** — Five hundred dollars (\$500) to be awarded annually to a student who has completed at least one year at University of Victoria and who is continuing university studies in the Province of British Columbia. The award will be made on the basis of scholastic achievement and effective participation in campus activities.

*Administered by the University of Victoria Foundation.

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.

*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.

THE ADELINE JULIENNE DELOUME 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.

*THE HAROLD M. DIGGON MEMORIAL BURSARY — Two hundred dollars (\$200) to be awarded annually by Mrs. Lucy E. Diggon to a promising and deserving student of the Humanities who has completed second year and who intends to continue University studies.

T. EATON COMPANY (Canada) LTD. SCHOLARSHIP — Two hundred dollars (\$200) awarded to a first year student of high standing in Mathematics 130 and, preferably, with a first-class average. The winner must continue at the University of Victoria.

PERCY H. ELLIOTT MEMORIAL SCHOLARSHIP — One hundred and thirty dollars (\$130) awarded to a student of outstanding merit and promise in one specific field of study, who has also a high general academic standing and qualities of character indicating worthiness to hold the scholarship. The scholarship is awarded, upon the recommendation of the Committee on Awards, to a student in the first or second year and, unless service in the Armed Forces intervenes, proceeding immediately towards a degree.

*THE H. O. ENGLISH SCHOLARSHIP — One hundred and seventy-five dollars (\$175) 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.

*Administered by the University of Victoria Foundation.

*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 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 120 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: Botany, Chemistry, Geography, Geology, Mathematics, Physics, Zoology. The winner must continue his academic work at an approved university.

*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 Kiwanis Club of Victoria in conference with the Faculty.

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.

LIONS CLUB SCHOLARSHIP — One hundred dollars (\$100) awarded annually to the student obtaining the highest standing in Biology 150 and Chemistry 102 or 124, and continuing similar work at the University of Victoria.

MILLARD H. MOONEY MEMORIAL LIONS CLUB FINE ARTS SCHOLARSHIP — One hundred dollars (\$100) awarded annually to a worthy and talented student registered in the School of Fine Arts in first, second or third year, on condition that the student return to the University of Victoria the following year.

QUITA NICHOL BURSARIES — Two hundred dollars (\$200) donated annually to the University by Mrs. W. C. Nichol, to provide scholarships in first and second year French. Two prizes of \$100 and \$50, respectively, will be awarded in the first year, and one prize of \$50 in the second year. These prizes are normally awarded on merit, but, if necessary, special circumstances may be taken into consideration. Students must continue at the University of Victoria.

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.

*Administered by the University of Victoria Foundation.

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 303 — 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.

ESTHER PEARCE 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 \$500.00 each will be awarded annually by the President upon the advice of the Committee on Awards. Awards will be made in Arts, Sciences, Social Sciences and Education, on the basis of distinction in scholarship. In making the awards, the President and the Committee will take into account any other scholarships candidates have received.

THE PROFESSIONAL INSTITUTE OF THE PUBLIC SERVICE OF CANADA SCHOLARSHIP — One hundred dollars (\$100) awarded annually to a worthy and needy first year student returning to the University of Victoria for the second year.

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 deserving and promising student of the University of Victoria who is continuing studies at the University of Victoria.

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.

*Administered by the University of Victoria Foundation.

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.

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.

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.

VICTORIA GYRO CLUB 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 SCHOLARSHIP — Two hundred and fifty dollars (\$250) 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 scholarship. Selection of the student will be made by the Faculty, and preference will be given to a student studying in the general area of the basic medical sciences.

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 1967-68.

VICTORIA ROTARY WOMEN'S AUXILIARY CENTENNIAL SCHOLARSHIP — One hundred dollars (\$100) to be awarded to a promising and deserving student with a high academic standing who is continuing studies at the University of Victoria.

*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 \$250.00 is awarded annually for general proficiency to a student entering third or fourth year at the University of Victoria.

THE WESTON BAKERIES, LIMITED, SCHOLARSHIP — Two hundred and fifty dollars (\$250) to be awarded annually to a deserving student completing first or second year and continuing University studies.

THE WOODS TRUST SCHOLARSHIPS — Awarded annually to promising students at the University of Victoria who intend to pursue studies as undergraduates at the university or as post-graduate students at other universities or educational institutions or at any industrial or commercial concern engaged in the field of electrical engineering or in any allied field in the physical sciences. The scholarships are valued at two hundred and fifty dollars (\$250) each.

THE WOODWARD STORES, LIMITED, SCHOLARSHIP — Two hundred and fifty dollars (\$250) to be awarded annually to an outstanding student completing first or second year and continuing University studies.

THE MAY E. WOOTTON MEMORIAL SCHOLARSHIP — One hundred dollars (\$100) to be awarded annually to the student who writes the best term essay in English 200. Selection is to be made by the 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.

THE YORKSHIRE AND CANADIAN TRUST LIMITED SCHOLARSHIP — One hundred and seventy-five dollars (\$175) awarded annually to an outstanding student who is registered in the Faculty of Education. The winner must be continuing university studies leading to a B.Ed. degree.

THE ROSALIND W. YOUNG SCHOLARSHIP — Two hundred dollars (\$200) to be awarded annually by the University Women's Club of Victoria to the leading woman in first year Education who is continuing University studies.

*Administered by the University of Victoria Foundation.

PRIZES

The following prizes are awarded annually to students for distinguished accomplishment.

ADELPHI BOOK SHOP PRIZE — Donated to a first class student who has completed two years in the Faculty of Education.

AUSTRIAN GOVERNMENT BOOK PRIZES — The Austrian Consulate awards book prizes to students in the upper years showing proficiency in German Studies.

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 303 (History of the Canadian West).

***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 the upper years 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.

THE MARIONETTE BOOK SHOP PRIZE — Donated to the student who stands first in the final examination in English 100.

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 G. B. STARK MEMORIAL SLIDE RULE PRIZE — A prize for proficiency in pre-engineering studies to a deserving student of the University.

THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA — These book prizes will be awarded to an outstanding student of French language and literature and to a student with high standing in German.

*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 1967-68 regular session. Application for these awards must be made before April 30, unless otherwise indicated, on forms available in the Registrar's 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 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 Awards Officer, Registrar's Office not later than January 31. Selection will be made by a representative of the Bay.

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.

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 CANCER SOCIETY, BRITISH COLUMBIA DIVISION BURSARY — This bursary of five hundred dollars (\$500), the gift of the Canadian Cancer Society, British Columbia Division, will be available for a worthy and deserving student who is a bona fide pre-medical student, or who will have already completed the pre-medical stage of his training and will be entering medical school. To be eligible for this award an applicant must be a graduate of a secondary school in British Columbia. Those students who are assisted, although not required to undertake a legal obligation, are asked to assume a moral responsibility to reimburse the fund after completion of their medical studies. Application must be made before August 1 on forms available in the Registrar's Office.

THE CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS — The 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 Company to a deserving student in any year with a good academic record who is continuing studies at the University of Victoria. Apply before April 30 to 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 — One hundred and fifty dollars (\$150) 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 Faculty 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 GLADYS LEDINGHAM PARENT-TEACHER AWARD — Seventy-five dollars (\$75) awarded annually to a graduate of the University of Victoria who enrolls in a Course of Library at a university. Selection of the winner will be made by the Committee on Awards which will consider the need for financial assistance as well as scholastic ability. Applications may be obtained from the Awards Officer, and must be returned by April 30.

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 Awards Officer, Registrar's Office.

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 PETER POLLEN FORD SALES LTD. CENTENNIAL AWARDS — Five hundred dollars (\$500) each to be granted to two worthy and deserving students entering either undergraduate or postgraduate studies in Political Science or Economics. These awards represent the donor's project for the celebration of Canada's Centennial. The selection will be made by the Senate Committee on Awards. Applications must be submitted to the Awards Officer before April 30.

*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 articled to a chartered accountant, or C.G.A. Selection of the student is to be made by the Committee on Awards of the University of Victoria. Applications must be submitted before April 30.

THE ROYAL CANADIAN LEGION (VICTORIA, B.C.) SIR PERCY LAKE MEMORIAL SCHOLARSHIP — Three hundred dollars (\$300) to be awarded annually to a worthy student on the recommendation of the Faculty. To be eligible a student must be a veteran of World War II, or 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.

SEAFORTH HIGHLANDERS OF CANADA SCHOLARSHIP — Two hundred dollars (\$200) awarded to a student attaining the highest standing in the study of Military History or to an armed forces cadet attending his final year in the University.

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.

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 1968, at the latest. Application forms are available from the Office of the Registrar and must be returned to the Awards Officer before March 15.

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 WEST PARENT-TEACHER ASSOCIATION BURSARY — Fifty dollars (\$50) to be awarded for the Session 1967-68 to a student entering his second year who has taken the major portion of his elementary education at Victoria West Elementary School. Application to be made to the Committee on Awards by September 25, 1967.

*Administered by the University of Victoria Foundation.

SECTION 6

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.

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.

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 Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver, 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.

CUS INTERREGIONAL SCHOLARSHIP EXCHANGE PLAN — Through this plan the Canadian Union of Students offers to Canadian students the opportunity to study for one year at a university in another part of Canada. An applicant must be under twenty-five, have completed at least one year in a Canadian University, and have obtained at least Second Class standing in the work of the session previous to the exchange year. The successful candidate does not pay fees to the exchange university. Applications may be obtained from the Registrar's Office in January.

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 beginning or continuing 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, then to undergraduates who were assisted in a previous year, and finally, to others. In order to be considered, a can-

didate must obtain from the office of the Dean of Inter-Faculty Affairs, 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 giving the name and address and details of the lodge with which the applicant's immediate family is or has been associated.

THE INDEPENDENT ORDER OF ODDFELLOWS BURSARIES — Six bursaries of \$250 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 Oddfellows Lodge or Rebekah Lodge, I.O.O.F. Applications should be submitted to the Oddfellows 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 Oddfellows 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.

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 Dean of Inter-Faculty and Student Affairs, 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 Dean of Inter-Faculty Affairs, University of British Columbia, Vancouver 8, B.C., must be submitted to the University not later than May 15.

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. M. F. McGregor, University of British Columbia or from the Awards Officer, 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 last 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.

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 15 with the Naval Officers' Association of British Columbia, Box 823, Station A, Vancouver, B.C.

NAVAL OFFICERS' ASSOCIATION OF BRITISH COLUMBIA SCHOLARSHIPS — Two scholarships of \$150 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 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 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.

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 July 31.

THE RHODES SCHOLARSHIPS — The Rhodes Trustees offer annually for award in the Province of British Columbia one Rhodes Scholarship of the value of £750 a year. At most Colleges, and for most men, this sum is scarcely sufficient to meet a Rhodes Scholar's necessary expenses for term-time and vacations, and Scholars who can afford to supplement it by, say £50 a year from their own resources are strongly 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, 1968. 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 assurances of support and accommodation for his wife. A candidate must be at least 19 but under 25 years of age on October 1, 1969. He must have completed two years of university study by October 1, 1969.

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 Manitoba, Saskatchewan or Alberta. If he is ordinarily resident in Prince Edward Island 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, kindliness, 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, 1968, and, if elected, to go to Oxford in October 1969. Further information and application forms may be had from Michael J. Brown, 7th floor, 602 West Hastings St., Vancouver 2, B.C.

THE TRI-SERVICES UNIVERSITY TRAINING SCHOLARSHIPS AND PRIZES

— Three scholarships of \$150 each, established by the trustees of the Combined University Services Trust Fund, are offered to students undertaking reserve officer training in the University of Victoria and the University of British Columbia Naval Training Division, the Canadian Officers' Training Corps and the R.C.A.F. Reserve University Squadron. To be eligible for the awards candidates must have completed at least the first phase of their practical and theoretical training with their respective services and be proceeding with their university studies. Winners will be selected by the Scholarship Committee of the University of British Columbia in consultation with Commanding Officers of the units, on the basis of academic proficiency and on qualities of leadership as exhibited in the service training programmes. The financial circumstances of candidates may, however, also be considered. If no candidate is considered to be sufficiently well qualified the awards may be withheld. Similarly, based on the criteria mentioned above a prize to the value of \$50 may be awarded to an officer cadet in each of the service units who is a member of the regular Navy, Army and Air Force and attending the University of Victoria and the University of British Columbia under the auspices of the Department of National Defence.

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.

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 the University of British Columbia toward a degree in Home Economics. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN AGRICULTURE — A scholarship of \$250 will be awarded annually by the Woman's Institute of B.C. It is available to the son or daughter of a member of the Institute. The member must have been in good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Agriculture. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

SECTION 7

AWARDS FOR GRADUATE STUDY

AWARDS ADMINISTERED BY THE UNIVERSITY OF VICTORIA

UNIVERSITY OF VICTORIA FELLOWSHIPS:

University of Victoria Fellowships of \$2,500, applicable to the session September to April, may be awarded by the Faculty of Graduate Studies to students of high academic standing registered full time in the Faculty. Upon recommendation of the Department concerned, these Fellowships will be accompanied by a Summer Supplement of \$1,000, applicable to the period May to 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 monthly installments. Application should be made at the time of application for admission. (The deadline for Fellowship applications is February 21. Successful candidates will be notified by March 21.)

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. Summer work may also be available in some Departments.

THE LEON J. LADNER B.C. HISTORY SCHOLARSHIP — Four hundred dollars (\$400) awarded annually for the best graduate thesis on the History of British Columbia.

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 BRITISH AMERICAN OIL COMPANY LIMITED GRADUATE FELLOWSHIPS — Five Fellowships will be awarded for 1968-69, each fellowship is valued at \$4,000: \$3,000 to be paid to the successful candidate, and \$1,000 to the department of the training university. Any resident of Canada who is a graduate of a Canadian university is eligible to apply. Fellowships are tenable in Canada in any field of study. Further information may be obtained from the Association of Universities and Colleges in Canada, 151 Slater Street, Ottawa. The competition closes March 1.

BRITISH COLUMBIA LIBRARY ASSOCIATION BURSARY — One or more bursaries, given by the British Columbia Library Association, are available annually for students intending to adopt librarianship as a profession. To be considered an applicant must be eligible for acceptance in the University of British Columbia School of Librarianship, and must plan to attend that School. The recipient will be selected on the basis of scholarship, personality, ability to work with others, aptitude for library work, physical fitness and financial need. It is to the student's advantage to have had some library experience. Application forms and further information may be obtained from the Director of the School of Librarianship, University of British Columbia, Vancouver 8, B.C.

BRITISH COUNCIL SCHOLARSHIPS — The British Council offers scholarships to overseas students, normally tenable at universities and other educational institutions in the United Kingdom. The awards are mainly for men and women who have already completed university degree courses or who have equivalent professional qualifications. Preference is given to candidates between 25 and 35 years of age. The scholarships are normally for one academic year of 10 months or for two academic years (22 months), according to the duration of the approved course of study. A full scholarship is intended to cover all expenses of maintenance and study, and includes fares, fees, personal maintenance, a grant for books and apparatus and approved travelling expenses in the United Kingdom. Inquiry should be directed before the middle of October to the Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa 4, Ontario.

THE CANADA COUNCIL AWARDS — The Canada Council offers scholarships, fellowships and grants in the field of the arts, humanities and social sciences. These include pre-doctor's degree fellowships; senior research fellowships in the humanities and social sciences; senior arts fellowships for musicians, artists, writers and others workers in, and teachers of, the arts; arts scholarships for artists, musicians, writers and other workers in the arts; scholarships for secondary school teachers and librarians; scholarships for arts teachers and professional staff members of art galleries and museums; grants in aid of research and other productive scholarship; fellowships of one year duration for non-residents for study or teaching in Canada in the arts, humanities, and social sciences; fellowships for journalists, broadcasters and film-makers; and special awards. Request for application forms should be sent to The Scholarship Section, The Canada Council, 140 Wellington Street, Ottawa, Canada.

THE CANADIAN FEDERATION OF UNIVERSITY WOMEN FELLOWSHIPS—

1. **JUNIOR FELLOWSHIP \$1,500** — This Fellowship is open to any woman holding a degree from a Canadian university who is not more than 25 years of age at the time of award and whose domicile is in Canada.
2. **MARGARET McWILLIAMS FELLOWSHIP \$2,000** — This Fellowship is open to any woman holding a degree from a Canadian university, whose domicile is in Canada (although she may be studying elsewhere at the date of application) and who wishes to do post-graduate study or research outside Canada. Preference will be given to candidates who have completed one or more years of graduate study and who have a definite course of study or research in view.
3. **PROFESSIONAL FELLOWSHIPS \$1,500** — This Fellowship is open to any woman holding a degree from a Canadian university, whose domicile is in Canada, and who wishes to spend a year at an accredited Library School, College of Education, or other professional school.
4. **TRAVELLING FELLOWSHIP \$2,500** — This Fellowship is open to any woman holding a degree from a Canadian university, whose domicile is in Canada (although she may be studying elsewhere at the date of application) and who wishes to do post-graduate study or research outside Canada. Preference will be given to candidates who have completed one or more years of graduate study and who have a definite course of study or research in view.

THE CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS AWARDS:

1. **GRADUATE FELLOWSHIPS** — Fellowships will be available to chartered accountants now teaching at a Canadian university who are candidates for a graduate degree in business; or to chartered accountants who are candidates for a graduate degree beyond a first master's degree and who are studying with a view to a teaching career in Canada.

Fellowships to a maximum amount of \$2,500 each will be awarded for one year. In particular cases a further grant of up to \$2,500 may be made for a second year upon renewal of application.

2. **RESEARCH GRANTS** — Research Grants will be available to chartered accountants who are members of the teaching staff of a Canadian university to enable them to carry out research in accounting, auditing or other areas of importance to the accounting profession.

Grants to a maximum amount of \$2,500 each will be awarded each year to allow such teachers to devote a reasonable amount of time to their chosen project and/or to meet out-of-pocket expenses for books, travel, stenographic or other assistance in connection with the project. A renewal of grant may be applied for if warranted by the project.

A Graduate Fellowship or Research Grant may be held simultaneously with another scholarship, fellowship or similar award.

Applications, setting out the academic and professional background of the applicant as well as complete details of the academic course or research project planned, should be sent in triplicate before February 28 to: The Director of Research, The Canadian Institute of Chartered Accountants, Chartered Accountants Building, 69 Bloor Street East, Toronto 5.

Successful applicants will be notified of the terms of their award by April 30.

COMMONWEALTH SCHOLARSHIPS — Under a plan drawn up at a conference held in Oxford in 1959, each participating country of the Commonwealth offers a number of scholarships to students of other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travelling, tuition fees, other university fees, and a living allowance. The closing date for receiving applications for scholarships awarded by countries in the Northern Hemisphere is October 31. For the dates of countries below the Equator and other details of Commonwealth Scholarships write to the Association of Universities and Colleges in Canada, 151 Slater Street, Ottawa 4, Ontario.

THE DEPARTMENT OF SOCIAL WELFARE, PROVINCE OF BRITISH COLUMBIA, BURSARY IN SOCIAL WORK — A bursary of \$1,000, established by the Department of Social Welfare, Province of British Columbia, is offered annually to graduates of the University of British Columbia or the University of Victoria proceeding to the first year of Social Work at the University of British Columbia. The award will be based on scholastic standing, personal qualities and display of special interest in public affairs. Consideration will also be given to the financial circumstances of applicants. The successful applicant must be prepared to enter the employ of the Department of Social Welfare for a period of at least sixteen months following completion of the first year of study in the School of Social Work. Applicants should consult the Director of the School about their admission to Social Work and the procedure for applying for this bursary. It will be awarded by a special joint committee composed of representatives of the Department and the School.

FRENCH GOVERNMENT SCHOLARSHIPS — Scholarships of the present value of approximately \$800 are donated by the French Government for graduate study in France. They are tenable for an eight-month period. Travelling expenses for the return to Canada and university fees are defrayed by the French Government. These scholarships are open to students of all faculties. Candidates must, however, produce satisfactory evidence that they are able to profit by instruction given in French. The awards are made by the French Embassy on the recommendation of the University, from whom further information may be obtained.

THE W. J. GAGE FELLOWSHIP IN LEXICOGRAPHICAL STUDIES — The W. J. Gage Fellowship in Lexicographical Studies has been established by the Company as a mark of their interest in linguistic studies, especially in lexicography. The Fellowship, valued at \$1,200, will be awarded to a student of high academic standing registered in the Faculty of Graduate Studies at the University of Victoria and proceeding towards a degree in linguistics, with emphasis on lexicographical studies.

The award will be made annually, in January of each year, by a Selection Committee composed of representatives from W. J. Gage Limited and the Lexicographical Centre, University of Victoria.

Applications should be made by January 1 to the Director, Lexicographical Centre, University of Victoria, Victoria, British Columbia, Canada.

INTERNATIONAL FELLOWSHIPS FOR WOMEN IN SENIOR GRADUATE WORK 1969-1970 —

1. THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN EDUCATIONAL FOUNDATION announces two Fellowships in the natural sciences:

SARAH BERLINER FELLOWSHIP in Physics, Chemistry or Biology.

IDA H. HYDE FELLOWSHIP in Euthenics or Eugenics.

These Fellowships, open to women in any country represented in the International Federation of University Women, have a stipend of \$5,000 each, require a Doctorate in the field of research, and are unrestricted as to age or place of research.

2. THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN EDUCATIONAL FOUNDATION offers to women of other countries which are represented in the International Federation of University Women, *thirty* international Fellowships of \$2,500 each, for study in the United States, and a few international Fellowships for study in any country other than the fellow's own.
3. THE BRITISH FEDERATION OF UNIVERSITY WOMEN LTD., announces an international residential scholarship at Crosby Hall, London, value 600 pounds sterling. The scholarship is offered for post-graduate research or other advanced study. It is open to members of any national association belonging to the International Federation of University Women.

IMPERIAL OIL GRADUATE RESEARCH FELLOWSHIPS — Imperial Oil Limited in 1946 established for annual competition Graduate Research Fellowships, now five in number and having a potential value of \$9,000 each (\$3,000 a year for a maximum of three years). A fellow may hold other awards concurrently.

The fellowships are open to any graduate of any approved Canadian university and are offered for research leading to a Doctor's degree in the fields of Pure and Applied Natural and/or Exact Sciences, including Mathematics (3 fellowships), and Social Sciences and Humanities (2 fellowships). Nomination of students for the fellowships is made by the university — such nominations to be received by the Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Avenue West, Toronto 7, not later than March 1 of each year.

IMPERIAL ORDER DAUGHTERS OF THE EMPIRE WAR MEMORIAL II SCHOLARSHIP (OVERSEAS) — This fund was established by the I.O.D.E. in order to perpetuate the memory of the men and women who gave their lives in defence of the Empire in World War II. Six postgraduate scholarships to the value of \$2,000 each are to be offered annually in Canada. Each candidate must have done or be doing postgraduate work. In view of the fact that for many years the emphasis for advanced study has been placed on science rather than on the humanities, these scholarships provided under War Memorial II will be offered annually to carry on postgraduate work in History, Philosophy, English or French Literature. The conditions under which they are awarded may be obtained from the Educational Secretary of the Provincial Chapter, I.O.D.E., 9031 Hudson Street, Vancouver 14, B.C. *Applications must be submitted by October 15 of each year.*

IMPERIAL ORDER DAUGHTERS OF THE EMPIRE WAR MEMORIAL I SCHOLARSHIP (OVERSEAS) — This fund was established by the I.O.D.E. in order to perpetuate the memory of the men and women who gave their lives in the defence of the Empire in the First Great War. Graduate scholarships to the value of \$2,000 each are offered annually, one in each province of Canada. Each candidate must have done or be doing postgraduate work. The conditions under which they are awarded may be obtained from the Educational Secretary of the Provincial Chapter, I.O.D.E., 9031 Hudson Street, Vancouver 14, B.C. *Applications must be submitted by October 15 of each year.*

THE INTERNATIONAL FEDERATION OF UNIVERSITY WOMEN COMMITTEE FOR THE AWARD OF INTERNATIONAL FELLOWSHIPS announces:

Five AAUW awards of \$2,500 each;

The CFUW A. VIBERT DOUGLAS FELLOWSHIP of \$2,000.

The IFUW IDA SMEDLEY MacLEAN FELLOWSHIP of 850 pounds sterling.

The FUWI (Bombay Branch) grant of (approx.) 370 pounds sterling.

IFUW WINIFRED CULLIS FUND short term grants not exceeding 300 pounds sterling each.

The Australian Federation of University Women grant of (approx.) 140 pounds sterling (for two or three months).

The Finnish Federation grant of (approx.) 333 pounds sterling (for six months study of research).

The South African Association of University Women grant of 300 pounds sterling (for not less than six months).

These awards are all for research only (except the Finnish grant) and candidates must be full members of their national Federation of University Women.

Canadian candidates for any of the above awards must submit applications to the Canadian Federation of University Women Fellowships Committee. CFUW applications must be completed by February 1. AAUW and BFUW applications must be completed by December 1, IFUW applications by November 1. Application forms may be obtained from:

Miss Jean Royce, 140 Stuart Street, Kingston, Ontario.

THE MacKENZIE KING TRAVELLING SCHOLARSHIPS — These scholarships of not less than \$1,500 each are available for graduates of any Canadian university who propose to engage, either in the United States or the United Kingdom, in post-graduate studies in the fields of international or industrial relations. Information may be obtained from Dean Walter H. Gage, University of British Columbia, Vancouver 8, Canada. Applications for those proposing to proceed to study in the fall of any year must be submitted by the previous March 1.

NATIONAL RESEARCH COUNCIL BURSARIES AND STUDENTSHIPS — The National Research Council awards annually a number of bursaries and studentships for graduate work. These are open to selected graduates in science and engineering who have shown distinction in their undergraduate studies. The values of the awards are as follows: bursary, \$2,500 and studentship, \$3,000. Students receiving these awards will be expected to spend the summer months in their research, and if they do not do so, the award will be reduced. Also available are a limited number of special scholarships for postgraduate study outside Canada and postdoctorate fellowships for those who have completed their work for the Ph.D. degree. These fellowships may be held either in Canada or abroad. Applications must be received in Ottawa before January 15. Application forms and regulations governing the awards may be obtained from heads of departments, or from the Awards Officer.

THE P.E.O. INTERNATIONAL PEACE SCHOLARSHIPS — Believing that education is fundamental to world peace and understanding, the members of the P.E.O. Sisterhood contribute funds for the purpose of providing scholarships for selected women from other countries to study in the United States and Canada. The applicant must have full time graduate status working towards a degree. She must state her intention to return to her own country on completion of her educational programme. Two or more awards of varying amounts will be made each year. Requests for application forms should be made before December 1. Further information may be obtained from the Awards Officer, Registrar's Office.

THE MERRILL C. ROBINSON BURSARY — One thousand dollars (\$1,000) 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 Thirty-Sixth Avenue, Vancouver 15, B.C.

ROTARY FOUNDATION FELLOWSHIPS — The Board of Directors of Rotary International and the Rotary Foundation Trustees have established a number of Rotary Foundation Fellowships, each to the value of \$2,500 approximately, for advanced study for a period normally of one year. Candidates are expected to pursue studies outside their own country. Preference will be given to a candidate who proposes to study in a country where the language is different from that of his own homeland and who is reasonably proficient in that language. These fellowships are open to unmarried students between the ages of twenty and twenty-eight. Applicants must be graduates or in their graduating year. They are advised to make application early in the year to the Rotary Club in their home district. It is suggested that complete information be obtained from the Rotary Club of Victoria or any other Rotary Club.

THE STEEL COMPANY OF CANADA: GRADUATE RESEARCH FELLOWSHIPS IN METALLURGY:

PURPOSE — The objective of the Fellowships is to encourage research in metallurgy in various universities across Canada.

PLAN — Four one-year Fellowships of \$3,500 may be granted each year, \$2,500 to be given to the individual and \$1,000 to the University for the department in which research is undertaken. Students may attend only Canadian universities having a qualifying course in Metallurgical Research.

A fellow may not hold concurrently any other major awards.

ELIGIBILITY and ADMINISTRATION

1. The selected student must be a permanent resident of Canada, who is a graduate of a Canadian university or who will graduate from a Canadian university before the commencement of the academic year for which the award is made.
2. Fellowships are tenable for one year. Application for renewal may be made in succeeding years, but the Award may not be held for more than three years.
3. Fellowship renewals are additional to the four annual Fellowships.
4. Two copies of a thesis, or a reasonably detailed account of the work done, should be sent to the Director of Awards of the Canadian Universities Foundation who shall forward one copy to The Steel Company of Canada, Limited, Hamilton, Ontario.
5. The Fellowships will be awarded by a Committee appointed by the Canadian Universities Foundation.
6. The Company reserves the right to alter, amend or discontinue this plan, but Fellowships in effect at such a time will be completed in accordance with the regulations in effect when they were granted.

Information may be obtained from the Association of Universities and Colleges in Canada, 151 Slater St., Ottawa 4, Ontario. Applications are due by the end of February each year.

THE WOODROW WILSON NATIONAL FELLOWSHIPS — The purpose of these fellowships is to attract men and women to the profession of college teaching in the humanities and the social and natural sciences. Outstanding seniors and graduates who are not registered in a graduate school are eligible for nomination provided they are, or intend to become, Canadian or U.S. citizens and are seriously considering a career in college teaching. Successful nominees must undertake a full programme of graduate study in a U.S. or Canadian graduate school; only in exceptional circumstances will Fellows be allowed to remain at the university where they have done their undergraduate work. The stipend is \$2,000; married male Fellows with children also receive \$1,000 for the first child and \$250 for each additional child. Tuition fees are paid directly to the Fellow's graduate school by the Foundation. Nominations for Woodrow Wilson Fellowships are by faculty members and are made early in the academic session; students should indicate their interest to a faculty member as soon as possible after registration in their final year.

SECTION 8

LOAN FUNDS

Inquiries relating to the following loan funds, and all applications for loans, should be addressed to the Financial Aid Officer, Registrar's Office, "M" Hut, 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.

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 5¾ per cent per annum simple interest on the outstanding balance. 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 \$58.00 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, Registrar's Office, "M" Hut, University of Victoria, Victoria, B.C.

Mid-Term Emergency Student Loan Fund — The Canadian Scholarship Trust Foundation considers loans for students who have made adequate plans for the academic year, only to have their plans break down by serious, unforeseen circumstances such as the death of a parent, sudden withdrawal of expected resources, the moving away of the family with consequent need for board and room. Application is made on special forms to the C.S.T. Foundation, Room 204, 160 Eglinton Avenue East, Toronto, Ont. Forms are normally sent to the Registrar of the University of Victoria, in October.

The Milva Reid Revolving Loan Fund — The Milva Reid Revolving Loan Fund, sponsored by Chapter V, P.E.O. Sisterhood, provides the sum of \$500 for short term loans to students in attendance at University of Victoria. For further information please consult the Financial Aid Officer.

P.E.O. Sisterhood Educational Loan Fund—Loans are available to women students in any year of a University course, and may be requested at any time. Maximum amount of a loan to any student is \$1,250. Fourth year or graduate students may be granted loans and draw the maximum loan in one year. Undergraduates may apply for and be granted the maximum loan of \$1,250 for two or more years of study but may draw only \$625 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. 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. Peggy Wallace, 2728 Dunlevy, Victoria, B.C.

University Extension Association Centennial Student Revolving Loan Fund—The sum of \$400 has been made available to students at the University of Victoria in the form of short term loans. For further information please consult the Financial Aid Officer.

Student Assistance—The University of Victoria has a small loan fund to assist students requiring financial assistance. For further information please consult the Financial Aid Officer.

Work in the Library and in the S.U.B. Cafeteria, at the minimum rate of \$1.55 per hour, will be provided for a limited number of students of good standing who require financial assistance. Application should be made to the Placement Officer at time of registration on a form available for this purpose.

of \$100 each — Major Programme	Patricia Ann Dunn Sandra Mary Irvine Donna Mary Louise Neve Beverly Jean Peters Heather Anne Robertson Kathleen Gertrude Thurston Daniel Richard Worsley
of \$100 each — First Year French	Frank Andrew Schroeder Mary-Lee Webster
Arthur S. Denny Scholarship of \$100	Donna Mary Louise Neve
Department of English Prize of \$50	Dale Alfred Townsend
*The Harold M. Diggon Memorial Bursary of \$200	Donna Mary Louise Neve
T. Eaton Company (Canada) Ltd. Scholarship of \$200	Richard Dennis Gee
Percy H. Elliot Memorial Scholarship of \$130	William James Salmond
*The H. O. English Scholarship of \$125	Vicki-Lynn Reekie
Faculty Woman's Club Prize of \$100	Donna Anne Cuthbert
Fine Arts Bursary of \$583	Eric Metcalfe
*The George Hamilton Harman Memorial Scholarship of \$100	Neil Bruce
Harbord Insurance Ltd. Scholarship of \$600	Ian Mills Franklin
*The William A. and Frances E. Harper Scholarship of \$75	Harry Milton Johnson
Hudson's Bay Company Service Award	No Award this year
The IBM Thomas J. Watson Memorial Bursaries of \$100 each	Donna Anne Cuthbert Joseph William Eades Alan Benjamin Hughes Jean Kathleen Money Gloria Louise Olenick Janita Ann Padget Robin Lauraine Paterson Daryl William Plater Delbert Burton Smith Dale Alfred Townsend
The Don Ingham Memorial Scholarship of \$150	Bodo Rudolf Delange Boom
The Island Tug and Barge Limited Scholarship of \$150	Arthur Leonard Lazzarotto (by reversion from Charles Lee)
Robert H. B. Ker Scholarship of \$150	John Hardy Green
*Freeman F. King Scholarship of \$250	Nancy Jean Chapman
Kiwanis Scholarship of \$250	Frank Andrew Schroeder
The Ladies Pharmaceutical Auxiliary (Victoria) Bursary of \$50	Linda Katherine McDonald
Leon J. Ladner B.C. Historical Scholarships of \$100 each	Roger Dennis Hall Andrea Judith Walker
Lady Laurier Club Scholarship of \$100	Kenneth John Macdonald
Gladys Ledingham Parent-Teacher Association Bursary of \$75	No Award this year
Lions Club Scholarship of \$100	Tod Bruce McNeely
*Sara and Jean MacDonald Bursary Fund of \$300	Gwenyth Louise L'Hirondelle Michella Donald Proby Pauline Rattan
of \$200	Anne Elizabeth Pugh
Mechanical Trade Promotion Fund Bursary of \$300	Roger Alan D'Amico
The Benny Nicholas Memorial Award of \$100	Linde Elizabeth Baker
Milliard H. Mooney Memorial Lions Club Fine Arts Scholarship of \$100	Roy Erwin James Hamill
Quita Nichol Bursaries of \$100	Julia Helene Cross
of \$50	Joan Alethea Mary Griffith Donna Mary Louise Neve

The Oak Bay Business and Professional Women's Club Bursary of \$100	Brigit Penelope Bledsoe
Oak Bay Kiwanis Scholarship of \$100	Kathleen Marian Isobell Bowerman (by reversion from Margaret Ellen Hammond)
Ocean Cement Limited Scholarship of \$100	Frank Andrew Schroeder
Esther Pearce Memorial Prize of \$50	Gillian Patricia Wallace
The Honourable and Mrs. G. R. Pearkes Prize of \$50	Daniel Thomas Gallacher
The Peter Pollen Ford Sales Ltd. Centennial Awards of \$500 each	William James Ashley Sparks (for graduate study) Geoffrey Thornburn
*The Alan Pratt Memorial Scholarship of \$100	Stephen Norman Sullivan
*The Oliver Prentice Memorial — Douglas Rotary Scholarship	James Patrick Angus
The President's Entrance Scholarships of \$600	William George Stewart
of \$500	James Frederick Henderson Jeanne Marlene Massey Paul Julius Pearlman (relinquished) Tony Quon Ralph William Sarkonak Robert Franklin Whitmore Cedric Albert Zala
The President's Honour Scholarships of \$600	Aveline Margaret Susan Bricknell
of \$500	Brian John Harvey Roy Irwin James Hamill Charles Lee (relinquished for the Alcan Scholarship)
The President's Scholarships of \$400	David Anthony Knox Patrick Allan LLoyd
of \$250	Leonard Frank Schmidt
of \$200	Per Holme Andersen Kathryn Ethel Anderson Peter William James David William Johns Tod Bruce McNeely Frank Graham Sommer Maria Van Leusden Mary-Lee Webster Janet Marion Wood
of \$150	James Patrick Carley Julie Rae Goodwin Terry Jack Klokeid Heather Anne Robertson Robert Thomas Smith Stephen Norman Sullivan
of \$100	Roger Frederick Allen Elaine Kay Armstrong Edward Anthony George Batterbury Mrs. Heather Ann Boucher Hamish Drummond Weaver Bridgman Neil Bruce John Robertson Campbell Jennifer Mary Clark Beverley Anne Cochrane Sydney Charles Croucher Garry Waine Curtis Robert Brian Davis Jerry Robert Davison Mark Mondelet Drum Bruce Wilson Duncan Diane Miriam Garduer William Sydney Goff

	Sheila Anne Haegert
	Nola Elizabeth Haynes
	Ronald Dwight Holland
	David Frederick Holm
	James Alan Stephen Howell
	Alan Benjamin Hughes
	Sandra Mary Irvine
	Donald Martin Jacobsen
	Harry Milton Johnson
	Marjorie Helen King
	John Robert Knox
	Linda May Langley
	David MacArthur Lawson
	Patricia Ann MacKenzie
	Mrs. Lilianna Anna McDiarmid
	John William McDonald
	Joan Elizabeth McMeiken
	Evelyn Anne Milner
	Alan Lindsay Montgomery
	Kathleen Marilyn Morrison
	Donna Mary Louise Neve
	Terence Richard O'Sullivan
	Anne Marilyn Pigott
	Beverley Katherine Porter
	Giuseppe Joseph Ranallo
	Mrs. Luzia Luise Rausch
	Vicki-Lynn Reekie
	Yvonne Hyacinth Veronica Richards
	Barry Douglas Robbins
	Lynda Mary Ross-Jones
	Margaret Olwen Sanderson
	Edward Martin Schellinck
	Karina Silvergieter Hoogstad
	Gillian Flora Smith
	Robert John Striha
	Robert James Tapp
	Kathleen Gertrude Thurston
	Douglas Reginald Toole
	Robert David Turner
	Johannes Pieter Van Netten
	Allison Jean Wejr
	Ronald Stuart Wells
	Michael Walter Whybrow
	Daniel Richard Worsley
of \$50	Julia Helene Cross
	Joan Alethea Mary Griffith
	Arthur Leonard Lazzarotto
	Gillian Patricia Wallace
The Professional Institute of the Public Service of Canada (Victoria Branch) Scholarship of \$100	Joan Alethea Mary Griffith
The Professional Men's Garden Club of Victoria Scholarship of \$100	Wayne William Fleming
The Read Jones Christoffersen Ltd., Consulting Engineers' Scholarship of \$200	Maria Van Leusden
Rithet Consolidated Limited Bursary of \$100	Brian John Harvey
The Rotary Club of Douglas (Victoria) Scholarship of \$100	Alexander James Tymchuk
Rotary Club of Victoria Scholarship of \$250	Carolyn Jean Zapf
The Royal Canadian Legion (Victoria) Sir Percy Lake Memorial Scholarship of \$300	Dawn Ellen Speed
*Royal Institution and Frank Eaton Memorial Scholarship of \$50	Jerry Robert Davison
The Madame Sanderson Memorial Scholarship of \$50	Patricia Ann Dunn

W. F. Savale Prizes	No Award this year
*The Edward J. Savannah Memorial Scholarship of \$150	Judith Violet Cameron
The Nora Lugin Shaw Memorial Scholarship of \$60	Robert Stanley Jones and Douglas Alan Macfarlane
The Andrew Sheret Ltd. Scholarships of \$75 each	Kathryn Ethel Anderson David Anthony Knox (by reversion from Sylvia May Austin)
The A. W. Sheret Scholarship of \$150	Julie Rae Goodwin
Special Scholarships in Biology of \$300 each	Valerie Gail Chan (by reversion from Lindsay McNiven Hodge)
of \$200 each	Johannes Pieter Van Netten John Stephen Griffiths Stuart James Harris
of \$150	Matti Erkki Valikoski
of \$100 each	Barbara-Anne Court Wayne William Fleming Paul Gary Young
of \$50 each	Alison Aileen Mainguy Donna Anne Cuthbert
of \$25 each	Brian John Harvey Gerald Stanley Wilkin
University Extension Association of Victoria Scholarship of \$100	James Patrick Carley
United Nations Association (Victoria Branch) Scholarship of \$250	Stein Conrad Gudmundseth
University of Victoria Alumni Association Scholarships of \$300 each	Jennifer Susan Dawes Nancy Elizabeth Dickson Mary Ann McCammon Denise Maureen Adele Schuetze James Alan Titerle
The University of Victoria Faculty Association Scholarship of \$200	Joan Alethea Mary Griffith
University of Victoria Graduate Studies Awards: Fellowships	
of \$3,600	Frank Jared Spellacy
of \$2,400 each	Dexter James Booth Betty Jamie Chung Mrs. Elizabeth Jean Clutton-Brock Ronald Calvin Coates Robert Millthorpe Dunnill Mrs. Norma Irene Mickleson Mrs. Marjorie Ruth Mitchell Robert George Otto Mrs. Marianne Pearl Pflager John Douglas Pringle William Alexander Sloan David James Thomson Mrs. Mary Lee Thomson
Bursaries of \$1,500 each	Corinne Elizabeth Argue Calvin Mitchell Banks Patrick Donald Floyd Terrance Don Grieve Tiju Kava Edward Arthur Killough Ellery John Littleton Margaret Anne Lockhart Henri Joseph Martel Marje Molder Philip Rodney Whitfield

of \$1,200 each	Martin Clutton-Brock Mrs. Doreen Leila Kilpatrick John William Leggett John Hamilton Ross
of \$1,000	Fred Paul Dieken
University Women's Club Scholarship of \$200	Dawn Ellen Speed
The Vancouver Island Branch, Engineering Institute of Canada Scholarship of \$100	Ronald Gary McCaig
The Victoria Council, United Commercial Travellers of America Scholarship of \$100	Patricia Ann Dunn
Victoria Gyro Club Scholarship of \$200	John Robertson Campbell
The Victoria Medical Society Scholarship I of \$250	Judith Violet Cameron
The Victoria Medical Society Scholarship II of \$500	Brian Arthur White
Victoria Municipal Chapter, I.O.D.E. Scholarship for General Proficiency of \$100	Richard Dennis Gee
Victoria Municipal Chapter, I.O.D.E. Scholarship in Canadian History of \$100	Philip Rodney Whitfield
Victoria Natural History Society Scholarship of \$100	Judith Violet Cameron
Victoria Rotary Women's Auxiliary Centennial Scholarship of \$100	Mrs. Margaret June Watson (by reversion from Gwendolen McComas)
Victoria West Parent-Teacher Association Bursary of \$50	Elaine Marie Chernoff
*The Weber Memorial Bursary of \$100	Robert Thomas Smith
*The Westad Scholarship of \$250	Robert Thomas Smith
The Weston Bakeries, Limited, Scholarship of \$250	Julia Helene Cross
The Woods Trust Scholarships of \$250 each	Per Holme Andersen David William Johns Harry Milton Johnson Terry Jack Klokeid Frank Graham Sommer Janet Marion Wood
The Woodward Stores, Limited, Scholarship of \$250	Peter William James
The Xi Nu Chapter, Beta Sigma Phi Sorority, Annual Bursary of \$25	Michelle Diana Spring
The Yorkshire and Canadian Trust Limited Scholarship of \$175	Dagmar Erika Schweitzer
The Rosalind W. Young Scholarship of \$200	Kathleen Marian Isobell Bowerman
Adelphi Book Shop Prize	Carolyn Jean Zapf
Government of Austria Book Prizes	Aveline Margaret Susan Bricknell Dennis Burnie Dorais Brian John Harvey G. Keith F. Homer Gunter Enrik Mundschutz Donna Mary Louise Neve Mrs. Irene Sennewald
Birks' Gold Watch	Patricia Ann Dunn
B.C. Historical Association Book Prizes	Elizabeth Mary Bunyan Arlene Mary Rich
Dr. Maxwell Cameron Memorial Medal and Prize	Robert Sinclair Mitchell
The Denton Memorial Book Prize	Dustine Peterson
Gwen Downes Memorial Book Prize	Joseph James Andrews
Francis Gold Watch	Aveline Margaret Susan Bricknell
The French Government Book Prizes	Aveline Margaret Susan Bricknell Kathleen Gertrude Thurston
French Government Medal	Micheline Elizabeth Paquette

Government of Federal Republic of Germany

Book Prizes	Aveline Margaret Susan Bricknell Dennis Burnie Dorais Brian John Harvey Gunter Enrik Mundschutz Donna Mary Louise Neve
Governor-General's Medal	Alexander Michael Dawes
The Marionette Book Shop Book Prize	Theo Quayle Dombrowski
Prize of the Ambassador of Switzerland to Canada	Johannes Willem Halee Daniel James Robinson
Rose's Limited Jeweller's Watch	Robert Sinclair Mitchell
The Spanish Government Book Prize	Karla Kristine Laigaard
G. B. Stark Memorial Slide Rule Prize	Ronald Gary McCaig

Government of British Columbia Scholarships:

The University honours 731 students presently enrolled who have received a government scholarship

SUMMER SESSION

Acting Director: ROBERT T. D. WALLACE, M.A.

Assistant to the Director: CORA E. BROWNE, B.A.

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.

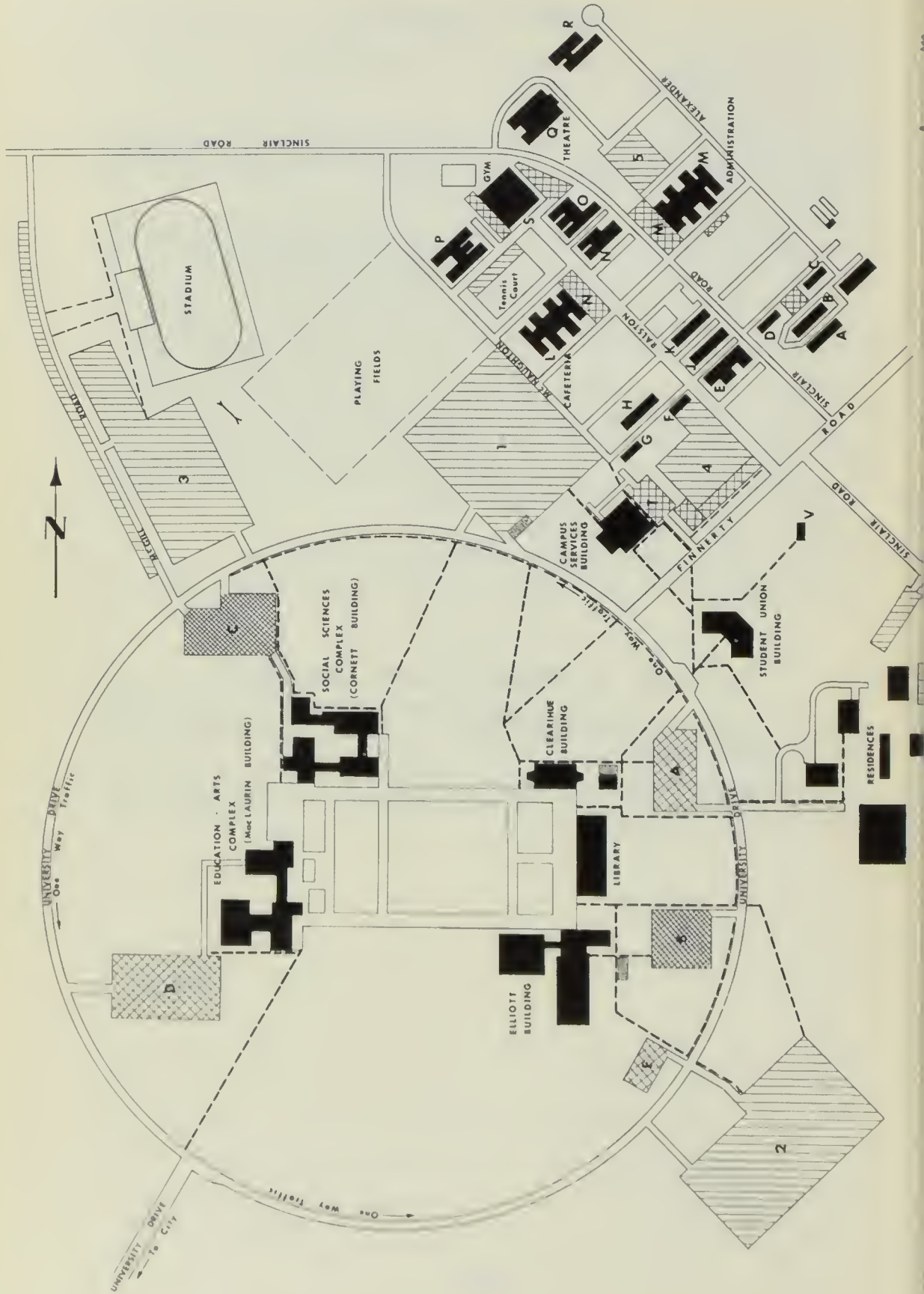
The regulations, etc., governing the Summer Session are as follows:

1. The maximum credit for Summer Session work in any one calendar year is 6 units. Correspondence courses may not be taken concurrently.
2. Students are required to register by June 3, 1968. A late registration fee of \$20.00 will be charged when permission to register late is granted.
3. Students who obtained Fail 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 43.
7. Summer Session examinations are held at the close of Summer Session.
8. For regulations regarding standing and credit, see page 40.

UNIVERSITY OF VICTORIA ALUMNI ASSOCIATION

Any student who has completed successfully 15 units of work at Victoria Normal School, Victoria College, or at the University of Victoria, is automatically a member of the Alumni Association.

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 Mr. Floyd Fairclough, Executive Secretary.



UNIVERSITY OF VICTORIA

LEGEND



BUILDINGS



RESERVED PARKING — DAY AND NIGHT



RESERVED PARKING — 7 A.M. TO 5 P.M.



STUDENT AND STAFF PARKING



MOTORCYCLE PARKING



SIDEWALKS

— All vehicles parked on campus must bear valid parking permits.

— Parking is permitted in designated parking areas only.

— No parking is permitted on roads, shoulders, building entrances, grassed or undeveloped areas, on walkways, or adjacent to yellow curbs.

— Speed limit in parking lots is 10 m.p.h.
Speed limit elsewhere on campus is 20 m.p.h. unless otherwise posted.

— Parking lots and roads within the campus are subject to the provisions of the University Traffic and Parking Regulations and of the Motor Vehicle Act and Regulations.

— Vehicles parked in contravention of the University Traffic and Parking regulations may be impounded.

— Parking permits or further information may be obtained from the Traffic and Security Office, Building B.

KEY TO BUILDINGS

- A. Carpenter's Shop
- B. Traffic and Security Office, Point Shop
- C. Buildings and Grounds Offices
- D. Campus Planning Offices
- E. Faculty Centre
- F. Development Board, Information Office
- G. Computer Services
- H. Classrooms
- J. Offices
- K. Offices
- L. Cafeteria
- M. Administration Offices
- N. Graduate Studies — Dept. of Linguistics
- O. Biochemistry
- P. Field House
- Q. Theatre
- R. Stores
- S. Gymnasium
- V. Student Health Service

REGISTRATION FOR 1967-68

FACULTY OF ARTS AND SCIENCE	Men	Women	Totals	
First Year	745	415	1160	
Second Year	524	259	783	
Third Year	297	134	431	
Fourth Year (and Unclassified)	289	102	391	
	1855	910	2765	2765
FACULTY OF EDUCATION				
Elementary (including Transfer Programme)				
First Year	27	220	247	
Second Year	42	262	304	
Third Year	23	142	165	
Fourth Year	21	34	55	
Fifth Year	2	—	2	
Unclassified Grads	13	11	24	
	128	669	797	
Secondary (including Transfer programme)				
First Year:	56	39	95	
(Accelerated Ind. Arts at Burnaby)	11	—	11	
Second Year:	45	35	80	
(Accelerated Ind. Arts at Burnaby)	5	—	5	
Third Year	28	17	45	
Fourth Year	19	4	23	
Fifth Year	17	6	23	
Unclassified Grads	27	10	37	
Unclassified Grads (Interns)	9	2	11	
	217	113	330	
Post B.Ed. (Elementary) Programme				
Unclassified Grads	1	1	2	
		1	1	
			TOTAL	1130
SCHOOL OF FINE ARTS				
First Year	22	31	53	
Second Year	14	13	27	
Third Year	1	4	5	
Fourth Year	1	2	3	
	38	50	88	88
FACULTY OF GRADUATE STUDIES				
			92	92
			TOTAL	4075

(Statistics compiled September 29, 1967)
(Source: Registrar's Office)

DEGREES CONFERRED MAY 1967

B.A. - 155; B.Sc. - 97; B.Ed. - 103 — Total - 355.

ENROLMENT 1962-68

Arts and Science	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
First Year	699	733	891	1044	1063	1160
Second Year	323	441	488	594	694	783
Third Year	165	180	228	268	336	431
Fourth Year	64	147	189	222	296	391
Graduates	4	8	10	11	—	—
Unclassified	—	—	2	6	21	—
Total in Faculty	1255	1509	1808	2145	2410	2765
Faculty of Commerce and Business Administration						
First Year	23	—	—	—	—	—
Faculty of Education						
Elementary Field						
First Year	141	141	206	203	216	247
Second Year	158	112	104	158	151	304
Third Year	36	43	70	104	124	165
Fourth Year	8	18	19	38	44	55
Fifth Year	—	—	—	—	—	2
Partial and Irregular (2nd Year)	—	—	—	—	3	—
Unclassified Grads ..	—	—	—	—	—	24
	343	314	399	503	538	797
Second Year Transfers	107	110	122	106	122	
Third Year Transfers	8	13	17	14	13	
Fourth Year Transfers	2	2	1	4	7	included above
Graduate Transfers Partial (Graduates)	9	12	21	18	16	
	—	—	—	—	1	
	126	137	161	142	159	
Post B.Ed. Degree (Elem.) 5th Yr. Programme	—	—	1	—	—	2
Secondary Field:						
First Year	29	46	52	80	80	106
Second Year	21	18	31	29	48	85
Third Year	34	24	22	25	35	45
Fourth Year	17	19	21	21	22	23
Fifth Year (Regular)	1	10	18	14	9	23
Fifth Year (Transfer from Elem.)	—	—	—	—	7	—
Graduates (One Yr. Prog.)	—	8	23	20	25	48
	102	125	167	189	226	330
Unclassified	—	—	5	3	4	1
Total in Faculty	571	576	733	837	927	1130
School of Fine Arts:						
First Year	—	—	—	—	33	53
Second Year	—	—	—	—	3	27
Third Year	—	—	—	—	1	5
Fourth Year	—	—	—	—	—	3
Total in School	—	—	—	—	37	88
Faculty of Graduate Studies:						
Total in School	—	—	—	—	49	92
TOTAL	1849	2085	2541	2982	3423	4075

**UNIVERSITY OF VICTORIA
SCHOOL DISTRICT SUMMARY 1967-68**

S.D.	No.	S.D.	No.
1 —	13	49 —	9
2 —	25	52 —	14
3 —	35	53 —	13
4 —	1	54 —	1
7 —	26	55 —	1
8 —	1	56 —	7
9 —	7	57 —	28
10 —	8	59 —	8
11 —	40	60 —	7
12 —	3	61 —	1835
13 —	5	62 —	80
14 —	10	63 —	213
15 —	29	64 —	15
16 —	2	65 —	114
17 —	3	66 —	13
19 —	15	67 —	31
20 —	14	68 —	119
21 —	6	69 —	25
22 —	39	70 —	60
23 —	25	71 —	75
24 —	28	72 —	36
25 —	1	75 —	1
26 —	2	76 —	1
27 —	12	77 —	8
28 —	6	79 —	2
29 —	4	80 —	10
30 —	1	84 —	2
31 —	3	86 —	22
32 —	3	* {	90 — 4
33 —	10		91 — 34
34 —	5		96 — 351
35 —	2		98 — 3
36 —	10		_____
37 —	2	No. with School	
38 —	3	District Coded — 3640	
39 —	27		
40 —	2		
41 —	12		
42 —	9		
43 —	3		
44 —	4		
45 —	12		
46 —	4		
47 —	16		

- *90 — Schools Unattached and Grant Aided.
- 91 — College — Vocational — Special Schools.
- 96 — Private Secondary Schools.
- 98 — Yukon

NOTE: Origin of students determined from School District or Category of School last attended.

**UNIVERSITY OF VICTORIA
REGISTRATION BY CENSUS DIVISION**

Census Division	1964- 65	1965- 66	1966- 67	*1967- 68
(1) East Kootenay and Upper Columbia River	40	64	60	65
(2) West Kootenay, Columbia River and Slocan Lake	93	106	108	109
(3) Okanagan, Similkameen, Kettle and Upper Shuswap Rivers	74	78	90	128
(4) Lower Fraser Valley, Howe Sound and Vancouver (Metropolitan)	64	67	67	94
(5) Vancouver Island and Greater Victoria	2112	2473	2889	3308
(6) N. Thompson, Shuswap, Nicola, Chilcotin S., Lillooet E., Bridge-Lillooet	40	41	49	60
(7) Bella Coola, Knight Inlet, Powell River	8	18	17	12
(8) Nechako, Fraser, Chilcotin-North Cariboo, Skeena, Tatla Lakes	22	55	33	51
(9) Atlin Lake, Skeena Coast, Queen Charlotte Islands	17	14	27	34
(10) N/E B.C., Laird, Finlay, Parsnip, Beaton River	16	15	10	20
	<hr/> 2,486	<hr/> 2,931	<hr/> 3,350	<hr/> 3,881
Alberta	10	14	23	36
Saskatchewan	7	4	6	9
Manitoba	2	—	—	7
Ontario	15	8	9	12
Quebec	—	2	4	5
Nova Scotia	—	1	1	2
New Brunswick	2	1	—	—
Prince Edward Island	—	—	—	—
Newfoundland	1	1	—	—
Yukon	3	2	3	2
Northwest Territories	—	—	1	1
	<hr/> 40	<hr/> 33	<hr/> 47	<hr/> 74
Other Countries	14	18	26	28
	<hr/> 2,540	<hr/> 2,982	<hr/> 3,423	<hr/> 3,983

NOTE: Origin of students determined from permanent address.

*Undergraduate students only.

CHILDREN OF WAR DEAD (Education Assistance) ACT

This Act provides fees and monthly allowances for children of veterans whose death was attributable to military service. Inquiries should be directed to the nearest district office of the Department of Veterans' Affairs.

GOVERNMENT OF BRITISH COLUMBIA SCHOLARSHIPS

The Government of the Province of British Columbia, recognizing the necessity and worth of encouraging capable persons to embark upon or continue studies in higher education, has made available a significantly large number of scholarships for first-class and high second-class students.

Application forms for these scholarships may be obtained **after May 1** from the Department of Education, Victoria, B.C.; from the University of British Columbia, Vancouver, B.C.; from University of Victoria, Victoria, B.C.; and, where the student is attending school, from the Principals of Senior Secondary Schools. Completed applications **must** be submitted by the dates specified.

Students already registered at University of Victoria must request application forms from the Registrar's Office; these forms are not mailed automatically with statements of grades.

GOVERNMENT BURSARIES

The Government of the Province of British Columbia, with contribution also by the Federal Government, provides funds annually for the award of bursary assistance to capable persons who can show financial need and who desire to embark upon or continue studies in higher education or in nurses' training.

Application forms for these bursary awards may be obtained **after May 1** from the Department of Education, Victoria, B.C.; from the University of British Columbia, Vancouver, B.C.; from University of Victoria, Victoria, B.C.; and, where the student is attending school, from the Principals of Senior Secondary Schools. Completed applications **must** be submitted by the dates specified.

