



**Saint Mary's
University**

Halifax, Nova Scotia, Canada

**Academic
Calendar
1992—93**





The academic year to which this Academic Calendar refers begins on 1 September 1992. The University hereby gives notice that while the information contained in this Calendar is considered to be accurate at the time of preparation, there may be changes made subsequent to publication without prior notice. Publication date: 31 December 1991.

Students and other readers will appreciate that the matters dealt with in this Academic Calendar are subject to continuing review. Saint Mary's University reserves the right to alter anything described herein without notice other than through the regular processes of the University.

Saint Mary's University reserves the right to alter what appears in this Academic Calendar and, without limiting the generality of the foregoing, to revise or cancel particular courses or programs and to change the rate of fees and charges in order to serve the best interests of the University or because of labour interruptions or circumstances beyond its control. The University cannot accept responsibility or liability for any person or persons who may suffer loss, or who may be otherwise affected by such change.

While the University will make every reasonable effort to offer classes as required within degree, diploma and certificate programs, students should note that acceptance to an academic program does not guarantee admission in a particular year to a given class or a particular section of a class.



Academic Calendar of Saint Mary's University

1992-93



Saint Mary's University

Halifax, Nova Scotia

Canada

B3H 3C3

Tel: (902) 420-5400

Fax: (902) 420-5561 (General)

(902) 420-5566 (Senior Administrative Offices: President; Vice Presidents)

(902) 420-5151 (Admissions; Continuing Education; Registrar's/Records)

Using This Calendar

Some of the courses described in this Calendar will not be offered in 1992-93. Students are therefore advised to consult the academic timetable for those courses which will be taught in the 1992-93 academic year and the time(s) when they will be offered.

Frequently in this Calendar, the masculine includes the feminine and the plural includes the singular, and vice versa, as the context may require. This matter is subject to ongoing revision.

Inquiries regarding academic matters should be directed to the Registrar.

Although a university calendar is used by numerous people for many different purposes, one of its chief functions is to provide information for students interested in pursuing further study at the university level. The following paragraphs were prepared to assist such students in finding relevant material in this Calendar.

Section 3 of this book sets forth the requirements for the several degree and diploma programs offered at Saint Mary's University.

These programs include:

Bachelor of Arts
Bachelor of Commerce
Bachelor of Education
Bachelor of Education (Vocational)
Bachelor of Science
Diploma in Engineering
Master of Arts (in Atlantic Canada Studies, Education, History, International Development Studies, Philosophy, or Sociology/Criminology)
Master of Business Administration
Executive Master of Business Administration
Master of Education
Master of Science (in Astronomy or Applied Psychology)

After deciding on the degree program in which they are interested and studying the requirements of the program, students should consult Section 5 which contains descriptions of all the courses offered by the departments of the University. The timetable for the current academic year shows exactly which courses will be available, when they will be taught, and by which instructor. Keeping within the requirements of the particular program chosen, students may then select the courses with the greatest interest and appeal to them. Frequently a course will have several sections taught at different times. This is arranged in order to keep classes to a reasonable size and to provide time options for students in the preparation of their timetables.

The next step is to apply for admission. Complete information on how to proceed is set forth in the latter part of Section 2. This section also contains the academic regulations and provides academic information. Details on fees and financial information are found in Section 6, which also contains facts about academic awards and scholarships as well as bursaries and student loans.

Inquiries related to specific problems should be directed to the officers indicated below.

Academic Policies and Records
Registrar (902-420-5582)
(Fax: 902-420-5151)

Admission of Students
Directors of Admissions (902-420-5415) or Continuing Education (902-420-5492)
(Fax: 902-420-5151)

Alumni Affairs
Director of Alumni (902-420-5420)

Fees
Comptroller (902-420-5473)

Student Employment and Job Placement
Manager of Canada Employment Centre on Campus (902-420-5499)

Residence Accommodation
Director of University Residences (902-420-5598)

Scholarships and Student Loans
Financial Aid Counsellor (902-420-5609)

Student Affairs
Director of Student Services (902-420-5615)

Summer School
Director of Continuing Education (902-420-5492)

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Section 1

General Information

- History
- Calendar of Events
- Board of Governors and Senate

General Information

The following information is provided for your reference. It is subject to change without notice. For the most current information, please visit our website at www.ourcollege.edu.

Academic Calendar

The academic calendar is available on our website. It includes the dates for classes, exams, and holidays. Please refer to the calendar for specific dates and times.

Admission

Admission is open to all students who meet the minimum requirements. For more information, please contact the Admissions Office at (555) 555-5555.

Financial Aid

Financial aid is available to eligible students. For more information, please contact the Financial Aid Office at (555) 555-5555.

Student Services

Student services are available to all students. For more information, please contact the Student Services Office at (555) 555-5555.

Faculty and Staff

Faculty and staff are available to provide support and guidance. For more information, please contact the Faculty and Staff Office at (555) 555-5555.

Contact Us

For more information, please contact us at (555) 555-5555. We are located at 123 Main Street, Anytown, USA.

General Information

History

Since its founding in 1802, Saint Mary's University has developed into a modern, urban university with more than 8,000 full and part-time students. It is the oldest English-speaking, Roman Catholic initiated university in Canada. With meagre resources, the Reverend Edmund Burke founded the institution and, on being named Bishop of Nova Scotia, insisted that support for the college be continued as essential in fostering the Catholic community.

In 1841 the Nova Scotian House of Assembly gave formal recognition of the college's academic role and, eleven years later, granted it legal status. The next few years saw a great deal of uncertainty about the survival of the college. However, in 1913 the Christian Brothers of Ireland were asked by the Archdiocese of Halifax to direct the college and its academic programs. Its reputation as a liberal arts institution thrived in these years. Undergraduate programs were widely respected and new instructional programs were initiated, the most notable being the Faculty of Commerce which, when established in 1934, was among the first of its kind in Canada. In 1940 the Upper Province of the Society of Jesus (the Jesuits) was invited to succeed the Christian Brothers as administrators and teachers. For more than thirty years, until the new Act of Incorporation in 1970, the college remained under Jesuit supervision. It established itself in teacher education; initiated the first courses in continuing education in Halifax/Dartmouth; purchased the first computer in Atlantic Canada; and became co-educational. Also, the long-standing emphasis on liberal arts and commerce was complemented by new programs in engineering and science. The Act of 1970 gave legal status to the Board of Governors and Senate. Subject to the powers of the Board, the Senate is responsible for the educational policy of the University. In 1974, faculty members formed the Faculty Union which has become an influential voice in the affairs of the University.

From the Jesuits and their predecessors, Saint Mary's has inherited a strong commitment to meeting community needs and an equally strong tradition of emphasising excellence in teaching and excellence in research. During the past two decades Saint Mary's has evolved into a more complex urban university, with a full range of undergraduate programs in arts, commerce, education, and science. Now a publicly accessible, co-educational institution, functioning with a sense of its tradition, the University also offers pre-professional programs in law, medicine, engineering, theology, dentistry, architecture, as well as selected graduate studies. Through the co-operative efforts of the Division of Continuing Education, part-time students study in these programs and in a variety of non-credit programs all of which have been rapidly expanding both in numbers and geographic locations.

Over the last twenty years this commitment to academic and research excellence has seen the number of full-time faculty with doctoral degrees rise to 85 percent. Part-time faculty members are recruited on the strength of academic qualifications in addition to the expertise and experience they can bring to the classroom.

More dramatic evidence of faculty enrichment is demonstrated by their research activities. In the last ten years, sponsored contract and academic research has increased from \$250,000 to more than \$4,200,000. This 1580% increase reflects the University's firm belief that excellence in both teaching and research are essential for professors and that research is an integral part of the contributions that universities must make to society.

The quality of instruction to students has been a focal point of Saint Mary's University since its founding. This long standing tradition of commitment to excellence in teaching has seen the introduction of new initiatives. The Quality of Teaching Committee has assisted faculty members by offering workshops on instructional techniques and innovations in teaching methodology including the use of computers. Awards for Teaching and Research Excellence are presented annually to members of faculty.

More than eleven thousand students are enrolled during the academic year and in the two summer sessions at Saint Mary's University. They attend day and evening classes both on the 30 acre campus in the south end of Halifax and at off campus locations including the World Trade and Convention Centre in downtown Halifax, and in Dartmouth, Truro, and several other communities. Saint Mary's boasts residence facilities for single and married students, a Student Centre, Science Building, the Patrick Power

Library, which is linked via computer to several other Halifax-Dartmouth universities, a multi-million dollar Computer Centre, and "The Tower" which is Atlantic Canada's most modern recreation and fitness complex. Over the last number of years, Saint Mary's University has become a teaching and research institution where tradition meets the future.

The traditions formed by its founder and early teachers, built upon by the sound educational values of the Christian Brothers, and strengthened by the imaginative leadership of the Jesuits, provide a stable base for future development. Saint Mary's has been innovative in seeking co-operative ventures with other Maritime universities. The results have included the Regional X-Ray Fluorescence Laboratory as well as the Gorsebrook Research Institute which contributes to the understanding of our regional culture within a national context. In response to the imperative that modern universities increase their outlook and outreach to other parts of the world, Saint Mary's University houses the Canada-China Language and Cultural Project. Our 'internationalization' has also seen formal teaching and research agreements signed with universities around the world including Japan. The Atlantic Centre of Support for the Disabled has grown remarkably over the last several years. This Centre provides a variety of support to an increasingly important sector of our student population. It also provides assistance to disabled students studying at other Maritime post secondary institutions.

Saint Mary's University concentrates on its mission of providing excellence in its service to students and the larger community around the campus. Its reputation is one of quality education on a campus environment where individual development is paramount. Saint Mary's student population is drawn largely from Halifax and Dartmouth with fifty-seven percent of its students from this area. Nova Scotia is the home province of 87 percent of Saint Mary's students. There is also a distinct international aspect to the University with students from many countries including China, Japan, Bermuda, the United States, and Kenya. We are ambitiously pursuing a goal shared by many. It is a vision centred around continued academic excellence in teaching and research, accessibility for all Nova Scotians, strong community outreach, and facilities and instruction for the physically challenged. With its strong sense of where it has been, Saint Mary's University has focused clearly on the mission ahead — being "where tradition meets the future...."

Statement of Objectives

The objectives of the University, as defined in the Saint Mary's University Act, 1970, are to:

- a. promote and disseminate learning and knowledge;
- b. give special emphasis to the Christian tradition and values in higher education;
- c. provide an atmosphere of freedom, responsibility, and mutual respect in the University community;
- d. aid in the improvement of society in all ways consistent with these objects.

Memberships

Saint Mary's University is a member of a number of organizations including Association of Universities and Colleges of Canada, Association of Atlantic Universities, and Association of Commonwealth Universities.

Affiliations

Saint Mary's University has been associated with the Technical University of Nova Scotia since 1916, providing the first two years of study leading to the degree of Bachelor of Engineering in civil, electrical, mechanical, mining, metallurgical, chemical, and industrial engineering. Formal association also exists between the University and Ignatius College in Guelph. The affiliation between Saint Mary's University and Regis College, Toronto, is presently in suspension in light of the association between the Toronto School of Theology and Regis College.

University Crest

The University crest was designed in the 1940s by the Reverend Daniel Fogarty, S.J. Each symbol in the crest has a significance relevant to the various phases and history of the University.

On the outer portion of the crest the name and location of the University are inscribed in Latin, and, in Roman numerals (1841), the date the University received its charter authorizing it to grant degrees.

The book shown above the shield represents learning and knowledge. The inscription on the page of the book is in Latin - "Age Quod Agis". This is the motto of the University which exhorts all those

connected with the University to strive to do their best in everything that they do. This quotation is from the Irish Christian Brothers and symbolizes their contribution to the development of the institution.

The upper part of the shield has the official seal of the Jesuits with I.H.S. being the Latin initials for Christ's name. Below these initials are the three nails which represent the Crucifixion and surrounding these is the Crown of Thorns.

The two crowns represent a dual loyalty - to the then Dominion of Canada and to the British Commonwealth. Below these crowns is the thistle, which stands for Nova Scotia's Scottish heritage.



Calendar of Events 1992-93

I: HIGHLIGHTS

1992

July

3 Deadline to file applications for Fall Convocation, 1992.

August

4-12 August Registration.

September

8-10 September Registration.
12 **Classes begin.**
14-15 Late Registration.
16-22 Change of Registration.
25 Deadline to (a) file applications for Spring Convocation, 1993, and (b) pay first semester fees.

October

12 Thanksgiving Day. No classes.
25 Fall Convocation, 1992.

November

11 Remembrance Day. No classes.
14 Deadline to withdraw from first semester courses.

December

4 Classes end.
7-19 Formal examinations.
19 First semester ends.*

1993

January

4 University reopens. No classes.
4-7 Registration.
4-12 Change of Registration.
6 **Classes resume.**
14 Deadline to withdraw from full courses.
15 Deadline to pay second semester fees.

February

21-27 Winter Break.

March

13 Deadline to withdraw from second semester courses.

April

7 Classes end.
8 Study Day. No classes.
9 Good Friday. No examinations.
10-24 Formal examinations.
23 Deadline to apply to graduate in absentia at Spring Convocation, 1993.
24 Second semester ends.*

May

10 Spring Convocation, 1993.

*Subject to change should it not be possible to schedule all examinations in this period.

II. DETAILED SCHEDULE

1992

July

3 Friday

Deadline for applying for Fall Convocation, 1992.

August

1 Saturday**

Registration Mail-In forms must be postmarked by this date except for those mailed from outside North America.

**To be confirmed in Registration Booklet, 1992.

4 Tuesday

9:30-11:30 a.m.

Registration for RETURNING undergraduates in CATEGORY A in the Faculties of Arts and Science, including the Division of Engineering.

5 Wednesday

9:30-11:30 a.m.

Registration for RETURNING undergraduates in CATEGORY A in the Faculty of Commerce; also those students officially enrolled in all graduate programs exclusive of Education.

6 Thursday

9:30-11:30 a.m.

Registration for RETURNING undergraduates in CATEGORY B in the Faculties of Arts and Science, including the Division of Engineering.

7 Friday

9:30-11:30 a.m.

Registration for RETURNING undergraduates in CATEGORY B in the Faculty of Commerce.

8 Saturday

(a) 9:30-10:30 a.m.

(a) CMA exemption checks will be conducted.

(b) 10:30-11:00 a.m.

(b) Special registration session exclusively for CMA students.

10 Monday

9:30-11:30 a.m.

Registration for NEW undergraduates in the Faculties of Arts and Science, including the Division of Engineering; and also those students officially enrolled in all graduate programs exclusive of Education.

11 Tuesday

9:30-11:30 a.m.

Registration for NEW undergraduates in the Faculty of Commerce.

12 Wednesday

5:00-7:00 p.m.

Registration for new and returning students (full and part-time) in any Faculty or Division (exclusive of Education); for new and returning part-time and mature students who have been officially accepted for study in a credit course(s) at Saint Mary's University except in Education; also for students with admission categories of NDS (non-degree status); upgrading (except those registering in Education); audit; and special (i.e., those on a Letter of Permission from other academic institutions), except those registering in Education.

September

8 Tuesday

(a) 5:30-6:30 p.m.

(a) Registration for all students who are enrolled in a graduate program at Saint Mary's University.

(b) 6:30-7:30 p.m.

(b) Registration for part-time undergraduate students (exclusive of those registering for Education courses) officially accepted in Saint Mary's University degree, diploma and certificate programs (including CMA).

9 Wednesday

(a) 9:30-10:30 a.m.

(a) Registration for RETURNING full-time undergraduate students in the Faculties of Arts and Science, including the Division of Engineering.

(b) 2:30-3:30 p.m.

(b) Registration for RETURNING full-time undergraduate students in the Faculty of Commerce.

(c) 4:30-5:30 p.m.

(c) Special session for admission of non-degree status students (i.e., NDS).

(d) 6:30-7:30 p.m.

(d) Registration for students who have been admitted for the 1992-3 academic year as NDS (non-degree status students); also students, both full and part-time, taking graduate level courses (except Education) but not actually accepted into or enrolled in a Saint Mary's University graduate program.

10 Thursday

- (a) 9:30-11:00 a.m. (a) Registration for NEW full-time undergraduate students in the Faculties of Arts and Science, including the Division of Engineering.
- (b) 2:00-3:30 p.m. (b) Registration for NEW full-time undergraduate students in the Faculty of Commerce.
- (c) 4:30-5:30 p.m. (c) Special session for admission of students in the following categories: audit, upgrading (i.e., holders of a university degree or diploma who wish to upgrade their academic qualifications), and special (i.e., students with Letters of Permission from other post-secondary institutions).
- (d) 6:30-7:30 p.m. (d) Registration for part-time undergraduate students whether in a degree, diploma, or certificate program offered by Saint Mary's University, or admitted on either a full or part-time basis to a credit course(s) (except Education) with the following admission categories: audit; upgrading; or special (i.e., with a Letter of Permission from another academic institution).

11 Friday

No registration.

14 Monday

Late Registration begins.

15 Tuesday

Late Registration concludes for all half courses designated .1 and all full courses.

Changes of Registration**16 Wednesday**

Change of Registration begins.

9:30-10:30 a.m.
5:30-6:30 p.m.

17 Thursday

Change of Registration continues.

2:30-3:30 p.m.

21 Monday

Change of Registration continues.

9:30-10:30 a.m.

22 Tuesday

Change of Registration concludes.

2:30-3:30 p.m.
5:30-6:30 p.m.

September**12 Saturday**

CLASSES BEGIN.

25 Friday

- (a) Last day for filing applications for degrees, diplomas and certificates to be awarded at Spring Convocation, 1993.
- (b) Last day for final payment of first semester tuition fees.

October**12 Monday**

Thanksgiving Day. No classes.

25 Sunday

Fall Convocation, 1992.

November**11 Wednesday**

Remembrance Day. No classes.

14 Saturday

Last day for withdrawing from a first semester course (.1) or a full course taught only in the first semester.

December**4 Friday**

Last day of classes in first semester.

7-19**Monday-Saturday**

Formal final examinations in first semester courses and formal mid-year examinations in full year courses.

8 Tuesday

Patronal Feast of the University. Examinations are usually not scheduled on this day.

19 Saturday*

First semester ends.*

1993**January**

- 4 Monday**
 (a) 9:30-10:30 a.m. University reopens. No classes.
 (a) Registration begins.
 (b) 10:30-11:30 a.m. Change of Registration begins.
 1:30- 2:30 p.m.
- 5 Tuesday**
 (a) 9:30-10:30 a.m. University open. No classes.
 (a) Change of registration continues.
 2:30- 3:30 p.m.
 (b) 1:30-2:30 p.m. Registration continues.
- 6 Wednesday**
 (a) 9:30-10:30 a.m. CLASSES RESUME.
 (b) Change of registration continues.
 6:00- 7:00 p.m.
 (c) 5:00-6:00 p.m. Registration continues.
- 7 Thursday**
 1:30-2:30 p.m. (a) Registration concludes.
 5:00-6:00 p.m. (b) Change of registration continues.
- 8 Friday**
 9:30-10:30 a.m. Change of registration continues.
- 11 Monday**
 9:30-10:30 a.m. Change of Registration continues.
 5:00- 6:00 p.m.
- 12 Tuesday**
 2:30-3:30 p.m. Change of Registration concludes.
 5:00-6:00 p.m.
- 14 Thursday**
 Last day for withdrawing from a full course taught over both semesters.
- 15 Friday**
 Last day for final payment of second semester tuition fees.

February

- 21-27 Winter Break.

March

- 13 Saturday Last day for withdrawing from a second semester course (.2) or a full course taught only in the second semester.

April

- 7 Wednesday Last day of classes for second semester.
- 8 Thursday Study Day. No classes.
- 9 Friday Good Friday. No examinations.
- 10-24 Formal final examinations in second semester courses and in full courses.
- Saturday-Saturday*
- 23 Friday Last day to apply to graduate in absentia at Spring Convocation, 1993.
- 24 Saturday* Second semester ends.*

*Subject to change should it not be possible to schedule all examinations in this period.

May

10 Monday

Spring Convocation, 1993.

July

2 Friday

Last day for filing applications for degrees, diplomas, and certificates to be awarded at Fall Convocation, 1993.

Each year, Saint Mary's University offers two summer sessions, the first from mid-May to the end of June; the second from early July to mid-August. For 1992, the dates of the First Summer Session are 13 May to 26 June, and for the Second Summer Session, 6 July to 21 August. Details are available in the Summer Sessions brochure published annually by the Division of Continuing Education.

1992

JULY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUG

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPT

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

OCT

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOV

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DEC

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1993

JAN

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEB

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

MAR

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APR

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JUNE

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Board of Governors and Senate

Board of Governors

Chairperson

E. J. Flinn, Q.C.

Vice-Chairperson

Mr. J. G. (Jack) Keith

Members Ex-Officio

Chancellor

Archbishop Austin E. Burke

Vice-Chancellor

Very Reverend Monsignor John R. Campbell, V.G.

President

Dr. Kenneth L. Ozmon

Vice-President (Academic and Research)

Dr. J. Colin Dodds

Vice-President (Administration)

Mr. Guy L. Noel

Members Appointed by the Roman Catholic

Episcopal Corporation

Rev. J. Christensen

to July 31, 1992

E. J. Flinn, Q.C.

to July 31, 1993

Judge Helen Gillis

to July 31, 1992

Members Elected by the Alumni Association

Robert Belliveau, Q.C.

to July 31, 1994

Mr. John Bishop

to July 31, 1993

Mr. Paul Goodman

to July 31, 1994

Mr. Donald Horne

to July 31, 1992

Ms. Lorraine Lafferty

to July 31, 1993

Mr. Gerald Walsh

to July 31, 1992

Members Elected by the Academic Staff

Dr. Cyril Byrne

to July 31, 1992

Dr. Samuel Jopling

to July 31, 1994

Dr. Frank Phillips

to July 31, 1992

Dr. Grace Pretty

to July 31, 1993

Dr. Peter Ricketts

to July 31, 1994

Dr. John Young

to July 31, 1993

Members Elected by the Students

Ms. Cheryl Cruz-Melanson

to July 31, 1992

Mr. Christian Flynn

to July 31, 1992

Ms. Nicole Phillips

to July 31, 1992

Mr. John Webber

to July 31, 1992

Member Appointed by the Upper Canada Province of the Society of Jesus

Reverend L. F. Murphy, S.J.

to July 31, 1994

Members Elected by the Board of Governors

Hon. Alan R. Abraham

to July 31, 1992

Mr. Louis R. Comeau

to July 31, 1992

Mrs. Iona Crawley

to July 31, 1992

Mr. Craig Dobbin

to July 31, 1992

Mrs. Martha Jodrey

to July 31, 1994

Mr. J. G. (Jack) Keith

to July 31, 1992

Mr. David F. Sobey

to July 31, 1994

Mr. Mike Zatzman

to July 31, 1994

Members Appointed by the Lieutenant-Governor in Council

Mr. James F. Snell

to July 31, 1994

Mr. F. MacGillivray

to July 31, 1994

Observer Elected by Support Staff

Ms. Ellen Flood

to March 22, 1992

Academic Senate

Chairperson

Mr. Ronald A. Lewis

Vice-Chairperson

Dr. Roger Barnsley

Secretary

Mr. Kevin J. Cleary

Members Ex-Officio

Dr. Kenneth L. Ozmon, President

Dr. J. Colin Dodds, Vice-President (Academic and Research)

Dr. Clive M. Elson, Acting Dean of Science

Dr. Paul S. Dixon, Acting Dean of Commerce

Dr. Michael J. Larsen, Dean of Arts

Dr. Roger Barnsley, Dean of Education

Mr. Ronald A. Lewis, Librarian

Ms. Elizabeth A. Chard, Registrar

Mr. Keith Hotchkiss, Director of Student Services

Members Elected

To August 1994

Dr. J. Chadwick-Jones

To August 1993

Dr. F. Dougherty

Dr. J. Baker

Dr. A. Farrell

Dr. J. Dostal

Dr. G. Pe-Piper

Dr. J. Ginsburg

Dr. K. Snyder

Dr. G. Pretty

Dr. P. Ricketts

To August 1992

Dr. V. Baydar

Student Senators (1991-92)

Dr. B. Kieseckamp

Ms. Katherine Aker

Dr. R. Konopasky

Mr. Tony Anderson

Dr. P. March

Ms. Cheryl Cruz-Melanson

Dr. S. Pendse

Mr. Christian Flynn

Mr. John Webber

Board of Governors and Senate

Board of Governors

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Section 2

Admission

Academic Regulations and Information

Registration

Admission

Students seeking admission to any degree program (except as noted below in 3 and 4), undergraduate or graduate, at Saint Mary's University should address all enquiries, requests for application forms or correspondence to:

Director of Admissions
Saint Mary's University
Halifax, Nova Scotia
B3H 3C3

Telephone: (902) 420-5415

Fax: (902) 420-5151

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1. Procedures for Admission to Undergraduate Programs

a. Applications from Canadian students (except those transferring from other post-secondary institutions) must reach the Admissions Office by 1 July for September admission; 1 November for January admission. For non-Canadian applicants, the deadlines are 1 April for September admission; 1 August for January admission. The deadline for receipt of applications from students who wish to transfer from another post-secondary institution to Saint Mary's University beginning in September is 1 June; beginning in January, the deadline is 1 October. Enclose provincial certificates or other accredited school certificates giving final grades or marks, and a processing fee of \$30.00 with the application forms.

b. Applicants who have completed courses at another post-secondary educational institution must request that institution to send an official transcript to Saint Mary's University. Failure to report all institutions attended will result in dismissal from the University.

c. (i) Former Saint Mary's University students who were not in attendance during the preceding academic year or during a period of up to four years who were not required to withdraw from the University and who wish to resume studies in the same degree program in which they were registered, must notify the Registrar in writing of their intent to return to the University before registering for any course, and must fill in a Data Sheet available from the Registrar's Office.

(ii) Students seeking to enrol in a different degree program, or who have not been registered during the preceding four years or longer, or who have been required to withdraw, must apply for re-admission to the Director of Admissions (see Academic Regulations).

d. Students who were registered in a degree program during the entire preceding academic year are not required to reapply for admission to the University. Such students will automatically be sent information with respect to registration for the coming year. This mail-out occurs approximately mid-July.

2. Requirements for Admission to Undergraduate Programs

a. General Considerations

(i) The following requirements have been established as a guide to applicants. Possession of these minimum requirements does not establish the right of an applicant to be admitted or readmitted to

the University. The University reserves the right to accept or reject any applicant.

(ii) Definitions:

(a) "Satisfactory grades" means an average in five subjects of 65 per cent with no mark below 50 per cent.

(b) "Academically recognized subjects" means subjects offered in the university preparatory program of an approved school system.

b. Nova Scotia

(i) Students entering from Nova Scotia Grade XII with satisfactory grades in English and four other academically recognized subjects, as defined below, may be admitted and receive advanced standing. Requirements are as follows:

(a) Faculty of Arts - English 441 plus 4 additional academic courses, one of which may be coded 341;

(b) Faculty of Science - English 441, Math 441, 2 sciences at the 441 level, plus one subject at the 441 or 341 level;

(c) Division of Engineering - English 441, Math 441, Physics 441, Chemistry 441, plus one subject at either the 441 or 341 level;

(d) Faculty of Commerce - English 441, Math 441 or Math 442, and three other academic subjects, one of which may be coded 341.

(ii) Students who have completed Grade XII but whose final grades do not meet complete advanced credits under the provisions of 2-b above, may be admitted and given credit for courses in which they have obtained a grade of at least 65 per cent, except in the case of mathematics and science subjects where a grade of 75 per cent will be required.

(iii) In exceptional cases, admission may be granted to students who have completed Nova Scotia grade XI (or equivalent) with high academic standing and with the same subject requirements as delineated for Nova Scotia grade XII. An additional year of full-time study (i.e., 5.0 credits) will be required of all such students.

(iv) Students will not be granted credit for high school work done after their first registration at any post-secondary institution.

c. New Brunswick, Prince Edward Island, and Newfoundland

(i) Students entering from these provinces' school system who have completed Grade XII are subject generally to the provisions outlined for Nova Scotia Grade XII students.

d. Other Provinces

(i) Quebec: High School Leaving Certificate. Students who have completed the first year of CEGEP with high standing may be considered as having the equivalent of Nova Scotia Grade XII. Credits for students with two years of CEGEP will be assessed separately.

(ii) Ontario: Students who have been awarded a Secondary School Graduation Diploma (Grade XII) may be considered for admission, while those who have completed a Secondary School Honors Graduation Diploma (Grade XIII/OAC) may be considered for admission with advanced standing.

(iii) Manitoba, Saskatchewan and Alberta: Grade XI certificate. Students who have completed Grade XII may be considered for admission with advanced standing.

(iv) British Columbia: Students who have completed a four year secondary school program may be considered for admission with advanced standing.

e. United States

(i) Students who have graduated from high school with 16 points - 4 in English and 12 in other academic subjects - will be considered for admission. Students seeking admission to engineering and science must have 3 points in mathematics and at least 3 points in science subjects. Students seeking admission to commerce must have 3 points in mathematics.

(ii) Students must arrange to provide the Admissions Office with a high school transcript, CEEB and SAT score results.

(iii) Students who have satisfactorily completed a year or more of a university or college program beyond high school may be considered for advanced credit.

f. Other Countries

(i) Students who have completed the British or the Caribbean GCE at the Ordinary Level will be considered for admission. Passes must be obtained, at the minimum, in five subjects including English for arts; and English, mathematics, and two science subjects for engineering and science. Commerce students must have English, mathematics, and three other subjects.

(ii) Students who have completed the Advanced Level GCE examinations may be considered for admission with advanced standing.

(iii) Students whose first language is not English, and who have not attended an English language secondary school, are required to take one of the standardized English language proficiency tests. These tests are administered by the University of Michigan, the College Entrance Examination Board, and the University of Cambridge. The University of Michigan English Proficiency Test is administered by the Language Institute at Ann Arbor, Michigan, U.S.A., 48104, and is given on request in any country in the world at any time during the academic year. The normal standards for admission to the University are as follows:

(a) a minimum score of 550 on the Test of English as a Foreign Language (TOEFL); or

(b) an aggregate grade of C or higher on the Cambridge First Certificate in English; or

(c) a minimum score of 90 on the Michigan examination.

One of the above examinations may be taken in almost any country of the world at almost any time of the year.

Applicants should apply directly to one of the following testing centres:

Educational Testing Service (TOEFL)
Box 899
Princeton, New Jersey 08514 U.S.A.

Cambridge Examinations in English
Local Examinations Syndicate
Syndicate Buildings
Cambridge, England

University of Michigan English Proficiency Test
Language Institute of Ann Arbor
Ann Arbor, Michigan 48104 U.S.A.

(iv) Students whose first language is not English should note academic regulation 23 below.

Note: Non-Canadian students on visas, student authorization, or minister's letter are advised that they are responsible for complying with the Immigration Laws of Canada. Students are responsible for keeping informed of revisions and addenda to these Laws.

g. International Baccalaureate Diploma

Students who successfully complete the requirements for this diploma program may be regarded as having the equivalent of Nova Scotia Grade XII standing. As such they may be admitted as noted above in 2-b(i).

3. Mature Admission

a. To qualify for admission as mature students, applicants must be at least twenty-two years of age and must show, through educational upgrading, work experience or community volunteer work, ability to benefit from university level education. Normally, mature applicants must have been out of school for at least five years.

b. The length of the degree program for mature students is as follows:

(i) Bachelor of Arts: a minimum of fifteen credits. Students may be asked to take more than the normal 15 credits where deemed appropriate by the Dean or Associate Dean of Arts.

(ii) Bachelor of Commerce: twenty credits. For students lacking in mathematics background, Mathematics 110.1(2) and 112.1(2) will be required.

(iii) Bachelor of Science: twenty credits. Students may be eligible for up to five advanced standing credits for work completed in high school (Nova Scotia Grade XII or equivalent) and/or advanced standing credit examination (academic regulation 22).

(iv) Diploma in Engineering: sixteen and one-half credits. Students may be eligible for up to five advanced standing credits for work completed in high school (Nova Scotia Grade XII or equivalent) and/or advanced standing credit examination (academic regulation 22).

c. The application procedure for admission as mature students is as follows:

(i) Application forms may be obtained by writing, telephoning or visiting:

The Division of Continuing Education
Room 101, McNally Building
Saint Mary's University
Halifax, N.S. B3H 3C3
Telephone: (902) 420-5492

(ii) Send the completed application form with an application fee of \$30.00; a resume detailing educational upgrading, work experience and volunteer community service; and, if possible, a copy of high school marks.

(iii) Applicants who have registered for credit courses at another university or recognized post-secondary educational institution must request that institution to send official transcripts of their work directly to the Division of Continuing Education. All official transcripts must be received by the Division of Continuing Education before the application for admission as a mature student will be considered.

(iv) Applications should be received by the Division of Continuing Education by the following dates:

First summer session - May 1
Second summer session - June 15
Fall semester - July 1
Winter semester - November 1

Early dates are also established annually for mail-in registration.

4. Procedures for Other Admission Categories

a. Admission as a Transfer Student

Students who have been enrolled in a degree program at another university should follow the regular procedure for admission to Saint Mary's through the Admissions Office. If admitted, transfer students will receive advanced standing credit in conformity with the principles and procedures stated in academic regulation 20. Transfer students who also meet the criteria for mature students may apply for admission through the Office of Continuing Education.

b. Admission as an Upgrading Student

Students who already hold a degree or professional certificate may enrol in a course or courses to upgrade their qualifications. Special 'Application for Admission' forms are available in the Registrar's Office, and students are to follow normal registration procedures. Such students must meet the stated prerequisites for the course(s) for which they register. A separate application is required for each academic year or summer session for this admission category.

c. Admission as a Student Auditor

Students who are interested in auditing a course (see academic regulation 2 below) are required to complete a special 'Application for Admission' form available in the Registrar's Office and to follow normal registration procedures. These students must meet any stated prerequisites for the course(s) for which they register.

d. Admission by Letter of Permission as a Special Student

Students currently enrolled at another institution, who have letters of permission to take courses at Saint Mary's University for transfer of credit to their home institution, must complete a special 'Application for Admission' form available in the Registrar's Office, and follow the normal registration procedures. In addition, these students must file a Letter of Permission with the Registrar at Saint Mary's. In all cases, grades for all courses for which students register will be forwarded to the students' home universities. Saint Mary's shall not be held responsible for meeting the deadlines for submission of grades of other universities. Students should also note that all deadlines as promulgated in the Calendar of Events apply to all students regardless of their admission category.

e. Admission to Non-Degree Status (NDS)

(i) Individuals interested in taking one or more courses at the University without being registered in a degree program can seek admission as a non-degree status student. Such students must meet the stated prerequisites for the course(s) for which they register. Students may take no more than five full courses (or half course

equivalents) as non-degree students. If non-degree students wish to continue to study at Saint Mary's beyond five full courses (or half course equivalents), they must formally be admitted to a degree program. Students who are subsequently admitted to degree or diploma programs from non-degree status may count the university credits that they have earned as non-degree students. All courses attempted at the University will remain a part of the students' permanent records.

(ii) Under special circumstances, high school students, with the permission of the appropriate Dean, may be admitted to enrol as non-degree students in Saint Mary's courses for which they have the necessary prerequisites.

(iii) Non-degree students must apply through the office of the Director of Continuing Education. A separate application is required for each academic year or summer session(s) in which the student is enrolled with this admission basis.

5. Graduate Admission

Admission to a graduate program at the University is covered in Section 3 of this Calendar.

Note: At the time of initial application to a degree, diploma, or certificate program involving credit courses, each student is issued with a Saint Mary's University I.D. number. This number must be shown on all transactions with the University. If after being accepted, a student opts not to register for the upcoming academic year, the I.D. number is cancelled.



Academic Regulations

The information, regulations, and guidelines contained in this section apply to all students at the University. Additional regulations pertaining to the Masters' programs are in Section 3 of this Calendar.

Note: Currently, the University is reviewing all of its academic regulations and hereby serves notice that significant revision(s) thereto may occur prior to the beginning of the 1992-93 academic year. These will be promulgated officially in the *Registration Booklet, 1992*, which is published in mid-July.

Introductory Information

Definitions

Academic Year	The period extending from Wednesday following Labor Day in September to and including Convocation Day in May of the following year.
Academic Status	Senior: one who has 13.0 or more credits; Junior: one who has 8.0 to 12.5 credits; Sophomore: one who has 3.0 to 7.5 credits; Freshman: one who has 0.0 to 2.5 credits.
Admission	Acceptance of an applicant as a student.
Advanced Standing	Credit granted for work completed before admission to Saint Mary's University.
Audit	Attend a course without working for or expecting formal credit.
Bursary	A monetary grant based on financial need.
Chairperson	Faculty member responsible for a department or area of study.
Course	A unit of instruction in a particular subject. The last digit of course numbers designates the following: .0 - full year course .1 - first semester half course .2 - second semester half course
Credit	A completed unit of university work or recognized equivalent. One credit is granted for each successfully completed full-year course; a half credit is granted for a successfully completed one semester course.
Dean	Also called Dean of the Faculty; the chief academic administrator of a Faculty.
Elective	A course not specifically required by a student's program of studies.
Faculty	When spelled with a capital F, refers to an academic unit offering its own degree program; when spelled with small f, refers to instructors in a Faculty.
Grade	The letter indicating an instructor's evaluation of a student.
Instructor	A member of faculty.
Major	A subject or area of concentration.
Non Degree Status (NDS)	A status permitting a student to take a course although that individual has not been accepted in a degree program at Saint Mary's University.
Prerequisite	A condition that must be fulfilled prior to registration in a particular course.
Probation	A conditional status assigned to a student who has shown evidence of academic weakness.
Program	An approved group of courses leading to a degree, diploma, or certificate.

Qualifying Year	Pertains to the Faculty of Commerce and refers to the first year of study for those students required to complete more than 20.0 credits for their degree.
Registration	Enrolment of a student in a course, courses, or program, including the payment of fees.
Satisfactory academic standing (standard)	Maintaining a quality point average of at least 1.50.
Scholarship	A monetary award based on academic achievement.
Semester	A term or period of instruction corresponding to one half of the academic year; each semester lasts approximately fourteen weeks.
Special Student	A student, working on a degree at another academic institution, who has a letter of permission to register for a course(s) at Saint Mary's University.
Subject	Also called a discipline; a specific field of study, e.g., accounting, chemistry, history.
Summer Sessions	Periods of instruction normally lasting six weeks during the months of May through August. Two summer sessions are offered each year.
Transcript	An official report of a student's academic record.
Transfer Credit	Credit granted for work completed at another institution after admission to Saint Mary's.
Upgrading Student	A student who already holds an undergraduate degree or professional certificate and who wishes to take additional credit courses at Saint Mary's University.

Course and Major Abbreviations:

Accounting	Acc
Anthropology	Ant
Asian Studies	ASN
Astronomy	Ast
Astrophysics	ASP
Atlantic Canada Studies	ACS
Biology	Bio
Business Administration	Bus
Certified Management Accountant Program	CMA
Chemistry	Che
Chinese	Chi
Classics	Cla
Commercial Law	Cml
Communication	Com
Computing Science	CSC
Co-operative Education Program in Accounting	COEA
Co-operative Education Program in Biology	COEB
Co-operative Education Program in Chemistry	COEC
Co-operative Education Program in Geology	COEG
Co-operative Education Program in Computing Science	COES
Creative Writing	CRW
Criminology Certificate Program	CRM
Data Processing Program	DPM
Economics	Eco
Education	Edu
Egyptian	Egp
Engineering	Egn
English	Egl
English as a Second Language	ESL
English as a Foreign Language	EFL
Executive Master of Business Administration	EMB
Finance	Fin

French	Fre
General Business Studies	GBS
Geography	Gpy
Geology	Geo
German	Ger
Greek	Gre
Hebrew	Heb
History	His
Human Resource Management and Industrial Relations	HRM
Image Studies	IST
Independent Study Program	ISP
International Development Studies	IDS
Irish Studies	IRS
Italian	Ita
Latin	Lat
Linguistics	Lin
Management	Mgt
Management Science	Msc
Marketing	Mkt
Master of Business Administration	MBA
Mathematics	Mat
Philosophy	Phi
Physics	Phy
Political Science	Pol
Psychology	Psy
Religious Studies	Rel
Sociology	Soc
Spanish	Spa
Women's Studies	WMS

It is the responsibility of students, faculty members, and administrative officers concerned with academic matters to be familiar with the rules and regulations published in this Calendar. In particular, it is the responsibility of students to ensure that the courses which they take are appropriate to the degree program in which they are registered, involve no timetable conflicts, and collectively satisfy all the requirements of that program.

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1. Number of Courses in a Year

a. Students must formally register for all courses. In the Faculties of Arts, Commerce and Science (exclusive of Engineering) the normal load in the academic session for a full-time undergraduate is five full courses (or the equivalent) per semester, while in the Division of Engineering six full courses (or the equivalent) per semester constitute a normal full-time load. The Bachelor of Education program requires the completion of seven credits. Undergraduate students registered for at least three courses in a semester are considered to be full-time, while students registered for fewer than three courses per semester are part-time. During the same academic year it is possible for students to be full-time in one semester and part-time in the other.

b. Students may apply to the Dean of their Faculty for permission to carry an extra half or full course. Normally, permission will be granted only to students whose quality point average during the previous year was at least 3.00. Course overload request forms are available in the Registrar's Office and, on completion, must be filed with the Registrar for processing.

c. Students are normally permitted to take only one full course or equivalent during a summer session. In exceptional circumstances and where students have attained a quality point average of 3.00 during the previous academic year of full-time study, or proven consistent performance at least at the 3.00 level in the case of part-time study, two courses may be authorized at the discretion of the Dean of the Faculty. No more than three full courses or equivalent may be taken by students during the two summer sessions in any year. Forms to request a course overload during a summer session are available in the Registrar's Office and, on completion, must be filed with the Registrar for processing.

2. Auditing Courses

Students may audit courses but they must formally register as auditors in these courses. Auditors participate in all regular class activities, but are not expected to prepare formal assignments, write papers, or take quizzes, tests, or examinations. With the consent of the instructor, however, they may perform these activities and receive an informal evaluation of their work. Audited courses are not given credit or regular grades but the notation of AU is included on the students' official record. Within the normal time limits for changing courses (see 13-b), students may request permission to change from regular registration status in a course to auditing status or vice versa.

3. Academic Advising

a. Although students are responsible for ensuring that they meet the requirements of their degree programs, the University makes every effort to provide assistance in the selection of courses and programs. Such advice is readily available during Registration. At all other times, and indeed during Registration if particular problems arise, students who have already decided upon their areas of concentration will be advised by the Chairperson of the appropriate departments or their appointees. All other students should seek advice from the Dean of their Faculty who will, if necessary, assign special academic advisors. It is strongly recommended that students consult with their assigned advisor prior to withdrawing from a course or courses.

b. Academic counselling is particularly recommended for the following students:

- (i) all students who are on academic probation as defined in regulation 7-d;
- (ii) all students who have previously incurred probationary status and who upon the completion of any subsequent course(s) have not yet achieved a minimum cumulative quality point average of 1.50;
- (iii) all students who do not attain a quality point average of at least 1.50 in any given semester;
- (iv) all students who are resuming their studies after having been required to withdraw from the University because of academic weakness [see regulation 7-h(iii)];
- (v) all full-time students who have received two or more grades of W, WP, WF, or F in any given semester;
- (vi) all full-time students who are resuming their studies after having voluntarily withdrawn from the University;
- (vii) all part-time students who withdraw from two or more of any five consecutive full courses or the equivalent.

c. Students who are urged to confer with their academic advisor will be notified by their Dean and will be urged to meet with their advisor within the time frame indicated in the Dean's notice. Students who have not yet officially declared a major program or concentration and who therefore do not yet have an academic advisor will be assigned to a faculty advisor by the Dean. It is strongly recommended that students consult with their assigned advisor prior to withdrawing from a course or courses.

4. Grading System

a. The final grade for a course will be based on the quality of a student's work including, where appropriate, essays and exercises, class tests, end of semester examinations, final examinations, reports, class participation, laboratory work, tutorial sessions, projects and field work.

b. Instructors must inform students in writing, within the time limits set down in 13-b, of the grading system to be used in the course. The written statement must include the relative weight which will be given to class and/or laboratory participation, examinations, tests, written assignments and other means of evaluation (see academic regulation 19-b). Changes in this system must also be made available to students in writing. A copy of the grading system and any subsequent changes to it must be placed on file in the office of the Dean of the Faculty.

5. Undergraduate Rating, Grades and Quality Points

a. The rating of undergraduate students' performance is given as shown below in equivalent grades and quality points. There are no recognized percentage equivalents for these grades*.

Grades	Quality Points (Full Courses)	Quality Points (Half Courses)	Percentage Equivalents*	Rating		
A+ } A } A- }	4.000 4.000 3.670	2.000 2.000 1.835	80-100	Excellent		
B+ } B } B- }	3.333 3.000 2.667	1.665 1.500 1.335			70-79	Good
C+ } C } C- }	2.333 2.000 1.500	1.165 1.000 0.750				
D	1.000	0.500	50-59	Marginal Pass		
F	.000	.000	0-49	Failure or withdrawal after deadline (see No. 16)		

* These percentage equivalents are provided solely to assist other institutions in interpreting letter grades. They have no internal application.

b. The following grades shall be given when appropriate but will not be calculated in the quality point average:

- Aegrotat standing (see No. 12)
- Authorized withdrawal from course (see No. 16-c)

AE
W

c. The minimum passing grade is D. Students should be aware that a grade of D (or the equivalent) is not ordinarily transferable as a credit either to or from other educational institutions.

d. To receive a passing grade in a course, students normally must complete all course requirements, including all tests and examinations.

e. Students who have not completed the work of the course may, in special circumstances and with the approval of the Dean of the Faculty, be given the temporary grade IC (incomplete) by the instructor; if no final grade has been submitted to the Registrar by the instructor within six weeks of the last day of classes in the semester, a grade of F will automatically be substituted for IC, except in the following cases:

(i) Honors level courses; and (ii) graduate level courses. In these cases the IC will not automatically be converted to the grade of F until the end of the semester following the one in which the IC grade was given.

(iii) Masters' Theses/Projects where the IC remains until the work is completed or the time limits expire for registration in the program.

f. The maximum time limit permitted for a change of final grade is six months from the last day of classes in the semester. Except for the changing of an approved "incomplete" to a real grade, a grade change must be approved by the Dean of the Faculty in which the course is offered.

g. Once a final grade has been determined, supplementary examinations or any additional assignments for the purpose of changing that grade are not permitted.

6. Quality Point Average

a. A quality point average (abbreviation: q.p.a.) is used to determine the standard of a student's performance for the academic year.

b. Each letter grade is given a quality point equivalent as described in 5-a above.

c. The quality point average is computed at the end of each academic year by dividing the total number of quality points obtained that year by the total number of full courses taken, or their equivalent.

d. The cumulative quality point average (abbreviation: c.q.p.a.) is based upon all courses taken for credit in any Faculty at Saint Mary's after 1 September 1974 other than those for which grades AE, W, or WP have been given (see academic regulation 5-b above). Courses for which grades of F or WF have been given will be included in the calculation of the quality point average even if such courses are subsequently retaken and passed.

e. Grades for courses taken at other institutions for which advanced standing or transfer credit is given are not included in calculations for a cumulative quality point average, a quality point average, or in calculations for determining awards and distinctions.

7. Standing Required

a. The regulations governing continuance in a program are those in effect at the time students first register in that program, except as provided under b. below.

b. In the case of students readmitted after an absence of five or more years, or after having been required to withdraw for academic weakness, or in the case of students transferring to a different degree program, the regulations in force at the time of readmission or transfer apply. In addition, the Dean may attach specific and binding conditions to the students' performance to assure that the normal standards of the degree requirements are met.

c. Satisfactory Standing

(i) To qualify for a Bachelor's degree in Arts, Science, or Commerce, a student must achieve a cumulative quality point average of at least 1.50. For this reason, performance in any individual course below the grade of C minus or a quality point average below 1.50 in any given semester is considered unsatisfactory. Special average requirements exist in the Division of Engineering and pertain only to that program.

(ii) To qualify for a Bachelor's degree in Education, candidates are required to maintain a quality point average of at least 2.00. For individual courses the pass mark is D, with the exception of Practice Teaching I, II, and III for which the pass mark is C.No supplementary examinations are provided.

d. Students must file a change of registration form indicating the dropping of their major and/or minor if they are no longer pursuing that major and/or minor. Otherwise it will be assumed to be valid and the student will be expected to complete the requirements in order to qualify for graduation.

15. Procedure for Changing Faculty

In order to register an official change of Faculty, students must file with the Registrar a Change of Registration Form which has been signed by the Dean of the Faculty into which the students intend to transfer. Upon receipt of such a Change of Registration Form, the Registrar, on the advice of the Dean of the Faculty, will inform the students of the number of credits (including advanced standing credits) being transferred to their new degree program. Students should be aware that a change of Faculty is not automatic.

Students on probation at the time of authorized transfer of Faculty automatically remain on probation.

16. Withdrawing from a Course

a. In the case of half courses, after the time limits indicated in 13-b above have expired, and provided the half course still has one quarter of the instruction time remaining, students may withdraw from the course. In the case of full courses, after the time limits indicated in 13-b above have expired, and providing the tenth day of classes in the second semester has not passed, students may withdraw from the course. In such cases a grade of W will automatically be awarded. Students cannot withdraw from a course after these time limits except with the grade of "F".

b. A student who registers for a course and does not withdraw is considered to be taking the course, and if no grade is assigned by the instructor, a grade of "F" will be recorded. It is not sufficient to cease to attend class and not complete the tuition payment for a course.

c. For purposes of registration sections of courses are considered to be individual courses.

d. It is strongly recommended that students consult with their assigned advisor prior to withdrawing from a course or courses. (See regulation 3 for further details.)

Notes:

(i) All withdrawals must be made officially on Change of Registration forms available in the Registrar's Office. Should it not be possible for students to obtain such a form, a letter of withdrawal can be forwarded to the Registrar. This must include the student's name, address, Saint Mary's I.D. number, and course(s) with section number(s) (if applicable) involved in the withdrawal.

(ii) Students should note that the deadlines for withdrawal academically, differ from those for financial adjustment.

17. Retaking a Course

a. Students may retake any course, with the prior written permission of their faculty advisors. Although all grades, including failing grades, count in computing quality points for the year and for the degree, each course counts only once as a credit in the degree program.

b. In the cases where courses have been renumbered, changed in level, or where a full course has been split into two half courses, or vice versa, a student who received a credit for the original course is not entitled to repeat the course in its new format or on its new level for an additional credit.

c. Students will not ordinarily be given credit for a course taken at another educational institution which they have already taken and failed at Saint Mary's.

d. In all instances in which a student is seeking to repeat a course for which credit has already been awarded (through advanced standing, transferring, or successful completion at Saint Mary's) permission is to be sought on a special form available from the Registrar. This form requires the authorization of the Dean of the Faculty in which the student is enrolled.

18. Withdrawal for Academic Reasons

Students whose participation, work, or progress is deemed to be unsatisfactory may have their registration terminated and be denied the right to continue at the University by the Dean of their Faculty.

19. Academic Responsibility

a. University students are expected to have a reasonable measure of self-discipline and maturity. While the University's teaching

resources are available for help and guidance in the programs of study undertaken by students, and every effort will be made by instructors and staff to assist students with academic or other problems, the final responsibility for success or failure in academic studies rests on the students.

b. While the University does not compel attendance at every class, students should realize that failure to attend regularly may seriously jeopardize their chances of success (see academic regulation 4-b).

c. Students who do not adhere to traditional ethical standards in the conduct of their academic work will be subject to penalty, including the possibility of being expelled from the University.

20. Advanced Standing

a. High School

Students from Nova Scotia Grade XII (or the equivalent) seeking advanced standing must forward their final transcript or certificate of marks to the Director of Admissions. A maximum of five credits can be awarded in respect of work completed in high school.

b. University and Post-Secondary Institutions

After an official transcript has been received by the Registrar, students transferring from other recognized universities or other post-secondary institutions to a degree program at Saint Mary's will be given advanced standing credit, if appropriate, by the Dean of the Faculty. To obtain a first baccalaureate degree or a diploma, they must fulfill all requirements for that degree or diploma and successfully complete a minimum of seven full courses (or the equivalent) at Saint Mary's, of which a minimum of three full courses (or the equivalent) must be in the students' major subject or area of concentration. In the case of students in an honors program, the minimum number of courses required at Saint Mary's is twelve, of which a minimum of eight full courses must be in the subject(s) of honors.

Notes:

(i) A request for advanced standing will not be considered after one year from the date of the students' first registration in a degree program at Saint Mary's.

(ii) Advanced standing will be given only for courses with satisfactory grades as required by the relevant Saint Mary's program. Grades of D or lower are not acceptable for undergraduate programs and grades of B- or lower for graduate programs.

(iii) Credit will not automatically be recognized for university courses completed more than ten (10) years prior to the students' return to university study. The Dean's assessment of the number of credits that students must complete to satisfy their degree requirements is final.

For further information on credit granted for work done prior to admission to Saint Mary's, see Admission Requirements.

21. Transfer Credit

a. While registered at Saint Mary's University students may be authorized by the appropriate Dean to take courses at another academic institution for transfer credit to a degree program at Saint Mary's. Students applying for such permission must provide the Registrar with a full description of the course(s) involved. The description from the academic calendar will suffice. The Registrar will notify the students of the Dean's decision and, if permission has been granted, will forward a Letter of Permission directly to the institution at which students are permitted to study. Students are responsible for completing the proper registration procedures at the designated institution. These procedures also apply to summer session courses.

b. The University will pay the tuition fee of full-time students who have been given permission to register in a credit course at another Halifax institution unless the course is an overload or summer session course, in which case the students must pay the fee directly to that institution.

c. In cases where the University has entered into a special arrangement with another educational institution for shared instruction in a particular program, the normal registration process (see section on Registration) will be followed.

d. In the case of correspondence courses, the normal procedures for transfer credits are to be followed. In addition, proof must be presented that the institution offering the correspondence course also recognizes it as a credit course.

e. Before transfer credit can be considered, students must have the university concerned send to the Registrar an official transcript of the work done.

f. For undergraduate programs, no transfer credit will be given for courses with grades of D (or the equivalent in numeric terms, namely 50-59). Students should also note that in some departments a grade of C or higher is required if the course is to be considered as part of the students' major. For graduate programs, no transfer credit will be given for courses with grades below B (or the equivalent).

g. Except under the above provisions, students may not register concurrently at Saint Mary's and at another academic institution. Should a student's concurrent registration be discovered, the University, on the advice of the Dean of the Faculty concerned, reserves the right not to grant the student any credit for a course or courses taken at another institution and to cancel that student's registration at Saint Mary's University.

22. Advanced Standing Credit by Examination

a. Students who have been admitted to Saint Mary's may obtain a limited number of credits in introductory (100 and 200) level courses by passing Advanced Standing Credit Examinations.

b. An Advanced Standing Credit Examination is given at the discretion of and administered by the department.

c. For a course with an accompanying laboratory, the department may require demonstration of appropriate laboratory skills as a prerequisite to taking the Advanced Standing Credit Examination.

d. Grading

(i) Advanced Standing Credit Examinations will be graded either P (pass) or F (fail).

(ii) Advanced Standing Credit Examination failures will not be recorded on students' transcripts.

(iii) If the Advanced Standing Credit Examination is passed, credit for the course will be recorded on the students' transcript along with an indication that credit was obtained by passing an Advanced Standing Credit Examination.

e. Conditions

(i) A request for Advanced Standing Credit Examinations will not be considered after one year from the date of the students' first registration in a degree program at Saint Mary's University.

(ii) The Advanced Standing Credit Examination for a given course may be taken only once.

(iii) Advanced Standing Credit Examination cannot be taken in courses for which the student has already received grades of AU, WF, or F.

(iv) Credits obtained from Advanced Standing Credit Examinations cannot be used to reduce a twenty-course program to less than a fifteen-course program or a twenty-five course program to less than a twenty-course program.

(v) Advanced Standing Credit Examination credits in excess of the above allowance will be entered as credits on the students' transcripts but will not be used to reduce the number of courses required for a degree.

f. Registration Procedures

Advanced Standing Credit Examinations are usually given three times a year. Dates and specific registration procedures may be obtained from the Registrar.

g. Fees

Information available from the Registrar.

23. Students Whose First Language is Not English

a. All students whose first language is not English or French are required to take the Saint Mary's Test of English Language Competence prior to their first year of study at Saint Mary's. Those who fail to achieve an acceptable score will be required to pass ESL 100.0 before being permitted to take a more advanced level course in English, i.e., Egl 200.0.

b. The Saint Mary's Test of English Language Competence is administered during the first week of any term or summer session in which ESL 100.0 is offered.

c. Students are strongly advised to take ESL 100.0 during the summer prior to their first year of study at Saint Mary's.

d. Students who are required to take ESL 100.0 and do not pass the course may be required by their Dean to withdraw from the University.

24. Requirements of Two Academic Programs (Dual Program)

If students are endeavouring to satisfy the requirements of two academic programs at the University, it may not be possible to satisfy the requirements of both these programs within the minimum number of credits stipulated for either or both of them. The two programs include, but are not limited to, dual degree programs; double major/ areas of concentration; major in one subject and honors in another; and degree and certificate programs such as the Criminology Certificate Program. Students are advised that they must meet the specific requirements of each portion of their academic program or programs in order to qualify for graduation. Also see registration regulation 6 below.

25. Second Undergraduate Degree

a. Students who hold a first baccalaureate degree from Saint Mary's University may earn a second baccalaureate degree in a different Faculty by completing all the requirements for that degree, as specified by the Dean of that Faculty. In so doing, they must obtain credit for at least five additional full courses (or the equivalent) and may not use the same major program or concentration to complete the requirements for both degrees. All of the courses required for the second baccalaureate degree must be taken at Saint Mary's.

b. Students who hold a first baccalaureate degree from a post-secondary institution other than Saint Mary's may obtain a second baccalaureate degree in a different Faculty by completing all of the requirements for that degree, as specified by the Dean of that Faculty. In so doing they must obtain credit for the minimum number of credits at Saint Mary's as stipulated in regulation 20-b and may not use the same major program or concentration to meet the requirements for both degrees. All of the courses required for a second baccalaureate degree must be taken at Saint Mary's.

c. All students who wish to register in a program leading to a second baccalaureate degree must complete the appropriate application in the Admissions Office at least three months prior to the term in which they expect to enter the second degree program. The admission of students who earned their first degree at a post-secondary institution other than Saint Mary's prior to September 1974 must be approved by the appropriate Dean, who may attach specific and binding conditions to the students' academic performance.

d. Students who wish to satisfy simultaneously the requirements for two baccalaureate degrees in the Faculties of Arts, Commerce, or Science may do so. Such students will formally declare their status as dual degree candidates by filling out the appropriate form in the Registrar's Office and having the form signed by each appropriate Dean. Prior to signing this form, each Dean will assess the students' university course work to date and inform the students in writing of other general requirements that must be completed in order to earn a degree within that Faculty. Specific program requirements should be discussed with the Chairperson of the department of the students' major. Dual degree students may receive both of their degrees at the same Convocation.

26. Honors Equivalency: Certificate of Honors Standing

a. The Certificate of Honors Standing was established by the University Senate to provide a means of granting appropriate recognition to those Saint Mary's graduates who did not follow the regular honors program of the University, but have subsequently completed all requirements for graduation in such a program, and having already received a degree, cannot have a second undergraduate degree in the same Faculty conferred upon them. To earn the Certificate of Honors Equivalency, students must complete all the requirements for the appropriate honors program.

b. Students who have earned a first undergraduate degree from another post-secondary institution are not eligible for the Certificate of Honors Equivalency but may enrol as upgrading students if they wish to take additional courses to qualify for admission to a Master's degree program.

27. Convocation Dates, Degrees and Diplomas

a. Students must file an Application for Graduation from a specific program with the Registrar by the dates stipulated in the University Calendar of Events and pay the graduation fee. This fee does not have to be paid when the application is filed. If, at the discretion of the Registrar, there are circumstances which warrant waiving the

stipulated deadline for graduation application, the student will be assessed twice the normal graduation fee or permitted to wait until the next Convocation in order to graduate. If during the course of the students' final academic year at the University, a change is made in the Faculty or in the type of program in which the student is enrolled (i.e., from honors to major), it will be necessary for the student to reapply for graduation, and the above-noted deadlines will apply as will the Registrar's discretionary authority.

b. Normally there are two Convocation exercises each year, in May and in October. Once all requirements are completed, students must graduate at the next Convocation.

c. Students are required to obtain the academic regalia appropriate to their academic program at the times, dates, and locations indicated in the Graduation Booklet which is mailed to all students who have filed an application for graduation and who qualify as potential graduates. This mailing occurs approximately the middle of March. It is the students' responsibility to ensure that they have received a copy of the publication.

Students will not be permitted to convocate if they are not attired in the academic regalia appropriate to their academic program at Saint Mary's University.

d. The parchment shows the degree which has been conferred but not the major area of concentration nor any distinction which may have been awarded. These, however, are noted in the students' official academic record and hence appear on any transcript issued, whether official or unofficial.

e. The University grants the following degrees:

Bachelor of Arts	B.A.
Bachelor of Science	B.Sc.
Bachelor of Commerce	B.Comm.
Bachelor of Education	B.Ed.
Bachelor of Education (Vocational Education)	B.Ed.(Voc.)
Bachelor of Education (in Association with The Nova Scotia Teachers College)	B.Ed.N.S.T.C.
Master of Arts	M.A.
Master of Business Administration	M.B.A.
Master of Education	M.Ed.
Master of Science	M.Sc.
Doctor of Civil Law, Honoris Causa	D.C.L.
Doctor of Laws, Honoris Causa	LL.D.
Doctor of Letters, Honoris Causa	D.Litt.
Doctor of Science, Honoris Causa	D.Sc.
Doctor of Commerce, Honoris Causa	D.Comm.

The University grants the following diplomas and certificates:

Diploma in Engineering	D.Egn.
Certificate of Honors Standing	-
Co-operative Education Certificate	-
Criminology Certificate	C.C.P.

f. Students whose accounts are in arrears may be denied the right to graduate until the debt is cleared.

28. Degree or Diploma in Absentia

Provided that candidates have officially notified the Registrar at least ten days in advance that they will not be present at Convocation, they may receive their degrees or diplomas in absentia. Failure to give such notification will result in a \$10.00 penalty which must be paid, in addition to the graduation fee, before the parchment will be mailed to them.

29. Distinctions

a. In the general undergraduate degree and diploma program, distinctions are awarded to successful candidates on the basis of the following quality point averages in respect of the courses specified in b. below.

Program:	Quality Point Average	Distinction: Diploma in
B.A., B.Sc., & B.Comm.		Engineering
summa cum laude	3.91-4.00	With greatest distinction
magna cum laude	3.76-3.90	With great distinction
cum laude	3.50-3.75	With distinction

b. The above quality point averages will be calculated on the basis of the highest grades attained in twelve full courses (or the equivalent) taken at Saint Mary's, including the last ten full courses in

the students' program. The only exceptions to this are (a) in the Diploma in Engineering program where the minimum number will be ten full courses (or the equivalent); or (b) when the student has earned the equivalent of 5.0 courses at Centre International d'Etudes Françaises (C.I.D.E.F.) de l'Université Catholique de l'Ouest, Angers, France; and other Exchange Programs which Saint Mary's University has entered into formally with non-Canadian post-secondary institutions. These include, but are not limited to, the University of Baghdad, Shandong Teachers University, Beijing Teachers College, the Nova Scotia/New England Exchange Program; and also the Université de Québec. Students who have taken fewer than twelve courses at Saint Mary's are not eligible for distinctions except as noted above for the Diploma in Engineering program and the Angers program.

c. No distinctions are awarded in the Bachelor of Education program, nor in graduate and certificate programs.

d. Students whose academic records contain a grade of F or WF will not be awarded a distinction except upon the recommendation of the appropriate Chairperson and Dean of the Faculty, and with the approval of Senate.

e. Bachelor's degree with Honors: A Bachelor's degree with Honors will be awarded with the distinction "First Class" when the cumulative quality point average for 17 full courses (or the equivalent) taken at Saint Mary's, including the last 15 in the student's program, is at least 3.60. Otherwise the Honors degree will be awarded without special distinction.

30. University Medals

At each Spring Convocation the following are presented:

a. Governor General's Gold and Silver Academic Medals

These medals are awarded annually to the graduate (gold) and the undergraduate (silver) deemed to be the top candidates at their respective levels of study.

b. Faculty and Division Medals

In the Faculties of Arts, Science, Commerce, and Education, and in the Division of Engineering, medals are awarded to the undergraduate students with the highest cumulative quality point average. Medals are also presented to the students with the highest cumulative quality point averages in the M.B.A., the M.A. (Education) and the M.Ed. graduate programs.

Notes:

(a) The cumulative quality point averages will be calculated on the same basis as that for determining distinctions (see academic regulation 28). In the case of a tie, Senate will determine the recipient of the medal.

(b) Students who graduate at Fall Convocation will be considered for medals at the next Spring Convocation.

c. The Reverend William A. Stewart, S.J., Medal for Teaching. The Alumni Association, with the cooperation of the Faculty Union and the Students' Representative Council, established the awarding of the Reverend William A. Stewart, S.J., Medal for Teaching in 1983. This award is open to faculty members who have made an extraordinary contribution to the education of Saint Mary's students through teaching in the Saint Mary's tradition of quality undergraduate education. Nominations are invited from alumni, students, and faculty members. This medal is presented at Convocation together with a cheque for \$1,000. Previous winners of this prestigious award are:

- 1983 Professor David Hope (Accounting)
- 1984 Professor Dermot Mulrooney (Engineering)
- 1985 Dr. David Pernier (Sociology)
- 1986 Dr. John Young (Chemistry)
- 1987 Professor E. McBride (Political Science)
- 1988 Dr. Jack Ginsburg (Chemistry)
- 1989 Dr. Peter March (Philosophy)
- 1990 Dr. Andrew Seaman (English)
- 1991 Dr. Phil Street (Psychology)

d. President's Award for Excellence in Research

This annual award, established in 1989, will honor outstanding research conducted by a full-time faculty member who has been employed at the University for at least three years. Presentation of the award will take place at Spring Convocation. A detailed nomination procedure has been delineated whereby each Dean of Faculty may select one member of his faculty who has been nominated by the 15th October, and whose candidacy he is prepared

to support. Other sponsors must be researchers, at least two of whom must be from outside Saint Mary's University. The award is adjudicated by the Senate Research Committee, which has the authority to decide which nominee, if any, is deserving of the award. The selection criteria consists of two component parts, namely productivity, whereby the nominee must have a record of continued exceptional contribution to research/scholarship, and secondly, recognition. The nominee must have attained national or international recognition as an authority in a major field of knowledge. The President's Award for Excellence in Research consists of a framed certificate presented at Convocation together with a cheque for \$1,000. Previous winners of this significant award are:

- 1989 Dr. George Mitchell (Astronomy)
- 1990 Dr. John Chadwick-Jones (Psychology)
- 1991 Dr. John Reid (History/Atlantic Canada Studies)

31. Dean's List for Undergraduate Programs

a. At the end of the academic year, full-time students whose quality point average indicates high academic achievement will be placed on the Dean's List. To qualify for this recognition, students must have taken at least five courses (or the equivalent) during that academic year and have achieved a quality point average of 3.50 or higher.

b. For part-time students to qualify for placement on the Dean's List, they must have taken and completed at least five full courses (or equivalent) while registered as a part-time student as defined in academic regulation 1-a. They must have achieved a minimum quality point average of 3.50 on these courses. A minimum of five of these courses must be from Saint Mary's University. After a part-time student has been placed on the Dean's List, they must take at least five additional courses to qualify again for placement on the Dean's List. Placement on the Dean's List will be assessed at the end of each academic year and recorded on students' transcripts. Because the Student Information System cannot easily identify those students who qualify for placement on the Dean's List under this part-time criteria, students must apply for placement on the Dean's List. Application forms are available from the Registrar's Office and can only be filed after final marks have been processed and officially received by the student.

32. Transcripts

a. Students' transcripts of records are privileged information and to that end will not be released by the Registrar to those outside the University without the prior written permission of the students.

b. To request a transcript students must complete the appropriate form obtainable from the Registrar or forward a letter of request to the Records Office. It is not possible to accept a transcript request

over the telephone. Transcript requests are processed strictly in the order in which they are received. Although the normal processing time for both official and unofficial transcripts is approximately ten working days, additional time will be needed at peak periods of the year. Transcripts include the following information:

- (i) Faculty, program and area of concentration;
 - (ii) advanced standing credits;
 - (iii) grades (failing as well as passing) in respect of all academic work attempted while registered at Saint Mary's.
- c. Where appropriate reference is also made to:
- (i) placement on, and removal of, academic probation;
 - (ii) requirement to withdraw for academic weakness, or for disciplinary reasons;
 - (iii) distinctions and scholarships, including placement on the Dean's List.

d. The cost is \$2.00 for the first copy of the transcript and \$1.00 for each copy made at the same time. Official transcripts are those forwarded directly from the Registrar's Office to an official third party. If detailed course descriptions are also required, there will be an additional fee of \$1.00 per description. Students whose accounts are in arrears will be denied transcripts until the debt is cleared.

e. Upon prepayment, the University is prepared either to fax a transcript, which has been ordered in the official manner, or to forward it by courier. Students are advised to check beforehand with the receiving institution to ensure that a transcript received by fax will be acceptable. The prepaid fees for faxing a transcript are: \$7.00 - Halifax metropolitan area (including Bedford); \$10.00 - elsewhere in Canada; and \$20.00 - outside of Canada.

f. While the University takes every reasonable precaution to ensure the confidentiality of student records, students should be aware that the University is connected to a number of external electronic systems.

33. Plagiarism

Plagiarism is a serious academic offence and will result in penalties being imposed, including the strong possibility of dismissal from the University. Intentional plagiarism is academic theft. It consists in taking the work of others and presenting it as your own. Accidental plagiarism is simply bad paraphrasing or careless documentation. Learn to paraphrase correctly and to acknowledge your sources.

Registration

1. Procedures

Registration procedures are the responsibility of the Registrar and will be made known to students, instructors and administrators in the official Registration Booklet, published annually in mid-July.

2. Registration in August (formerly "Early Registration")

Registration takes place during the month of August on the dates and at the times noted in the Calendar of Events of this Academic Calendar.

This involves (a) the selection and approval by the appropriate authorities of students' courses for the coming academic year; and (b) the payment of tuition fees as duly promulgated by the University. Those who register in August are required to make satisfactory arrangements with the Business Office no later than 30 September in respect of any remaining tuition fees.

Students may also complete their registration by mail during the first two weeks of August.

3. Registration in September (formerly "Regular Registration")

The dates and times for registration in September are given in the Calendar of Events.

4. Late Registration

On payment of the stipulated late fee, students may register after the final day of registration in September but before the expiration of the time limits specified in academic regulation 13-b. Students are strongly encouraged not to leave their registration until this timeframe because of the extremely limited range of course selections.

5. Changes to Registration

In addition to having completed initial procedures, registration also consists of maintaining the accuracy of one's record by properly completing and filing "Change of Registration" forms for such items as changes in course and/or section numbers, address, telephone, name, and application for graduation. Only students can initiate these changes; only the Registrar can officially register these changes. Changes made in any other way, formally or informally, or solely by arrangement with an instructor, are not honored.

6. Registration in Dual Degree Programs

Students are advised that if they are concurrently registered for either two degrees in a dual degree program or registered for a degree and a certificate and/or diploma, and graduate with only one of these qualifications, they are assumed to have discontinued the second program.

To reactivate their status, the student must complete a data sheet in advance of registering for any additional courses. Students are strongly advised to reactivate their status at least four (4) weeks before they undertake any registration procedures.

7. Alterations in Timetable

The University reserves the right to change the times and the instructor(s) of a course from those advertised in the official timetable which is published annually in mid-July.

8. Cancellation of Courses

If the number of students registered for a course is insufficient to warrant being offered, that course may be cancelled by the Dean of the Faculty. Other circumstances may also require the cancellation of a course or a section of a course by the Dean of the Faculty.

9. Addresses

During the academic year, all communications mailed to students are sent to local addresses. Therefore students are urged to keep their addresses up-to-date in the Registrar's Office. During the summer months, communications are normally sent to the students' permanent addresses unless the student has filed an alternate address card with the Registrar by the advertised deadline.

10. Identification Cards

At the time of first registration, students are required to purchase an I.D. card at a cost of \$5.00. This card is issued upon presentation of the Registration Form duly signed by the University cashier. It provides the student with a University identification which can be required for the writing of examinations and tests. (Reference: academic regulation 8-f above.) The card also serves as a Library card, allows access to The Tower (Fitness and Recreation Centre), and enables students to obtain discounts from some local business establishments.

Each subsequent year I.D. cards are validated during registration. There is no charge for validation. A replacement card costing \$10.00 for lost or damaged cards will be issued with a photocopy of the registration form or with a form stamped "I.D. Issued". No cards will be issued without a registration form.

Students who have not received their I.D. card by September 30 can obtain one at the Library.

Section 3

Faculties and Programs

- Arts
- Commerce
- Science
- Engineering
- Education
- Masters
- Special Programs
- Pre-Professional

(The following table contains extremely faint and illegible text, likely representing a directory of faculty and programs. The content is not transcribable due to low contrast and blurriness.)

Faculty of Arts

Dr. Michael J. Larsen, Dean
Dr. Donald J. Naulls, Associate Dean

General Information

The Faculty of Arts offers programs of study leading to the degrees of Bachelor of Arts, Bachelor of Arts (Honors), and Master of Arts. The last of these is at present available in Atlantic Canada Studies, History, International Development Studies, and Philosophy.

The primary purpose of the ordinary B.A. program is to provide a sound basic education in the liberal arts, combined with a study in some depth in at least one subject or other area of concentration. The honors program is designed for students of above-average ability, especially for those who intend to proceed to graduate work or who seek a professional career in the area of the honors subject or subjects. It requires greater specialization, and a higher level of performance, than the ordinary B.A. program, and includes courses specially designed for honors students.

Proficiency in English

All candidates for the Bachelor's degree are expected to be able to express themselves clearly and cogently in the English language. To this end, instructors in all subjects attach great importance to clarity of expression and to the capacity to sustain a coherent argument (as well, of course, as to substance and relevance) in assessing written work. Students who are deficient in this area are therefore strongly advised to take immediate steps to remedy that deficiency, and in particular to use the compulsory courses in English to maximum advantage. Otherwise, however industrious they may be, and however extensive their knowledge, they may have difficulty in accumulating sufficiently high grades to qualify for graduation.

In a nation that is officially bilingual it should be unnecessary to point out the added advantage of acquiring a working knowledge of the French language.

Although the time required for study and review will vary from course to course, students should expect to devote a total of nine hours per course per week (including class periods and private study). Normally this will mean spending about two hours of private study time for each hour of class time. Term papers and lab exercises may require additional time. Students should note that some professors may include class attendance in their course grading scheme.

Requirements for the Degree of Bachelor of Arts

Summary of Requirements for a Bachelor of Arts Degree

- (1) Courses required: 20.0 (see Arts regulation 1)
- (2) Arts courses required: 12.0 (see Arts regulation 1)
- (3) 300 level Arts courses required: 8.0 (see Arts regulation 1)
- (4) General Arts requirements: 5.0 (see Arts regulation 3)
- (5) Major courses required: 6.0-8.0 (see Arts regulations 4 and 5 plus departmental requirements)
- (6) Cumulative quality point average for major: 2.00 (see Arts regulation 7 plus departmental requirements)
- (7) Cumulative quality point average for graduation: 1.50 [see academic regulation 7-c(ii)]

1. Subject to the regulations set forth in this Calendar, candidates for the Bachelor of Arts degree must complete the equivalent of 20 full courses including any advanced standing credits for which they may qualify (see academic regulation 20). The specific length of a program is determined by the quality and extent of the student's academic preparation prior to admission to Saint Mary's. For example, students who have successfully completed English and at least four other academic subjects in Nova Scotia Grade XII with marks of 65 or better are admitted to a 15 credit program. Whatever the length of a program, a student must complete a minimum of 12 full courses in recognized Arts subjects, of which a minimum of eight must be at the 300 level or above.

2. During the regular academic year, a full-time student will normally take the equivalent of five full courses. In exceptional circumstances, students with a quality point average of at least 3.00 in the previous year of full-time study may, at the discretion of the Dean, be permitted to take a sixth course.

3. Each candidate must receive credit for:

a. English 201.1(.2) and 202.1(.2) or, at the discretion of the Chairperson of the English Department, an alternative full course in English.

b. the equivalent of one full course in one of the following subjects:

Philosophy 200 (Basic Logic) (No other philosophy course satisfies this requirement.)

or mathematics

or a language other than English

or a natural science (except psychology);

c. the equivalent of one full course from among the remaining humanities (classics, history, philosophy other than Philosophy 200, and religious studies);

d. the equivalent of one full course in at least two of the following social sciences: anthropology, economics, geography, political science, psychology, and sociology.

Full-time students must attempt to fulfill these requirements in their first year. It is hoped that they will thereby be introduced to the basic skills required for university study, and be exposed at the introductory level to a variety of disciplines. Students with special interests can, with the Dean's permission, fulfill some of these in their second year. Credits for Grade XII work may not be used in fulfillment of any of these requirements.

4. Not later than the beginning of the junior year, candidates must declare the particular subjects in which they wish to major, or alternative areas of concentration. The following are recognized as Arts subjects in which it is possible to major: anthropology, classics, economics, English, French, geography, German, history, Latin, mathematics, philosophy, political science, psychology, religious studies, sociology and Spanish. In addition, Asian Studies, Atlantic Canada Studies, International Development Studies (for details consult the Program Coordinator), and Women's Studies are four areas of concentration which are formally organized; and alternative areas, tailored to the needs and interests of particular students, may be devised and approved by the Dean of the Faculty. Once major subjects or areas of concentration have been declared, candidates' programs must be approved annually and supervised by the departments in which they are majoring or by the persons responsible for their areas of concentration. While a subsequent change of major subject or area of concentration is possible, students are advised that such a change may necessitate additional courses in order to meet graduation requirements. The regulations governing the major program will be those in effect at the time of declaration of the major.

5. In addition to satisfying requirement 3, each candidate must receive credit for the equivalent of not fewer than six full university courses in the subject of the major or in the chosen area of concentration; but may count among these six any relevant course or courses taken in fulfillment of requirement 3. Not fewer than four of the six courses must be at the 300 level or above. No department may require more than the equivalent of eight full courses in the major subject.

6. Within the limits imposed by these regulations, any candidate may count towards his B.A. degree the equivalent of up to three full courses from outside the range of recognized Arts subjects as specified in requirement 4. The Dean of the Faculty may authorize an extension of this upper limit to meet special program requirements or where there are sound academic reasons for doing so.

Students registered in the Faculty of Arts should note that certain course offerings in the Faculty of Commerce are acceptable as Arts credits. These are Msc 205.1(.2); Msc 206.1(.2); Msc 207.1(.2); and Msc 325.1(.2). Other Commerce (also Science and Education) courses to a maximum of 3.0 may be taken in a Bachelor of Arts program but they cannot be counted as Arts courses.

7. In order to have major subjects or areas of concentration formally entered upon their records, candidates must have maintained a cumulative quality point average of 2.00 (or an average grade of C) in the courses specified in requirement 5, and must have fulfilled any additional requirements specified by their departments or

areas of concentration. Candidates who fail to achieve this average may, provided that they fulfil all other requirements, graduate as non-majors.

8. Candidates have the option of declaring minor fields in addition to major ones. To satisfy the requirements for a minor they must receive credit for at least four full courses in that particular subject or area of concentration, and at least two of these courses must be at the 300 level or above. For more specific departmental requirements, consult the departmental statements in Section 5 of the Calendar.

9. It is also possible to declare a double major, in which case the candidate must fulfil both Faculty and departmental requirements in respect of each of the subjects declared. In some cases this may not be possible without exceeding the total number of courses normally required for graduation; but the Dean, with the approval of the appropriate departmental chairpersons, may reduce these requirements in the light of a student's overall record.

10. In conformity with academic regulation 7-c(i) students must achieve a minimum cumulative quality point average of 1.50 in order to qualify for graduation.

Requirements for the Degree of Bachelor of Arts - Honors

11. The Faculty of Arts offers honors programs in anthropology, Atlantic Canada Studies, Asian Studies, economics, English, geography, history, International Development Studies, mathematics, modern languages, philosophy, political science, psychology, religious studies, and sociology. It is also possible to take combined honors in any two of these subjects.

12. Admission Requirements

a. Normally after having taken at least three courses in the discipline, or in certain cases at the conclusion of their second university year, candidates should make application for admission to the honors program on the special form obtainable from the Registrar. They must obtain the approval of the chairperson of the appropriate department and of the Dean of the Faculty in which they are enrolled.

b. The normal prerequisite for honors is a cumulative quality point average of 3.00. Candidates, however, will be assessed on the basis of their overall academic record.

13. Requirements for Continuance In and for Graduation with Honors

a. Students must accumulate 25 full course credits or equivalent, including any advanced standing credits.

b. To continue in the program, students must achieve a yearly quality point average of 3.00.

c. To graduate, students must achieve a cumulative quality point average of 3.00.

d. Students must receive credit for not fewer than ten full courses or equivalent in the honors subject, of which eight must be at the 300 level or above. Each year the students' programs must have the approval of the chairperson of the department who may permit the substitution of up to two courses from a related subject area as part of the ten courses required.

e. In the courses presented to satisfy 13-d, students must have a quality point average of 3.00 with at least eight grades of B or higher and no grade lower than C (2.00).

14. Requirements for Graduation with Combined Honors

a. Candidates for a combined honors degree must receive credit for not fewer than seven full courses (or equivalent) in each of two honors subjects. At least ten of these courses must be at the 300 level or above, including a minimum of four in each subject. Each year, the students' programs must have the approval of the chairpersons of both departments involved.

b. To continue in the program, students must achieve a yearly quality point average of 3.00.

c. To graduate, students must achieve a cumulative quality point average of 3.00.

d. In the courses presented to satisfy 14-a, students must have a quality point average of 3.00 with at least eleven grades of B, and no grade lower than C (2.00).

15. Additional Requirements for Graduation with Honors and Combined Honors

Candidates for honors must complete the requirements for the Bachelor of Arts degree as outlined in the Calendar (see no. 3), and any additional requirements of the relevant department(s).

16. Candidates who fail to meet the requirements for an honors degree but who otherwise meet the requirements for the general degree, on application, should be awarded the general degree.

17. In addition to the overall quality point average noted in 13 above, every candidate for honors must have a quality point average of 3.00 in the honors subject or subjects, with not more than two grades of C, and no grade lower than C, in the same subject or subjects.

18. Co-operative Education Programs

The Faculty of Arts offers an optional co-operative education program in geography. Co-operative education is an innovative approach to university education which integrates academic classroom studies with related practical work experiences outside the formal university environment. The principle upon which this concept is based is that learning and individual development are greatly enhanced when the concepts studied in the classroom are periodically applied, tested and observed by the students in meaningful work situations. A "Co-operative Education" distinction is noted on the diplomas and academic records of students who successfully complete co-operative education requirements in addition to their regular degree requirements.

19. Admission Requirements for Co-operative Education Programs

a. Students may be considered for admission to a co-operative education program after completion of their tenth university credit (including any advanced standing credit they may have received).

b. Candidates should make application for admission to a co-operative education program on a special form obtainable from the Registrar. Students will be admitted to a co-operative education program on the basis of their formal academic achievement and interviews with the co-operative education coordinator of the appropriate department.

c. The normal prerequisite for admission to a co-operative education program in a regular Bachelor of Arts program is a cumulative quality point average of at least 2.50 and a grade point average of at least 3.00 in the course(s) of the student's major subject.

d. Candidates will be admitted to a co-operative education program on the basis of their interest, aptitude and assessed ability to combine successfully the academic requirements of a regular Arts program together with the special work-term requirements of the co-operative education program they wish to enter.

20. Requirements for Continuance In and Graduation from a Co-operative Education Program

a. Students must complete all of the regular requirements for a Bachelor of Arts degree (see regulations 1 through 10 above). Since individual programs may have specific additional requirements for co-operative education students, students should consult the appropriate departmental section of this Calendar for a description of these regulations.

b. Students must complete five additional half course credits as specified by the department of their major. These courses comprise the academic core of the co-operative education program, and are normally taken during the period following the student's first, and prior to the student's last work term. There are a number of approved co-operative education core courses which relate academic studies to practical working experience which can be taken to fulfil this regulation.

c. In addition to the above requirements, students must complete three work-term experiences as specified by the department of their major program (see regulation 21 below and departmental co-operative education regulations).

d. To continue in and graduate from a co-operative education program, students must earn a yearly quality point average of at least 2.50 with a grade point average of at least 3.00 in courses of their major subjects.

21. Policies and Regulations Governing Co-operative Education Work Terms

a. The University will make every effort to locate work-term positions for co-operative education students in academically related areas of employment, but cannot guarantee placements. Employment settings may also be identified by co-operative education students, but require the approval of the appropriate departmental co-operative education coordinator.

b. The satisfactory fulfilment of co-operative education work-terms requires:

(i) the completion of three terms of work experience in academically related, paid employment situations of 13 to 16 weeks duration. Under certain circumstances, and with the approval of the appropriate department, students may be permitted to satisfy their work term requirements in an unpaid position.

(ii) a satisfactory employer evaluation for each co-operative education work-term;

(iii) the satisfactory completion of a written report following each work-term detailing the student's work experience in accordance with departmental standard and expectations.

c. A notation will be included on the student's academic transcript following satisfactory completion of each work-term.

d. Graduating students who have successfully completed their co-operative work-term requirements will have this noted on their academic transcripts. If, in addition, all other normal academic requirements are fulfilled, a "Co-operative Education" notation will be printed on their diploma.

e. Students may be required to withdraw from a co-operative education program if:

(i) they are dismissed from, quit, or fail to accept an appropriate and approved co-operative work-term position;

(ii) they fail to submit or successfully complete a work-term report;

(iii) they do not maintain the required quality point average necessary for continuance in a co-operative education program;

(iv) in the judgement of their department, they are no longer suitable for the particular requirements of a co-operative education program.

f. Students who voluntarily withdraw from or who are required to withdraw from a co-operative education program, may remain enrolled in and continue with the major degree program offered by their department.

22. Co-operative education students will be expected to attend any special seminars or colloquia developed by the Faculty of Arts, or the co-operative education departments, which deal with employment orientation and the application of formal academic study to work experiences.

23. Fees for Co-operative Education

a. Students pay for their academic courses as they take them.

b. Students pay a fee equivalent to a half credit for a work-term they undertake. This amount is paid to the Business Office within one month of the start of the work-term.

Criminology Certificate Program

This program of six credits courses is designed to provide broad theoretical and practical foundations for persons who deal in their daily work with problems of delinquency, criminal behavior and the treatment of offenders.

While intended primarily for working officers in the police forces, in federal or provincial correctional services and custodial institutions, and for court workers, the program is open also to other interested persons.

Admission

Students must be enrolled in a degree program at Saint Mary's University or have completed an undergraduate degree. The Criminology Certificate Program requires a formal application for admission. Demonstrated academic ability or relevant work experience, and official approval of the Criminology Certificate Program Coordinator are prerequisites for admission to the program. To be eligible for the Criminology Certificate Program, a student without relevant work experience must have completed at least four

full courses (or half course equivalents), one of which must be Sociology 200.0, and have attained a minimum cumulative quality point average of 2.00. Once students are eligible they are urged to apply for the program. Required courses in the program should be taken after the student has officially been admitted. In cases where students already have completed one full course requirement (or half course equivalents) or less in the program, they may be admitted subject to their completing at least one additional full course (or half course equivalents) in the criminology field. Alternative program courses will be selected and approved by the Coordinator after consultation with the student. Normally, students who have completed more than 25% of the program courses will not be admitted. Transfer credits from other academic institutions are not accepted towards the Criminology Certificate Program. Students who have already completed an undergraduate degree may apply for the program. Applicants must submit a resume of relevant experience and official university transcripts.

Program Courses

The six courses totalling four full credits which comprise this program are: Sociology 201.1(.2); 202.1(.2); 203.1(.2); 204.1(.2); 303.0; and 315.0. Detailed descriptions of these courses are found in the Department of Sociology, Section 5 of this Calendar.

Requirements for Graduation

Students are encouraged to complete the program within six years. A minimum cumulative quality point of 2.00 in the Criminology Certificate Program courses is required. Students who have completed courses without being officially admitted to the Criminology Certificate Program will not be accredited.

Application

Students must apply for the program by completing the application form available from the Registrar. The completed form (along with supporting documents, where applicable) must be returned to the Registrar, who will submit the application for approval to the Coordinator of the Criminology Certificate Program. Because academic and relevant work experience are important criteria for admission to the program, students are advised that applications to the Criminology Certificate Program are processed on a competitive basis. The deadline for applications is June 1 for entry the following September.

A Minor in Image Studies

Pictures have always played an important part in interpreting human experience. They take a variety of forms from film to photograph, from woodcut to painting, from sculpture to drawing. This minor will offer students the opportunity to examine, from the critical perspective of several disciplines, the attributes of images and the cultural functions of images.

Students may declare a minor in Image Studies after consultation with the Dean of Arts (or designate).

A minor in Image Studies requires successful completion of four full courses (or half course equivalents) accredited in the Image Studies curriculum. Courses must be selected from at least three departments involved in the Image Studies Program. Prerequisites for courses in the Image Studies Program can be waived with the permission of the course instructor.

Courses in the Image Studies Minor

Ant 332.0	Anthropological Approaches to Folklore
Ant 390.0	Myth and Symbol
Cla 203.1(.2)	Art in Greece and the Ancient Near East
Cla 204.1(.2)	Art in Rome and Christian Europe to the 14th Century
Egl 313.0	Narrative in Fiction and Film
Egl 314.0	Film Criticism
His 366.0	Images and European History
Mkt 472.1(.2)	Advertising Management
Phi 320.0	Aesthetics: The Philosophy of Art
Phi 348.1	Aesthetics: The Work of Art, The Artist
Phi 349.2	Aesthetics: The Aesthetic Experience
Psy 436.1(.2)	Psychology of Art I
Psy 437.1(.2)	Psychology of Art II
Psy 445.0	The Psychology of the Unconscious
Rel 337.1(.2)	
[437.1(.2)]	Religion and Art in South Asia
Rel 338.1(.2)	
[448.1(.2)]	Religion and Art: The West.

Degree Program for Vocational School Teachers

- Vocational teachers may be admitted to the Bachelor of Arts program if they have completed:
 - eight years trade training and experience,
 - Grade XII or its equivalent,
 - the three-summer program at the New Brunswick School of Institute of Technology, or Nova Scotia Teachers College,
 - and three years successful teaching at a vocational high school or technical institute.
- Teachers so admitted may qualify for the Bachelor of Arts degree by completing a minimum of 12 credits in recognized Arts subjects and by completing all other degree requirements as specified in the above regulations.
- Vocational teachers who have successfully completed a Bachelor of Arts degree at Saint Mary's University may receive the degree of Bachelor of Education (Vocational) by successfully completing at Saint Mary's University three credits in Education which have been approved by the Dean of Education.
- Vocational teachers may proceed to the degrees of Bachelor of Education (Vocational) and Bachelor of Arts concurrently.

Dual Bachelor Degree Programs

Since it is possible to pursue two bachelor degrees from Saint Mary's University, students may desire to arrange their courses so as to obtain a bachelor degree in any two of the following three Faculties - Arts, Science, or Commerce.

While the total time required is somewhat longer, such dual degree programs are quite feasible. Students who contemplate pursuing any dual degree program should consult with the Deans of both Faculties before embarking on their program of study.

If a student opts to graduate after completing only one of the degree programs, and subsequently wishes to complete the second program, the requirements are those for a second undergraduate degree as stated in academic regulation 24.

Degree of Master of Arts in Atlantic Canada Studies

The general requirements for the Master's degree (Section 3 of this Calendar) apply to the graduate program in Atlantic Canada Studies (hereafter ACS).

Specifically, the Master's degree in Atlantic Canada Studies involves the following considerations and includes the following requirements:

- The normal qualification for entry into the one-year Master's program is an honors degree in Atlantic Canada Studies, or a degree which the Atlantic Canada Studies Committee deems to be equivalent. At the discretion of the Committee, a candidate may be admitted to the program subject to the prior completion of such qualifying work as the Committee shall prescribe.
- The ACS Coordinator will work with all Master's candidates from the earliest stages of their participation in the graduate program to determine the area of a thesis topic and to select a thesis supervisor. The thesis supervisor will be the Graduate Faculty Advisor for the duration of a given candidate's participation in the program.
- All candidates for the M.A. in ACS must complete an acceptable thesis. It is not possible to satisfy the requirement for a thesis by means of extra course work.
- Candidates are expected to produce a thesis which shows both originality and the analytical-critical skills of sound research and interpretation. The topic must deal directly with an Atlantic Canada subject matter.
- All candidates must present and defend a thesis proposal and ultimately a thesis, before a Thesis Examining Committee. This Committee consists of a thesis supervisor, the ACS Graduate Studies Coordinator (or appointee), and a third reader acceptable to the thesis supervisor and the ACS Committee.
- In addition to the thesis, candidates must complete four courses at the 600 level approved for the ACS graduate program. Two of these courses must be selected from the following ACS seminars:

ACS 620.0	The Atlantic Canada Culture Seminar
ACS 630.0	Seminar on Atlantic Canada Ecology and Resources
ACS 640.0	Atlantic Canada Political Economy Seminar
ACS 660.0	History and Society: The Atlantic Provinces Seminar

7. All candidates, as part of their four-course program, must complete ACS 690.0. Credit for the course will be determined when the candidate satisfies the thesis supervisor that both thesis research and all other preparation for the successful handling of the thesis topic have been completed. Supervisors may require a demonstration of language competence or extra course work as preparation for the treatment of certain thesis topics.

Degree of Master of Arts In History

The University's general requirements for admission to graduate studies and for the Master's degree apply to the Department of History. Applicants for admission to the graduate program in History must submit a succinct statement of their anticipated field of study and anticipated choice of a thesis topic. The particular requirements of the department, which include a thesis as well as course work, are as follows:

- Candidates with a general B.A. must satisfy the course requirements of the honors program in History or its equivalent before entering a one-year Master's program. They must then complete three additional history courses at the 500 or 600 level, and History 690.0. The program of each candidate must be approved by the department.
- After a review of a candidate's progress at the end of the first term, the department may recommend to the Dean that the student be required to withdraw from the program.
- The candidate will be required to demonstrate a reading knowledge of at least one language other than English. French is required of candidates intending to write a thesis on any aspect of Canadian history.
- The subject of the thesis must be decided in consultation with the thesis advisor.
- Before presenting a thesis, the student must pass an oral, comprehensive examination in both a major and a minor field. Upon completion of the thesis, an oral defence will be required. Two months prior to this defence, the candidate will be invited to select an examination board subject to the approval of the Department of History. While the department will make every attempt to meet individual requests, it cannot guarantee full compliance. No student may enrol in a course at the 600 level without the permission of the department.

Degree of Master of Arts in International Development Studies

The general requirements for the Master's degree (Section 3 of this Calendar) apply to the graduate program in International Development Studies (IDS). The specific requirements and conditions of the Master's degree in International Development Studies are as follows:

- Students who have earned an honors baccalaureate undergraduate degree with a major concentration in a discipline or a field of study related to international development qualify for admission into the two-year graduate program.
- Students who have earned an honors baccalaureate undergraduate degree (or its equivalent) with a minor concentration (four relevant courses) or practical experience in the field of international development may be exempted from one to a maximum of three courses listed for the first year of the two-year graduate program.
- Students who have earned an honors baccalaureate undergraduate degree with a major concentration in international development (or its equivalent) may be admitted directly into the second year of the two-year graduate program.
- A minimum average of B (or equivalent) is required for graduation.
- Applicants must submit academic transcripts; a statement that specifies areas of preparation and interest; and two letters of

recommendation from individuals who can attest to their academic or professional competence and/or interest in pursuing graduate training in international development.

6. A minimum score of 550 on the TOEFL is required of all international applicants whose native language is not English and whose undergraduate education was conducted in a language other than English.
7. The Graduate Committee of the IDS program will review the files of all applicants and determine final admission into the program.
8. Candidates for the Master's degree must complete and receive credit for the following course programs:

Year One

- a. IDS 510.0 Seminar in International Development and IDS 530.1(.2) Contemporary Development Planning
- b. Two of: IDS 520.1(.2) Methodology of Research and Analysis
IDS 540.1(.2) to 545.1(.2) Topics in International Development;
- c. One of: IDS 560.1(.2) Field Research Project;
IDS 550.1(.2) to 555.1(.2) Directed Readings in International Development.
- d. A minimum of three cognate courses (the equivalent of two full or half course equivalents) chosen from an approved list in consultation with the Program Coordinator (e.g., economics, history, etc.)

Year Two

- a. IDS 600.0 Development in a Global Context and IDS 610.1(.2) Problems in International Development
- b. One of: IDS 620.1(.2) Methodology of Research and Analysis;
IDS 630.1(.2) Contemporary Development Planning;
ECO 5250 Program and Project Evaluation (Dalhousie University);
ES 5020 Development and Environment Planning (Dalhousie University).
- c. One of: IDS 650.1(.2) to 655.1(.2) Directed Readings;
IDS 640.1(.2) to 645.1(.2) Special Topics in International Development;
IDS 660.1(.2) Field Research Project.
- d. A minimum of one cognate course (the equivalent of one full credit) chosen in consultation with the Program Coordinator from among an approved list.
- e. A thesis or practicum that shows analytical/critical skills of research/interpretation and that makes an original contribution to the field of international development.

Degree of Master of Arts in Philosophy

The University's general requirements for admission for graduate studies and for the Master's degree apply to the Department of Philosophy. The particular requirements of the department are as follows:

1. Candidates are normally required to have an honors degree in philosophy with at least second class standing (B average), or its equivalent. In some cases a candidate with a general B.A. or its equivalent may be admitted with the permission of the department. Such candidates will have to make up for background deficiencies. Some acquaintance with modern logic and the various sections of the history of philosophy is desirable for all candidates.
2. The degree can normally be taken in one year. Candidates with certain deficiencies in philosophical knowledge and education are asked to study for two years.
3. Candidates usually take four full courses in an academic year. Those enrolling in a two-year program may be asked to attend certain medium level courses in their first year. In addition to the regular courses listed in the Calendar, reading and tutorial classes can be arranged for those who require special or advanced instruction. (See Reading Courses in the Philosophy section of this Calendar.)
4. Every Master of Arts candidate is required to write a thesis which shows critical acumen as well as originality. Thesis research is closely supervised by one or two members of the department. Areas from which the topic of the thesis may be chosen include: ancient, medieval, and modern philosophy, metaphysics, philosophy of mind, epistemology, logic, philosophy of science, philosophy of man, philosophical analysis, philosophy of language, existentialism, phenomenology, ethics, and aesthetics.

Degree of Master of Arts in Sociology and Criminology

The general requirements for the Master's degree (Section 3 of this Calendar) apply to the graduate program in Sociology and Criminology. The specific requirements and conditions of the Master's degree in Sociology and Criminology are as follows.

1. Admission Requirements

- a. Students who have earned an honors B.A. degree with a major concentration in sociology or criminology may be admitted into the one-year graduate program.
- b. Students who have earned a B.A. degree in sociology, criminology, or other related disciplines may be admitted to a two-year graduate program, the first year of which would be equivalent to the honors program.
- c. Applicants must submit academic transcripts; a statement that specifies areas of preparation and interest; and three letters of recommendation from individuals who can attest to their academic or professional competence and/or interest in pursuing graduate training.
- d. A minimum score of 650 on the TOEFL or of 110 on the University of Michigan English Proficiency Test is required of all international applicants whose native language is not English and whose undergraduate education was conducted in a language other than English.
- e. The Graduate Committee of the Sociology and Criminology Department will review the files of all applicants and make final decisions about admission into the program.

2. Degree Requirements

- a. In addition to the requirements of the honors program, all candidates must receive credit for the following:
 - (i) Soc 601.0 - Social Justice and Social Change.
 - (ii) Either Soc 613.1(.2) - Advanced Criminological Theory or Soc 623.1(.2) - Theories of Social Development.
 - (iii) Soc 602.1(.2) or Soc 603.1(.2) or Soc 604.1(.2) - Research Methods.
 - (iv) The equivalent of one full course at the 600 level relevant to the student's area of concentration.
 - (v) Thesis Research - Soc 630.0. Candidates are expected to produce a thesis which shows both originality and the analytical/critical skills of research and interpretation. The thesis must be accepted by the students' Thesis Committee by May 1 if the degree is to be completed by the deadline stipulated for graduation that same year. The Thesis Committee will consist of a thesis supervisor and two members. All candidates must defend their thesis before an Examining Committee consisting of the Thesis Committee, the Graduate Studies Coordinator, and one outside reader chosen by the Thesis Committee in consultation with the Graduate Studies Coordinator and the student. The defense will be public.
- b. A minimum quality point average of B (or equivalent) is required for graduation.
- c. All degree requirements must be completed within five years of first registration in the program.

This program is subject to the approval of the Maritime Provinces Higher Education Commission.

Faculty of Commerce

Faculty of Commerce

Dr. Paul S. Dixon, Dean

Prof. David H. Bateman, Associate Dean

General Information

The Faculty of Commerce offers programs of study leading to the degrees of Bachelor of Commerce, Bachelor of Commerce (Honors) in Economics, as well as the Executive and Master of Business Administration. The purpose of these programs is to prepare students for meaningful careers in business and government.

The bachelor degree programs couple a broad educational foundation in English, mathematics and other basic arts and science subjects with the study of a common body of business and economic knowledge and the opportunity to attain an appropriate degree of specialized expertise in one or more of the major Commerce functional areas. These areas are accounting, data processing, economics, finance, management, management science, marketing, human resource management and industrial relations, and computing science and business administration.

Both the honors in economics and the general bachelor degree programs are of the same duration and require the same total number of courses. A cumulative quality point average of B (3.00) is needed for admission to, and continuation in, the honors in economics program. This program also requires completion of certain other specified courses including an honors project or thesis.

The Master of Business Administration program encompasses a common body of business and economic knowledge and advanced study in the following areas: accounting, economics, finance, management, management science and marketing.

Requirements for the Degree of Bachelor of Commerce

The following requirements apply to all entering Commerce students.

1. Bachelor of Commerce program consists of the equivalent of twenty full courses beyond Nova Scotia Grade XII (or equivalent) or a total of twenty-five full courses (or equivalent) for those entering from Nova Scotia Grade XI or otherwise not granted advanced standing.
2. In conformity with academic regulation 7-c(i) students must achieve a minimum cumulative quality point average of 1.50 in order to qualify for graduation.
3. During the regular academic year a full time student will normally take the equivalent of five full courses. (See academic regulation 1.)
4. Each candidate for the Bachelor of Commerce degree is required to successfully complete the courses listed below (credit value of each course is indicated in parenthesis after the course number). They are arranged by year as a guide to students in preparing their individual programs of study.
5. Students in the computing science and business administration major should refer to subsection j. for the recommended course sequence and all the program requirements for this major.

25.0 Course Program

Qualifying Year (first year of 25 credit program for students without advanced standing)

Mat 110.1(.2) (1/2)	Algebra
Mat 112.1(.2) (1/2)	Mathematics for Commerce and Social Sciences
Egl 201 (1/2)	English Composition
Egl 202 (1/2)	An Introduction to Literature (see note a. below)
Non-Commerce electives (3)	

In addition to the above courses, students admitted to the 25.0 course program are required to complete the program below.

30.0 Course Program

Freshman Year (first year of 20 credit program)

Msc 205 (1/2)	Introduction to Quantitative Methods for Commerce I (see note b. below)
Msc 206 (1/2)	Introduction to Quantitative Methods for Commerce II (see note b. below)
Mgt 281 (1/2)	Introduction to Business Management
Msc 325 (1/2)	Introduction to Computers
Eco 201 (1/2)	Principles of Economics: Micro
Eco 202 (1/2)	Principles of Economics: Macro

Egl 201 (1/2)	English Composition
Egl 202 (1/2)	An Introduction to Literature (see note a. below)
Non-Commerce elective (1) (see note c. below)	

Sophomore Year

Msc 207 (1/2)	Introductory Statistics for Commerce
Acc 241 (1/2)	Introductory Accounting I
Acc 242 (1/2)	Introductory Accounting II
Mkt 370 (1/2)	Introduction to Marketing
Mgt 383 (1/2)	Organizational Behavior I
Mgt 384 (1/2)	Organizational Behavior II
Cml 201 (1/2)	Legal Aspects of Business - Part I
Economics elective (1) (see note d. below)	
Com 293 (1/2)	Managerial Communications
or	
Egl 250 (1/2)	Business English

Junior Year

Acc 332 (1/2)	Planning and Control
Fin 360 (1/2)	Business Finance I
Fin 361 (1/2)	Business Finance II
Free elective (1) (see note e. below)	
Courses as listed for major (2 1/2) (see requirement 6)	

Senior Year

Mgt 489 (1/2)	Business Policy
Courses as listed for major (4 1/2) (see requirement 6)	

Notes:

- a. Egl 201.1(.2) and 202.1(.2) are required of all students, including those entering with advanced standing as a result of senior matriculation. Students on a 25 credit program should take Egl 201.1(.2) and 202.1(.2) in their qualifying year and substitute a non-Commerce elective for Egl 201.1(.2) and 202.1(.2) in their freshman year.
 - b. Nova Scotia Grade XII mathematics (or equivalent) is a prerequisite for Msc 205 and 206. In the event that students have not received advanced standing for Grade XII mathematics they are required to take Mat 110.1(.2) and 112.1(.2) as the equivalent of one of the non-Commerce or free electives, prior to taking Msc 205.1(.2) or Msc 206.1(.2).
 - c. All undergraduate Commerce students are required to successfully complete at least three (3) elective courses (or equivalent) offered outside of the Faculty of Commerce. At most, one of these may be at the 100 level.
- Non-Commerce courses taken in lieu of Commerce courses cannot be counted as non-Commerce electives.
- d. Economics students must take Eco 300 (1/2) and 301 (1/2). Other Commerce students may take one or both of these courses or any other two half courses in Economics for which they have the necessary prerequisites, except Eco 317 (1/2) or 322 (1/2).
 - e. A free elective may be chosen from any Faculty.

6. Students are also required to complete a major in accounting, business administration, economics, or computing science and business administration. Students wishing to apply for the computing science and business administration major should apply to the director of the joint program no later than the end of their freshman year. For other majors (i.e., accounting, business administration, and economics) students are expected to choose a major by the end of their sophomore year. At this time, business administration majors are also expected to choose their program (data processing, finance, management, management science, marketing, human resource management and industrial relations, or general business studies). The junior and senior year requirements are listed below by major and programs where applicable.

a. Accounting Major

Junior Year

Acc 323 (1/2)	Information Systems I
Acc 334 (1/2)	Cost Accounting
Acc 341 (1/2)	Intermediate Financial Accounting I
Acc 342 (1/2)	Intermediate Financial Accounting II
Acc 345 (1/2)	Financial Accounting Theory

Senior Year

Acc 455 (1/2) Accounting Seminar
 Accounting elective (1) - see note (i) below
 Non-Commerce electives (2)
 Free elective, 200 level or above (1) - see note (ii) below

Notes:

- (i) Msc 324 (1/2) may be used to partially satisfy this requirement.
 (ii) Crml 202 (1/2) is normally required by professional accounting associations.

b. Economics Major**Junior Year**

Eco 300 (1/2) Intermediate Microeconomic Theory I
 Eco 301 (1/2) Intermediate Macroeconomic Theory I
 One of Eco 306 (1/2), 310 (1/2), 312 (1/2), 315 (1/2), 323 (1/2), 406 (1/2), or 412 (1/2)

Humanities or language elective (1) [classics, history, philosophy (except Phi 200.0), religious studies, English, or modern languages]

Senior Year

Eco 304 (1/2) or 305 (1/2)
 Economics elective, 300 level or above (1)
 Social science (excluding economics) elective (1) [anthropology, geography, political science, sociology, or psychology]
 Free electives, 200 level or above (2)

Note: It is recommended that students planning to major in economics take Eco 300 (1/2) and 301 (1/2) in the sophomore year and defer one credit of economics electives to the junior year.

c. Business Administration Major (Data Processing Program)**Junior Year**

Acc 323 (1/2) Information System I
 Msc 324 (1/2) The Use of COBOL in Data Processing
 Msc 326 (1/2) Database Programming - see note below
 Non-Commerce elective (1)

Senior Year

Acc 425 (1/2) Management Information Systems II
 Mgt 483 (1/2) Interpersonal Behavior I or other Mgt elective approved by the Chairperson of the Department of Finance and Management Science
 Msc 424 (1/2) COBOL II
 Msc 426 (1/2) Computer Configurations
 Msc 436 (1/2) Advanced Topics in Business Computing
 Non-Commerce elective (1)
 Free elective, 200 level or above (1)

Note: Students registered in the data processing (DPM) concentration prior to 1991, can use Msc 331 to satisfy the Msc 326 requirement.

d. Business Administration Major (Finance Program)**Junior Year**

Commerce elective, 300 level or above (1)
 Non-Commerce elective (1)
 Free elective, 200 level or above (1/2)

Senior Year

Fin 463 (1/2) Financial Management
 Fin 464 (1/2) Corporation Finance
 Fin 466 (1/2) Investments
 Fin 467 (1/2) Portfolio Management
 Free electives, 200 level or above (1 1/2)
 Non-Commerce elective (1)

e. Business Administration Major (Management Program)**Junior Year**

Msc 316 (1/2) Management of Service Operations
 or
 Msc 317 (1/2) Management of Manufacturing Operations
 Accounting elective (1/2)
 Marketing elective (1)
 Commerce elective (1/2)

Senior Year

Mgt 385 (1/2) Human Resource Management
 Mgt 386 (1/2) Industrial Relations
 Mgt 481 (1/2) Organization Theory: Structure, Process, Analysis and Design
 Finance elective (1/2)
 Non-Commerce electives (2)
 Free elective, 200 level or above (1/2)

f. Business Administration Major (Management Science Program)**Junior Year**

Msc 301 (1/2) Operations Research - see note (i) below
 Msc 303 (1/2) Statistical Analysis for Business and Economics
 Msc 316 (1/2) Management of Service Operations
 or
 Msc 317 (1/2) Management of Manufacturing Operations
 Non-Commerce elective (1)

Senior Year

Free electives in a quantitative area (1 1/2) - see note (ii) below
 *Commerce elective in a non-quantitative area (1)
 Non-Commerce elective (1)
 Free elective, 200 level or above (1)

Notes:

- (i) Mat 445.0 may be taken in lieu of Msc 301 (1/2) and (1/2) non-Commerce elective.
 (ii) These electives must be selected in consultation with and approved by the student's Management Science advisor.

g. Business Administration Major (Marketing Program)**Junior Year**

Mkt 376 (1/2) Consumer Behavior
 Mkt 378 (1/2) Marketing Research
 Marketing elective (1/2)
 Non-Commerce elective (1)

Senior Year

Mkt 479 (1/2) Marketing Policy
 Marketing elective (1)
 Non-Commerce elective (1)
 Free electives, 200 level or above (2)

h. Business Administration Major (Human Resource Management and Industrial Relations Program)**Junior Year**

Mgt 385 (1/2) Human Resource Management
 Mgt 386 (1/2) Industrial Relations
 Eco 339 (1/2) Labor Economics
 Eco 340 (1/2) Human Resource Economics
 Free elective, 200 level or above (1/2) - see note below

Senior Year

Mgt 481 (1/2) Organization Theory: Structure, Process, Analysis and Design
 Mgt 483 (1/2) Interpersonal Behavior I
 Non-Commerce electives (2)
 Free electives, 200 level or above (1 1/2)

Note: If Eco 339 (1/2) and/or Eco 340 (1/2) were used to satisfy the required economics electives in the sophomore year, the number of free electives is increased to (1) or (1 1/2) as appropriate.

i. Business Administration Major (General Business Studies Program)**Junior Year**

Commerce electives, 300 level or above (1 1/2)
 Non-Commerce elective (1)

Senior Year

Commerce electives, 300 level or above (1 1/2)
 Non-Commerce elective (1)
 Free electives, 200 level or above (2)

j. Computing Science and Business Administration Major

For details on this program, please consult the "Computing Science and Business Administration" entry in Section 5 of this Calendar.
Note: Students already enrolled in the Commerce program who wish to major in computing science and business administration must apply to the director of the joint program for admission into this program. Normally, the minimum cumulative quality point average for transfer is 3.00.

General Requirements for the Degree of Bachelor of Commerce (Honors - Economics)**1. Admission Requirements**

- a. Minimum cumulative quality point average of at least 3.00 at the end of the sophomore year.
 b. Candidates must make application for admission to the honors program on the special form obtainable from the Registrar no later than the last day of registration at the beginning of their junior year. They must obtain the approval of the Chairperson of the Economics Department and of the Dean of Commerce.

Requirements for Continuance and Graduation

a. To continue in the program and to graduate, students must maintain a minimum cumulative quality point average of 3.00.

b. The specific course requirements of the program are:

Freshman Year

- * Msc 205 (1/2)
- * Msc 206 (1/2)
- Mgt 281 (1/2)
- Msc 325 (1/2)
- * Eco 201 (1/2)
- * Eco 202 (1/2)
- Egl 201/202
- Humanities elective (1)

Sophomore Year

- * Msc 207 (1/2)
- Acc 241 (1/2)
- Acc 242 (1/2)
- Mkt 370 (1/2)
- Mgt 383 (1/2)
- Mgt 384 (1/2)
- Cml 201 (1/2)
- Com 293 (1/2)
- * Eco 300 (1/2)
- * Eco 301 (1/2)

Junior Year

- Acc 332 (1/2)
- Fin 360 (1/2)
- Fin 361 (1/2)
- * Eco 302 (1/2)
- * Eco 303 (1/2)
- * Eco 304 (1/2)
- * Eco 305 (1/2)
- * One of Eco 306 (1/2), 312 (1/2), or 406 (1/2)
- Social science (excluding economics) elective (1)

Senior Year

- Mgt 489 (1/2)
- * Eco 309 (1/2)
- * Eco 591 (1)
- * One of Eco 440 (1/2) or 441 (1/2)
- Economics elective at 400 level or above (1/2)
- Economics electives (1 1/2)
- Free elective (1/2)

Note: With the permission of the Chairperson of the Department of Economics, another economic theory course may be substituted for Eco 304 or 305, but not both.

c. For courses marked with an asterisk (*), no grade below a C is acceptable and at least eight full credits, or equivalent, must have a grade of B or higher.

d. With the approval of the Chairperson of the Department of Economics, a student may be permitted to substitute up to two full courses, or equivalent, from a related subject, for junior and senior year required economics courses.

e. With the approval of the Chairperson, Department of Economics, a student may substitute one and a half (1 1/2) credits from the Department of Mathematics and Computing Science for Eco 302 (1/2), 303 (1/2), and 309 (1/2).

Dual Bachelor Degree Programs

Since it is possible to pursue two bachelor degrees from Saint Mary's University, students may desire to arrange their courses so as to obtain a bachelor degree in any two of the following three Faculties - Arts, Science, or Commerce.

While the total time required is somewhat longer, such dual degree programs are quite feasible. Students who contemplate pursuing any dual degree program should consult with the Deans of both Faculties before embarking on their program of study.

If a student opts to graduate after completing only one of the degree programs, and subsequently wishes to complete the second program, the requirements are those for a second undergraduate degree as stated in academic regulation 24.

Certified Management Accountants (CMA) Program

Saint Mary's University has entered into an official agreement with the Society of Management Accountants of Nova Scotia to offer all academic courses for the Certified Management Accountant (CMA) program. The courses are offered through evening classes on campus and through distance education.

The CMA Program includes the following academic courses:

Society Number	Saint Mary's Number	Saint Mary's Course Title
111	Acc 241.1(.2)	Introductory Accounting I
111	Acc 242.1(.2)	Introductory Accounting II
122	Cml 201.1(.2)	Legal Aspects of Business
123	Mgt 383.1(.2)	Organizational Behavior I
123	Mgt 384.1(.2)	Organizational Behaviour II
212	Eco 201.1(.2)	Principles of Economics: Micro
212	Eco 202.1(.2)	Principles of Economics: Macro
214	Msc 325.1(.2)	Introduction to Computers
229	Acc 341.1(.2)	Intermediate Financial Accounting I
241	Acc 332.1(.2)	Planning and Control
324	Acc 453.1(.2)	Taxation
332	Msc 207.1(.2)	Introductory Statistics for Commerce
339	Acc 342.1(.2)	Intermediate Financial Accounting II
341	Acc 334.1(.2)	Cost Accounting
441	Msc 301.1(.2)	Operations Research
442	Fin 360.1(.2)	Business Finance I
442	Fin 361.1(.2)	Business Finance II
451	Acc 323.1(.2)	Management Information Systems I
452	Acc 460.1(.2)	Internal/Operational Auditing
541	Acc 449.1(.2)	Management Control Systems
543	Acc 443.1(.2)	Advanced Financial Accounting: Corporate Accounting
553	Acc 470.1(.2)	Management Accounting Seminar

Upon successful completion of all courses (to successfully complete the program, a cumulative quality point average of 1.50 must be attained), the candidate will qualify to sit for the Professional Program Entrance Examination, Part 1. This examination represents a comprehensive testing of topics and their inter-relationships as expressed in the pre-professional syllabus of the Society of Management Accountants of Canada. Upon successful completion of these examinations, the student will then proceed to the professional program offered directly by the Society.

For a complete education and accreditation syllabus, please contact the Nova Scotia Society of Management Accountants, Atlantic Region, Box 42, Halifax, Nova Scotia B3J 3B7. Telephone: (902) 422-5836.

June 1 is the deadline for receipt of Saint Mary's University applications for CMA students wishing to begin courses in September; November 15 is the deadline for courses which begin in January.

For information concerning the CMA Program at Saint Mary's University, please contact the CMA Office at (902) 420-5527.

Executive Master of Business Administration (EMB)

Director

Dr. Hermann Schwind

The Program

The Executive MBA will be a four-semester program designed to meet the unique needs of both mid-career managers who have demonstrated the potential to reach senior management positions and senior managers who want to increase significantly their personal and organizational effectiveness. The Executive MBA will be structured as an integrative program that will enhance participants' ability to think across functional lines and understand better the "whole enterprise" in its global competitive situation.

Governance of Program

The program administration will be under the direction of the EMBA Director, reporting to the Dean of Commerce.

All program policies will be formulated and guided by an EMBA Council. This Council will consist of one member representing each of the departments in Commerce; the EMBA Director; a representative from the MBA Graduate Council; and representatives from the Alumni, the EMBA students, and industry.

In matters of course scheduling and required withdrawal of students, the EMBA Council will make the decisions and communicate these to appropriate administrative bodies through the EMBA Director. In the matter of recruiting, faculty members will be recommended to the Dean by the EMBA Council.

Each year the EMBA Council will constitute a subcommittee called the "Admissions Committee". This Committee shall have two EMBA Council members both of whom are instructors in the program at Saint Mary's and the EMBA Director. The Dean of Commerce may also opt to sit on this Admissions Committee.

An EMBA participant who fails in a course will be required to withdraw from the program. No course credit will be recognized for the other courses which the candidate has successfully completed.

An EMBA candidate who is required to withdraw may, after the lapse of one calendar year, seek re-admission. The application for re-admission shall be evaluated by the EMBA Council (and not the Admissions Committee alone). The Council may deny re-admission or re-admit subject to stipulated conditions. After a lapse of three years, credit for previous EMBA courses will not be recognized.

Qualifications for Admission

The EMBA Admissions Committee will consider an applicant's prior academic record, scores on the GMAT, military or work experience, extracurricular activities, letters of recommendation, and the written application. While each of these general criteria is important, the applicant's entire profile will be evaluated, where significant strengths in one area may help compensate for weaknesses in another.

Test scores and academic records will be evaluated as evidence of academic quality; however, the Admissions Committee will also look for personal qualities, such as leadership and motivation, which are important for success as a manager.

A written application, including a statement of the objectives of the candidate, and interview will be the basis of the Admissions Committee's decision. Applications will not be evaluated until the application is complete, including test scores. It will be the responsibility of the applicant to ensure that the application is complete.

In general, an applicant for admission to the Executive MBA Program will have:

1. substantial experience at the senior management level;
2. sponsorship by an employer who agrees to pay the fees and guarantees the involvement of the employer to facilitate successful completion of the program;
3. a bachelor's degree with high standing or equivalent qualification (in certain cases, consideration will be given to candidates who do not hold a bachelor's degree);
4. taken the Graduate Management Admissions test (GMAT), or its equivalent, such as the GRE;
5. two letters of reference from work-related or academic sources.

Upon acceptance, each student will be provided, as appropriate, with orientation materials designed to upgrade skills in Quantitative Methods, Computer Literacy and/or Appreciation of Financial Statements. Where necessary, courses will be run on campus prior to the commencement of classes, so that students are fully conversant in a computerized-learning environment and possess the quantitative skills expected.

Program Highlights

- A four-semester course of study leading to the degree of Master of Business Administration.
- Classes will meet on alternating weeks on Fridays and Saturdays during the academic year.
- Managerial experiences and practical backgrounds of participants will be utilized.

- A broad management view of various business and organizational problems will be provided.
- An understanding of economic, social, political, and environmental forces that affect the organization and influence managerial decisions will be developed.
- An exchange of information and insights will be encouraged among participants from diverse industries, organizations, functions and responsibilities.
- The sponsoring organization and its participating manager will be able to meet common educational goals without major disruptions of job assignments and home life.

Program Structure

The EMBA Program will consist of 16 modules of 26 hours each, over a four-semester period, or four modules totalling 104 hours in each semester. Classes will be held on alternating weeks on Fridays from 9:00 a.m. to 10:00 p.m. and Saturdays from 8:30 a.m. to 6:00 p.m. Eight subjects (see curriculum below) will be covered in the first year.

Year II of the program will follow the class schedule followed in Year I.

Curriculum

First Year: Required Courses

EMB 511.1(.2)	Managerial and Financial Accounting
EMB 512.1(.2)	Organizational Behavior and Theory
EMB 513.1(.2)	Marketing Management
EMB 514.1(.2)	Business Research Methods
EMB 521.1(.2)	Corporate Finance
EMB 522.1(.2)	Managerial Economics
EMB 523.1(.2)	Operations Management
EMB 524.1(.2)	Human Resource Management

Second Year: Required Courses

EMB 631.1(.2)	Management Information Systems
EMB 632.1(.2)	International Capital Markets
EMB 633.1(.2)	Policy I - Business Strategy
EMB 634.1(.2)	Business Research Project I
EMB 641.1(.2)	International Business
EMB 642.1(.2)	Policy II - Public Policy in Business
EMB 646.1(.2)	Business Research Project II
EMB 690.1(.2)	Seminar in Business Studies
EMB 691.1(.2)	Directed Study

Elective Courses

EMB 643.1(.2)	Industrial Relations
EMB 644.1(.2)	Financial Innovations
EMB 645.1(.2)	International Marketing

Summary: 15 required courses; 1 elective.

Graduate students should also refer to the material entitled "Master's Degree" which is found in Section 3 of this Calendar.

Detailed EMBA course descriptions are found in Section 5 of this Calendar.

Master of Business Administration (MBA)

Director

Dr. T. S. Chan

Program Objectives

The primary objective of the Master of Business Administration program is to provide an intellectual and social environment in which the students can discover how to develop potential for effective management. Both business and government are increasingly demanding that professional administrators possess specialist competence as a prerequisite for middle management employment, plus generalist competence from those who aspire to more senior management positions. The program at Saint Mary's University is designed to satisfy both these demands.

Since many MBA students can realistically expect to hold middle line or staff management positions before moving on to more senior levels later in their careers, the program is designed to satisfy short-term and long-term educational needs by providing:

- a. generalist concepts in anticipation of potential to succeed to more general and senior management positions later; and
- b. specialist concepts and techniques applicable to a particular line or staff area.

Qualifications for Admission

Admission to the program is open to students with a bachelor's degree from a recognized university, whose scholarly records indicate that they are capable of studying management and administration at the graduate level, and who obtain a satisfactory score in the GMAT.

Application Procedures

Applications for admission to the MBA Program should be made as early as possible. The normal deadline for the receipt of all application material is May 31, for entry the following September, except for overseas students whose applications and supporting documents must be received by April 1.

Application material and program information may be obtained by contacting the:

Director of Admissions
Saint Mary's University
Halifax, Nova Scotia
B3H 3C3

To be considered for admission, students will be required, where applicable, to submit the following to the Director of Admissions:

- a. completed application forms;
- b. an official transcript for all work previously undertaken;
- c. two letters of recommendation;
- d. GMAT results (Note: 0958 is the appropriate code for the MBA Program at Saint Mary's University);
- e. for overseas students whose native language is not English, a test in English (TOEFL);
- f. a non-returnable application fee of \$30.00.

Note: Enquiries regarding the status of an application for admission are to be addressed to the Director of Admissions.

Financial Aid

In addition to Canada Student and other loans, financial aid is available through University scholarships and assistantships. (See Section 6 for additional information.)

Registration Deposit

A non-refundable registration deposit of \$100.00 for full-time students and \$25.00 for part-time students is applicable to the MBA Program.

Part-Time Basis

The program is available on a part-time basis for students who wish to complete it in part, or whole, while remaining in full-time employment. At least two courses from each year of the program will be offered in evening classes each semester. Subject to satisfactory placement, courses will also be offered during the summer sessions. Consequently, students may complete the whole program on a part-time basis within four years.

Teaching Methodology

The program is neither discipline nor case oriented, but courses embrace combinations of lectures, case discussions, seminars, and assignments according to the requirements of the individual subjects. Since the Faculty has extensive business as well as academic experience, attention is focused on both the practical and the academic aspects of the materials covered during the program.

The Faculty believes that management education is essentially a process of personal development which must be student-centred. Therefore, to facilitate individual academic and management development throughout the program, a personal advisor is assigned to assist students to discover and develop their management potential.

Program Structure

Both generalist and specialist management education, as with medicine, ideally requires a blend of knowledge in the disciplines (the social and behavioral sciences and mathematics), and their applications to the functional areas of management. Therefore the first year of the program necessarily consists of foundation courses in both the basic disciplines and each of the functional areas of management. It also shows the students how the concepts and techniques developed by the basic disciplines are used to enhance managerial effectiveness.

Basic Disciplines

- Economics of the Enterprise
- Economics of the Enterprise Environment
- Management Science
- Computers in Business
- Organizational Behavior

Functional Areas

- Accounting - a. Financial
b. Managerial
- Managerial Finance
- Marketing Management

Year II

The second year of the program is designed such that the students maintain a broad managerial perspective, but can concentrate in a more specialized area. Students are required to take Mgt 689 (Strategic Management) and one of the Research Seminars (Acc 698, Eco 698, Fin 698, Mgt 698, Mkt 698, or Msc 698) and a Research Project (699 course) in the area corresponding to the 698 course as part of their second year program. In addition, students must take at least one second year course in Accounting, Finance, Management, Management Science, and Marketing; the 698 course may be used to satisfy this requirement for a 600 level elective in the corresponding area. Beyond this, students may have up to four second year courses (two credits) which are designated as free electives. Students may desire to maintain a broad perspective by taking these courses in four different areas or they may take these courses in one area in order to gain a more specialized knowledge.

Thus, the overall intention of this program is to ensure that students receive a broad business overview which provides an essential element of successful management. The program, however, is flexible enough to allow for concentrated knowledge through the judicious selection of free electives.

Program Summary

The overall course requirements for the MBA Program are summarized below:

First Year

Course	Credits
Eco 500	1/2
Eco 501	1/2
Msc 506	1/2
Msc 507	1/2
Msc 521	1/2
Acc 540	1/2
Acc 548	1/2
Fin 561	1/2
Mkt 571	1/2
Mgt 585	1/2
Mgt 586	1/2
	5 1/2

Second Year (See Note Below)

Course	Credits	Comments
Mgt 689	1/2	Required
— 698*	1/2	Required
— 699	1/2	Required
Acc 6xx	1/2	Acc elective
Fin 6xx	1/2	Fin elective
Mgt 6xx	1/2	Mgt elective
Mkt 6xx	1/2	Mkt elective
Msc 6xx	1/2	Msc elective
600 Level	2	Free electives

*This course may be used to satisfy the requirement for a 600 level elective in the corresponding area.

Note: The latter part of this Calendar section lists the departmental courses that can be used to satisfy this requirement.

Alternative Program

It is recognized that some students, particularly some of those enrolled in the program on a part-time basis, may already have substantial management experience and be aspiring towards general management positions soon after graduation. Such students could be offered the opportunity of following a General Management Program specifically suited to their needs. In their second year of studies, they would be required to complete the Management Research Project and Policy and Strategy Formulation course plus the equivalent of four and a half credits from the remainder of the second year program.

Advanced Standing

If students believe that through previous course work or practical experience they possess the knowledge embodied in any of the first year courses, they should contact the Director of the MBA Program. The Director may grant advanced standing on the basis of previous course work or waiver examinations, which are written in September.

Students will normally take these examinations prior to the commencement of their degree program. The successful completion of waiver examinations will result in the students receiving credits for those courses.

Listed below are the first year required courses, second year required courses, and second year elective courses. Students are referred to the appropriate departments for complete course descriptions and for individual course requirements.

First Year Required Courses

Eco 500.1(.2)	Economics of the Enterprise
Eco 501.1(.2)	Economics of the Enterprise Environment
Msc 506.1(.2)	Introductory Decision Analysis I
Msc 507.1(.2)	Introductory Decision Analysis II
Msc 521.1(.2)	Computers in Business
Acc 540.1(.2)	Financial Accounting
Acc 548.1(.2)	Managerial Accounting
Fin 561.1(.2)	Business Finance
Mkt 571.1(.2)	Marketing Management: An Overview
Mgt 585.1(.2)	Organizational Behavior I
Mgt 586.1(.2)	Organizational Behavior II

Second Year Required Courses

Mgt 689.1(.2)	Strategic Management
— 698.1(.2)	Research Seminar
— 699.1(.2)	Research Project

Each student is required to complete a project, normally on an in-company basis, involving the practical application of the concepts and techniques learned in a specialist area, under the direct supervision of a faculty member in that area.

Second Year Elective Courses (Listed by Department)

Accounting

Acc 626.1(.2)	Management Information Systems
Acc 641.1(.2)	Financial Reporting: Problems and Issues
Acc 648.1(.2)	Management Control Systems
Acc 657.1(.2)	International Accounting
Acc 690.1(.2)	Seminar in Accounting
Acc 692.1(.2)	Directed Study
Acc 698.1(.2)	Research Seminar
Acc 699.1(.2)	Research Project

Economics

Eco 600.1(.2)	Issues in Industrial Economics
Eco 690.1(.2)	Seminar in Economics
Eco 692.1(.2)	Directed Study
Eco 698.1(.2)	Research Seminar
Eco 699.1(.2)	Research Project

Finance

Fin 663.1(.2)	Financial Management
Fin 664.1(.2)	Corporate Financing
Fin 666.1(.2)	Capital Markets
Fin 667.1(.2)	Options, Futures, and Sway Markets
Fin 676.1(.2)	International Business Finance and Banking
Fin 690.1(.2)	Seminar in Finance
Fin 692.1(.2)	Directed Study
Fin 698.1(.2)	Research Seminar
Fin 699.1(.2)	Research Project

Management

Mgt 681.1(.2)	International Business Management
Mgt 682.1(.2)	Compensation Theory and Administration
Mgt 683.1(.2)	Management of Interpersonal Relations
Mgt 684.1(.2)	Management of Organizational Design and Development
Mgt 685.1(.2)	Strategic Human Resource Management
Mgt 686.1(.2)	Labor-Management Relations
Mgt 687.1(.2)	Small Business Opportunities
Mgt 688.1(.2)	Social Issues in Business
Mgt 690.1(.2)	Seminar in Management
Mgt 692.1(.2)	Directed Study
Mgt 695.1(.2)	Small Business Performance Improvement
Mgt 698.1(.2)	Research Seminar
Mgt 699.1(.2)	Research Project

Management Science

Msc 603.1(.2)	Statistical Applications in Management Science I
Msc 604.1(.2)	Statistical Applications in Management Science II
Msc 615.1(.2)	Operations Management
Msc 636.1(.2)	Data Processing Management

Msc 690.1(.2)	Seminar in Management Science
Msc 692.1(.2)	Directed Study
Msc 698.1(.2)	Research Seminar
Msc 699.1(.2)	Research Project

Marketing

Mkt 670.1(.2)	Ethical and Social Analysis in Marketing Decisions
Mkt 672.1(.2)	Marketing Communications: Planning and Strategy
Mkt 673.1(.2)	Marketing Distribution: Planning and Strategy
Mkt 675.1(.2)	Multinational Marketing
Mkt 676.1(.2)	Consumer Behavior: Decision-Making Applications
Mkt 677.1(.2)	Industrial Marketing Management
Mkt 678.1(.2)	Marketing Research
Mkt 679.1(.2)	Marketing Policy
Mkt 690.1(.2)	Seminar in Marketing
Mkt 692.1(.2)	Directed Study
Mkt 698.1(.2)	Research Seminar
Mkt 699.1(.2)	Research Project

MBA Professional Accounting Concentration

Co-operative Education Program

Program Objectives

Accounting major undergraduates typically enter one of three professional programs. The MBA concentration will provide accounting students with the opportunity to acquire an up-to-date understanding of this field of study and the technology surrounding it together with a cross section of modern management practices so critical to a long term career. Expectations are that students should write their professional certification examinations after one year of further professional experience and an examination preparation course tailored to the specific professional association of interest. The two co-op terms indicated as part of the program should permit graduates to receive commensurate professional exemption from their association's service requirements.

Negotiations are ongoing with the Institute of Chartered Accountants, the Society of Management Accountants and the Certified General Accountants Association to establish the nature of their service requirements. In addition, accreditation of the courses in the program is a matter that is under review by these groups.

Qualifications for Admission

Admission to this program will require satisfaction of normal MBA admission standards and satisfaction of the credit waiver requirements for 3 full credits as specified below; Acc 540 and 548, Eco 500 and 501, Fin 561 and one half credit from any of Mkt 571, Mgt 585, Mgt 586, Msc 506, 507, and 521. Notification of credits will be given with the notice of admission. Make-up courses will be necessary where credit requirements or prerequisite requirements to 600 level courses cannot be obtained on entrance.

Full-time Basis

The MBA Accounting Concentration program requires full time attendance for the five terms.

Program Structure

First term

Acc 650.1	Managerial Decision Analysis and Information	1/2 credit
Acc 658.1	Computer Based Auditing	1/2 credit
Mkt 678.1	Marketing Research	1/2 credit
Acc 668.1	Advanced Management Information Systems	1/2 credit
Elective:	Subject to departmental approval	1/2 credit
		2 1/2 credits

Second term

Co-op term - January to April 30	4 months
Acc 699.1(.2) Research Project	1/2 credit

Third term

Co-op term - May 15 to August 15	3 months
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Fourth term

Term - September to December		
Mgt 689.1	Strategic Management	1/2 credit
Mgt 686.1	Labour/Management Relations	1/2 credit
Acc 654.1	Advanced Financial Accounting Theory	1/2 credit
Fin 666.1	Capital Markets	1/2 credit

Acc 664.1 Advanced Taxation Legislation -
Corporate and Sales 1/2 credit
2 1/2 credits

Fifth term

Term - January to April

Acc 652.2	Integrative Managerial Accounting	1/2 credit
Acc 656.2	Integrative Financial Accounting	1/2 credit
Acc 660.2	Integrative Public Auditing	
or		
Acc 662.2	Integrative Internal Auditing	1/2 credit
Acc 666.2	Taxation and Financial Planning	1/2 credit
Mkt 679.2	Marketing Policy	1/2 credit
	Total	8 credits
	Credits on entrance	3 credits
	Total credits for program	11 credits

Note: Students entering this program of study and receiving credits will not automatically be able to transfer to the regular MBA Program without prior approvals.

Graduate students should also refer to the material entitled "Master's Degree" which is found in Section 3 of this Calendar.



Faculty of Science

Faculty of Science

Dr. Clive M. Elson, Dean
Dr. G. Hilliard, Co-op Liaison Officer

General Information

Students electing to pursue a program leading to the Bachelor of Science degree should consider which of three programs best suits their aspirations.

Honors

The honors program demands a minimum grade of C in all courses followed in the honors subject. This program involves an additional year of study and is designed primarily for students who wish to proceed to graduate work or who wish to obtain professional status in the area of the honors subject. Students of above-average ability are urged to make application to follow an honors program before the end of their sophomore program. Formal application for admission to an honors program must be made on a form available in the Registrar's Office. The form must be submitted by the student to the chairperson of the department concerned, and must receive the approval of the Dean of Science.

Major

The regular major program demands a minimum grade of C in all courses in the major subject. The program is designed to meet the needs of those students who wish to be employed in work related to the area of their major; it will be useful to those wishing to practice as technicians or technical officers. Additionally, this program permits students to prepare adequately for continued study at the graduate level, if warranted by performance and motivation.

General

The general program is designed to give a person a good educational background for life in today's technological world. It is of the same duration as the major program but broader in content. More emphasis is placed on the humanities and social sciences, recognizing that greater understanding of science in relation to society will be required of educated people in the days ahead. Students taking this program as preparation for entrance to professional schools are urged to place special emphasis on a high standard of performance from the beginning.

Requirements for the Degrees of Bachelor of Science

1. Subject to the regulations set forth in this Calendar, the candidate must complete the equivalent of 20 full courses following junior matriculation, or 15 full courses following senior matriculation. Not more than seven credits of the required twenty may be at the 100 level without the approval of the Dean of Science. All numbering is based on a 20-course program.

2. The candidate will normally take five full courses during the regular academic year.

3. Each candidate for the degree of Bachelor of Science must receive credit for:

- a. one university course in English, normally Egl 201.1(.2) and 202.1(.2);
- b. two courses in mathematics: Mat 110.1(.2)/111.1(.2) and one of 200.0 or 226.1/227.2;
- c. two courses in the humanities in addition to a. (The humanities herein intended are classics, English, history, modern languages, philosophy and religious studies.)
- d. in conformity with academic regulation 7-c(i) students must achieve a minimum cumulative quality point average of 1.50 in order to qualify for graduation.

Degree of Bachelor of Science - General

4. Each candidate for the general degree of Bachelor of Science shall, in addition to satisfying the requirements in Sections 1 to 3, receive credit for:

- a. not less than five or more than seven courses beyond the 100 level in one subject from biology, chemistry, geology, mathematics, physics, psychology. This subject shall be known as the "subject of concentration";
- b. four science courses not in the subject of concentration and in addition to the required mathematics or computing science courses;
- c. sufficient elective courses to complete the degree program.

Degree of Bachelor of Science - Major

Note: With the approval of the departments involved, a student may pursue a combined major program in any two science subjects.

5. Each candidate for the Bachelor of Science degree with a major shall, in addition to satisfying the requirements in Sections 1 to 3, receive credit for:

- a. not less than seven or more than nine courses beyond the 100 level in the major subject;
- b. four science courses not in the major subject and in addition to the required mathematics or computing science courses;
- c. sufficient elective courses to complete the degree program.

6. Each candidate for the Bachelor of Science degree with a combined major shall, in addition to satisfying the requirements in Sections 1 to 3, receive credit for:

- a. at least five full courses beyond the 100 level in each major subject;
- b. two science courses not in the major subjects and in addition to the required mathematics or computing science courses;
- c. sufficient electives to complete the degree program.

7. Each candidate for the Bachelor of Science degree with major in astrophysics shall, in addition to satisfying the requirements in Sections 1 to 3, receive credit for:

- a. at least six full courses in physics and three full courses in astronomy beyond the 100 level;
- b. two science courses not in the major subjects;
- c. sufficient electives to complete the degree program.

8. The candidate's program must be approved by the department(s) in which the major is taken and must satisfy any core programs specified by the department(s) and approved by the Faculty of Science. These requirements may be waived in special cases by the Dean of Science who may approve a special program for the candidate in consultation with the department(s) concerned.

9. Each candidate must obtain a grade of not less than C in every course in the major subject(s). A student obtaining a grade of less than C in any such course may be permitted to continue in the major program with the approval of the Dean of Science, acting in consultation with the department(s) concerned.

Degree of Bachelor of Science - Honors

10. An honors program can be taken in any of the following disciplines: biology, chemistry, geology, mathematics, physics or psychology; or as a combination of any two of these subjects. Students who plan to take an honors program must have the approval of the major department(s) and the Dean. Since the honors programs require the equivalent of five full courses more than the major programs, they normally require an additional year of study.

11. Each candidate for the Bachelor of Science degree with honors shall, in addition to satisfying the requirements in Section 3, receive credit for:

- a. The equivalent of 25 full courses following junior matriculation or 20 full courses following senior matriculation. Without the approval of the Dean, no more than seven credits of the required 25 may consist of Grade XII and 100 level courses. (See academic regulation 20-a);
- b. ten to 12 full courses beyond the 100 level in the honors subject or, in a combined program, 14 to 16 courses in the two honors subjects (at least six in each subject), or, in astrophysics, at least nine courses in physics and three in astronomy;
- c. four science courses not in the honors subject (two in a combined honors, three in astrophysics) in addition to the required mathematics or computing science courses;
- d. sufficient electives to complete the degree program.

12. The student's courses must be approved by the department(s) involved.

13. A candidate for the Bachelor of Science degree with honors must obtain a grade of not less than C (2.00 quality points) in every honors course described in Section 11-b and an average of not less than B in the same courses. A student receiving a mark of less than

Only in any honors course will be permitted to continue in the honors program only with the approval of the department.

The above Faculty requirements will apply to all students applying to enter an honors program from September 1979 and thereafter. Students registered in degree programs in effect prior to that date may elect to remain in their present degree programs or transfer to programs under the new requirements.

Bachelor of Science (Major in Computing Science and Business Administration)

For details on this program, please consult the "Computing Science and Business Administration" entry in Section 5 of this Calendar.

Co-operative Education Programs (Major and Honors)

The Faculty of Science offers co-operative education programs in biology, chemistry, geology, and computing science. Co-operative education is a dynamic approach to university education which integrates academic classroom studies with related practical work experiences outside the formal university environment. The principle upon which this concept is based is that learning and individual development are greatly enhanced when the concepts studied in the classroom are periodically applied, tested and observed by the students in meaningful work situations. Through this program, participating industries have an excellent opportunity to observe and influence the education of bright enthusiastic students. They also benefit from the access gained to university faculty and expertise, while university faculty and students become aware of the concerns of industry and the technical problems which they face. Dr. Grant Hilliard serves as the Liaison Officer for the co-operative education programs.

A "Co-operative Education" notation is entered on the parchments and academic transcripts of students who successfully complete co-operative education requirements in addition to their regular degree requirements.

Admission Requirements for Co-operative Education Programs

Entrance to the program is determined at the end of the first semester of the first year and will be based on the students' grades. Final decision on admission to the program will be at the end of the second semester.

Candidates should make application for admission to a co-operative education program on a special form obtainable from the Co-op Liaison Officer. Students will be admitted to a co-operative education program on the basis of their formal academic achievement and interviews with the co-operative education coordinator of the appropriate department.

The normal prerequisite for admission to a co-operative education program in a regular Bachelor of Science program is a cumulative quality point average of at least 2.50 and a quality point average of at least 3.00 in the course(s) of the student's major subject(s).

Candidates will be admitted to a co-operative education program on the basis of their interest, aptitude and assessed ability to combine successfully the academic requirements of a major or honors science program together with the special work term requirements of the co-operative education program they wish to enter.

Requirements for Continuance in and Graduation from a Co-operative Education Program

Students must complete all of the regular requirements for a Bachelor of Science degree (see regulations 1 through 13 above). Since individual programs may have specific additional requirements for co-operative education students, students should consult the appropriate departmental section of this Calendar for a description of these regulations.

In addition to the above requirements, students must complete four work term (five work terms for honors students) experiences as specified by the department of their major program (see regulations below and departmental co-operative education regulations).

To continue in and graduate from a co-operative education program, students must earn a yearly quality point average of at least 2.50 with a cumulative quality point average of at least 3.00 in courses of their major subjects.

Policies and Regulations Governing Co-operative Education Work Terms

a. The University will make every effort to locate work term positions for co-operative education students in academically related areas of employment, but cannot guarantee placements. Employment settings may also be identified by co-operative education students, but require the approval of the appropriate departmental co-operative education coordinator.

b. The satisfactory fulfilment of co-operative education work terms require:

(i) the completion of four (five for honors) terms of work experience in academically related, paid employment situations of 13 to 16 weeks duration. Under certain circumstances, and with the approval of the appropriate department, students may be permitted to satisfy their work terms requirements in an unpaid position.

(ii) a satisfactory employer evaluation for each co-operative education work term;

(iii) the satisfactory completion of a written report following each work term detailing the student's work experience in accordance with departmental standards and expectations.

c. A notation will be included on the student's academic transcript following satisfactory completion of each work term.

d. Graduating students who have successfully completed their co-operative work term requirements will have this noted on their academic transcripts. If, in addition, all other normal academic requirements are fulfilled, a "Co-operative Education" notation will be printed on their parchments.

e. Students may be required to withdraw from a co-operative education program if:

(i) they are dismissed from, quit, or fail to accept an appropriate and approved co-operative work term position;

(ii) they fail to submit or successfully complete a work term report;

(iii) they do not maintain the required quality point average necessary for continuance in a co-operative education program;

(iv) in the judgement of their department, they are no longer suited for the particular requirements of a co-operative education program.

f. Students who voluntarily withdraw from or who are required to withdraw from a co-operative education program may remain enrolled in and continue with the major or honors degree program offered by their department.

g. Co-operative education students will be expected to attend any special seminars or colloquia developed by the Faculty of Science, or the co-operative education departments, which deal with employment orientation and the application of formal academic study to work experiences.

Fees for Co-operative Education

a. Students pay for their academic courses as they take them.

b. Students pay a fee equivalent to a half credit for a work term they undertake. This amount is paid to the Business Office within one month of the start of the work term.

Dual Bachelor Degree Programs

Since it is possible to pursue two bachelor degrees from Saint Mary's University, students may desire to arrange their courses so as to obtain a bachelor degree in any two of the following three Faculties - Arts, Science, or Commerce.

While the total time required is somewhat longer, such dual degree programs are quite feasible. Students who contemplate pursuing any dual degree program should consult with the Deans of both Faculties before embarking on their program of study.

If a student opts to graduate after completing only one of the degree programs, and subsequently wishes to complete the second program, the requirements are those for a second undergraduate degree as stated in academic regulation 24.

Degree of Master of Science in Astronomy

Graduate students in Astronomy come with a diversity of university backgrounds. Indeed, some have previously had no undergraduate courses in astronomy though obviously some exposure to such courses is desirable. (Saint Mary's students can consider Ast 202.0, 401.1 and 402.2.) Students who are interested in entering the program should write the Chairperson of the department (enclosing an up-to-date transcript) and ask for an outline of the course program they would be expected to complete.

The University's general requirements for admission to graduate studies for the Master's degree apply to this program. (See material entitled "Master's Degree" found later in this section of the Calendar.)

Particular requirements are as follows:

1. Admission to the program requires an honors degree in astronomy, mathematics, or physics, or the equivalent. (This represents four years after Nova Scotia Grade XII.) Students who have not completed such a program may be admitted to a make-up year to bring themselves up to an acceptable level.
2. Students accepted into the program will normally be required to complete a minimum of four courses in addition to preparing a satisfactory thesis on their research (Ast 610.0). The individual student's program must be approved by the department.
3. An average grade of B (3.00) must be achieved, and an acceptable thesis must be submitted.
4. Candidates must pass an oral examination in which they will be expected to demonstrate comprehensive knowledge of basic areas in astronomy. For full-time students this examination will normally be given at the end of the first year of study.

Degree of Master of Science in Applied Psychology

The Department of Psychology offers a Master of Science (M.Sc.) in Applied Psychology with concentrations in clinical and industrial/organization psychology. The program is designed for part-time as well as full-time students. Normally, part-time students will be concurrently employed in an occupation related to applied psychology. Students whose basis of admission is full-time will need at least two years to complete all degree requirements. All requirements must be completed within three years. Students whose basis of admission is part-time must complete all requirements within five years. Extensions to these limits will be considered in exceptional cases only and must be recommended by the department to the Graduate Studies Committee. Further information can be obtained from the departmental Chairperson.

The University's general requirements for admission to graduate studies for the Master's degree apply to this program. Departmental requirements are as follows:

1. Admission to the program requires an honors degree in psychology or its equivalent (i.e., four years after Nova Scotia Grade XII). A completed application form, official transcript, letters of reference, and Graduate Record Exam scores must be forwarded to the Director of Admissions no later than March 1. Appropriate consideration will also be given to relevant work experience.
2. Normally students accepted into the program will be required to take four full-year courses (or equivalent) in addition to preparing a thesis (Psy 695.0) and completing a supervised practicum (Psy 690.0). Normally, a full-time student will take the equivalent of three full-year courses during the first year of study and one full-year course, thesis and practicum course during the second. All required courses must be completed before the practicum course is begun. The following first year courses are required.

Psy 601.0 (Advanced Psychological Statistics and Research Design)

Psy 603.1 (Advanced Assessment)

and one of the following:

Psy 604.2 (Clinical Assessment)

Psy 605.2 (Assessment of Work Behavior)

Psy 606.2 (Neuropsychological Assessment)

The remaining course work will be chosen in accordance with the individual student's program as approved by the department.

Students admitted with part-time status must take a minimum of a one-half credit course, which is an integral part of the student's degree program, per semester. Elective courses are to be taken following the successful completion of the Statistics and Research Design and Advanced Assessment courses, or they may be taken concurrently with these courses. All required courses must be successfully completed before part-time students begin the practicum course.

3. Students must achieve an average of at least B (3.00). A review of a candidate's progress will be undertaken by the department at the end of the first year of study (three full-year courses).

Notwithstanding the candidate's grade point average, the department reserves the right to recommend to the Dean that a student be required to withdraw from the program.

4. Each student must submit a thesis on a topic chosen in consultation with his or her Thesis Committee, which shall consist of the student's advisor, one other member of the department, and one person from outside the department, recommended by the department on the advice of the supervisor. The Thesis Committee is normally formed towards the end of the first year of study for a full-time student, or after completion of three courses by a part-time student. Each thesis must be approved by the student's Thesis Committee, after which it will be presented orally to the department and interested scholars from the community.

Degree of Master of Science in Astronomy

Graduate students in Astronomy come with a diversity of university backgrounds. Indeed, some have previously had no undergraduate courses in astronomy though obviously some exposure to such courses is desirable. (Saint Mary's students can consider Ast 202.0, 401.1 and 402.2.) Students who are interested in entering the program should write the Chairperson of the department (enclosing an up-to-date transcript) and ask for an outline of the course program they would be expected to complete.

The University's general requirements for admission to graduate studies for the Master's degree apply to this program. (See material entitled "Master's Degree" found later in this section of the Calendar.)

Particular requirements are as follows:

1. Admission to the program requires an honors degree in astronomy, mathematics, or physics, or the equivalent. (This represents four years after Nova Scotia Grade XII.) Students who have not completed such a program may be admitted to a make-up year to bring themselves up to an acceptable level.
2. Students accepted into the program will normally be required to complete a minimum of four courses in addition to preparing a satisfactory thesis on their research (Ast 610.0). The individual student's program must be approved by the department.
3. An average grade of B (3.00) must be achieved, and an acceptable thesis must be submitted.
4. Candidates must pass an oral examination in which they will be expected to demonstrate comprehensive knowledge of basic areas in astronomy. For full-time students this examination will normally be given at the end of the first year of study.

Degree of Master of Science in Applied Psychology

The Department of Psychology offers a Master of Science (M.Sc.) in Applied Psychology with concentrations in clinical and industrial/organization psychology. The program is designed for part-time as well as full-time students. Normally, part-time students will be concurrently employed in an occupation related to applied psychology. Students whose basis of admission is full-time will need at least two years to complete all degree requirements. All requirements must be completed within three years. Students whose basis of admission is part-time must complete all requirements within five years. Extensions to these limits will be considered in exceptional cases only and must be recommended by the department to the Graduate Studies Committee. Further information can be obtained from the departmental Chairperson.

The University's general requirements for admission to graduate studies for the Master's degree apply to this program. Departmental requirements are as follows:

1. Admission to the program requires an honors degree in psychology or its equivalent (i.e., four years after Nova Scotia Grade XII). A completed application form, official transcript, letters of reference, and Graduate Record Exam scores must be forwarded to the Director of Admissions no later than March 1. Appropriate consideration will also be given to relevant work experience.
2. Normally students accepted into the program will be required to take four full-year courses (or equivalent) in addition to preparing a thesis (Psy 695.0) and completing a supervised practicum (Psy 690.0). Normally, a full-time student will take the equivalent of three full-year courses during the first year of study and one full-year course, thesis and practicum course during the second. All required courses must be completed before the practicum course is begun. The following first year courses are required.

Psy 601.0 (Advanced Psychological Statistics and Research Design)

Psy 603.1 (Advanced Assessment)

and one of the following:

Psy 604.2 (Clinical Assessment)

Psy 605.2 (Assessment of Work Behavior)

Psy 606.2 (Neuropsychological Assessment)

The remaining course work will be chosen in accordance with the individual student's program as approved by the department.

Students admitted with part-time status must take a minimum of a one-half credit course, which is an integral part of the student's degree program, per semester. Elective courses are to be taken following the successful completion of the Statistics and Research Design and Advanced Assessment courses, or they may be taken concurrently with these courses. All required courses must be successfully completed before part-time students begin the practicum course.

3. Students must achieve an average of at least B (3.00). A review of a candidate's progress will be undertaken by the department at the end of the first year of study (three full-year courses).

Notwithstanding the candidate's grade point average, the department reserves the right to recommend to the Dean that a student be required to withdraw from the program.

4. Each student must submit a thesis on a topic chosen in consultation with his or her Thesis Committee, which shall consist of the student's advisor, one other member of the department, and one person from outside the department, recommended by the department on the advice of the supervisor. The Thesis Committee is normally formed towards the end of the first year of study for a full-time student, or after completion of three courses by a part-time student. Each thesis must be approved by the student's Thesis Committee, after which it will be presented orally to the department and interested scholars from the community.

Division of Engineering

Director

Dr. V. Sastry

General Information

Engineering studies at Saint Mary's University provide the first two years of the Bachelor of Engineering degree in association with the Technical University of Nova Scotia. Students follow a core program leading to the Diploma in Engineering or a Bachelor of Science and Diploma in Engineering upon completion of their courses at Saint Mary's.

Entrance Requirements

a. Nova Scotia Grade XII, or equivalent, including five courses from those listed below with a grade standing of 50% in each course and a general average of at least 65%.

- (i) English
- (ii) Mathematics
- (iii) Physics
- (iv) Chemistry
- (v) One other academic course.

b. Nova Scotia Grade XI, or equivalent, with satisfactory grades in English and mathematics, and three other academically recognized subjects.

Notes:

(i) Where it is deemed advisable, students with partial Grade XII certificates may be given credits in certain subjects depending on the mark in the course and the general average. Such a decision will be at the discretion of the Director of Engineering.

(ii) The enrolment in the first year of the Diploma program is limited to a maximum of 100 students.

Requirements for the Diploma in Engineering

1. Two Year Diploma After Nova Scotia Grade XII or Equivalent

First Year Courses

Egn 106.1	Engineering Design Graphics
Egn 107.2	Design and Descriptive Geometry
Egn 204.1(.2)	Computer Science
Egn 203.1(.2)	Engineering Mechanics (Statics)
Mat 200.0	Differential and Integral Calculus
Phy 221.0	University Physics
Che 203.0	General Chemistry for Engineers
Egl 201.1(.2)	English Composition
Egl 202.1(.2)	Introduction to Literature

Second Year Courses

Egn 300.1	Dynamics of Particles
Egn 302.2	Dynamics of Rigid Bodies
Egn 303.1(.2)	Fluid Mechanics
Egn 306.1(.2)	Engineering Thermodynamics
Egn 304.1(.2)	Mechanics of Deformable Bodies
Egn 308.1(.2)	Electric Circuits
Mat 301.1(.2)	Introduction to Vectors, Matrices and Complex Numbers
Mat 310.1(.2)	Intermediate Calculus I
Mat 311.1(.2)	Intermediate Calculus II
Elective (humanities, social sciences), 1 credit	

Notes on Academic Requirements In Engineering:

1. Two Year Diploma After Nova Scotia Grade XII or Equivalent

Each student is required to achieve a grade of not less than C in each of the following courses for continuance in the Diploma program:

First Year Courses

Egn 203.1(.2)	Engineering Mechanics (Statics)
Egn 204.1(.2)	Computer Science
Mat 200.0	Differential and Integral Calculus
Phy 221.0	University Physics

Second Year Courses

Egn 300.1	Dynamics of Particles
Egn 306.1(.2)	Engineering Thermodynamics
Mat 310.1(.2)	Intermediate Calculus I
Mat 311.1(.2)	Intermediate Calculus II
Egn 302.2	Dynamics of Rigid Bodies.

A student who fails to meet the above requirements may continue only with the approval of the Director of Engineering and the Dean of Science; and under such conditions as they may lay down in writing.

In addition, to qualify for a Diploma in Engineering, each student is required to achieve a cumulative grade point average of at least 1.50.

The above requirements will apply to each student who registers in 1984-85 and thereafter; or who is readmitted on academic probation for the 1984-85 academic year or thereafter after having been required to withdraw for academic weakness.

2. Three Year Diploma After Nova Scotia Grade XI or Equivalent

In addition to the two year program shown above, this program includes a foundation year consisting of the following courses:

Mat 110.1(.2)	Algebra
Mat 111.1(.2)	Precalculus
Phy 111.0	General Physics
Che 101.0	Introduction to Chemistry
Elective (humanities, social sciences), 1 credit	
Elective (humanities, social sciences), 1 credit	

3. Three Year Bachelor of Science Plus Diploma After Nova Scotia Grade XII or Equivalent

This program entails an extra year of five (5) courses, as shown below, after the two year Diploma program.

Mathematics elective (1 credit) at 400 level
 Chemistry elective (1 credit) at 300 level or above
 Physics elective (1 credit) at 300 level or above
 Elective (humanities, social sciences), 2 credits at 200 level or above

With a Saint Mary's University Diploma in Engineering a student may enter without examination any of the Departments of Engineering at the Technical University of Nova Scotia and obtain the degree of Bachelor of Engineering (Civil, Mechanical, Electrical, Chemical, Mining, Industrial, Bio-Resources, or Metallurgical) on the successful completion of the Technical University of Nova Scotia portion of the Bachelor of Engineering program. The length of the Technical University of Nova Scotia program is three years.

The objectives of the Engineering programs at Saint Mary's University are to offer programs, accredited by the Associations of Professional Engineers of the Provinces through the Canadian Accreditation Board, which will assist students in developing the following qualities:

- a basic scientific understanding
- a competence in engineering design
- creativity
- social understanding
- an appreciation for continued learning.

Faculty of Education

Dr. Roger H. Barnsley, Dean

Bachelor of Education

General Information

This program is designed to give university graduates a professional foundation for a career in teaching. This is a full-time program of one academic year which prepares students to teach at the junior and senior high school levels.

There are two specific goals: the first, to assist the Bachelor of Education student to develop a basic competence in the skills of teaching academic subjects; the second, to lead the Bachelor of Education student into a deeper study of the aims and the process of education.

Requirements: Regular Program

1. Applicants must hold a bachelor's degree from a recognized university with a minimum average of B (or equivalent) in order to be considered for admission. It should be noted that admission to the Bachelor of Education program is on a competitive basis.
2. Admission may be refused in cases where the applicant lacks the academic background necessary for course work related to, and practice teaching in, a secondary school subject for which the Faculty offers teacher preparation, or where the applicant is otherwise deemed unsuited for teaching.
3. Applicants are expected to provide evidence of prior experience in an instructional capacity or in working with children or youth.
4. Students must complete the following program:

Edu 501.0 Philosophy of Education
 Edu 502.0 Psychology of Education
 Edu 503.0 Classroom Processes
 Edu 504.0 History of Education
 Edu 550.1 Special Education
 Edu 591.1(.2)/592.1(.2) Practice Teaching
 Edu 595.1 Orientation to Teaching

The Bachelor of Education student chooses two from the following:

Edu 521.1(.2) through 549.1(.2) Content and Methods of Specific Fields.

5. In the first semester, the regular Bachelor of Education program begins with an "Orientation Week" prior to the commencement of classes. An "Early School Experience" is provided for all students during September and October. During Early School Experience, students spend the equivalent of one full day per week in a classroom situation assisting the regular teacher. Details and dates of Orientation Week and Early School Experience are provided to students after they are accepted into the program.

The required courses are not intended to be independent one of the other. Rather they are to be considered integral parts of a whole with the overall organization of the courses modified and adjusted from time to time to conform to best practice.

The Faculty of Education produces each year a Bachelor of Education Handbook which outlines the program in greater detail.

Requirements: Special Programs

1. Graduates of the Nova Scotia Teachers College who have since acquired the degree of Bachelor of Arts, Commerce or Science at Saint Mary's University may apply to enter the Bachelor of Education program. Candidates are required to complete successfully two credits in Education approved by the Dean of Education or designate.
2. Graduates of the Nova Scotia Teachers College who have acquired an undergraduate degree at a recognized university other than Saint Mary's University may apply to enter the Bachelor of Education program. These candidates are required to complete successfully a minimum of five credits at Saint Mary's University approved by the Dean of Education, two of which are in Education.
3. Graduates of Nova Scotia Teachers College who hold the Associate of Education or its equivalent may apply for admission to a program leading to a Bachelor of Education in Association with the Nova Scotia Teachers College degree. Candidates are required to complete successfully five credits approved by the Dean of Education

or designate. Three credits must be in the Faculty of Arts, Commerce or Science and at the 300 or 400 level; and two credits in the Faculty of Education at the 500 level.

Normally, the Education courses provided for this degree program are: Edu 507.0 (Sociology of Education) and Edu 508.0 (Introduction to Comparative Education).

4. Vocational teachers may apply for admission to a program leading to the degree of Bachelor of Education (Vocational). Such teachers must have met the requirements outlined under the admission requirements for the Faculty of Arts degree program for vocational teachers; and hold a Bachelor of Arts, Science, or Commerce degree from, or be enrolled in a Bachelor of Arts program at, Saint Mary's University. The candidate may receive the Bachelor of Education (Vocational) degree after completing three Education credits approved by the Dean of Education and after the awarding of the Bachelor of Arts, Science, or Commerce degree from Saint Mary's University.

5. Graduates of a teachers' college in another province of Canada or of a college of education in the United Kingdom or of a teacher training college in the United States; who have had professional teacher training of at least two years' duration; who are licensed as teachers by the Province of Nova Scotia; and who have acquired a Bachelor's degree (a) from Saint Mary's University may apply for admission to the Bachelor of Education program. Candidates are required to complete successfully two credits in Education approved by the Dean. (b) Graduates from a recognized university other than Saint Mary's University may apply for admission to the Bachelor of Education program. Candidates are required to complete successfully five credits, two of which must be in Education, that have been approved by the Dean.

Application Procedure: Regular Program

1. Complete application forms and make sure that all documents required are complete and returned with the application.
2. Ensure that supporting documents (transcripts, references, etc.) are sent to the University. The Director of Admissions does not undertake to send for transcripts or references.
3. Applications with all supporting documents should be received by the Director of Admissions, Saint Mary's University, by 1 March.
4. Candidates may be required to attend a personal interview with the Dean or designate as part of the admission procedure.

Application Procedure: Special Programs

1. Complete application forms and make sure that all documents required are complete and returned with the application.
2. Ensure that supporting documents (transcripts, references, etc.) are sent to the University. The Director of Admissions does not undertake to send for transcripts or references.
3. Applications, with all supporting documents, should be received by the Director of Admissions, Saint Mary's University, by August 1.
4. Candidates may be required to attend a personal interview with the Dean or designate as part of the admission procedure.

Registration Procedure: Bachelor of Education (all programs)

All students accepted into this program are required to register by mail. Failure to complete registration by the stated deadline may result in the withdrawal of admission status.

Certification

On successful completion of the Bachelor of Education program students may apply to the Department of Education of the Province of Nova Scotia for a teaching certificate. Students are entirely responsible for any negotiations with that department respecting their certification.

It is the students' responsibility to determine what category of licence they will receive from the issuing authorities. While the Faculty of Education Office will post whatever information is received from the provincial Ministries of Education, the University will not assume responsibility for guaranteeing the precise level of licence which graduates will receive from different provinces upon completion of the Bachelor of Education program.

Academic Regulations

Candidates should note that the pass mark for the entire program is a C average, while for individual courses the pass mark is D, with the exception of Edu 591.1(2), 592.1(2), and 593.1(2), Practice Teaching, for which the pass mark is C. No supplementary examinations are provided.

The standing of candidates is reviewed by the Faculty at the end of the first semester. On the basis of the likelihood of successful completion of the program, the Faculty decides either to confirm, terminate, or continue candidacy on a probationary basis.

Master's Degrees in Education (M.Ed. or M.A.)

General Information and Requirements

The Faculty of Education offers Master's degrees in two areas of specialization, "Educational Administration" and "Curriculum and Instruction". Suggested programs for these areas of specialization are included in the Faculty of Education Graduate Handbook which is available from the Dean's Office on request.

General requirements, which have been set by the University for admission to the Master's degree, apply to those seeking admittance to the programs and to those enrolled. For those requirements see the Master's degree section of this Calendar. The particular requirements of the Faculty are as follows:

Candidates are encouraged to have completed at least one year of successful teaching before embarking on a Master's degree. Bachelor of Education or its equivalent with a minimum of B standing is essential.

Students who have not met requirements for admission to the Master's program may, on recommendation of the Dean and the Committee on Graduate Studies in Education, be permitted to enrol in one or two qualifying or make-up course(s). The qualifying or make-up course(s) will not be credited towards the Master's degree.

The Faculty of Education at Saint Mary's University offers two degree programs, the Master of Arts in Education (M.A.) and the Master of Education (M.Ed.)

The Master of Arts in Education (M.A.)

This degree places emphasis on the development of students' ability to conduct research in the field of Education. Students taking this degree may wish to continue their graduate studies later at the doctoral level.

This program of study must provide a specific focus for the study of educational theory and practice. A program will consist of a two credit thesis (Edu 601.0/602.0) and a minimum of three credits obtained through graduate course offerings. It should be noted that because a thesis is required, Edu 611.0 (Research Skills for Practicing Educators) is generally required to be taken in each program of studies either prior to or concurrently with the work on the thesis.

Students applying to enter the Master of Arts in Education degree program must include with their application materials a written statement of the area of interest to be pursued in the thesis. In addition to the general requirements for admission to this degree program, acceptance will depend upon the availability of a suitable thesis supervisor.

The Master of Education (M.Ed.)

This degree is intended for those students who wish to improve their professional skills. A minimum of five credits obtained through graduate course offerings or four credits obtained through graduate course offerings and a thesis (Edu 610.0) is required. If a student decides to write a thesis, Edu 611.0 (Research Skills for Practicing Educators) is generally required to be taken either prior to or concurrently with the work on the thesis.

Students enrolled in the M.Ed. program will be required to develop a program which reflects a specialization. This will be achieved through one of the following ways.

1. **Specialization in Curriculum and Instruction.** This program is for teachers who intend to remain teaching in the classroom and who wish to improve their instructional practice. This program must contain:
 - a. two of Edu 617.0, 619.0, 620.0, 685.0, or 686.0;
 - b. one credit course with a direct "curriculum" focus;
 - c. two credit courses chosen by the student (electives).

Teaching English as a Second or Foreign Language Option

A student specializing in Curriculum and Instruction may choose to concentrate on the Teaching of English as a Second or Foreign Language. Students electing this option should follow the program of study outlined below.

- a) Two of Edu 617.0, 619.0, 620.0, 685.0, or 686.0
- b) Edu 656.0: Curriculum & Instruction in TESL/TEFL
- c) Edu 655.0: Linguistics for Teachers
- d) Edu 657.0: Principles of Language Acquisition for Educators

2. **Specialization in Administration.** This program is intended for teachers who are either practising school administrators or who wish to develop the necessary skills to become a school based administrator. This program must contain:

- a. Edu 660.0: Educational Administration;
- b. Edu 662.0: Educational Supervision;
- c. one of Edu 617.0, 619.0, 620.0, 685.0, or 686.0;
- d. two credit courses chosen by the student (electives).

3. **Other Specializations.** Students may develop a unique program of study in order to meet their own personal or professional goals and interests. It should be noted that such programs must reflect a particular theme in educational practice or theory. In order to have such a program approved, each student must develop a written statement of the particular theme which he or she wishes to pursue. The selection of courses for this specialization will then be made in conjunction with the Dean of Education and will be related to the stated theme.

Additional Information

1. Students who follow one of the two "standard" programs of specialization (i.e., Curriculum and Instruction, or Administration) may receive approval for the program after filing a completed "Program Planning Form" (available from the Dean's Office) with the Office of the Dean.
2. Students may have one graduate course taken at another university credited towards their Master's degree program. If a student wishes this consideration, application must be made in writing to the Dean of Education prior to taking the course from the other university. The application must include a calendar description of the course to be taken. In order to be approved, the course must relate to the student's program at Saint Mary's University.
3. The Master's program is available on a full-time or part-time basis. A part-time student wishing to enrol in more than one full course (or equivalent) must have the prior written approval of the Dean of Education.
4. The Faculty of Education produces each year a Graduate Handbook which outlines the program in detail.

Application Procedure

1. Complete application forms and make sure that all documents required are complete and returned with the application.
2. Ensure that supporting documents (transcripts, references, etc.) are sent to the University. The Director of Admissions does not undertake to send for transcripts or references.
3. Applications with all supporting documents should be sent to the Director of Admissions, Saint Mary's University.
4. Applications will be considered by the Faculty of Education Admissions Committee only after all required materials and documents have been received.
5. Applications for admission as a full-time student will be considered by the Faculty of Education's Admissions Committee when all documents are completed and received.
6. Applications for admission as a part-time student will be considered by the Faculty of Education's Admissions Committee three times per year.

Registration Procedure

1. In order to ensure that all students are able to enrol in the courses they require, a priority enrolment system has been implemented.
2. Students who will be attending full-time and students who have only one course remaining to complete their degree will be given the highest priority for course selection. Then, students will be assigned a priority for course selection based upon the number of courses they have left to complete their degree.
3. Students are advised to read the Registration Brochure carefully in order to determine the time for registration. Registration priority will be lost if the student is not in attendance at the assigned time.

Master's Degree

General Requirements

The University offers courses of study leading to graduate degrees in the following courses:

Master of Arts in Atlantic Canada Studies
 Master of Arts in Education
 Master of Arts in History
 Master of Arts in International Development Studies
 Master of Arts in Philosophy
 Master of Arts in Sociology and Criminology
 Master of Business Administration
 Master of Education
 Master of Science in Applied Psychology
 Master of Science in Astronomy

The program of each candidate is administered by the department concerned.

1. Qualifications for Admission

a. Admission is limited and at the discretion of the department concerned. To be considered, an applicant shall hold a bachelor's degree or its equivalent from an institution recognized by the Senate and shall have a knowledge of the proposed field of specialization satisfactory to the department concerned (or departments, when interdisciplinary study is intended).

b. Preference will be given to applicants who hold an honors degree. In addition, admission will be granted only to those students who show a high promise of success in post graduate study as demonstrated by the results of appropriate tests and their records of previous academic accomplishment. See the regulations listed under each graduate program for specific additional minimum requirements for admission to that program.

c. Applicants whose mother tongue is not English may be required to demonstrate an appropriate level of proficiency in English.

2. Procedure for Admission

a. Application for admission shall be made to the Director of Admissions. Applicants shall arrange to have forwarded to the Director of Admissions an official transcript of their academic record and letters of recommendation from at least two persons in a position to judge the applicant's capacity for graduate study. Application forms and all supporting documents must ordinarily be on hand by May 31 of the academic year prior to the one for which admission is sought.

b. Successful applicants will be notified by the Director of Admissions.

3. Registration

a. Registration of students in graduate studies shall take place at times indicated in this Calendar.

b. Students are not permitted to register until they have received notification of acceptance.

c. Students can register on either a full or part-time basis depending on the terms of acceptance to their graduate program and with the permission of the departmental chairperson/director. The normal academic and fiscal definitions of full-time and part-time, as delineated in academic regulation 1 in Section 6 of this Calendar, apply except in the instance where official verification has been received by the Registrar from a student co-signed by the departmental chairperson/director indicating that the individual is working on a full-time basis on a dissertation, thesis, major research paper/project, or is employed on an official co-operative education work term. The verification is valid only for a single academic term but can be extended on the authorization of the departmental chairperson/director.

4. Program of Study and Research

a. Candidates entering with an honors degree (or equivalent) must complete four full courses and submit an acceptable thesis. On the recommendation of the department concerned, a three course program is permissible for a candidate undertaking a proportionately more demanding thesis. In departments authorized by the Committee on Graduate Studies, a five course program, without thesis, is also acceptable for the degree. Courses in all programs must be at the 500 or 600 level, but where advisable, courses at the 400 level may be included in a program, provided that the requirements applying to graduate students in such courses be of a graduate standard.

b. On the recommendation of the appropriate department or graduate council, a maximum of twenty percent of the credits required for a graduate degree in Education, Astronomy, Philosophy, History, Psychology, and Atlantic Canada Studies at Saint Mary's can be recognized for graduate courses previously completed at another recognized academic institution and not previously used in the fulfillment of the requirements for another degree. In the case of the MBA Program, the maximum number of such transfer credits is five full courses (or half course equivalents).

c. A candidate may be required to audit a course as part of the program of study.

d. Where required, a candidate shall submit a thesis on a subject approved by the department in which research has been conducted under the direction of a supervisor appointed by the appropriate department or departments. An oral defense in the presence of an Examining Committee appointed by the department is mandatory.

e. Changes in either the program of courses or the topic of the thesis require the approval of the department.

5. Period of Study

The maximum period of a Master's degree program in Astronomy, Philosophy, Education and History shall be five years, and six years in International Development Studies, the MBA, and Atlantic Canada Studies. For Psychology, the maximum period is three years for students with full-time admission status and five years for students with part-time admission status. Extensions may be granted. In order to establish a uniform standard across the University for the extension of Senate deadlines for completion of graduate degrees and for the re-admission of those graduate students who did not complete their graduate degree during the specific period of time, department chairpersons and/or program coordinators concerned must make their recommendations on either of the above matters to the Graduate Studies Committee which will consider the matter and communicate its final decision to the chairperson of the department or the coordinator of the program.

Students may apply to the Committee on Graduate Studies through their departmental chairperson/director for official withdrawal, for non-academic reasons, from their graduate program. If granted, students would then be required to reapply for admission at the point in time when they are in a position to resume their studies. If readmitted, the departmental chairperson/director would be responsible for delineating the terms of readmission, including the outstanding academic requirements and the deadline for completion of the entire graduate program.

6. Evaluation

In order to qualify for a Master's degree a candidate shall obtain a quality point average of 3.00. Failure of any full course (or the equivalent) ordinarily will require withdrawal from the program. In exceptional circumstances, the department and the Dean of the Faculty concerned may allow the student to remain in the program. In such a case, failure of a second full course (or equivalent) will require withdrawal from the program.

a. Letter grades and quality points for graduate courses will be assigned as follows:

A = 4.00 = Excellent
 B+ = 3.50 = Good
 B = 3.00 = Satisfactory
 B- = 2.50 = Below graduate standard
 C = 2.00 = Marginal pass
 F = 0.00 = Failure

IP = - = In progress (Reserved exclusively for thesis, dissertation, major research paper/project, and practicum courses; also for co-operative education work terms.)

b. The following grades shall be given when appropriate but will not be calculated in the quality point or cumulative quality point average:

Aegrotat AE
 Authorized withdrawal from a course W
 In progress IP

Grades earned on advanced standing and transfer courses are also not included in the calculation of averages.

c. In the case of advanced standing and transfer courses, credit will not be awarded for less than a grade of B (or the equivalent).

7. Thesis (If required)

a. To be eligible for graduation at Spring Convocation, the candidate's finished thesis must be submitted to the department no later than the last day of classes of the regular academic year and by 30 September for Fall Convocation.

b. The thesis must be ruled acceptable by the Examining Committee appointed by the department. Any suggestions by the Committee concerning corrections, additions and other necessary changes must be either carried out or formally refuted by the candidates before the thesis can be accepted.

c. The Student's Responsibilities

The thesis must be submitted in the following form:

- Paper - good quality bond paper, 21.5 cm (8 1/2") x 28 cm (11")
- Typing - double spaced
- Margins - left hand margin: 4 cm (1 1/2")
all other margins: 2.5 cm (1")
- Abstract - length: approximately 300 words
- must be typed
- should bear the title "Abstract" and include the name of the author, the title of the thesis and the date of submission.
- Signature Page - a page designed to contain the signature of all members of the Examining Committee, including any external examiners, if applicable.

The candidate must also meet any additional requirements of the department concerned.

The student must submit one original and two (2) copies of the accepted thesis with the binding fee of \$33.00 to the Registrar. A duplicate receipt for this amount must accompany the unbound thesis when delivered to the library, as proof of payment.

A completed "Permission to Microfilm" form must also accompany the above. This form, from the National Library of Canada, Canadian Theses Division, is available from Information Services in the Library. It grants permission for the microfilming of the thesis and the sale of the microfilm.

d. The Library's Responsibilities

- The Library arranges for the binding of all accepted theses.
- Original copies of Master's theses are sent to the National Library in Ottawa for microfilming before they are bound and placed in the archives.
- Copies of the theses are bound and distributed as follows:
 - One copy is sent to the student's department;
 - One copy is catalogued and made available through the General Collection of the library; and
 - One copy (the original) is placed in archives and remains as non-circulating material.
- The Library will accept for binding additional copies of a thesis only if the student provides the extra copies and pays the additional binding fee of \$11.00 per copy. (Proof of payment in the form of a duplicate receipt must accompany additional copies.)

e. Departmental Regulations

In addition to the above requirements, candidates must comply with any additional requirements of the department concerned.

f. Financial Regulations

Please consult Section 6 of this Calendar for details on special graduate fees.

Special Programs

Year of Study Abroad: China

Up to five scholarships are awarded yearly to Saint Mary's University students for study at Shandong Teachers' University, Jinan, People's Republic of China. The scholarship includes full tuition, room and board, but not travel expenses or a living allowance. A program of study including a course in the Chinese language is designed by the faculty of Shandong Teachers' University for the students selected. The study period is for ten months and credits may be applied towards the Bachelor of Arts degree at Saint Mary's University.

For further details please contact the Office of the Dean of Arts.

Year of Study Abroad: Angers, France

Saint Mary's University has entered into an arrangement whereby qualified students have the opportunity to study at the Centre International d'Etudes Françaises (C.I.D.E.F.) de l'Université Catholique de l'Ouest in Angers, France. Permission to participate in this program is granted by the Dean of Arts, the chairperson of the student's area of concentration, and the Chairperson of the Modern Languages and Classics Department. Usual registration procedures are to be followed, except that tuition fee payments must be made directly to the University of the West.

Study at the Université du Québec

Special arrangements exist for students competent in the French language to undertake regular studies at the Université du Québec à Chicoutimi, Rimouski or Trois Rivières, and to receive credit for these studies towards their Saint Mary's degree. Further details and application forms are available at the Registrar's Office.

Note: Other official exchange agreements are currently being negotiated with The Bermuda College; the University of Newcastle-Upon-Tyne; Oslo Business School; and the University of Sussex.

Pre-Professional Programs

Professional Schools

Students who intend to continue studies at professional schools, such as Theology, Law, Medicine, Architecture, Education, and Dentistry, should ensure that their plan of studies includes courses needed for admission to the appropriate professional schools. Calendars of professional schools may be consulted in the Library.

Though not strictly required by some professional schools, it is recommended that the student complete an undergraduate degree before seeking admission to a professional school. Prerequisite course requirements apply to pre-professional students.

Pre-Medical

Students intending to study medicine should have an impressive academic record as a basic qualification for admission into medical school.

The following subjects are the normal minimum requirements of many Canadian medical schools: general biology, general chemistry, organic chemistry, physics and English, each of an academic year's duration. Students should extend their studies beyond the minimum requirements and are encouraged to include subjects in the humanities and social sciences in their program. In addition to the academic factors, medical schools also take into consideration several other criteria such as the Medical College Admission Test, interviews, and non-academic factors such as emotional stability, social values, leadership, personal maturity, motivation, etc.

Effective September 1991, Dalhousie University will require applicants to hold a university degree but will not require any specific prerequisite courses. For complete details, the student should consult the academic calendar of the university to which admission is sought.

Pre-Dental

The preceding information is equally applicable to the pre-dental program. The students interested in complete information should consult the academic calendar of the university to which admission is sought.

Pre-Optometry

The University of Waterloo's School of Optometry accepts a limited number of candidates from the Atlantic Provinces to its program of optometry.

Applicants are considered from students who have entered a university with Nova Scotia Grade XII or its equivalent and completed at least one year of university study with courses in chemistry, physics, biology, mathematics and psychology. Applications obtainable from the University of Waterloo are submitted to the Ontario Universities' Application Centre.

Pre-Veterinary

Students with high academic standing in science, especially biology or chemistry, are considered by Atlantic Veterinary College, Charlottetown, P.E.I., and Ontario Veterinary College, University of Guelph. The University of Saskatchewan also accepts competitive students into their veterinary medicine program. The University of British Columbia offers a two-year pre-veterinary program leading to a four-year veterinary program at the University of Saskatchewan.

Prospective students should contact the veterinary college of their choice for specific information.

Pre-Occupational Therapy

The School of Occupational Therapy, Dalhousie University, considers, on an equal basis, students who have completed their prerequisite courses at any recognized university. It is recommended that interested students consult the School of Occupational Therapy, Dalhousie University, to determine acceptable prerequisite courses. Since enrolment in the program is limited, applicants should note that admission is on a competitive basis with preference given to residents of the Atlantic Provinces. Selection is based on completion of prerequisites, academic achievement, and personal suitability for occupational therapy. Application packages are available through the Registrar's Office, Dalhousie University. The application deadline is March 1.

Pre-Law

Students applying for admission to the Law School are required to submit results of the Law Schools Admission Test (LSAT) of the Educational Testing Service, Princeton, New Jersey. Information for taking this test at Canadian universities can be obtained from the Law School. Dalhousie University considers applications from students who have completed at least three full years' studies after junior matriculation (Nova Scotia Grade XI or equivalent) or two full years after senior matriculation (Nova Scotia Grade XII or equivalent) of a program leading to the degree of B.A., B.Sc., or B.Comm. Applications are considered as they are received or in the month of June.

Pre-Architecture

Saint Mary's University, in association with the Technical University of Nova Scotia, offers the first two years of a six-year program in architecture leading to a Bachelor of Architecture degree.

Qualification for entrance to the architecture program at the Technical University of Nova Scotia is the satisfactory completion of at least two years in a degree program at any university or equivalent institution recognized by the Faculty of the School of Architecture. A university course in mathematics is prerequisite, except that the Admissions Committee may instead require a written examination in this subject.

Providing it has been undertaken in a 'recognized' degree program, virtually any course of studies - including arts, fine arts, engineering and other technologies, science, agriculture, social sciences, education, medicine - is acceptable.

Selection from qualified students for admission to the School of Architecture is carried out by a Selection Committee of the Faculty of the School of Architecture.

Pre-Theological Courses

Students who are candidates for the Christian Ministry are in most cases required to obtain a B.A. degree, or its equivalent, before proceeding to theology. Normally the B.A. course will be followed by three years in theology. Requirements may vary somewhat from one denomination to another, but generally speaking, students are advised to select a broad range of subjects from such departments as English, history, philosophy, classics, psychology and sociology, along with some course in religious studies. A working knowledge of Greek is desirable for students entering theology.

Pre-Education

Students intending to pursue a career in teaching must apply to enter a Bachelor of Education program after completing a Bachelor's degree in Arts, Science, or Commerce. Those persons who wish to teach at the secondary school level should undertake a program in the first bachelor's degree that will develop sound academic preparation in a subject area normally taught at the secondary school level. Students wishing to teach at the elementary level should develop a program in the first bachelor's degree which has a breadth of academic courses. Students who plan on applying to enter a Bachelor of Education program should determine the course requirements for the particular university where they plan to attend.

Pre-Professional Counselling Committee

Because of the severe competition for admission to graduate and professional schools, the Faculty of Science organized a Pre-Professional Counselling Committee in 1977. This Committee of faculty members compiles up-to-date information on graduate and professional schools and advises students of the closing dates for admission to these schools and the dates of various admissions tests. The Committee also gives guidance to students on how they can best prepare for the admission tests and some interviews.

Students (from any Faculty) who are interested in applying to graduate or professional schools are urged to contact the Office of the Dean of Science for further information on the Counselling Committee. These students should also regularly check the Counselling Committee Bulletin Board located on the third floor of the Science Building.

Section 4

Continuing Education

Continuing Education

Continuing Education is a requirement for all members of the Institute of Professional Engineers, Ontario (IPEO). The purpose of this requirement is to ensure that members maintain their knowledge and skills in their respective fields. This is achieved through a variety of educational activities, including seminars, workshops, conferences, and courses. The IPEO provides a list of approved activities and the number of hours required for each. Members are required to complete a certain number of hours each year to remain in good standing. The IPEO also provides a system for tracking and reporting on continuing education activities. Members are required to submit a report to the IPEO at the end of each year, detailing the activities they have completed and the number of hours earned. The IPEO will then review the report and issue a certificate of completion if the member has met the requirements. This certificate is then used to renew the member's membership for the following year. The IPEO also provides a number of resources to help members find continuing education opportunities, including a list of approved providers and a directory of courses. Members are encouraged to take advantage of these resources to ensure they are meeting their continuing education requirements in a timely and effective manner.

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Continuing Education

The Division of Continuing Education coordinates administration of University programs for part-time and mature learners. This includes summer session programs, admission for mature and non-degree students, courses in extension centres, coordinated programs with professional associations, and an extensive program of non-credit courses.

Part-time Degree Programs

It is possible to complete the Bachelor of Arts and the Bachelor of Commerce programs entirely through part-time, evening study. As well, it is possible to begin the Bachelor of Science and Diploma in Engineering programs by part-time study. Each year the Division of Continuing Education publishes a schedule of late afternoon and evening courses to assist part-time students in planning their programs. Part-time students are encouraged to seek academic counselling from the dean of their faculty, the chairperson of the department in which they are majoring, or their designated faculty advisor.

Summer Sessions

Saint Mary's University offers a wide selection of courses in two summer sessions offered each year. The tentative dates for the summer sessions are listed in the Calendar of Events in the front of this academic calendar. A preliminary listing of summer school courses is available from the Division of Continuing Education by December. A brochure detailing all of the summer session course offerings is published each year in early March.

Mature and Non-Degree Admission

Regular admissions regulations need not apply to mature students. For details of the mature and non-degree admission procedures consult Section 2 of this academic calendar.

Saint Mary's at the World Trade Centre

Our downtown office at the World Trade Centre draws upon the academic resources of the University to deliver programs and courses for the benefit of the workplace, the business sector and the local economy. Through its initiative at the World Trade Centre, Saint Mary's University recognizes its commitment to developing innovative managerial practices that promote business success.

Extension Centre Courses

Each year Saint Mary's University offers degree credit courses in a number of off-campus extension centres. In the past courses have been offered in Bridgewater, Truro, Sackville, Dartmouth, Cole Harbour, Shearwater, and downtown Halifax. The courses are offered in a variety of settings: schools, libraries, office buildings, and cultural centres. These courses allow part-time and mature learners to begin or continue their university studies without having to leave their community or place of work. For information on the courses being offered during the academic year and the summer sessions contact the Division of Continuing Education.

Joint Programs with Professional Associations

Society of Management Accountants

Saint Mary's University has entered into an official agreement with the Society of Management Accountants of Nova Scotia to offer all academic courses for the Certified Management Accountant (CMA) programs. The courses are offered through evening classes on campus and through distance education.

In order to be accepted into the CMA Program you must submit your application for membership to the Society and apply for admission to Saint Mary's University prior to the enrolment deadline for the semester in which you plan to take a course(s). Upon acceptance to the CMA Program students will adhere to the guidelines and regulations of Saint Mary's University.

June 1 is the deadline for receipt of Saint Mary's University applications for CMA students intending to begin courses in September; November 15 for courses beginning in January.

For a complete education and accreditation syllabus, please contact the Nova Scotia Society of Management Accountants, Atlantic Region, P.O. Box 42, Suite 1309, Purdy's Tower II, 1969 Upper Water Street, Halifax, Nova Scotia, B3J 3R7. Telephone: (902) 422-5836.

For a schedule of the CMA courses at Saint Mary's University, please contact the Division of Continuing Education at 420-5492.

Certificate Program in Human Resource Management

The Human Resource Association of Nova Scotia, in cooperation with the Division of Continuing Education, offers this certificate program in human resource management. It is designed for practitioners of human services management who wish to upgrade their professional skills. It is also available to persons interested in pursuing a career in this field. To earn the certificate, a student must complete sixteen half-course degree credits, seven of which are compulsory courses, while the remainder are to be chosen from a selection of elective courses. Successful completion of the program (or its equivalent) is a prerequisite for membership in the Human Resource Association of Nova Scotia.

Compulsory Courses

Mgt 281.1(.2)	Introduction to Business Management
Mgt 383.1(.2)	Organizational Behavior I
Mgt 384.1(.2)	Organizational Behavior II
Mgt 385.1(.2)	Human Resource Management
Mgt 386.1(.2)	Industrial Relations
Mgt 485.1(.2)	Wage and Salary Administration
Mgt 486.1(.2)	Personnel Staffing, Training and Development

Elective Courses (nine of the following are required)

Acc 241.1(.2)	Introductory Accounting - Part I
Acc 242.1(.2)	Introductory Accounting - Part II
Cml 201.1(.2)	Legal Aspects of Business - Part I
Eco 201.1(.2)	Principles of Economics: Micro
Eco 202.1(.2)	Principles of Economics: Macro
Eco 339.1(.2)	Introduction to Labor Economics
Eco 340.1(.2)	Human Resource Economics
Com 293.1(.2)	Managerial Communications
Mgt 481.1(.2)	Organization Theory: Structure, Process, Analysis and Design
Mgt 483.1(.2)	Interpersonal Behavior I
Mgt 484.1(.2)	Interpersonal Behavior II
Mgt 488.1(.2)	International Business Management
Mgt 496.1(.2)	Collective Bargaining
Mgt 497.1(.2)	Issues in Industrial Relations
Msc 325.1(.2)	Introduction to Computers

Application for the certificate program is to be made to the Division of Continuing Education.

Coordinated Programs with Professional Associations

Certified in Management (CIM) Program

This certificate program is offered by the Canadian Institute of Management in cooperation with the Division of Continuing Education. This program can be completed by taking the series of core courses offered by the Canadian Institute of Management or by taking the equivalent Saint Mary's University degree credit courses. The required courses are as follows:

Canadian Institute of Management Core Courses

M1-A	Business Management, Operations and Philosophy
M1-B	Managerial Communications
M2-A	Canadian Business Law
M2-B	Managerial Process and Organizational Behavior
M3-A	Marketing Management
M3-B	Managerial Accounting
M4-A	Financial Management
M4-B	Policy and Administration

Saint Mary's University Equivalent Degree Courses

M1-A Mgt 281.1(.2)	Introduction to Business Management
M1-B Com 293.1(.2)	Managerial Communications
M2-A Cml 201.1(.2)	Legal Aspects of Business - Part 1
M2-B Mgt 383.1(.2)	Organizational Behavior I
M3-A Mkt 370.1(.2)	Introduction to Marketing
M3-B Acc 241.1(.2)	Introductory Accounting - Part 1
M4-A Fin 360.1(.2)	Business Finance I
M4-B Mgt 489.1(.2)	Business Policy

Optional course and courses taken previously may be applied as advanced standing toward the Certificate in Management designation.

For further information and a descriptive brochure contact:

Division of Continuing Education (902) 420-5491 or
Canadian Institute of Management, P.O. Box 162,
Halifax, Nova Scotia, B3J 2M4, (902) 465-6245.

Certificate Program in Facility Management

The Recreation Facility Managers Association of Nova Scotia, in cooperation with the Sport and Recreation Commission of Nova Scotia and the Division of Continuing Education, Saint Mary's University, offers a certificate program in facility management. The program consists of the following:

- Facility Management and Finance
- Human Resource Management
- Mechanical Systems
- Accounting
- Facility Construction and Maintenance
- Program Scheduling and Promotion

Each May, two of these courses are offered in a two-week, intensive format. For information on current program offerings contact the Recreation Facility Managers Association of Nova Scotia, P.O. Box 1010S, Halifax, N.S., B3J 1G6, or Saint Mary's University at the World Trade Centre, 420-5167.

Other Coordinated Programs

Saint Mary's University courses can be used as credit towards professional designations offered by the following associations:

- Appraisal Institute of Canada
- Canadian Hospital Association
- Certified General Accountants Association
- Institute of Canadian Bankers
- Insurance Institute of Canada
- Purchasing Managers Association of Canada
- Real Estate Institute of Canada

For information on any of these programs contact the association directly.

Non-Credit Courses**Microcomputer Courses**

The Division of Continuing Education offers an extensive program of microcomputer courses for professionals, managers, office administrators, and other microcomputer users. All courses feature "hands-on" instruction using the IBM Personal Computer or the Apple Macintosh Microcomputer. For a brochure describing current courses, times and prices contact the Division of Continuing Education, 420-5491.

Diploma in Marketing and International Business

This diploma program is designed for managers, professional, and individual business owners who have an in-depth practical knowledge of the principles and strategies of marketing and international business. Of the eight program modules, four focus on marketing and four on international business. For further information, please contact Saint Mary's University at the World Trade Centre, 420-5638.

Professional Development Courses

Recognizing that learning is lifelong, Saint Mary's University offers a variety of courses for career and professional development. In the past these have included Global Economic Trends, Writing for Work, Effective Presentations, and Running an Effective Meeting. For further information on courses and programs for professional development, please contact Saint Mary's at the World Trade Centre, 420-5639.

Academic Upgrading

The Division of Continuing Education offers short upgrading courses in mathematics and writing skills. For descriptive course brochures contact the Division of Continuing Education.

General Interest Courses

Each year a variety of general interest courses for personal development and enjoyment are offered. In past years, these courses have included Figure Drawing, General Drawing, Painting with Watercolours, Conversational French, and English as a Second Language. For information on current course offerings contact the Division of Continuing Education.

Information

Descriptive pamphlets, summer session brochures, and evening program schedules are available from the Division of Continuing Education, Saint Mary's University, Halifax, Nova Scotia, B3H 3C3. Telephone (902) 420-5492.



Section 5

Description of Courses

Some of the courses described in this Calendar will not be offered in 1992-93. Students are therefore advised to consult the academic timetable for those courses which will be taught in the 1992-93 academic year and the time(s) when they will be offered.

Accounting (Acc)

Chairperson, Professor
Professors
Associate Professors
Assistant Professors

G. R. Chesley
F. Dougherty, S. Jopling
D. Bateman, B. Emerson,
B. Gorman, P. Secord
G. Ansorg, A. Ireland

The Department of Accounting offers a program for accounting majors which will prepare students for careers in professional accounting, industry, government and institutions. The department also offers courses in financial and managerial accounting and information systems for all Commerce students.

Commerce graduates may receive exemption from many of the courses and examinations conducted by the Atlantic School of Chartered Accountancy, and various other institutes of chartered accountants, the Society of Management Accountants, and the Certified General Accountants Associations. The exemptions are based upon specific courses taken and the grades obtained in the undergraduate program. Details of these exemptions may be obtained from the Chairperson of the department.

Society of Management Accountants

Saint Mary's University has entered into an official agreement with the Society of Management Accountants of Nova Scotia to offer all academic courses for the Certified Management Accountant (CMA) program. The courses are offered through evening classes for residents of the Halifax metropolitan area and by distance education for interested students outside of the Halifax metropolitan area. Further details are found in the Faculty of Commerce section of this Calendar.

The Accounting Major: In addition to meeting the general requirements for a Bachelor of Commerce degree, students must complete the following:

Junior Year

Acc 323(1/2) Information Systems I
Acc 334(1/2) Cost Accounting
Acc 341(1/2) Intermediate Financial Accounting I
Acc 342(1/2) Intermediate Financial Accounting II
Acc 345(1/2) Financial Accounting Theory

Senior Year

Acc 455(1/2) Accounting Seminar
Accounting electives (1) (see note below)
Non-Commerce electives (2)
Free electives, 200 level or above (1)

Note: Msc 324(1/2) may be used to partially satisfy this requirement.

Students with a grade of D in Acc 242.1(.2), Acc 341.1(.2) or Acc 342.1(.2) are advised against pursuing an accounting major.

241.1(.2) Introductory Accounting - Part I

Prerequisite: Eco 201.1(.2); Eco 202.1(.2); Mgt 281.1(.2); Mat 110.1(.2) and 112.1(.2), or appropriate work experience, determined in advance of registration by the chairperson.

Part I of a two-course series. This course is concerned with a study of basic accounting concepts and principles, their application to business transactions and financial statements, and an introductory consideration of the balance sheet and income statement, and statement of changes in financial position. This course is to be followed by Introductory Accounting - Part II.

Classes 3 hrs. and lab 1 hr. a week. 1 semester.

242.1(.2) Introductory Accounting - Part II

Prerequisite: Acc 241.1(.2).

Part II of a two-course series. This course deals with accounting for intercorporate investments, analysis of financial statements, introduction to manufacturing accounting and managerial uses of accounting data.

Classes 3 hrs. and lab 1 hr. a week. 1 semester.

323.1(.2) Management Information Systems I

Prerequisite: Msc 325.1(.2) and Acc 242.1(.2).

The study of computer-based data processing and information systems, management problems of computers in business such as organization, control and feasibility.

Classes 3 hrs. a week. 1 semester.

332.1(.2) Planning and Control

Prerequisite: Acc 242.1(.2) and Msc 325.1(.2).

Covers concepts and techniques of planning and control such as profit planning, financial forecasting, budgets, performance measurements, management control systems, and the analysis of performance.

Classes 3 hrs. and lab 1 1/2 hrs. a week. 1 semester.

334.1(.2) Cost Accounting

Prerequisite: Acc 332.1(.2), Fin 360.1(.2), and Msc 206.1(.2).

This is a course about cost accounting information for decision analysis. It covers both the accumulation of cost and the control features of information provided by the cost system. Topics introduced in Acc 332.1(.2), such as job order costing, standard costs and variance analysis, will be explored for their relevance to decision analysis.

Classes 3 hrs. a week. 1 semester.

341.1(.2) Intermediate Financial Accounting - Part I

Prerequisite: Acc 242.1(.2) and Msc 325.1(.2).

Part I of a two-course series which provides a comprehensive study of financial accounting and financial reporting. This course is to be followed by Intermediate Financial Accounting - Part II.

Classes 3 hrs. a week. 1 semester.

342.1(.2) Intermediate Financial Accounting - Part II

Prerequisite: Acc 341.1(.2).

Part II of a two-course series which provides a comprehensive study of financial accounting and financial reporting.

Classes 3 hrs. and lab 1 1/2 hrs. a week. 1 semester.

345.1(.2) Financial Accounting Theory

Prerequisite: Acc 341.1(.2).

Study of objectives of financial accounting, major accounting theories, evolution of financial accounting theory and practice, survey of contemporary accounting practice with emphasis on latest developments and issues. This course should be taken concurrently with Acc 342.1(.2) or after the completion of Acc 342.1(.2).

Classes 3 hrs. a week. 1 semester.

357.1(.2) International Accounting

Prerequisite: Acc 332.1(.2).

An introduction to accounting in the international environment, building on introductory financial (and to a lesser extent, managerial) accounting to provide the requisite background to understand accounting issues facing multinational firms. Topics will include: international accounting standards; foreign exchange, foreign currency transactions, and translation of financial statements; intercorporate investment, including consolidation of subsidiaries, both foreign and domestic; inflation and current value accounting; transfer pricing; as well as information systems and audits.

Note: This course cannot be counted toward the credit requirements for accounting majors.

423.1(.2) Accounting Information Systems and Control

Prerequisite: Acc 323.1(.2), 332.1(.2) and 341.1(.2); Mgt 383.1(.2) and 384.1(.2).

This course expands on the systems and control concepts introduced in Acc 323. Accounting transaction processing, the use of accounting information systems (AIS), and their design and construction are analyzed. Internal controls within AIS, evaluation techniques, and techniques for developing, documenting, and monitoring the effectiveness of AIS are investigated.

Classes 3 hrs. a week. 1 semester.

425.1.(2) Management Information Systems II

Prerequisite: Acc 323.1.(2).

This course is an introductory systems analysis and design course covering fundamental systems concepts; the systems development life cycle; and processes, tools and techniques for each stage in the life cycle, with emphasis on requirements analysis and design. Project management, proposal development and presentation and cost-benefit analysis techniques are also discussed. These concepts and skills are applied in a major practical case project.

Classes 3 hrs. a week. 1 semester.

443.1.(2) Advanced Financial Accounting - Corporate Accounting

Prerequisite: Acc 342.1.(2).

This course includes in-depth consideration of partnerships, long term investments in equity securities, international operations, non-business and not-for-profit organizations, and fund accounting.

Classes 3 hrs. and lab 1 1/2 hrs. a week. 1 semester.

444.1.(2) Advanced Financial Accounting - Special Topics

Prerequisite: Acc 342.1.(2) and Acc 345.1.(2).

This course includes extended consideration of special topics in corporate accounting, branch accounting, fiduciary accounting, receivership, bankruptcy and liquidations, and alternatives to historical cost.

Classes 3 hrs. a week. 1 semester.

449.1.(2) Management Control Systems

Prerequisite: Acc 332.1.(2) and Mgt 383.1.(2)/384.1.(2).

An advanced study of the management control system which examines problems of effective and efficient control from the perspective of the total system: expense centers, profit centers, investment centers, programming, planning, budgeting, performance appraisal.

Classes 3 hrs. a week. 1 semester.

450.1.(2) Auditing

Prerequisite: Acc 342.1.(2).

A study of the basic concepts and theory of auditing including the auditing environment; the auditor's role; the structure of the profession; responsibilities of auditors; nature and theory of evidence; the auditor's report and other related material.

Classes 3 hrs. a week. 1 semester.

453.1.(2) Taxation

Prerequisite: Acc 342.1.(2) or Fin 361.1.(2).

An introductory study of the theory and procedures of federal income taxation. Both personal and corporation income tax issues are examined.

Classes 3 hrs. a week. 1 semester.

455.1.(2) Accounting Seminar

Prerequisite: Acc 342.1.(2) and Acc 345.1.(2).

An intensive study of the problems of income determination, asset valuation and liability and equity measurements; a study of the conventional accounting model and the accounting theories that are proposed as a framework for the resolution of the problems in the conventional model.

Classes 3 hrs. a week. 1 semester.

461.1.(2) Internal/Operational Auditing

Prerequisite: Acc 332.1.(2) and 342.1.(2), or permission of department chairperson and instructor.

A study of the concepts and theory of internal/operational auditing including the internal/operational audit environment; the structure of the internal/operational auditing profession; the duties, responsibilities and procedures of internal/operational auditors; and the relationship between the internal/operational auditing function and the external audit.

Classes 3 hrs. a week. 1 semester.

462.1.(2) Management Accounting Seminar

Prerequisite: Acc 334.1.(2) and 449.1.(2).

Advanced Management Accounting is the capstone course in the managerial accounting sequence. Its purpose is to provide an exposure to recent developments in the management accounting literature. The course introduces material relating to operations

management, strategic planning, and management control systems. Integrating this material with knowledge gained in previous courses is a major purpose of the course. The course develops an understanding of the interactions between planning and control systems. These relationships deal with the three basic issues of management accounting: the choice of useful information, the problems in its measurement, and the behavioral consequences of using the data.

Classes 3 hrs. a week. 1 semester.

492.1.(2) Directed Studies

Prerequisite: permission of chairperson and instructor.

This course provides an opportunity to study specific areas of accounting, auditing, taxation or MIS. A detailed course proposal must be submitted and will be evaluated on its educational merits. In-depth study of accounting concepts, systems, auditing, or taxation issues are intended to be within the scope of this course.

The following courses are available only to students registered in the Master of Business Administration Program and with permission of the MBA Director, to students registered in other Master's programs.

540.1.(2) Financial Accounting

This course provides an introduction to financial accounting and presumes no prior knowledge of the subject. Using a conceptual approach, the student is given a thorough understanding of financial accounting concepts, principles and practices. Emphasis is placed on providing the student with a fundamental knowledge of how to interpret and analyze financial statements and also with an appreciation of the limitations inherent in published financial information.

548.1.(2) Managerial Accounting

Prerequisite: Acc 540.1.(2).

The primary objective of this course is to provide the student with a knowledge of the various types of accounting information which are available for use by managers in decision-making. The student examines selected cost concepts and the appropriateness of their use in diverse areas of decision-making. Financial forecasting, budgeting, profit-planning and performance measurement make up the major portion of the course content.

626.1.(2) Management Information Systems

Prerequisite: completion of all required 500 level courses or permission of MBA Director.

This course presents a management-level overview of information systems and related planning, organizing and control issues. Fundamental concepts in systems, computing and communications technology, applications, information management, systems development, internal control and strategic uses of information technology are introduced, illustrated and applied in case studies.

641.1.(2) Financial Reporting: Problems and Issues

Prerequisite: completion of all required 500 level courses or permission of MBA Director.

This course focuses on the problems inherent in the process of communicating financial information to various interested groups outside the business organization. Commencing with an examination of the basic objectives of financial statements and the information requirements of various financial statement users, the course provides an opportunity to evaluate generally accepted accounting principles currently in use. Alternative asset valuation and income measurement models are considered as well as current financial reporting issues.

648.1.(2) Management Control Systems

Prerequisite: completion of all required 500 level courses or permission of MBA Director.

Designed to provide the student with an understanding of the nature of management control systems, this course places particular emphasis on organizational structure and the control process. Various applications of the 'responsibility center' concept are examined as well as planning, budgeting and performance appraisal. The emphasis is on the design of systems suitable to the organization and its objectives and includes consideration of both profit-oriented and non-profit organizations.

650.1(.2) Managerial Decision Analysis and Information

Prerequisite: completion of all required 500 level courses or permission of MBA Director, an accounting major undergraduate degree including a quantitative managerial accounting course, and permission of department.

This course will explore formal decision analysis to assess the approach and the requirements it places on the information system. Focus will be on formal rational models of decision analysis under certainty and uncertainty including decision support systems and computerized analysis.

652.1(.2) Integrative Managerial Accounting

Prerequisite: completion of all required 500 level courses or permission of MBA Director, Acc 650.1(.2), and permission of department.

Current developments in managerial accounting and integrative problem analysis will be emphasized in the course and modern management thinking and analysis approaches will be included.

654.1(.2) Advanced Financial Accounting Theory

Prerequisite: completion of all required 500 level courses or permission of MBA Director, an accounting major undergraduate degree including an accounting theory course, and permission of department.

Accounting theory involves conceptual, historical, and empirical developments. Exploration of these issues in light of recent developments will be made in this course. Included are theoretical issues surrounding advanced accounting topics such as not-for-profit organizations, foreign currency, business combinations, on-going concerns, partnerships, and resource industries.

656.1(.2) Integrative Financial Accounting

Prerequisite: completion of all required 500 level courses or permission of MBA Director, Acc 654.1(.2), and permission of department.

Theory and practice will be combined to investigate complex financial accounting issues and problems. Recent research and practice will be explored as part of this course.

657.1(.2) International Accounting

Prerequisite: Acc 540.1(.2) and Acc 548.1(.2).

An introduction to accounting in the international environment and especially within multinational enterprise, which will involve in-depth examination of international accounting issues. Topics will include: international accounting standards; foreign exchange, foreign currency transactions, and translation of financial statements; intercorporate investments; accounting for changing prices; transfer pricing; international aspects of taxation; culture and accounting; as well as accounting in developing countries.

658.1(.2) Computer Based Auditing

Prerequisite: completion of all required 500 level courses or permission of MBA Director, an accounting major undergraduate degree including an auditing course, and permission of department.

This course investigates internal controls and audit in computer and data communications environments. Topics include hardware and software control features, data security, control evaluation, computer assisted auditing, statistical sampling and working paper preparation and selected current topics. Microcomputer and networked systems will be emphasized.

660.1(.2) Integrative Public Auditing

Prerequisite: completion of all required 500 level courses or permission of MBA Director, Acc 658.1(.2), and permission of department.

Specialized public auditing areas such as forensic audits, environmental audits, and computer systems investigations will be combined with the study of recent audit questions of concern to both practitioners and researchers.

662.1(.2) Integrative Internal Auditing

Prerequisite: completion of all required 500 level courses or permission of MBA Director, Acc 658.1(.2), and permission of department.

This course covers value-for-money auditing, and operational and management audits, investigations of computer systems and emerging issues in internal auditing. Modern management practices and approaches will constitute necessary background.

664.1(.2) Advanced Taxation Legislation—Corporate and Sales

Prerequisite: completion of all required 500 level courses or permission of MBA Director, an accounting major undergraduate degree including an income tax course, and permission of department.

Tax legislation is not only complex but subject to continual change. This course will explore the recent changes in both corporate and sales tax legislation and engage in an in-depth study of selected areas of the legislation relevant to business decisions.

666.1(.2) Taxation and Financial Planning

Prerequisite: completion of all required 500 level courses or permission of MBA Director, Acc 664.1(.2), and permission of department.

The tax implications for various complex business decisions such as mergers, capital structuring, investments, and business valuations will be investigated. Recent income tax legislation will also be considered as part of the investigation conducted.

668.1(.2) Advanced MIS

Prerequisite: completion of all required 500 level courses or permission of MBA Director, an accounting MIS course, and permission of department.

This course analyzes advanced topics in computerized information systems from an accounting perspective. Systems analysis and design, database design, systems documentation and the role of expert systems and artificial intelligence will be explored. CASE and expert systems tools will be used.

690.1(.2) Seminar in Accounting

Prerequisite: completion of all 500 level courses or permission of MBA Director, department chairperson, and instructor.

The course deals with selected topics in the accounting area. The topics to be covered will vary depending on the interests of the students and instructors.

692.1(.2) Directed Study

Prerequisite: completion of all required 500 level courses and permission of MBA Director, department chairperson, and instructor.

Intended to supplement or provide an alternative to the regular accounting courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

698.1(.2) Research Seminar

Prerequisite: completion of all required 500 level courses and permission of MBA Director, department chairperson, and instructor.

A study of research problems and methodologies in accounting, with each student preparing and defending a research proposal of his/her own based upon a critical review of current literature. This course is designed to aid students in the development of their project course.

699.1(.2) Research Project

Prerequisite: Acc 698.1(.2) or permission of MBA Director.

Each student is required to complete a project involving the practical application of the research concepts and techniques used in accounting, under the direct supervision of a faculty member. Interdisciplinary projects are acceptable.

Anthropology (Ant)

Chairperson, Professor
Professors
Associate
Assistant

H. McGee, Jr.
P. Erickson, J. R. Jaquith
Professor S. Davis
Professor S. Walter

Departmental Policy

- To obtain a major concentration, a student is required to have completed at least six courses in anthropology. These must include Ant 200.0, 450.0, and three additional courses at the 300 level or above.
- To obtain an honors concentration in anthropology, a student is required to (a) satisfy pertinent Faculty of Arts requirements; (b) have a cumulative quality point average of at least 3.00 for admission to the program; (c) an approved statement of a thesis topic; (d) meet departmental major requirements; (e) complete the equivalent of 10.0 courses in anthropology, including the following obligatory core: Ant 200.0, 270.0, 300.0, 380.0, 390.0, 450.0, and 499.0; (f) in addition, honors majors are urged to take at least one of the following methods courses: Ant 321.0, 360.0, 410.0, and 411.0.
- The program for majors must be approved by the student's departmental advisor who will be assigned at the time the major is declared.
- In the case of re-numbered courses, students are advised that only one credit can be obtained for one course, even if that course was offered on different levels in different years.
- Ant 200.0, 201.0, 220.0, 270.0, 319.0, and 372.0 do not have prerequisites.
- The department considers courses in the disciplines of anthropology, economics, geography, political science, psychology, and sociology as social sciences.
- Students are advised that not all courses listed are taught every year. Therefore, students are urged to check with the department prior to registration to confirm the department's offerings.
- The department offers a range of courses from general introductory to specialized area or topical courses. The following guide, noted below, is intended to outline the diversity of the department's course offerings:
- The department offers a prize for excellence in anthropological writing to major or honors students in anthropology. The prize is named for Prince John Loewenstein, the founder of the department, and consists of a cash award, certificate of merit, and the prize-holder's name will appear on a memorial plaque. Details may be obtained from the Chairperson of the department.

General Introductory Course

200.0

Introductory Specialized Courses

201.0; 220.0; 270.0

Advanced General Courses

300.0; 360.0; 380.0; 390.0

Advanced Specialized Courses

310.0; 315.0; 320.0; 330.0; 335.0; 340.0; 349.0; 350.0; 445.0

Advanced Specialized Courses with a Geographical Focus

322.0, 325.0; 326.1(.2); 327.1(.2); 370.0

Method Courses

321.0; 361.0; 410.0; 461.0

History and Theory Course

450.0

Special Topics Courses

399.0; 480.0

Honors Thesis Course

499.0

200.0 Introduction to Anthropology

Introduction to the scientific study of humanity. Origins, physical and cultural evolution and diversification, prehistory, ecological adaptation, social organization, economic systems, religion, language and value systems of the world's peoples.

201.0 Women: A Cultural Perspective (WMS 201.0)

The differential status of women and men in a variety of societies will be examined. Special attention will be given to the portrayal of "woman" in expressive media. Differential patterns of enculturation for women and men will be the focal, but not exclusive, explanatory thesis.

220.0 Native Peoples of North America

A survey of the Indian and Inuit peoples of North America, their cultures and their life histories as groups.

270.0 Archaeology and World Prehistory

An introduction to archaeology and its contribution to an understanding of the development of culture. The course investigates the earliest known tools and their associated activities. The development of technology is traced from the early stone age through the iron age in a world-wide setting.

300.0 Culture and Society

Prerequisite: Ant 200.0 or permission of instructor.

An in-depth examination of some of the basic concepts used by anthropologists to analyze socio-cultural systems. Special attention will be given to the concepts of culture, structure, *communitas*, and the dialectic.

310.0 Applied Anthropology: Culture Change and Development

Prerequisite: a social science course or permission of instructor.

An introduction to the applications of socio-cultural anthropology. Consideration is given to the nature of society and culture as well as to anthropological and other theories of culture change, including development.

315.0 Peasant Society and Culture (IDS 315.0)

Prerequisite: an introductory socio-cultural anthropology course or permission of instructor.

A treatment of theories and substantive studies of peasant society and culture.

320.0 World Ethnology

Prerequisite: Ant 200.0, 220.0 or permission of instructor.

Vanished and vanishing cultures in Africa, Oceania, North America, South America and Asia, viewed in relation to historical and environmental influences. Theories of cultural evolution are considered.

321.0 Ethnohistory

Prerequisite: Ant 200.0 or permission of instructor.

Ethnohistory and the development of ethnohistorical research, with particular reference to North America. This course is concerned with the anthropologist's use of archival material, and the critical evaluation of different types of oral traditions as sources of historical information. Some ethnohistorical studies are examined.

322.0 Native Peoples of Atlantic Canada

An examination of the social and cultural history of the native peoples of the Atlantic area. The political, religious, technological, economic, kinship and aesthetic systems of the Abenaki, Beothuk, Maliseet-Passamaquoddy, Micmac, and Penobscot ethnic groups will be discussed within a temporal framework.

325.0 Ethnology: Oceania

Prerequisite: a socio-cultural anthropology course or permission of instructor.

Ethnological survey of selected (representative) societies of Polynesia, Micronesia, Melanesia and Australia.

326.1(.2) Ethnology: East Asia

Prerequisite: Ant 200.0 or permission of instructor.

A survey of the cultures and societies of the peoples of China, Korea, Japan, Mongolia, Siberia, and Southeast Asia. Special attention will be given to the socio-cultural integration of community and state.

327.1.(2) Ethnology: Japan

Prerequisite: Ant 200.0 or permission of instructor.

An examination of the culture and society of contemporary Japan. Emphasis will be placed upon the topics of world view, community type, and gender issues.

330.0 Warfare and Aggression: Anthropological Approaches to Human Conflict

Prerequisite: Ant 200.0.

The course will examine the nature and structure of human conflict by evaluating anthropological theories of warfare and aggression in light of the case materials available on small-scale societies. In addition, particular attention will be devoted to: (1) the role of racism in human conflict, and (2) a critique of sociobiological theories of human aggression.

335.0 Psychological Anthropology

Prerequisite: Ant 200.0, Psy 201.0 or permission of instructor.

Deals with the interaction between the individual and culture. Examines roots of both individual and group differences and explores human nature from an anthropological perspective. Looks at complex relations between heredity, culture and environment in a cross-cultural context.

340.0 Socio-cultural Aspects of Health and Illness

Prerequisite: a full course credit (or half course equivalents) in social science.

This course examines the relationships among health, illness, society, and culture. Conceptions of health and illness differ around the world, particularly when they concern the definitions, causes, and cures of ill health. Light will be shed on these complexities by examining cross-cultural views of health and illness, theories of disease causation, deviance and stress, culture-bound and transcultural syndromes, non-Western medical systems, trance and possession and other aspects of health and illness.

349.0 Myth and Symbol

[Rel 320.0 (420.0)]

An examination of myth as an expression of a people's image of the world and how it works. The nature and use of symbols in the myth process is central to this examination. While examples may come from a number of societies, there will be a concentration upon the myth corpus of a single society.

350.0 Anthropology of Religion

[Rel 316.0 (416.0)]

Prerequisite: Ant 200.0 or permission of instructor.

Examination of religious behavior from anthropological perspective. Cross-cultural consideration of such questions as origin and nature of religion, religion as adaptation to environment, religion and culture change.

360.0 Method and Theory in Archaeology

Prerequisite: Ant 200.0 or permission of instructor.

Concepts and methods of archaeology, lab analysis, survey methods, and collection of data. Suggested for students who intend to take field work courses in anthropology.

361.0 Fieldwork in Archaeology

Prerequisite: one of Ant 200.0 or 270.0 or 360.0 or 370.0 and permission of instructor.

Course involves detailed instruction in, and practical application of, archaeological field techniques in the excavation of archaeological sites. The course will offer training in the laboratory analysis of artifacts recovered in the excavation phase of the course. This course may be offered during summer sessions. Please consult the departmental chairperson regarding availability.

3 weeks field work and 3 weeks lab.

370.0 Archaeology of North America

Prerequisite: Ant 200.0 or permission of instructor.

A survey of North American prehistoric culture, the course considers the first entry into North America of human societies and the subsequent cultures which developed here.

380.0 Physical Anthropology

Prerequisite: Ant 200.0 or permission of instructor.

An advanced treatment of primate behavior, primate anatomy and human genetics involving laboratory and workbook exercises.

390.0 Linguistic Anthropology

Prerequisite: Ant 200.0 or permission of instructor.

Comprehensive cross-cultural introduction to language and speech behavior; to the relations between language and culture generally; to the analysis and description of languages in terms of their constituent units and dynamics; to the social functions of language; applied linguistics and literacy.

399.0 Directed Independent Studies

Directed independent study on a reading or research program agreed to by student and instructor. The student must obtain instructor's approval of proposed study plan before registering for the course.

410.0 Methodology in Socio-cultural Anthropology

Prerequisite: Ant 200.0 or permission of instructor.

This course introduces the student to a variety of data collection techniques and methods of analysis. The student may be permitted to collect and analyze ethnographic data within the local area.

445.0 Evolution and Human Behavior

Prerequisite: Ant 380.0 or permission of instructor.

An examination of physical anthropology's contribution to the nature/nurture debate focusing on human sociobiology, human ethnology and human behavioral genetics.

450.0 History of Anthropological Theory

Prerequisite: Ant 200.0, and two additional courses in anthropology or permission of instructor.

The development of anthropological theory from the Enlightenment to the present with reference to current theoretical issues.

461.0 Advanced Fieldwork in Archaeology

Prerequisite: Ant 361.0.

Students are expected to have knowledge of field and laboratory techniques used in archaeology. They will conduct their own excavations and analysis of an archaeological site and its material. This course may be offered during summer sessions. Please consult departmental chairperson regarding availability.

3 weeks field work and 3 weeks lab.

490.0 Seminar

To be offered in response to expressed student desire for advanced instruction in anthropological topics not covered intensively in substantive course offerings. It will be given as a formal seminar.

499.0 Honors Thesis

Supervised preparation of a significant research paper for honors students in anthropology.

Asian Studies ASN)

Committee on Asian Studies

Coordinator	T.B.A.
J. Ahiakpor	Economics
P. Bowlby	Religious Studies
P. Bowles	Economics
N. Jones	Geography
J. Lee	History
H. McGee	Anthropology
J. Morrison	History
D. Mukhopadhyay	Economics
H. Ralston	Sociology
B. Robinson	Geography
H. Schwind	Management
S. Walter	Anthropology
S. Wein	Philosophy

There is little question of the place or significance of Asian Studies in university education. Since World War II, we have witnessed the increasing importance of Asia in world politics and economics and have recognized the need for educated citizens to develop a better understanding of the forces involved. An informed acquaintance with the Asian experience in the field of politics, history, culture, philosophy, and religion has become an essential corollary to a full understanding of our own Western experience.

An academic background in Asian Studies will help to prepare students for careers in the diplomatic service, in international trade and industry and in the secondary and university teaching fields.

Saint Mary's University is the only institution in the Atlantic Provinces offering a comprehensive program in Asian Studies.

Regulations for Majors

Majors should choose a supervisor from among the faculty in the Committee on Asian Studies who will oversee their program of study. Aside from the normal university requirements for the Bachelor of Arts degree, students intending to complete a major concentration in Asian Studies are required to obtain at least six course credits. The credits must be obtained from at least three different departments. The list of courses where the credits may be earned is given at the end of the Calendar description.

Regulations for Honors

- Admission to and continuance in the honors program in Asian Studies follows the general regulations of the Faculty of Arts, namely regulations 11, 12, and 13.
- Students seeking an honors degree in Asian Studies are encouraged to pursue a combined honors program in one of the departments offering Asian Studies courses. See Faculty of Arts regulation 14.
- Students in either an honors or combined honors program in Asian Studies must satisfy the following requirements:
 - at least an introductory level course in an Asian language;
 - courses which will acquaint them with the major cultural areas of Asia;
 - at least one Asian Studies course within each of the following departmental groupings:
 - History and Religious Studies;
 - Anthropology, Geography, Political Science, or Sociology;
 - Economics or Management.
 - An honors thesis to be prepared during the final year of study in the program. The topic must be approved by the Asian Studies Committee and the thesis will be supervised and graded by three faculty members chosen by the Asian Studies Committee. Students writing an honors thesis must enrol in Asian Studies 492.0: Honors Thesis.
 - Annual approval of their program of study by the Chairperson of the Asian Studies Committee.

Dual Degree Program

Since it is possible to obtain two undergraduate degrees from Saint Mary's University, for Commerce students it may be very attractive to combine a degree in their field with a major in Asian Studies, especially in light of the interest which the Canadian federal and provincial governments and private industries have in developing trade with the Pacific Rim countries. It is relatively easy to combine Commerce and Asian Studies if Commerce students select their non-Commerce and free electives carefully. The second degree can be obtained in a year or less in addition to the normal time requirement for a Commerce degree. For more information please contact either the Dean of Arts, Dean of Commerce, or the Coordinator of Asian Studies, and also consult the last entry in the Faculty of Commerce descriptions in this Calendar.

Anthropology

315.0	Peasant Society and Culture
325.0	Ethnology: Oceania
326.0	Ethnology: East Asia
327.0	Ethnology: Japan

Asian Studies

400.0	China's Developmental Experience
410.2	Special Topics on Japan
492.1(.2)	Directed Study

Economics

310.1(.2)	Development Economics
313.1	International Finance
315.1(.2)	Comparative Economic Systems
323.1(.2)	Soviet-Type Economy

Geography

330.1(.2)	Geography of China
390.1(.2)	Geography of Southeast Asia

History

209.0	East Asia: From Prehistoric to Modern Times
323.0	China Before 1800
324.0	Traditional Japan: History and Culture
325.0	Asian Crossroads: Southeast Asia from 1600 to Independence
341.0	China and Japan in the 20th Century
342.0	China in Revolution: 1840 to the Present
385.0	Third World from 1500
391.0	East Asia and the West
392.0	Modern Japan
394.1(.2)	The Emergence of Modern Korea
396.1(.2)	China and Japan in the 20th Century: Ideology, State, and Society
511.0	Seminar on Modernization in East Asia

International Development Studies

300.0	Introduction to Development Studies
320.0	Development Studies through Canada World Youth
400.0	Seminar in Development Studies
420.1(.2)	Special Topics in Development Studies
421.1(.2)	Special Topics in Development Studies
422.0	Special Topics in Development Studies
470.1(.2)	Environment and Development

Management

488.1(.2)	International Business Management
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Modern Languages and Classics

Chinese

100.0	Elementary Chinese
200.0	Intermediate Chinese

Philosophy

325.1	Ethical Issues in International Development
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Political Science

340.0	Politics of the Developing Areas
341.0	Government and Politics in East Asia
553.0	International Studies Seminar

Religious Studies

240.0	When Great Religions Meet
324.0	Religions of China
325.1	Myth and Story
326.1(.2)	The Hindu Religious Tradition
327.1(.2)	The Buddhist Religious Tradition
337.1(.2)	Religion and Art in South Asia
340.0	Ethnic and Minority Groups
341.1(.2)	Political Theology: East and West
342.1(.2)	Religion and War
417.0	Religious Movements

Sociology

386.1(.2)	Sociology of Developing Societies
415.1(.2)	New Religious Movements
416.1(.2)	Religion in Developing Societies

400.0 China, External and Transforming: Travel and Study

Prerequisite: permission of ASN Coordinator.

This course takes place for six weeks between May and July at the Shandong Teacher's University in Jinan, China, with guided tours of other urban centres and cultural sites. Students will be accompanied by a faculty member from Saint Mary's, and on-site instruction will be provided by faculty from Shandong. Subjects taught will cover a broad range of topics on Chinese language, history, and culture. The course is offered contingent upon sufficient enrolment.

Time in China is approximately four weeks.

Six weeks full time.

410.2 Special Topics on Japan

Prerequisite: one Asian Studies course or permission of instructor.

Special Topics on Japan is a seminar to be taught by a Japanese specialist invited to Saint Mary's University.

490.1(.2)-499.1(.2) Directed Study

Prerequisite: permission of Coordinator and instructor.

Intended to supplement or provide an alternative to the regular courses in Asian Studies in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

Classes: Tutorial and independent study. 1 semester.



Astronomy (Ast)

Chairperson, Professor
 Professor
 Observatory Director, Associate Professor

D. G. Turner
 G. F. Mitchell
 G. A. Welch

The Burke-Gaffney Observatory opened early in 1972 and began a program to make its facilities available to the general public and to students and faculty at Saint Mary's University. The telescope is a reflector with a 0.4-metre diameter mirror and is equipped with research instrumentation. Telescope observations are a standard component of the 200-level courses in astronomy, and a few upper-year courses.

Undergraduate Courses

Ast 201.0 is a non-mathematical course intended for the non-science student. In addition, the department offers a series of courses for undergraduate science majors. Ast 202.0 is an introductory course for science students which provides a broad background in all areas of astronomy. The 300 and 400-level courses are one-semester courses in astronomical techniques, astrophysics, the solar system, and stellar systems, and these courses are suitable as science electives (requirement 5-b) for science majors, including students in Co-operative Education Programs.

Astrophysics Program

The astrophysics program is offered jointly with the Department of Physics. The program demands a minimum grade of C in all physics and astronomy courses taken. The program of study must be approved by the Department of Astronomy and the Department of Physics. Further details are found below in the Department of Physics.

The Master's Program

Saint Mary's University is the only institution in Atlantic Canada offering a Master's degree in astronomy. Both full-time and part-time students can be accommodated. The 600-level courses listed are graduate courses and are not usually open to undergraduate students. The Master's program attempts to provide the student with a broad background in physical science, to foster research ability, and to develop in the student an understanding of modern astronomy at the professional level. The graduate will be sufficiently versatile to enter a doctoral program elsewhere, pursue a technological career, or choose a career in teaching.

The program is two years in length (or up to six years for part-time students) and includes course work and a thesis. The number of courses required will depend on the qualifications of the student, but will normally be four plus thesis. The major effort of the first year will be in acquiring a basic knowledge of astronomy through courses, seminars, and general reading. Three courses will normally be taken during this first year a thesis topic will be chosen in consultation with the department. In the second year the student will normally take one course and complete a thesis. The thesis work will be carried out under the supervision of a faculty member and will involve original research. Graduate students will normally spend the summer in the department working on their research.

Admission and degree requirements are given in the Graduate Studies section of this Calendar.

201.0 Introduction to Astronomy

This survey course is intended for students who are not science majors and who have little background in science and mathematics. It emphasizes the scientific methods currently used to determine physical properties (such as distance, size, composition, age and origin) of astronomical objects. A survey of known constituents of our universe will include objects as near as the earth itself and as remote as the mysterious quasars, and objects as commonplace as the moon and as bizarre as neutron stars and black holes. Among the great themes of 20th century astronomy to be described will be the life cycles of stars, the nature of the Milky Way Galaxy, and the origin and fate of the universe. During the course students will also be able to gain practical observing experience and to make use of the Burke-Gaffney Observatory.

Classes 3 hrs. a week. 2 semesters.

202.0 Introductory Astronomy for Science Students

Prerequisite: Phy 111.0 and Mat 100.0.

After a study of the celestial sphere, the motions of the earth and time measurement, the solar system will be investigated in some detail. Topics will include the moon, planets, asteroids, comets and the sun. Consideration of the properties of stars and stellar evolution will lead to a brief discussion of neutron stars, black holes and pulsars. Our Galaxy will be examined with respect to its size, rotation, and spiral structure. The nature and space distribution of external galaxies will be studied.

Classes 3 hrs. a week. 2 semesters.

301.1(2) Observational Astronomy

Prerequisite: Ast 202.0 or permission of instructor.

This course is concerned with astronomical instruments and techniques. Beginning with optical properties of telescopes, this course examines the design and use of modern astronomical instruments such as the photoelectric photometer, the spectrograph, and the CCD camera. Students will have the opportunity to use this equipment in observing sessions, and gain practical experience in the acquisition and reduction techniques of astronomical data.

Classes 3 hrs. a week. 1 semester.

302.1(2) Introductory Astrophysics

Prerequisite: Phy 221.0.

Astrophysics is concerned with application of principles from physics and other sciences to astronomical systems. This course is an introduction to this endeavour. Topics discussed will include the transfer of radiation through the outer layers of stars, the sources of stellar energy, the evolution of stars and the nature of interstellar gas clouds in the Galaxy.

Classes 3 hrs. a week. 1 semester.

401.1(2) Solar System Astronomy

Prerequisite: Phy 221.0 and Ast 202.0, or permission of instructor.

Topics covered include: fundamental data for planets and satellites, orbital mechanics, rocks and minerals, age dating of rocks by radioactive decay, meteorites and tektites, comets, asteroids and remote sensing techniques, cosmogony and the early history of the solar system, planetary and satellite interiors, surfaces and atmospheres, and comparative planetology.

Classes 3 hrs. a week. 1 semester.

402.1(2) Stellar Astronomy

Prerequisite: Phy 221.0 and Ast 202.0, or permission of instructor.

This course forms an introduction to the material covered in Ast 602.1(2). Topics covered include: aspects of the celestial sphere, review of spherical astronomy, stellar astrometry, photometry and spectroscopy, basic stellar parameters, star cluster H-R diagrams and observable features of stellar evolution, interstellar extinction, dynamics of star clusters, introduction to studies of the Milky Way and Local Group galaxies.

Classes 3 hrs. a week. 1 semester.

The 600-level courses are intended for graduate students in astronomy and are not normally taken by undergraduates. Interested undergraduates should discuss their background with the Department Chairperson before enrolling in these courses.

602.1(2) Galactic Astronomy

This course describes the contents and structure of the Milky Way Galaxy. Topics covered include: historical highlights, reference frames and stellar astrometry, spectral classification, photometric systems, luminosity calibrations, clusters and associations, star counts and stellar density functions, the luminosity function, chemical composition variations in the Galaxy, solar motion, statistical and secular parallaxes, kinematic groups, galactic rotation and structure, spiral arms, and an introduction to galactic dynamics.

Classes 3 hrs. a week. 1 semester.

603.1(.2) Stellar Astrophysics

Topics covered include: the transfer of radiation through gas, the equations of stellar structure and their solution, stellar evolution to the red giant stage, quantum statistics, degeneracy, white dwarfs, supernovae, and neutron stars.

Classes 3 hrs. a week. 1 semester.

604.1(.2) Astrophysics of Interstellar Matter

Topics covered include: the phases of the interstellar medium, neutral clouds, ionized hydrogen regions, interstellar molecules, dust grains, shocks, gravitational collapse, bipolar outflows, and accretion disks.

Classes 3 hrs. a week. 1 semester.

606.1(.2) Techniques and Instruments in Astronomy I

A review of the celestial sphere and timekeeping systems begins this course, which deals primarily with the optical region of the spectrum. A discussion of radiation measurement will include the effects of the terrestrial atmosphere. An investigation of the properties of modern detectors leads to a summary of the observing and data reduction techniques associated with them. Assignments will include a variety of instruments currently used in the Astronomy Department and Burke-Gaffney Observatory.

Classes 3 hrs. a week. 1 semester. Required observing sessions at the 40 cm telescope extend through second semester.

607.1(.2) Binary and Variable Stars

This course is devoted to the study of both binary stars and variable stars. Topics covered under binary stars include: fundamentals of orbital motion and the properties of binary star systems, analytical and practical techniques for studying visual, astrometric, spectroscopic, and eclipsing binaries, the mass-luminosity relation, and classification of close binaries by Roche-lobe filling, light curves and variable star classification, eclipsing variables, eruptive variables. Topics covered under variable stars include: pulsating variables and pulsation theory, rotating variables, unique types, and the link between variability and stellar evolutionary stages.

Classes 3 hrs. a week. 1 semester.

608.1(.2) Selected Topics in Astronomy and Astrophysics

One or more selected specialty areas in astronomy will be examined in greater detail than is possible within the broader scope of other courses. Topics will be chosen by the department and made available to interested students prior to registration.

Seminar 3 hrs. a week.

609.1(.2) Extragalactic Astronomy

Starting with a survey of the different galaxy classes, recent observations of galaxies will be reviewed with emphasis on how these observations are interpreted using concepts arising from studies of the Milky Way. The present content and possible evolutionary histories of the galaxy classes will be compared. The nature of galaxy clusters will be examined, and this will lead to a discussion of how observations of galaxies are employed to infer the large-scale properties of our universe.

Classes 3 hrs. a week. 1 semester.

610.0 Thesis

Normally taken during the second year of enrolment in the M.Sc. program. The research will be conducted under the supervision of a faculty member.

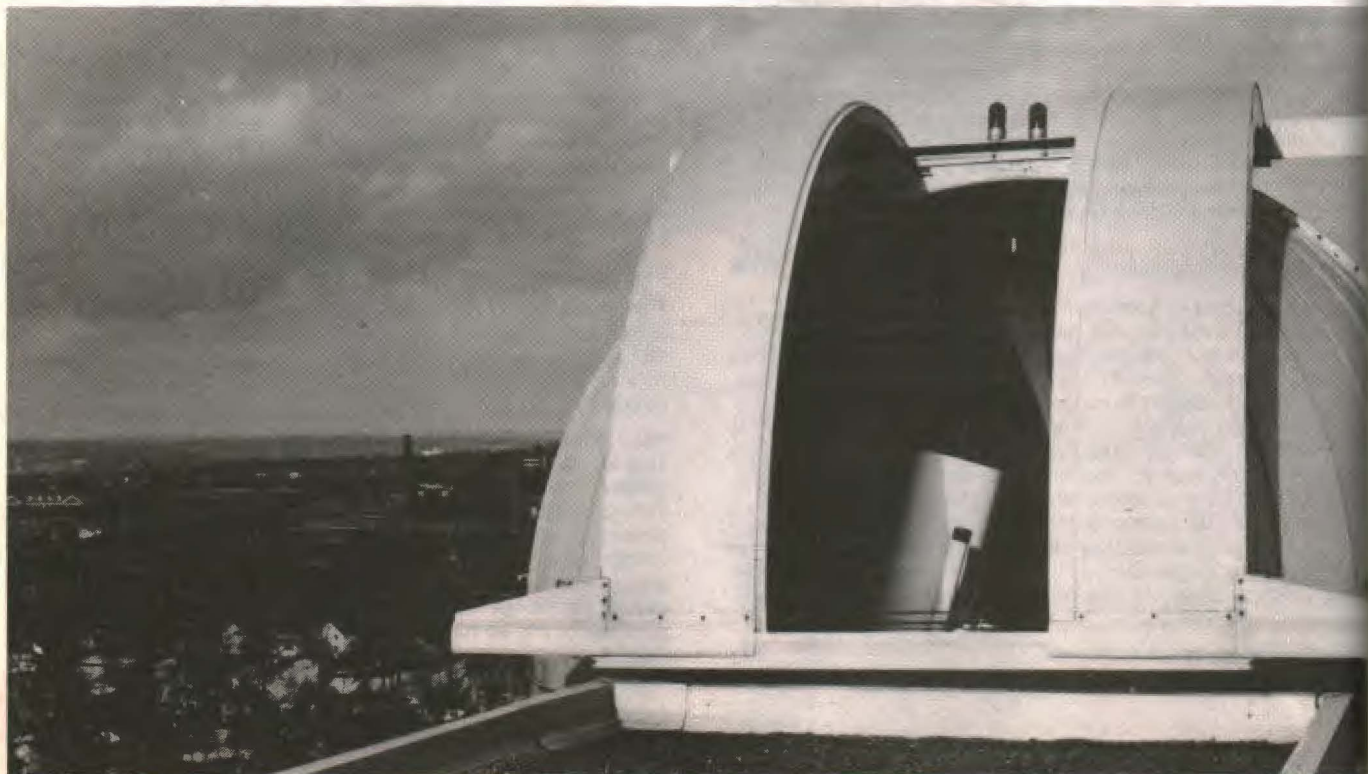
611.1(.2) Directed Readings in Current Literature

A topic of current interest in astronomy will be chosen in consultation with a faculty member. After a thorough study of recent work on the topic, a detailed written report with references will be submitted. Extensive use will be made of available research journals.

616.2 Techniques and Instruments in Astronomy II

This course complements Ast 606.1(.2) by dealing primarily with wavelengths outside the optical spectral region. It begins with a summary of atmospheric effects across the spectrum. A discussion of astronomical telescopes and detectors will include descriptions of specific hardware being used to study electromagnetic radiation and other information from beyond the atmosphere. The techniques of radio interferometry will be investigated in detail.

Classes 3 hrs. a week. 1 semester.



Atlantic Canada Studies (ACS)

Committee on Atlantic Canada Studies

J. G. Reid, Coordinator	History
T. Arseneau	Political Science
L. G. Barrett	Sociology
C. J. Byrne	English
J. Chamard	Management
T. Charles	Finance and Management Science
L. Christiansen-Ruffman	Sociology
D. Cone	Biology
P. Connelly	Sociology
S. Davis	Anthropology
D. Day	Geography
K. Filkeid	Modern Languages and Classics
M. Harry	English
C. Howell	History
B. Kieseckamp	History
M. MacDonald	Economics
K. MacKinnon	English
R. McCalla	Geography
H. F. McGee	Anthropology
H. Millward	Geography
J. H. Morrison	History
D. Nauls	Political Science
T. O'Neill	Economics
D. Perrier	Sociology
H. Ralston	Sociology
B. Robinson	Geography
A. T. Seaman	English
R. Twomey	History
H. Veltmeyer	Sociology
J. Waldron	Geology
T. A. Whalen	English
M. Wiles	Biology
T.B.A.	student enrolled in ACS graduate program
T.B.A.	undergraduate student majoring or honoring in ACS

Atlantic Canada Studies is an interdisciplinary major, minor, and honors option in the Arts Faculty which has developed out of an increasing demand by students, faculty and the community generally, for a more organized study of this region.

Students who complete a major, minor, or honors in Atlantic Canada Studies will have helped to prepare themselves for a fuller and more meaningful participation in the life of Atlantic Canada, and will have acquired a useful background for careers in teaching, trade and industry, and the various bureaus of the provincial and federal civil services. Their attention is particularly drawn to the advantages, from a career point of view, of taking Atlantic Canada Studies as part of a double major or combined honors.

Students are required to choose their courses in consultation with a member of the Atlantic Canada Studies Committee, and are strongly urged to select one of its members to advise them for the duration of the program, and to provide the necessary liaison with the Committee. The following are the regulations for major, minor, and honors programs. Details concerning the Master of Arts in Atlantic Canada Studies degree are found in Section 3 of this Calendar.

Major

To complete a major concentration in Atlantic Canada Studies, a student must meet the usual University requirements for the Bachelor of Arts degree, and in particular, obtain eight full course credits (or the equivalent) from the courses listed below. At least four of the eight credits must be at the 300 level or above. Students are required to select courses in accordance with the following criteria:

1. The courses must include at least one full credit from each of three of Groups A, B, C, D and E.
2. The courses must include at least one full credit from each of three different academic disciplines. Interdisciplinary ACS courses do not count as a discipline for this purpose.
3. ACS 400.0 must be one of the courses selected.
4. No more than three full credits may be selected from Group E.

5. No student may include both ACS 310.0 and Bio 207.0 among the courses selected.

6. It is the responsibility of the student to ensure that all prerequisites have been fulfilled for the courses chosen.

Minors

A minor in Atlantic Canada Studies consists of four full courses, or the equivalent, chosen from the courses listed below and completed with a quality point average of at least 2.00. At least two full course equivalents must be at the 300.0 level or above, and the courses selected must include ACS 400.0. The courses must also include one full course equivalent from each of three different academic disciplines, and no more than two full course equivalents may be selected from Group E.

Honors

To complete an honors program in Atlantic Canada Studies, a student must meet the usual University requirements for the Bachelor of Arts degree with Honors, and in particular, obtain ten full course credits (or the equivalent) from the courses listed below. At least eight of the ten credits must be at the 300 level or above. Students are required to select courses in accordance with the following criteria:

1. The courses must include at least one full credit from each of four of Groups A, B, C, D, and E.
2. The courses must include at least one full credit from each of three different academic disciplines. Interdisciplinary ACS courses do not count as a discipline for this purpose.
3. ACS 500.0 must be one of the courses selected.
4. No more than three full credits may be selected from Group E.
5. No student may include both ACS 310.0 and Bio 207.0 among the courses selected.
6. It is the responsibility of the student to ensure that all prerequisites have been fulfilled for the courses chosen.

Group A Interdisciplinary Courses in Atlantic Canada Studies
ACS 300.0; ACS 301.1; ACS 302.2; ACS 303.1(.2); ACS 310.0; ACS 400.0; ACS 401.1(.2) to ACS 405.1(.2); ACS 500.0.

Group B Culture and History

Ant 322.0; Egl 312.1(.2); Egl 380.0; IRS 307.0; Fre 305.1(.2); Fre 405.1(.2); His 320.0; His 340.0; His 344.0; His 345.0; His 346.1(.2); His 372.1(.2); His 373.1(.2); His 535.0; His 560.0.

Group C Social and Political Economy

Eco 324.1(.2); Eco 325.1(.2); Pol 307.0; Soc 320.0; Soc 327.0; Soc 332.0; Soc 420.0; Soc 453.0; Soc 468.1(.2).

Group D Ecology and Environment

Bio 207.0; Eco 361.1(.2); Gpy 304.1(.2); Gpy 340.1(.2); Gpy 434.1(.2); Geo 204.0; Geo 205.0; Soc 310.1(.2).

Group E Cognate Courses

Ant 220.0; Ant 321.0; Ant 370.0; Bio 103.0; Bio 310.0; Bio 405.0; Che 372.0; Eco 306.1(.2); Eco 310.1(.2); Eco 315.1(.2); Eco 360.1(.2); Eco 406.1(.2); Eco 430.1(.2); Egl 335.0; Egl 371.1(.2); 372.1(.2); Egl 375.1(.2); Egl 376.1(.2); Egl 432.0; Egl 475.0; Fre 412.1(.2); Fre 419.0; Fre 425.0; Fre 440.1(.2); Gpy 300.0; Gpy 303.1(.2); Gpy 311.1(.2); Gpy 319.0; Gpy 331.1(.2); Gpy 354.1(.2); Gpy 364.1(.2); Gpy 384.1(.2); Gpy 423.1(.2); His 231.0; His 232.0; His 240.0; His 311.0; His 319.0; His 329.0; His 332.0; His 333.0; His 347.0; His 349.0; His 361.1(.2); His 362.1(.2); His 390.0; IRS 308.0; Phi 425.0; Pol 304.0; Pol 309.0; Pol 310.0; Pol 315.0; Pol 317.0; Pol 317.0; Pol 320.0; Pol 330.0; Pol 551.0; Psy 418.1; Psy 419.2; Rel 346.1; Rel 347.2; Soc 306.0; Soc 321.0; Soc 333.0; Soc 340.0; Soc 405.0; Soc 425.0; Soc 448.0; Soc 480.0; WMS 349.1(.2).

300.0 The Culture of Atlantic Canada

This course provides an introduction to the cultural traditions and institutions of the various regions and ethnic groups of the three Maritime Provinces and Newfoundland. Lectures will cover a wide variety of architectural, artistic, ecclesiastical, educational, ethnic, and linguistic topics. Students will engage in both individual and group projects and be required to write a final examination.

Note: While the same course description is applied to half courses designated I and II, each course is in fact self-contained in content and entirely different each time it is offered. A student does not need to have passed I as a prerequisite to enrol in II.

301.1 Selected Topics in Atlantic Canada Studies I

This semester course will provide the student with an opportunity to take courses on specific Atlantic Canada topics which do not fit in with the standard offerings of other departments of the University.

302.2 Selected Topics in Atlantic Canada Studies II

This semester course will provide the student with an opportunity to take courses on specific Atlantic Canada topics which do not fit in with the standard offerings of other departments of the University.

303.1(2) Higher Education in Atlantic Canada

This course will examine the role of higher education institutions in Atlantic Canada, from historical and contemporary perspectives, and will thus encourage informed assessment of the needs and responsibilities of higher education in the region.

310.0 The Atlantic Fisheries

A study of the relationship between the material basis and political economy of the Atlantic fisheries since 1945. Stress will be placed on the scientific facts underlying the fisheries, and in particular, the qualities and quantities in the marine ecosystem that support them. A detailed study will also be made on the methods of fisheries science which are the basis of fish stock assessments by government scientists. Roughly the last third of the course will examine the effects on the livelihood of fishermen, of government policies respecting the fisheries, and the regional, national and international political forces which are behind federal government fisheries regulations.

400.0 Atlantic Canada Seminar

Prerequisite: student must be a fourth year (senior) ACS major.

This course, intended for majors in Atlantic Canada Studies, will provide an opportunity for students in the program to integrate their knowledge of the region in an interdisciplinary fashion. Drawing upon the expertise of a number of guest speakers familiar with various aspects of Atlantic Provinces life, the course will deal with such topics as the Atlantic fishery, agriculture, industry and labour, business enterprise, regional protest, and cultural ethnicity. Students will be afforded an opportunity to use the vast quantity of primary source material at the Public Archives of Nova Scotia and other local repositories.

401.1(2) to 405.1(2) Directed Reading

Prerequisite: permission of ACS Coordinator.

These courses provide opportunities to study a particular subject in detail. They will normally require a considerable amount of independent, though supervised, study.

500.0 Honors Seminar

Prerequisite: enrolment in ACS honors program.

This course will provide an opportunity for honors students to integrate their knowledge in an interdisciplinary fashion.

Master of Arts in Atlantic Canada Studies

620.0 Culture of Atlantic Canada

Prerequisite: enrolment in the Master of Arts in ACS or permission of ACS Coordinator.

The course will deal with the historical, geographical and linguistic aspects of the culture of the Atlantic Region. This will include the tracing of the development of distinctive cultures within the region. The development of various literary forms within the region from folk-tale and folk-song to more sophisticated written literary materials will be emphasized. The course will also explore regional and federal policies.

630.0 Seminar on Atlantic Canada Ecology and Resources

Prerequisite: enrolment in the Master of Arts in ACS or permission of ACS Coordinator.

This seminar looks at the changing ways nature has been viewed and transformed in the Atlantic Region before and after European settlement. Topics covered include Indians and the land, patterns of animal extinction, Natural Theology and Darwinism, the conservation movement, "technological flaw", and the ways in which business, politicians and ordinary people have dealt with environmental concerns. A central question asked will be the relevance of ecological insights in an industrialized, yet underdeveloped, region.

640.0 Atlantic Canada Political Economy Seminar

Prerequisite: enrolment in the Master of Arts in ACS or permission of ACS Coordinator.

This course will involve an interdisciplinary perspective on the region's economic, political and social institutions and the problems associated with them. On the basis of both a historical and a structural analysis of the region's political economy, the seminars will focus on a broad range of problems including uneven industrial and urban development, rural decline, regional disparity, economic concentration and corporate power, the role of government in economic and social development, industrial relations and social conflict, resource extraction and the single-industry community.

650.0 Directed Reading

Prerequisite: enrolment in the Master of Arts in ACS or permission of ACS Coordinator.

Reading courses will be organized by the instructor(s) involved. In general, each course will centre on a specific theme, and the students will be expected, through their reading, to be familiar with aspects of the chosen area. Examinations and/or papers will be required at the end of each course.

660.0 History and Society: The Atlantic Provinces Seminar

Prerequisite: graduate standing or permission of instructor.

This course, intended for Master's students in Atlantic Canada Studies and honors students and M.A. candidates in history, addresses the nature of historical inquiry into issues relating to the social and economic history of the Atlantic region. Topics to be covered will include regional culture, gender and race, the family, processes of development and underdevelopment, scientism and professionalization, health, recreation and sport. Students who have completed ACS 660.0 are not eligible to enrol in His 560.0.

Seminar 3 hrs. a week. 2 semesters.

690.0 Thesis Research

Prerequisite: enrolment in the Master of Arts in ACS or permission of ACS Coordinator.

Students will engage in the research for and writing of a thesis under supervision of a graduate committee. Credit for the course will be determined when the candidate satisfies the thesis advisor that the research and all other methodological and disciplinary preparation for the successful handling of the thesis topic have been completed. Supervisors may require a demonstration of language competence and extra course work as preparation for the treatment of certain thesis topics.

Biology (Bio)

Chairperson, Professor	B. Kapoor
Professor	M. Wiles
Associate Professor	D. Cone
Assistant Professors	T. Rand, D. Strongman

The Biology Department offers programs to fulfil the requirements of the following degrees:

1. general degree of Bachelor of Science with a concentration in biology,
2. degree of Bachelor of Science with a major in biology and,
3. degree of Bachelor of Science with honors in biology.

In addition to the traditional program of study, the department offers a Co-operative Education Program in Biology (COEB). A description of this can be found below in this section of the Calendar.

The department also prepares students for the professional studies of medicine and dentistry.

The core program for biology majors consists of Bio 111.0 or Nova Scotia Grade XII biology (or equivalent); Bio 200.0; and 307.1/308.2.

Students intending to take an honors degree in biology should consult the Chairperson or a member of the department before completing registration.

Students completing a concentration in biology should be able to understand most of the disciplines of the subject and be capable of teaching or doing technical work in biological, paramedical, or health science fields after appropriate on-job training. Students finishing a major in biology should be capable of undertaking graduate level work in biology either after a further year of honors work or after a qualifying year in a graduate program. In the major program more emphasis is placed on the scientific aspects of education and training, while a concentration in biology is aimed at providing a broad general education in arts and sciences.

Note: Students who fail the laboratory component of a course will fail the course.

The following schemes are recommended by the department for biology students doing the general science degree; the degree with a major or an honors degree; or the co-operative education degree.

Scheme A: General Science Degree with Biology Concentration

Freshman Year

1. Egl 201.1(.2) & 202.1(.2)
2. Mat 110.1(.2) & 111.1(.2)
3. a course in the humanities
4. Bio 111.0
5. a related science course

Sophomore Year

1. a course in the humanities
2. Mat 200.0 or 226.1(.2)/227.1(.2)
3. a related science course
4. Bio 200.0
5. Che 202.0

Junior Year

1. Two courses from the following:

Bio 302.0	Bio 309.0	Bio 317.0
Bio 305.0	Bio 310.0	Bio 319.0
2. Bio 307.1 & 308.2
3. a related science course
4. a related science course
5. non-biology elective

Senior Year

1. One course from the following:

Bio 302.0	Bio 309.0	Bio 317.0
Bio 305.0	Bio 310.0	Bio 319.0
2. Bio 307.1 & 308.2
3. One course from the following:

Bio 401.1 & 403.2; or 407.1 or 411.1 plus 408.2, 409.2, or 412.2; 415.0
Bio 405.0
Bio 406.0

3. non-biology elective
4. non-biology elective
5. non-biology elective

Scheme B: Science Degree with a Major in Biology

Freshman Year

1. Egl 201.1(.2) & 202.1(.2)
2. Mat 110.1(.2)/111.1(.2)
3. a course in the humanities
4. Bio 111.0
5. a related science course

Sophomore Year

1. a course in the humanities
2. Mat 200.0 or 226.1(.2)/227.1(.2)
3. a related science course
4. Bio 200.0
5. Che 202.0

Junior Year

1. Bio 307.1 & 308.2
2. Two courses from the following:

Bio 302.0	Bio 309.0	Bio 317.0
Bio 305.0	Bio 310.0	Bio 319.0
3. a related science course
4. non-biology elective

Senior Year

1. Two or three courses from the following:

Bio 302.0	Bio 319.0	Bio 406.0
Bio 305.0	Bio 320.0	Bio 407.1 or 411.1 plus
Bio 309.0	Bio 401.1, 403.2	Bio 408.2, 409.2, or 412.2
Bio 310.0	Bio 405.0	Bio 415.0
Bio 317.0		
2. a related science course
3. a biology or non-biology elective
4. non-biology elective

Scheme C: Science Degree with Honors in Biology

Students must satisfy the requirement for the major degree program as outlined in Scheme B, and in the honors year, take the following five courses:

Honors Year

Students will consult with their honors supervisor for the selection of courses.

1. One course from the following:

Bio 401.1 & 412.2	Bio 407.1 & 409.2	Bio 406.0
Bio 403.1 & 412.2	Bio 411.1 & 412.2	Bio 415.0
Bio 407.1 & 408.2	Bio 405.0	
2. Bio 549.0
3. Two courses from the following:

Bio 501.0	Bio 552.0	Bio 554.0
Bio 510.0	Bio 553.0	Bio 555.0
Bio 550.0		
4. Bio 590.0

Note: In any biology course, the instructor may decide to substitute a one-hour seminar discussion period for one of the lectures.

Honors Program with a Combined Major in Biology and Chemistry

A total of 14.0 courses are required with a minimum of 6.0 in each major subject.

First Year

1. Bio 111.0
2. Che 101.0
3. Mat 110.1(.2) & 111.1(.2)
4. Egl 201.1(.2) & 202.1(.2)
5. elective (science or arts)

Second Year

1. Che 201.0 or 202.0
2. Bio 200.0
3. a science elective (Phy 221.0)
4. Mat 200.0
5. Egl 201.1(.2) & 202.1(.2)

Third Year

1. Bio 307.1/308.2
2. Bio 300 level, other than above
3. Che 341.0 or 343.0
4. Che 311.0, 321.0, or 331.0
5. a humanities course

Fourth Year

1. Bio 400 level
2. Bio 400 level
3. Che 311.0, 321.0, or 331.0
4. a full course (or half course equivalents) in chemistry
5. a science elective

Fifth Year

1. Che 500.0 or Bio 590.0
2. Bio 549.0

Plus sufficient chemistry and biology courses to meet the 14.0 course requirement

Scheme D: Co-operative Education in Biology (COEB)

The co-op program gives students the opportunity to integrate work experience with academic studies so that classroom learning is reinforced and additional skills are learned in a work environment. Under this scheme a student can earn either a B.Sc. in Biology (Co-operative Education) or B.Sc. in Biology (Honors: Co-operative Education) degree.

Admission is by application to the departmental coordinator. Some students may be interviewed. Decisions will be made based on grades, motivation, overall suitability of the student and the needs of the employer.

To remain in the program the student must obtain a minimum grade of B in all biology courses and a cumulative quality point average of at least 2.50. Satisfactory work term reports (written reports that are graded) and positive employer assessments are also required for continuance in the co-op program. Students who fail to meet any of these requirements may be required to withdraw from the co-op program. Such students may be permitted to transfer into the corresponding major or honors program.

For co-op students the school year is composed of 3 four-month terms (Fall = September-December, Winter = January-April, Summer = May-August). In order to complete the requirements for the degree, academic terms (AT) are interspersed with work terms (WT) as outlined below:

B.Sc. in Biology (Co-operative Education)

Year	Term		Summer
	Fall	Winter	
1 (see note below)	AT1	AT2	—
2	AT3	AT4*	WT1**
3	AT5	AT6	WT2
4	AT7	WT3	WT4
5	WT5	AT8	

B.Sc. in Biology (Honors: Co-operative Education)

Year	Term		Summer
	Fall	Winter	
1	AT1	AT2	—
2	AT3	AT4*	WT1**
3	AT5	AT6	WT2
4	AT7	WT3	WT4
5	WT5	AT8	WT6
6	AT9	AT10	

Year 1 is not necessary if given 5.0 advanced standing credits from high school.

*Deadline for application is January 15.

**Optional

Co-op students must satisfy the same course requirements as non co-op students pursuing either a major or honors degree (see Biology and Faculty of Science regulations in this Calendar). Normally the co-op program would take 1 year longer to complete than the corresponding major or honors program. The department will place students in jobs for work terms after consultation with the student and employers. While on work terms, students are paid salaries and benefits and have the responsibilities determined by the employer, similar to all employees. The departmental co-op coordinator is available to advise co-op students on their academic and work term requirements.

Recommended course schemes: (with advanced standing)**AT 3&4**

1. Egl 210.1(.2)/202.1(.2)
2. Mat 200.0 or 226.1(.2) and 227.1(.2)
3. a science elective
4. Bio 200.0
5. a humanities elective

Option 1**AT 5&6**

1. Bio 307.1 and Bio 308.2
2. two 300 level Bio courses
3. a science elective

Option 2**AT 5&6**

1. two 300 level Bio courses
2. a 400 level Bio course
3. a science elective
4. a non-biology elective

AT 7 (One Semester) AT 7 (One Semester)

- | | |
|---|-----------------------------------|
| 1. three of Bio 401.1, 407.1, 411.1 | 1. Bio 307.1 |
| 2. a 1 semester science elective | 2. two of Bio 401.1, 407.1, 411.1 |
| 3. a 1 semester biology or non-biology elective | 3. a 1 semester science elective |
| 4. a 1 semester biology or non-biology elective | 4. a non-biology elective |

AT 8 (One Semester)

- | | |
|---|--|
| 1. two of Bio 403.2, 408.2, 412.2, 446.2 | 1. Bio 308.2 |
| 2. a 1 semester science elective | 2. two of Bio 403.2, 408.2, 412.2, 446.2 |
| 3. a 1 semester science elective | 3. a 1 semester science elective |
| 4. a 1 semester biology or non-biology elective | 4. a non-biology elective |

The recommended honors scheme would be the same as above with the addition of the required honors courses and thesis in the honors year.

Further details and regulations on the Faculty of Science Co-operative Education Program are found in Section 3 of this Calendar.

103.0 Biology, Environment and Man (for non-science students)

An introduction to the scope and principles of modern biological science. Wherever possible, examples explaining these principles will be drawn from familiar, everyday events. The importance of biology in today's world will be discussed with particular emphasis on the problems associated with degradation of the environment and with human ecology. This course will not include laboratory work, but rather two lecture hours per week, and discussion sessions averaging one hour per week where demonstrations will sometimes be presented.

Note: Normally this course is restricted to non-science students for whom it constitutes a science elective. However, should a student wish to change to a science degree after taking the course, credit would be granted for the course, either as an arts elective, or in the case of a mark of A as a regular science course equivalent to the introductory biology course, Bio 111.0. Students who already have a credit for Grade XII biology will not receive another credit for this course.

Classes 3 hrs. a week. 2 semesters.

111.0 Introduction to Biological Science

This course examines the physical, chemical and biological bases of the activities of living organisms and emphasizes the modern approaches to biological sciences through consideration of the following: ecology, life history, behavior, physiology, cytology, heredity and molecular biology.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

200.0 Principles of Biology

Prerequisite: Bio 111.0 (or equivalent).

An in-depth study of the principles and organization of life with respect to various levels of integration. Emphasis in the laboratory work will be on experimental and precise observational techniques.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

207.0 The Atlantic Fisheries

Prerequisite: permission of instructor.

A study of the relationship between the biology and political economy of the Atlantic fisheries since 1945. Stress will be placed on the scientific facts underlying the fisheries, and in particular, the qualities and quantities in the marine ecosystem that support them. A detailed study will also be made on the methods of fisheries science which are the basis of fish stock assessments by government scientists. Roughly the last third of the course will examine the effects on the livelihood of fishermen, of government policies respecting the fisheries, and the regional, national and international political forces which are behind federal government fisheries regulations.

Classes 3 hrs. a week. 2 semesters.

Note: This course cannot be used to satisfy the Bachelor of Science requirements 4-a, 4-b, 5-a, or 5-b. It also cannot be used to satisfy requirement 3-b of the Faculty of Arts.

249.1 Introduction to the Marine Sciences

Prerequisite: Bio 111.0 or equivalent.

A three-week summer course organized by, and offered at, the Huntsman Marine Laboratory, St. Andrews, New Brunswick, during July. The course is an introduction to the principles and methods of marine science with an emphasis on field studies. Admission is by application. Students are expected to defray their own travel costs to and from the Laboratory.

36 hrs. including lab and field work during 1 summer session.

302.0 Cytology

Prerequisite: Che 101.0 or Che 202.0, Bio 200.0.

Structure and function of the cell organelles, cell reproduction, meiosis, reproductive cytology, architecture of the chromosome, function of the chromosomes, chromosomal rearrangements, polyploidy, sex-chromosomes, karyotype evolution, cytology in relation to taxonomy.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

305.0 General Physiology

Prerequisite: Bio 200.0 and Che 202.0, Che 341.0 or Che 343.0 are suggested; or permission of chairperson.

An introduction to the essential aspects of cellular physiology and a discussion of the physiology of the major organ systems of the vertebrate body. The topics discussed include: circulation, respiration, digestion, nutrition, metabolism, muscles, nervous system and endocrine system.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

307.1(2) Genetics

Prerequisite: Bio 200.0 and Che 101.0 or Che 202.0.

A study of the principles of inheritance in plants and animals by consideration of the genetic code, protein synthesis, mutations, polyploidy and Mendel's Laws.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

308.1(2) Biostatistics

Prerequisite: Bio 111.0, Bio 200.0 concurrently; Mat 100.0.

Introduction to the principles and methods of analyzing and using quantitative data in the biological sciences. The emphasis will be on practical applications of statistics in biology rather than on statistical theory. Material covered includes graphical presentation of data, transformation of data, handling of data. Descriptive statistics, distributions, regressions, correlation, analysis of variance, probability theory, comparisons of sets of data and sampling methods will be studied.

Classes 3 hrs. and calculator 3 hrs. a week. 1 semester.

309.0 Botany of Domesticated Plants

Prerequisite: Bio 200.0.

An introduction to the study of economically important plants, their origin, domestication, botany, cultivation, harvesting, uses, diseases, breeding and their role in modern world economy. Plants and plant products of industrial importance, medicinal plants, food plants and food adjuncts will be treated in detail.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

310.0 Ecology

Prerequisite: Bio 200.0.

A study of the fundamental concepts and principles of modern ecology, consideration of physiological ecology, population ecology, and community ecology. A brief treatment of energy flow, biogeochemical cycles, applied ecology, conservation and management. Renewable and nonrenewable natural resources; the earth's biosphere as a dynamic, balanced system.

Classes 3 hrs. and lab or field 3 hrs. a week. 2 semesters.

317.0 Evolutionary Biology

Prerequisite: Bio 200.0; Bio 307.1; and Bio 308.2 (or concurrently).

A study of the history of the concept of evolution, the process whereby present species came into being, the mechanisms operating in nature, the factors affecting evolution and the final result as we witness it. Main areas of study are population genetics, history of the earth, fossil records and the evolution of man.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

319.0 Diversity of Non-Vertebrate Animals

Prerequisite: Bio 200.0.

A systematic study of non-vertebrate animals, their taxonomy, functional morphology, and behavior. Laboratory exercises provide the student with the opportunity to experiment with certain living animals and to dissect and examine a variety of preserved specimens.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

320.0 Functional Morphology of Vertebrate Animals

Prerequisite: Bio 200.0.

A comprehensive study of functional morphology of the vertebrates, with consideration of structural adaptations for particular life styles. Laboratory instruction involves dissection of representative animals and the construction of physical models.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

401.1 Morphology of Vascular Plants

Prerequisite: Bio 200.0.

Structure, development and evolution of major taxa of vascular plants: pteridophytes, gymnosperms and flowering plants, both extinct and extant.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

403.2 Plant Taxonomy

Prerequisite: Bio 200.0.

An introduction to the principles of plant variation, origin, distribution, evolution and classification; major emphasis will be to identify and classify vascular plants of Nova Scotia.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

405.0 Biology of Fishes

Prerequisite: Bio 200.0 and Bio 308.2.

A study of fishes, their classification, growth and development, ways of life and management. The laboratory portion of the course familiarizes students with representatives of world taxa and the study of fishes in Nova Scotia.

Classes 3 hrs. and lab or fieldwork 3 hrs. a week. 2 semesters.

406.0 Microbiology

Prerequisite: Bio 307.1; either Bio 302.0 or 305.0; and either Che 202.0 or 343.0.

Biological concepts pertaining to microorganisms will be investigated under the headings: classification, morphology, physiology, ecology, genetics and biotechnology. Emphasis will be placed on bacteria and viruses. Class participation is emphasized.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

407.1 Histological Techniques

Prerequisite: Bio 200.0 and Che 101.0.

An introduction to the principles and practice of biological microtechnique, including basic histochemistry and immunohistology. Laboratory work involves the fixation, processing, sectioning and staining of animal or plant tissues for light microscopy.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

408.2 Vertebrate Embryology

Prerequisite: Bio 200.0 or permission of department.

Early developmental processes involved in the transformation of the fertilized egg into a new individual.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

409.1(2) Electron Microscopy Techniques

Prerequisite: Bio 407.1(2).

An introduction to the principles and practice of biological material preparation for transmission and scanning electron microscopy, including cytochemistry, immunocytochemistry and quantitative microscopy. Laboratory work will consist of fixing, processing, microtomy and staining of biological material for transmission electron microscopy, and preparation of material for SEM, including freeze fracturing.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

411.1 Principles of Animal Parasitology

Prerequisite: Bio 200.0.

Relation between parasites and their hosts (symbiosis), emphasizing protozoa and helminths of aquatic vertebrates and of man. Aspects studied are biology and ecology of parasites, and physiology and immunology of parasitism. Laboratory work is on living and prepared materials, maintenance of life cycles and infectivity of aquatic vertebrates.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

412.2 Human Genetics

Prerequisite: Bio 307.1 and Bio 308.2.

The chemical and physical nature of genes. The study of population genetics using a statistical approach. Chromosomal and metabolic variations. Human hemoglobins - Immunogenetics. Emphasis will be on genetic screening and genetic counselling through study of karyotypes and analysis of pedigrees.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

415.0 Mycology

Prerequisite: Bio 302.0 or 305.0; 307.1; and Che 202.0 (or equivalent).

The study of fungi. Concepts under the headings morphology, classification, heredity, physiology, ecology and biotechnology will be discussed.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

446.1(2) [546.1(2)] Biology Field Course and Aquatic Biology in Bermuda

Prerequisite: Bio 310.0 and fifth year honors standing.

A three-week summer course offered by biology faculty. The first two weeks will involve the ecology of various terrestrial, aquatic and estuarine habitats in Nova Scotia as an introduction to the design and practice of research under field conditions. The third week will either be spent in Nova Scotia or in Bermuda. In Bermuda, the work will be an introduction to Bermuda's aquatic environment with classroom and field emphasis on inland pond, shoreline, mangrove, seagrass, and reef habitats, and ecology and conservation.

Classes 36 hrs., including lab and field work during a summer session.

501.0 Advanced Microbiology

Prerequisite: Bio 406.0 and/or 415.0.

Recent advances in microbiology will be explored through extensive reading in the current literature, discussion and laboratory projects.

Classes 2 hrs. plus tutorials and lab 3 hrs. a week. 2 semesters.

510.0 The Theory of Ecosystems

Prerequisite: Bio 310.0.

Ecosystems are arbitrary classes in the hierarchy of life. This course examines contemporary views on the structure of ecosystems, on the processes of succession, on the diversity-stability debate, and on the response of ecosystems to stress.

Seminar and tutorial 2 hrs. plus lab 3 hrs. a week. 2 semesters.

549.0 Honors Seminar

Prerequisite: fifth year honors standing.

Seminars followed by discussions based on recent advances in biology. In consultation with the honors advisors, the honors students will select and prepare the topics for presentation to biology faculty and students.

Classes 3 hrs. a week. 2 semesters.

550.0 Advanced Mycology

Prerequisite: Bio 406.0 or 415.0.

The study of morphology, classification, genetics and ecology of main groups of land and water fungi, fungal relationship to man, animals and plants will be discussed.

Classes 2 hrs. plus tutorials and lab 3 hrs. a week. 2 semesters.

552.0 Cytogenetics

Prerequisite: Bio 302.0.

Study of chromosome biology, experimental studies on the mitotic apparatus, karyotype and its evolution, sex chromosomes, control of meiotic system, regulation of chromosome pairing, cytology in relation to taxonomy and cancer cytology.

Classes 2 hrs. plus tutorial and lab 3 hrs. a week. 2 semesters.

553.0 Marine Invertebrates

Prerequisite: Bio 200.0.

Study of marine invertebrates with emphasis on commercial species. Taxonomy, morphology and physiology of the different groups will be the main topics covered. The life histories of representative species will be studied in the laboratory periods.

Classes 2 hrs. plus tutorials and lab 3 hrs. a week. 2 semesters.

554.0 Experimental Fish Embryology

Prerequisite: Bio 405.0, 407.1, and 408.2.

Detailed study of embryological development of fish with emphasis on the formation of organ systems. Laboratory work involves microscopical study of selected fish species raised by the student.

Classes 2 hrs. plus tutorials and lab 4 hrs. a week. 2 semesters.

555.0 Advanced Physiology

Prerequisite: Bio 302.0, Bio 305.0 and Che 343.0.

A course dealing in some detail with advances in particular areas of animal physiology. Areas covered include metabolism of proteins, carbohydrates, lipids, and nucleic acids, intermediary metabolism, regulation and control of metabolic processes, bioenergetics, molecular physiology of muscles and neurophysiology.

Classes 2 hrs. plus tutorials and lab projects. 2 semesters.

590.0 Research Thesis

Prerequisite: fifth year honors standing.

Research project carried out by the student under the supervision of a member of the department. The student will submit a thesis and present it orally.

Lab 6 hrs. a week. 2 semesters.

Chemistry (Che)

Chairperson, Professor
Professors

J. Ginsburg
W. A. Bridgeo, D. H. Davies
C. M. Elson
K. Vaughan, J. C. O'C. Young
M. Zaworotko
A. Piorko

Associate Professor
Assistant Professor

The program of the Department of Chemistry is designed to satisfy two functions:

a. Fulfill requirements for the general degree of Bachelor of Science, the degree of Bachelor of Science with major, and the degree of Bachelor of Science with honors.

These degrees will permit graduates to enter the work force or graduate school with a background at least equal to that provided by other universities in Canada and the United States.

b. Introduce students in other disciplines to the ideas of chemistry and provide them with the chemical skills necessary for their professional development.

All members of staff are engaged in active research projects, and senior undergraduates are expected and encouraged to contribute to these projects. Some jobs, both during the term and in the summer, are available for senior undergraduates.

The core program for a major in chemistry consists of one of Che 201.0, 202.0, or 203.0; and Che 312.1(.2), 313.1(.2), 322.1(.2), 323.1(.2), 332.1(.2), 333.1(.2), 344.1(.2), 345.1(.2); and any four 400 level half credits in chemistry. Students may take two additional chemistry courses of their choice. Major students are also required to complete Phy 221.0 and this course should normally be taken in the sophomore year.

The core program for an honors degree in chemistry consists of one of Che 201.0, 202.0, or 203.0; and Che 312.1(.2), 313.1(.2), 322.1(.2), 323.1(.2), 332.1(.2), 333.1(.2), 344.1(.2), 345.1(.2); 412.1(.2), 413.1(.2), 443.1(.2), 444.1(.2), 500.0; and one of 511.0, 513.0, 521.0, 531.0, 541.0, or 542.0. Students are required to take one to three additional chemistry courses of their choice. Honors students are also required to complete Phy 221.0 and this course should normally be taken in the sophomore year. Honors students and students taking a major in physical chemistry must take Mat 300.0 in their junior year.

The core program for both combined majors and combined honors consists of: one of Che 201.0, 202.0, or 203.0; three of Che 311.0, 321.0, 331.0, 341.0/343.0; and two of the 400 level one semester courses. In addition, it is strongly recommended that students complete Mat 200.0 to fulfil the mathematics requirement, and Phy 221.0 as one of their science electives.

Note: Students who fail the laboratory component of a course will fail the course.

In addition to the traditional program of study, the Department of Chemistry offers a Co-operative Education Program in Chemistry (COEC). A description of this program can be found below in this section of the Calendar.

101.0 Introduction to Chemistry

The fundamental laws and principles of chemistry are explored and applied in the study of selected nonmetals, metals and their compounds.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

201.0 General Chemistry for Physical Sciences

Prerequisite: Che 101.0, Mat 200.0 to be taken concurrently.

An introduction to the chemistry of gases, liquids, solids and solutions.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

202.0 General Chemistry for Life Sciences

Prerequisite: Che 101.0 and Mat 200.0 or Mat 226.1(.2) and 227.1(.2) to be taken concurrently.

A practical introduction for students in life sciences to the chemical behavior of gases, liquids, solids and solutions.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

203.0 General Chemistry for Engineers

Prerequisite: Che 101.0, Mat 200.0 to be taken concurrently.

A practical introduction for engineering students to the chemical behavior of gases, liquids, solids and solutions.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

312.1(.2) Introductory Chemical Thermodynamics

Prerequisite: Che 201.0 or 202.0 or 203.0 and Mat 200.0.

An introduction to the laws of thermodynamics as they apply to the equilibrium behavior of ideal gaseous and liquid chemical systems.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

313.1(.2) Chemical Reaction Equilibria and Kinetics

Prerequisite: Che 312.1(.2).

An introduction to the thermodynamics of non-ideal chemical systems and to chemical reaction kinetics.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

322.1(.2) Inorganic Chemistry

Prerequisite: Che 201.0 or 202.0 or 203.0.

An introduction to theoretical aspects of inorganic chemistry. Course will cover atomic structure, electron configuration and periodicity of element properties. Bond types and classification of compounds based on bond types. VSEPR and Hybridisation theory to explain geometry. Structure of ionic solids. Ligand types and introduction to coordination chemistry - CFT, LFT, MOT and their application to explain properties of compounds. Introduction to reaction types and experimental techniques in inorganic chemistry such as NMR, ESR, and Crystallography.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

323.1(.2) Special Topics in Inorganic Chemistry

Prerequisite: Che 322.1(.2).

An introduction to special topics in inorganic chemistry such as main group and transition metal organometallic chemistry, catalysis, bioinorganic chemistry and Coordination chemistry. Emphasis will be on structure, reactivity and function of compounds.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

332.1(.2) Introductory Analytical Chemistry: Wet Methods

Prerequisite: Che 201.0 or 202.0 or 203.0.

An integrated lecture-laboratory course with emphasis on basic analytical methods. The practical application of analytical methods will be stressed by analyzing geological and environmental samples. Lecture topics will include treatment of data, theory of gravimetric and titrimetric analyses and chemical equilibria.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

333.1(.2) Introductory Analytical Chemistry: Instrumental Methods

Prerequisite: Che 201.0 or 202.0 or 203.0.

An integrated lecture-laboratory course with emphasis on basic analytical methods. The practical application of analytical methods will be stressed by analyzing geological and environmental samples. Lecture topics will include an introduction to electrochemistry, spectroscopy, chromatography and extractions.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

344.1(.2) Organic Chemistry I

Prerequisite: Che 201.0 or 202.0 or 203.0.

Physical and chemical properties of simple aliphatic and aromatic compounds, including alkanes, alkenes, alkynes, polyenes, arenes, alkyl halides, alcohols, ethers, carboxylic acids, acid chlorides, esters, amides, anhydrides, aldehydes and ketones, amines. This course is designed for all students - life science, physical science, general science, engineers or non-science.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

345.1(.2) Organic Chemistry IIA

Prerequisite: Che 344.1(.2).

A course for chemistry majors and other physical science students intending to go on to more advanced organic chemistry. Introduction to the mechanisms of the reactions of monofunctional organic compounds. Introduction to stereochemistry. Simple spectroscopy. Macromolecules. Introduction to synthesis design.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

346.1(.2) Organic Chemistry IIB

Prerequisite: Che 344.1(.2).

A course for students in the life sciences. The organic chemistry of molecules of biological importance: lipids, fats and oils, terpenes and steroids, carotenoids, pheromones, amino acids and peptides, sugars, heterocycles, other natural products.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

373.1(.2) Introduction to Environmental Chemistry I

Prerequisite: Che 201.0 or 202.0 or 203.0.

A first course in those aspects of chemistry useful for studying environmental science and engineering. The topics include: a review of selected concepts from the general chemistry course; thermodynamic concepts of enthalpy and free energy; vapor pressure of liquids; surface tension; binary mixtures; osmosis; dialysis; solvent extraction, electrochemical cells; first and second order kinetics, catalysis; absorption; degradation of aliphatic, aromatic and polycyclic organic compounds including trace organics, detergents, soaps and pesticides.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

374.1(.2) Introduction to Environmental Chemistry II

Prerequisite: Che 373.1(.2).

The course attempts to bring into focus the chemistry which is particularly valuable to environmental science and engineering. The topics include: applications of equilibrium chemistry; colloids in liquid and gas phases; enzymes and their reactions with carbohydrates, proteins, fats and oils; nuclear fission; nuclear fusion; and the effect of radiation on man.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

375.1(.2) Marine Chemistry I

Prerequisite: Che 201.0 or 202.0 or 203.0.

An introduction to chemical oceanography. Tracers in the sea and its sediments are used as an aid to deciphering the chemistry of the ocean. Topics discussed include: pathways (of chemicals) from the river mouth to the sea floor; factors influencing the distribution of sedimentary constituents; cycles of gases within the sea; cycles of metals in the sea; and rates of vertical mixing and sediment accumulation.

Classes 3 hrs. and lab (chemical/computer) 3 hrs. a week. 1 semester.

376.1(.2) Marine Chemistry II

Prerequisite: Che 375.1(.2).

The ocean is viewed as a chemical system. Chemical information is integrated with information on ocean sediments, ocean currents and organisms living in the sea. Topics discussed include: control mechanisms operating within the sea; movement of water through the deep sea; movement of water through the oceanic thermocline; glacial to interglacial changes in ocean chemistry; and the buildup of fossil fuel CO₂ in the atmosphere and the oceans.

Classes 3 hrs. and lab (chemical/computer) 3 hrs. a week. 1 semester.

412.1(.2) Quantum Chemistry

Prerequisite: Che 312.1(.2), Che 313.1(.2), and Mat 300.0.

The basic principles of quantum physics are used to develop an understanding of atomic and molecular structure.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

413.1(.2) Physical Chemistry

Prerequisite: Che 312.1(.2), Che 313.1(.2), and Mat 300.0.

An introduction to statistical thermodynamics and the study of chemical reaction rates and mechanisms.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

421.1(.2) Organometallic Chemistry

Prerequisite: Che 323.1(.2) and Che 345.1(.2).

A survey of the history and recent development in the area of organometallic chemistry. Emphasis will be placed upon organotransition metal chemistry and its impact upon organic synthesis and catalysis. In the laboratory students will be introduced to air sensitive compounds and modern characterization techniques.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

432.1(.2) Instrumental Analysis I

Prerequisite: Che 332.1(.2) and Che 333.1(.2).

Emphasis will be placed on i) separation techniques including high performance and gas chromatography; ii) modern electro-chemical techniques including differential pulse voltammetry and stripping analysis; iii) analogue circuits and devices and digital electronics.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

433.1(.2) Instrumental Analysis II

Prerequisite: Che 332.1(.2) and Che 333.1(.2).

Emphasis will be placed on (i) atomic spectroscopy including atomic absorption and emission; (ii) x-ray fluorescence; (iii) neutron activation analysis; (iv) mass spectrometry.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

443.1(.2) Organic Reaction Mechanisms

Prerequisite: Che 345.1(.2).

A study of the more important mechanisms of reactions of organic molecules and the methods by which they are elucidated: applications of kinetic data, isotope effects, linear free energy relationships, orbital symmetry control and acid and base catalysis.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

444.1(.2) Synthesis in Organic Chemistry

Prerequisite: Che 345.1(.2).

A study of the principles involved in the planning and execution of the synthesis of organic molecules. Laboratory experiments are designed so that students learn to identify their products by the use of spectroscopic and other techniques.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

445.1(.2) Organic Spectroscopy

Prerequisite: Che 345.1(.2).

An introduction to the interpretation of ¹H and ¹³C nuclear magnetic resonance spectra. Infrared spectroscopy, mass spectrometry, and ultra-violet spectrophotometry will also be applied to the problems of organic and organometallic structural determination.

Classes 3 hrs. a week. 1 semester.

451.1(.2) Introductory Biochemistry

Prerequisite: Che 345.1(.2) or Che 346.1(.2).

An introduction to the chemistry of proteins, enzymes, sugars, lipids and nucleic acids. The laboratory will emphasize micro chemical measurements.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

452.1(.2) Biochemistry: Metabolism and Molecular Biology

Prerequisite: Che 345.1(.2) or Che 346.1(.2).

Intermediary metabolism, biosynthesis, bioenergetics, the genetic code, protein synthesis, and control of gene expression.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

500.0 Research Thesis

Prerequisite: restricted to final year students in the honors program.

Students will carry out a research project under the direction of one of the members of the department and will prepare a thesis on their work. The thesis is presented orally.

Lab 6 hrs. a week (minimum). 2 semesters.

511.0 Advanced Topics In Physical Chemistry

Prerequisite: Che 412.1(.2) and 413.1(.2).

A course on special topics selected from advanced areas of physical chemistry.

Classes 3 hrs. a week. 2 semesters.

513.0 Quantum Chemistry

Prerequisite: Che 412.1(.2) and 413.1(.2), Phy 221.0 and Mat 300.0.

Techniques for generating approximate solutions of atomic and molecular wave equations (Hartree-Fock method, perturbation theory, configuration interaction). Interpretation and properties of probability distributions. The use of symmetry in quantum chemistry. Theoretical basis of spectroscopy.

Classes 3 hrs. a week. 2 semesters.

521.0 Advanced Topics in Inorganic Chemistry

Prerequisite: Che 321.0.

A lecture-seminar-laboratory course on selected topics in advanced areas of inorganic chemistry.

Classes and lab 5 hrs. a week. 2 semesters.

531.0 Selected Topics in Instrumental Analysis

Prerequisite: Che 433.1(.2) and 432.1(.2).

A lecture-seminar-laboratory course designed to present topics in electronic circuits, chromatography, spectroscopy and electrochemistry.

Classes and lab 5 hrs. a week. 2 semesters.

541.0 Advanced Organic Chemistry

Prerequisite: Che 443.1(.2) and 444.1(.2); and Che 411.0 (may be taken concurrently).

Selected topics in stereochemistry, heterocyclic compounds, natural products and polymers. In the laboratory the student will perform selected synthesis and characterize structure by spectroscopic methods.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

542.0 Advanced Topics in Biochemistry

Prerequisite: Che 451.1(.2) and 452.1(.2).

A lecture-seminar-laboratory course on selected topics in advanced areas of biochemistry.

Classes and lab 5 hrs. a week. 2 semesters.

544.1(.2) Theoretical Organic Chemistry

Prerequisite: Che 412.1(.2) and 413.1(.2) (may be taken concurrently); 443.1(.2) and 444.1(.2).

An introduction to Huckel theory as applied to conjugated, aromatic and alternate hydrocarbons, with a brief introduction to more sophisticated M.O. methods. A survey of reactions which are subject to orbital symmetry control. Application of correlation diagrams, frontier molecular orbitals and the Huckel-Mobius concept in simple organic reactions.

Recommended Program

The following programs are recommended by the Department of Chemistry for chemistry students taking the general science degree, the degree with a major, or an honors degree.

Scheme A: General Science Degree with Chemistry Concentration**Freshman Year**

1. Egl 201.1(.2)/202.1(.2)
2. Mat 100
3. Che 101.0
4. A science elective
5. A course in the humanities

Sophomore Year

1. Che 201.0
2. Mat 200.0
3. A non-chemistry science elective
4. A course in the humanities
5. An elective

Junior Year

1. Two courses from:
Che 312.1(.2)/313.1(.2)
Che 322.1(.2)/323.1(.2)
Che 332.1(.2)/333.1(.2)
Che 344.1(.2)/345.1(.2)/
346.1(.2)
2. A science elective
3. An elective
4. A non-chemistry elective
5. A non-chemistry elective

Senior Year

1. A chemistry elective
2. A chemistry elective
3. A science elective
4. A non-chemistry elective
5. A non-chemistry elective

Scheme B: Science Degree with a Major in Chemistry**Freshman Year**

1. Egl 201.1(.2)/202.1(.2)
2. Mat 100.0
3. Che 101.0

Sophomore Year

1. Che 201.0
2. Phy 221.0
3. Mat 200.0

4. Phy 111.0

5. A course in the humanities

4. A non-chemistry science elective

5. A course in the humanities

Junior Year

1. Che 312.1(.2)/313.1(.2)
2. Che 322.1(.2)/323.1(.2) or
Che 332.1(.2)/333.1(.2)
3. Che 344.1(.2)/345.1(.2)
4. Mat 300.0
5. A non-chemistry science
elective

Senior Year

1. Four courses from:
Che 412.1(.2) Che 443.1(.2)
Che 413.1(.2) Che 444.1(.2)
Che 421.1(.2) Che 445.1(.2)
Che 432.1(.2) Che 451.1(.2)
Che 433.1(.2) Che 452.1(.2)
2. Che 322.1(.2)/323.1(.2) or
Che 332.1(.2)/333.1(.2)
3. A non-chemistry elective
4. Elective

Scheme C: Science Degree with Honors in Chemistry (Note: The freshman, sophomore, and junior years are as in Scheme B.)

Senior Year

1. Che 412.1(.2)
Che 413.1(.2)
2. Che 443.1(.2)
Che 444.1(.2)
3. Che 322.1(.2)/323.1(.2) or
Che 332.1(.2)/333.1(.2)
4. A science elective
5. A non-chemistry elective

Honors Year

1. Che 500.0
- One course from:
Che 511.0 Che 531.0
Che 513.0 Che 541.0
Che 521.0 Che 542.0
3. One elective
4. A non-chemistry elective
5. Chemistry elective

Scheme D: Co-operative Education in Chemistry (COEC)

This program, which is available at both the major and honors level, integrates on-the-job work experience and academic studies. Upon completion of one of the COEC programs, the student receives the Bachelor of Science degree in Chemistry, at the major or honors level, with the added qualification of "Co-operative Education".

Students apply for admission to the co-op program during the fall of their sophomore year. Generally, admission to and continuance in the program requires a cumulative quality point average of at least 2.50 with a grade point average of at least 3.00 in chemistry courses. The academic year is divided into 3 four-month terms (September-December; January-April; and May-August) and the student is required to complete a series of academic terms (AT) and work terms (WT) as outlined in the following schemes:

B.Sc. with Chemistry Major (COEC)

Year	Sept.-Dec	Term Jan.-Apr.	May-Aug.
1 (N.S. Grade XII or equivalent)	AT	AT	—
2 (sophomore)	AT	AT	WT*
3	AT	AT	WT
4	AT	WT	WT
5	WT	AT	

* Optional

- Year 1 is equivalent to N.S. Grade XII; student receiving advanced standing in 5.0 Grade XII subjects enter the program at Year 2.

- The program consists of 8 academic terms (AT) and 4 or 5 work terms (WT) spread over almost 5 years (4 years from N.S. Grade XII).

- Students must satisfy the same requirements as non co-operative students for a major degree.

Honors B.Sc. in Chemistry (COEC)

Year	Sept.-Dec	Term Jan.-Apr.	May-Aug.
1 (N.S. Grade XII or equivalent)	AT	AT	-
2 (sophomore)	AT	AT	WT*
3	AT	AT	WT
4	WT	AT	WT
5	AT	WT	WT
6	AT	AT	

* Optional

- Year 1 is equivalent to N.S. Grade XII; students receiving advanced standing in 5.0 Grade XII subjects enter the program at Year 2.

- The program consists of 10 academic terms and 5 or 6 work terms spread over almost 6 years (5 years from N.S. Grade XII).

- Students must satisfy the same requirements as non co-operative students for an honors degree.

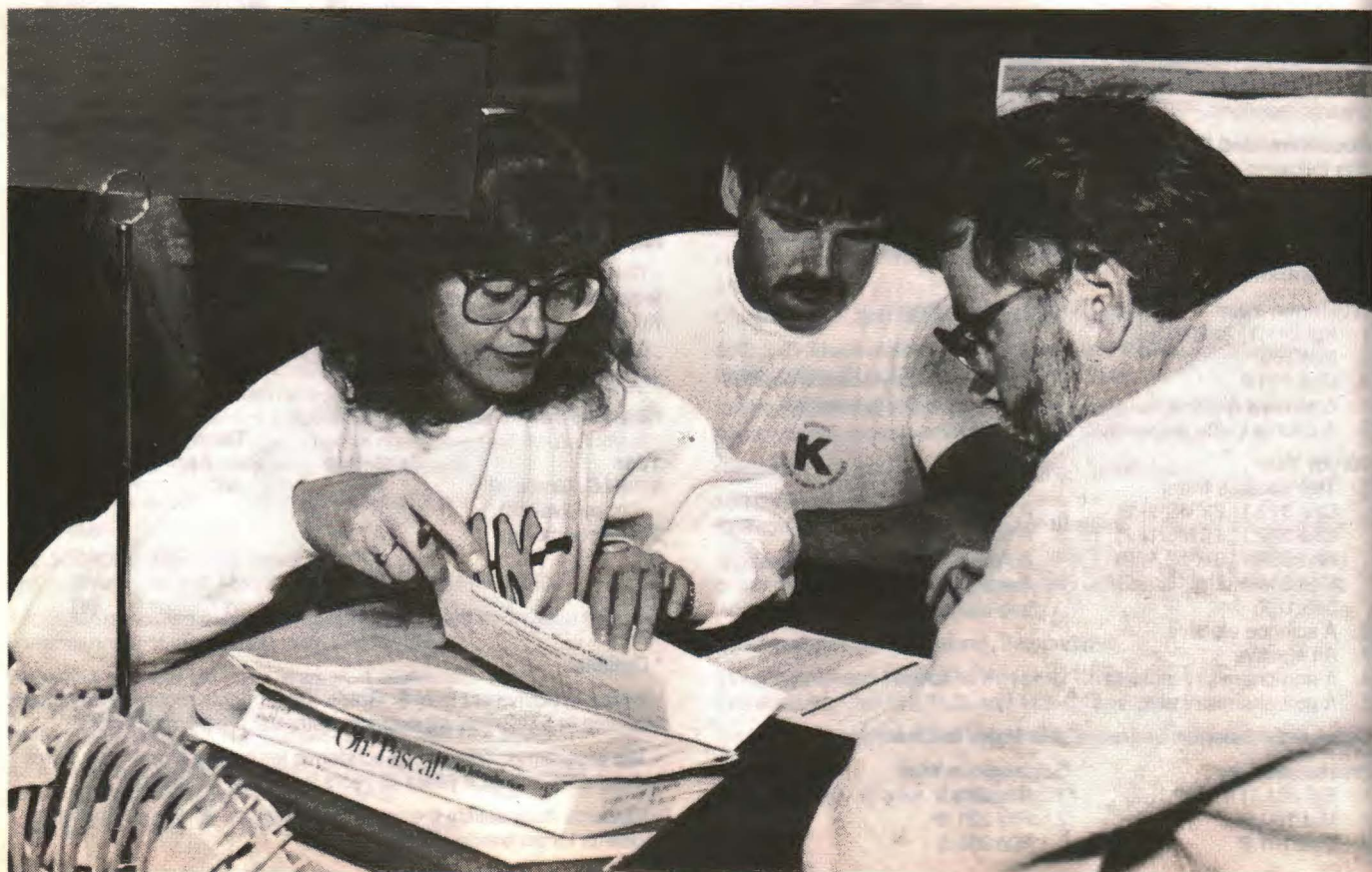
In general, the COEC program takes one year longer to complete than the corresponding traditional program but the academic content of both is the same. Students may, with the permission of the department, transfer from the COEC program to the non co-operative programs at any time. Transfers from the traditional programs to COEC are not permitted after the spring term of Year 2. Fees for the COEC program are as follows:

- a. students pay for their academic courses as they take them; and
- b. students pay a fee equivalent to a half credit for a work term they undertake. This amount is paid to the Business Office within one month of the start of the work term.

Placement for work terms is arranged by the department in consultation with the student and the employer. The student's salary and benefits will be determined by the policies of the employer. A faculty member is available throughout the year to advise students

concerning their studies and work terms. Work term reports are required and graded and, along with the employer's assessment, form the basis of a grade for the work term. Failure of a work term will result in the student's release from the COEC program.

Further details of the Faculty of Science Co-operative Education regulations can be found in Section 3 of this Calendar.



Commercial Law (CML)

These courses are administered by the Department of Accounting.

201.1(.2) Legal Aspects of Business - Part I

Prerequisite: Eco 201.1(.2) and 202.1(.2) or appropriate work experience, determined in advance of registration by the Chairperson of the Department of Accounting.

An introduction to the essential legal aspects of commerce: contracts, some special contracts, corporations, and special areas, such as anti-combines, tax and tariff legislation.

Classes 3 hrs a week. 1 semester.

202.1(.2) Legal Aspects of Business - Part II

Prerequisite: Cml 201.1(.2).

A further examination of some of the legal aspects of commerce; areas included are impeachment of contract, the requirements of writing, discharge of contracts, assignment of contracts, bailment, insurance, guarantee, and landlord and tenancy.

Classes 3 hrs. a week. 1 semester.

601.1(.2) Commercial Law

Prerequisite: completion of all required 500 level courses or permission of MBA Director.

A survey of the legal aspects of business such as contracts, corporate law, competition, sale of goods and consumer protection, negotiable instruments, employment, real estate, insurance and creditor rights. The workings of the legal system will also be explored.

Communications (Com)

These courses are administered by the Department of Marketing.

293.1(.2) Managerial Communication

Prerequisite: Egl 201.1(.2).

The course emphasizes business writing skills and prepares the student to communicate effectively, using the tools of the modern electronic office. Students learn basic computer concepts and use word processors to write weekly memoranda, letters, reports, resumes, and other business documents. The course deals with oral communications to a limited extent. Students plan each assignment by developing audience profiles and defining the use for their document. Lab activities provide a structured context for using software to practice points of editing, graphic illustration, formatting, design, grammar, mechanics, and prose style.

Classes 3 hrs. a week. 1 semester.

Note: Students who have previously earned a credit for Egl 250.1(.2) may not also earn a credit for Com 293.1(.2) or vice versa.

675.1(.2) Advanced Managerial Communications

Prerequisite: Com 293.1(.2) and 2 half credit Mkt courses beyond Mkt 370.1(.2). It is recommended that students enrol in Mkt 479.1(.2) simultaneously.

The course is designed to help the student develop personal communications skills in a variety of marketing situations. The student learns to develop and present a formal marketing plan to a client; increase the impact of written documents through format, design, and graphic illustration; increase the impact of oral presentations through effective use of voice, body, setting, and audio-visual support; prepare for, participate in, record minutes for, and chair strategic planning meetings; sell his or her professional assets to a potential employer; and use current electronic tools to achieve these objectives. The course is taken concurrently with Marketing Policy in the student's final year.

Classes and lab 2 hrs. each a week. 1 semester.

675.1(.2) Advanced Managerial Communications

Prerequisite: completion of all 500 level required courses and permission of MBA Director.

The course is designed to help the student develop personal communications skills in a variety of marketing situations. Students learn to develop and present a formal marketing plan to a client; increase the impact of written documents through format, design, and graphic illustration; increase the impact of oral presentations through effective use of voice, body, setting, and audio-visual support; prepare for, participate in, record minutes for, and chair strategic planning meetings; sell their professional assets to a potential employer; and use current electronic tools to achieve these objectives.

Classes and lab 2 hrs. each a week. 1 semester.

Computing Science and Business Administration

Computing Science and Business Administration Committee

D. F. Gray, Director	Finance & Management Science
A. M. Ireland	Accounting
P. H. Muir	Mathematics & Computing Science
E. Rosenthal	Finance & Management Science
P.F. Scobey	Mathematics and Computing Science
F. L. Hughes,	Mathematics & Computing Science
Co-op Coordinator	

Computing Science and Business Administration is an interdisciplinary four-year program that can be taken by students registered in either the Faculty of Commerce or the Faculty of Science. This program was developed to meet the increasing demand for people with a technical knowledge of computing science who could also understand the application of this technology to business problems.

Entrance Requirements

1. To be admitted to this program directly from high school, students must have five Grade XII subjects including Egl 441, Mat 441, and three other academic subjects with an average of at least 80 percent. For those enrolling in the Faculty of Science, two of the other academic subjects must from the sciences.
2. To transfer into this program from another program within the University or from another university, the student must have completed at least 5 full credits with a cumulative quality point average of at least 3.00 and have the permission of the Program Director.

Course Program

Each student must meet the general requirements of the Faculty in which he or she is enrolled.

Each student must complete 20 credits as listed below according to the Faculty in which he or she is enrolled.

All students	Commerce	Science
Freshman Year		
Csc 226* (0.5)		
Csc 227* (0.5)		
Eco 201* (0.5)		
Eco 202* (0.5)		
Mat 200* (1.0)		
Mgt 281* (0.5)		
Egl 201 or 202 (0.5)	Egl 201 or 202 (0.5)	Sci elective (1.0)
	Cml 201 (0.5)	
Sophomore Year		
Acc 241* (0.5)		
Acc 242* (0.5)		
Csc 341* (0.5)		
Csc 342* (0.5)		
Mat 305* (0.5)		
Mat 320* (0.5)		
Mkt 370* (0.5)		
Msc 324* (0.5)		
Msc 207* (0.5)	Com 293 (0.5)	Egl 201 or 202 (0.5)
Junior Year		
Acc 332* (0.5)		
Csc 327 (0.5)		
Csc 328 (0.5)		
Fin 360* (0.5)		
Fin 361* (0.5)		
Mgt 383* (0.5)		
Mgt 384* (0.5)		
Msc 301* (0.5)	Free elective (1.0)	Sci elective (1.0)
Senior Year		
Acc 323* (0.5)		
Acc 425* (0.5)		
Csc 461* (0.5)		
Csc 462* (0.5)		
Mgt 489* (0.5)	Com elective (1.0)	Hum elective (1.0)
	Eco elective (1.0)	Hum elective (1.0)
	Free elective (0.5)	Free elective (0.5)

Notes:

1. Both Egl 201 and Egl 202 must be completed.
2. All electives are to be at the 200 level or above. With the permission of the Director, at most one elective credit may be taken at the 100 level.
3. The economics electives may not include Eco 317 or Eco 322.
4. The humanities electives are to be selected from classics, English, history, modern languages, philosophy, and religious studies.
5. Egl 250 may be taken instead of Com 293.
6. Credit will not be given for Csc 101 or any other introductory computing course if taken subsequent to Csc 226.
7. No more than one full credit of elective courses can be selected from Msc 325, Msc 326, Msc 424, Eng 204, Csc 332, or other programming courses.
8. Credit will not be given for Mat 110/111/112, Msc 205/206, or other introductory mathematics courses if taken subsequent to Mat 200.
9. Further information on particular courses, including required prerequisites, can be found in the section of the Calendar for the appropriate department.
10. Courses marked with an asterisk are considered as major courses for the purpose of regulation 9 of the Faculty of Science.
11. Canada Science Scholars should take Acc 323 in their junior year and replace one humanities elective with another science elective to fulfil the science requirement of the scholarship. For each such student, this program change must be authorized by the Dean of Science.

Co-operative Education Program

This program has a co-op option. Students taking the co-op option must meet all the requirements of the Computing Science and Business Administration program. Additional requirements can be found in the Faculty of Science section of the Calendar. Interested students should see the Co-op Coordinator for the program at the end of their first semester.

Note: Students who complete a specific sequence of courses in computing science at Saint Mary's University may be eligible to transfer into the Bachelor of Computing Science with Engineering option program at the Technical University of Nova Scotia. Further information may be obtained from the Department of Mathematics and Computing Science.

Economics (Eco)

Chairperson, Associate

Professor

Professors

Associate Professors

A. K. Mukhopadhyay

P. L. Arya, E. J. Doak, A. S. Harvey

J. C. Ahiakpor, S. Amir-Khalil

R. A. Azhar, P. Bowles, A. Dar

M. MacDonald, T. O'Neill

Assistant Professors

A. H. Akbari, J. Taheri

Department Statement

Economics has been defined as "the study of how men and society end up choosing, with or without the use of money, the employment of scarce productive resources, which could have alternative uses, to produce various commodities over time and distribute them for consumption, now and in the future, among various people and groups in society." (Paul A. Samuelson)

Economics borders on other academic disciplines, such as political science, sociology, psychology, anthropology and business administration. It also draws heavily on the study of history, statistics and mathematics.

Students who desire some minimum understanding of economics are encouraged to consider taking one or more courses at the 200 level. Entrance into higher level courses ordinarily requires a full-year of principles of economics, but this may be waived with the approval of the department.

The Economics Department is able to offer students with a special interest in economics the opportunity to undertake some concentration beyond the core of required courses in the following areas and associated courses:

Money and Banking, Eco 307.1, 407.1(.2)

Public Finance, Eco 318.1(.2), 319.1(.2)

International, Eco 313.1(.2), 414.1(.2)

Quantitative, Eco 302.1(.2), 303.1(.2), 309.1(.2), 409.1(.2)

Urban-Regional, Eco 324.1(.2), 325.1(.2), 430.1(.2), 450.1(.2)

Natural Resources and Environment, Eco 360.1(.2), 361.1(.2)

Comparative Systems, Eco 315.1(.2), 323.1(.2)

History and Development, Eco 306.1(.2), 310.1(.2), 317.1(.2),

320.1(.2), 406.1(.2), 410.1(.2)

Labour, Eco 339.1(.2), 340.1(.2)

Industrial Organization, Eco 316.1(.2)

Other theory courses, Eco 304.1(.2), 305.1(.2), 312.1(.2), 412.1(.2),

440.1(.2), 441.1(.2)

Students who desire a major in economics are encouraged to enrol in an appropriate program under the guidance of a faculty advisor.

There are two general programs: (1) B.A. with a major in economics, and (2) B.Comm. with a major in economics.

The former requires a total of twenty full courses, or equivalent, following Nova Scotia Grade XI or, providing advanced standing is granted, a minimum of fifteen full courses, or equivalent, following Nova Scotia Grade XII. The latter requires a minimum of twenty full courses, or equivalent, following Nova Scotia Grade XII, or twenty-five full courses, or equivalent, following Nova Scotia Grade XI. (See Faculty of Arts and Faculty of Commerce, Section 3 of this Calendar, for the basic requirements for these degrees.)

Regardless of the degree sought, the Department of Economics requires that the program of study leading to a major in economics include the following:

- Mat 110.1(.2) and 112.1(.2) (Nova Scotia Grade XII mathematics) or equivalent
- Egl 201.1(.2) and 202.1(.2).
- One full course in university mathematics beyond the level of Mat 110.1(.2) and 112.1(.2). [Msc 205.1(.2) and 325.1(.2), which are required of all Bachelor of Commerce students, and recommended for all Bachelor of Arts majors in economics, satisfy this requirement.] Bachelor of Arts students, majoring in economics who entered Saint Mary's without Grade XII mathematics may substitute Eco 304.1(.2) and 305.1(.2) for the above requirement, i.e., that of taking one full course in mathematics beyond Mat 110.1(.2) and 112.1(.2).
- One course in the humanities [classics, history, philosophy and religious studies, or languages (English or modern languages)]. In special circumstances, with the permission of the Department Chairperson, all or part of this requirement may be fulfilled from

among the following: Eco 306.1(.2); 312.1(.2); 315.1(.2); 323.1(.2); 406.1(.2); and 412.1(.2). Philosophy 200.0 does not satisfy this requirement.

- One course from the social sciences other than economics.
- The following economics courses:

Eco 201.1(.2) Principles of Economics: Micro

Eco 202.1(.2) Principles of Economics: Macro

Eco 206.1(.2) Introduction to Quantitative Methods for Economists II or

Msc 206.1(.2) Introduction to Quantitative Methods for Commerce II

Eco 207.1(.2) Introductory Statistics for Economics or

Msc 207.1(.2) Introductory Statistics for Commerce

Eco 300.1(.2) Intermediate Microeconomic Theory I

Eco 301.1(.2) Intermediate Macroeconomic Theory I

Eco 304.1(.2) Intermediate Microeconomic Theory II or

Eco 305.1(.2) Intermediate Macroeconomic Theory II

One of: Eco 306.1(.2), Eco 310.1(.2), Eco 312.1(.2), Eco 315.1(.2),

Eco 323.1(.2), Eco 406.1(.2), or Eco 412.1(.2)

4 additional half course economic electives at the 300 level or above

In addition, students must satisfy conditions set down by the Faculty in which they enrol. Bachelor of Arts students majoring in economics are especially advised to consult Faculty of Arts requirement 3-c when fulfilling the above regulation.

Suggested Courses Leading to a Bachelor of Arts Degree with a Major in Economics (assuming advanced standing)

First Year

Eco 201.1(.2) and 202.1(.2)

Mathematics and/or computers (see note 2 below) (1 credit)

Egl 201.1(.2) and 202.1(.2)

Social science other than economics (e.g., political science, anthropology, sociology, geography, or psychology) (1 credit)

Humanities or language [e.g., classics, history, languages, philosophy (not Phi 200.0), religious studies] (1 credit)

Second Year

Eco 300.1(.2) and 301.1(.2)

Eco 206.1(.2) and Eco 207.1(.2)

Eco 304.1(.2) or Eco 305.1(.2)

One of: Eco 306.1(.2), Eco 310.1(.2), Eco 312.1(.2), Eco 315.1(.2),

Eco 323.1(.2), Eco 406.1(.2), Eco 412.1(.2)

Electives (2 credits)

Third Year

Eco electives (2 credits)

Electives (3 credits)

Notes:

- Students are reminded that the electives should be chosen in such a way as to fulfil the Faculty of Arts requirements. (See Section 3 of this Calendar.)
- Students taking Eco 205.1(.2) and Msc 325.1(.2) to satisfy requirement d. above, should take Eco 205.1(.2) and 206.1(.2) in the first year and Eco 207.1(.2) and Msc 325.1(.2) in the second year.

For suggested courses for a Bachelor of Commerce degree with a major in economics, see the Faculty of Commerce Section of this Calendar.

Honors Program in Economics

The Department of Economics offers honors programs to students enrolled in either the Faculty of Arts or the Faculty of Commerce. Descriptions of the general requirements for the degrees of Bachelor of Arts with Honors and of Bachelor of Commerce with Honors are contained in Section 3. In addition to these general requirements, all candidates for graduation with honors in economics must comply with the following:

- Students must satisfy the applicable requirements for a major in economics as outlined on the preceding pages.
- The ten full credits or equivalent in economics presented for honors must include:
 - Eco 201.1(.2), Eco 202.1(.2), Eco 206.1(.2), and Eco 207.1(.2), or equivalent;
 - one full credit or equivalent in macroeconomic theory beyond the 200 level;

- (iv) Eco 302.1(.2), Eco 303.1(.2), and Eco 309.1(.2), or equivalent credit (1 1/2) from the Mathematics and Computing Science Department with the approval of the Chairperson of the Economics Department;
- (v) an honors project, which is the equivalent of one credit, done under the supervision of a faculty member;
- (vi) either Eco 306.1(.2), Eco 312.1(.2), Eco 406.1(.2), Eco 412.1(.2), or another economics half credit approved by the Department Chairperson;
- (vii) one full economics credit at the 400 level to include either Eco 440.1(.2) or Eco 441.1(.2).

c. With the approval of the Chairperson of the Department of Economics, a student may be permitted to substitute up to two full credits or equivalent from a related subject area as part of the ten credits in economics presented for honors.

d. Commerce students doing honors in economics are permitted to count one economics credit at the 300 level or above as a non-commerce elective.

e. The recommended course selection and sequence for the degree of Bachelor of Commerce (Honors: Economics) can be found in the Bachelor of Commerce section of this Calendar.

201.1(.2) Principles of Economics: Micro

General price theory, theory of the firm, market structure, production, cost, revenue and profit maximization, theory of distribution.

Classes 3 hrs. a week. 1 semester.

202.1(.2) Principles of Economics: Macro

National income determination, national accounting, business fluctuations, money and banking, international economics, economic growth.

Classes 3 hrs. a week. 1 semester.

205.1(.2) Introduction to Quantitative Methods for Economists I

Prerequisite: Mat 113.0 [110.1(.2) and 112.1(.2)] or Grade XII mathematics (or equivalent).
This course is designed to provide an overview of linear systems with emphasis on applications. It includes the topics of linear programming as well as transportation and assignment problems.

Classes 3 hrs. a week. 1 semester.

Note: This is the same course as Msc 205.1(.2).

206.1(.2) Introduction to Quantitative Methods for Economists II

Prerequisite: Mat 113.0 [110.1(.2) and 112.1(.2)] or Grade XII mathematics (or equivalent).
The purpose of this course is to provide an overview of non-linear optimization, differential and integral calculus with emphasis on applications, as well as an introduction to decision models under uncertainty.

Classes 3 hrs. a week. 1 semester.

Note: This is the same course as Msc 206.1(.2).

207.1(.2) Introductory Statistics for Economists

Prerequisite: Eco 206.1(.2).

Functions of statistical methods, collection, analysis and interpretation of data, frequency distribution, measures of central tendency and dispersion, probability, binomial, normal, and sampling distributions, hypothesis testing, estimation of parameters, regression and correlation.

Classes 3 hrs. a week. 1 semester.

Note: This is the same course as Msc 207.1(.2).

300.1(.2) Intermediate Microeconomic Theory I

Prerequisite: Eco 201.1(.2) and 206.1(.2), or permission of instructor.

Theory of consumer behavior and demand, theory of production and cost, behavior of the firm, theory of price and output under different market structures.

Classes 3 hrs. a week. 1 semester.

301.1(.2) Intermediate Macroeconomic Theory I

Prerequisite: Eco 202.1(.2) and 206.1(.2) or permission of instructor.

National income accounting, models of aggregate income output and price level determination, analysis of and public policies for unemployment and inflation.

Classes 3 hrs. a week. 1 semester.

302.1(.2) Mathematical Economics

Prerequisite: Eco 206.1(.2) or equivalent.

An introduction of the role of mathematics in economic analysis. Mathematical topics include linear algebra, partial differentiation, implicit function theorems and comparative statics analysis, unconstrained and constrained optimization theory.

Classes 3 hrs. a week. 1 semester.

303.1(.2) Intermediate Economic Statistics

Prerequisite: Eco 207.1(.2) or equivalent.

A further study of the basic concepts of statistics and its application to the solution of business and economic problems: review of probability, random variables and their distribution, sampling and sampling distributions, normal and associated distribution, statistical inference, simple and multiple regression and related topics.

Classes 3 hrs. a week. 1 semester.

Note: This is the same course as Msc 303.1(.2).

304.1(.2) Intermediate Microeconomic Theory II

Prerequisite: Eco 300.1(.2).

This course is a sequel to Eco 300.1(.2). Topics covered will include: theory of distribution and input markets, intertemporal choice, general equilibrium analysis, topics in welfare economics.

Classes 3 hrs. a week. 1 semester.

305.1(.2) Intermediate Macroeconomic Theory II

Prerequisite: Eco 301.1(.2).

Extension of topics covered in Eco 301.1(.2) to include theories of aggregate consumption and investment expenditures, inflation, growth, international aspects of macroeconomics and macroeconomic policy.

Classes 3 hrs. a week. 1 semester.

306.1(.2) North American Economic History

Prerequisite: Eco 202.1(.2) and 300.1(.2); or Eco 201.1(.2) and 202.1(.2) and permission of the instructor; or 1.5 credits in history and permission of instructor.

This course surveys growth, fluctuation and structural change in the North American economy, from the Revolution Era to the Great Depression. Topics such as slavery, the Civil War, industrialization, railroads and the capital market will be included.

Classes 3 hrs. a week. 1 semester.

307.1 Money and Banking

Prerequisite: Eco 201.1(.2) and 202.1(.2).

Money and the payments system, development of banking in Canada, financial instruments, theory of banks' intermediation, chartered banks structure, operation and competition, governments and Canadian financial markets.

Classes 3 hrs. a week. 1 semester.

309.1(.2) Introduction to Econometrics

Prerequisite: Eco 303.1(.2) or permission of instructor.

Theory and applications of econometric models and their estimation. Linear algebra will be used to study classical linear regression. Some extensions of the basic single equation model will be discussed.

Classes 3 hrs. a week. 1 semester.

310.1(.2) Development Economics [IDS 310.1(.2)]

Prerequisite: Eco 201.1(.2) and 202.1(.2).

Alternative theories of growth and development, including economic and non-economic determinants of growth in developing countries, the role of government in development policies and lessons from experience in growth and change.

Classes 3 hrs. a week. 1 semester.

312.1(2) History of Economic Thought

Prerequisite: Eco 201.1(2) and 202.1(2).

This course traces the development of economic ideas from the middle ages to the middle of the 19th century (Karl Marx). Students will be introduced to the contributions of economic ideas of these times to contemporary thinking.

Classes 3 hrs. a week. 1 semester.

313.1 International Finance

Prerequisite: Eco 201.1(2) and 202.1(2).

An introduction to the theory, institutions, and history of international finance: balance of payments; foreign exchange rates, instruments, and markets; adjustment mechanisms; stabilization policy.

Classes 3 hrs. a week. 1 semester.

315.1(2) Comparative Economic Systems

Prerequisite: Eco 201.1(2) and 202.1(2).

An examination of how different economic systems choose to solve the basic economic problems of resource allocation and distribution of income and wealth. Theoretical models of (idealized) economic systems as developed by the Classical economists (e.g., Smith, Ricardo, Mill), Marx, Schumpeter, Lange, Keynes, etc., will be studied. The structure and performance of existing systems (e.g., Western managed capitalism, Yugoslavian market socialism and Eastern European command socialism) will also be analyzed.

Classes 3 hrs. a week. 1 semester.

316.1(2) Industrial Organization

Prerequisite: Eco 201.1(2) and 202.1(2).

The course begins by laying out the arguments for competitive market processes and then proceeds to investigate the determinants of real-world industrial market structures, the behavior of firms, and efficiency in resource allocation.

Classes 3 hrs. a week. 1 semester.

317.1(2) The Economic History of Europe

An examination of the economic evolution of Modern Europe, with major concentration on the period from 1750 to the present. The course does not deal with the chronological development but rather emphasizes those aspects of history which are reflected in contemporary institutions, practices and policies.

Classes 3 hrs. a week. 1 semester.

Note: This course is not open to commerce students nor does it count as an elective for a major in economics.

318.1(2) Public Finance: Expenditure

Prerequisite: Eco 201.1(2) and 202.1(2).

This course is an introduction to Public Finance with special emphasis on the theory of government expenditures. Topics may include public goods, externalities, income redistribution, and fiscal federalism.

319.1(2) Public Finance: Taxation

Prerequisite: Eco 201.1(2) and 202.1(2).

This course is an introduction to Public Finance with special emphasis on government revenues. Topics may include tax incidence theory, personal income taxation, sales and excise taxes, property tax, corporation income tax, public debt, and stabilization policy.

Classes 3 hrs. a week. 1 semester.

322.1(2) Current Economic Problems

The lectures introduce the student to the discipline of economics through a survey of the major economic issues of the current decade. This is designed for students who wish to familiarize themselves with economic principles and their applications, but do not feel a need for a more theoretical and technical introduction to economics' principles.

Classes 3 hrs. a week. 1 semester.

Note: This course is not open to commerce students nor does it count as an elective for a major in economics.

323.1(2) Soviet-Type Economies

Prerequisite: Eco 201.1(2) and 202.1(2).

This course traces the economic history of the Soviet Union from the 1917 revolution through the Stalinist period to the present. This provides a background for examining the functioning of the

contemporary Soviet economy and economies which have been structured on the Soviet model in Eastern Europe and Asia. The trend in economic reforms in Eastern Europe will also be studied.

324.1(2) The Atlantic Economy

Prerequisite: Eco 201.1(2) and 202.1(2).

Analysis of the structure, development and performance of the economy of the Atlantic region. Topics covered include: economic history of the region, current structure of the regional economy and state of economic development, sub-regional differences in economic structure and performance, external trade linkages, demographic and labour market characteristics, the role of government in the development process.

Classes 3 hrs. a week. 1 semester.

325.1(2) Atlantic Economy Seminar

Prerequisite: Eco 201.1(2) and 202.1(2).

This course will examine in detail a small number of current economic issues in the Atlantic region. General topic areas, from which specific issues may be chosen, include: the impact on the region of policies and programs of the federal government including monetary, fiscal, manpower, and development policies; the role of provincial and municipal planning and development agencies; the role of key sectors of the economy in future development, including energy, natural resources, steel, and transportation.

Classes 3 hrs. a week. 1 semester.

339.1 Introduction to Labour Economics

Prerequisite: Eco 201.1(2) and 202.1(2).

This course introduces the student to the study of labour markets - supply and demand for labour, and wage and employment determination in different types of markets. Emphasis is on the economic analysis of wage differentials, including the importance of human capital, unionization, internal labour markets, discrimination and segmented labour markets.

Classes 3 hrs. a week. 1 semester.

340.2 Human Resource Economics

Prerequisite: Eco 304.1(2) or Eco 339.1(2).

This course examines a variety of topics in the study of labour markets and human resource use. Topics in any year may include: the changing composition of the labour force and structure of employment; unemployment and manpower policy; history, structure and impact of the labour movement; inequalities in the labour market; income distribution and problems of poverty; technological change; macro-economic policy and the labour market.

Classes 3 hrs. a week. 1 semester.

349.1(2) Women and the Economy**(WMS 349.1(2))**

Prerequisite: Eco 339.1(2) or permission of instructor.

This course will examine various aspects of women's participation in the economies of developed countries (primarily Canada) as well as developing countries. Topics in any year may include analysis of the relationship between the paid and unpaid work of women, changes in labour force participation, trends and determinants of the male/female wage gap, models of household economic decision-making, the impact of technological change, and the international gender division of labour. Particular attention will be paid to policy issues relevant to the economic status of women. The course will also examine gender bias in the theory, methodology and practice of economics and will evaluate various theoretical approaches to the study of women.

361.1(2) Fisheries Economics

Prerequisite: Eco 201.1(2) or permission of instructor.

This course emphasizes the application of economic concepts to problems of fishery management and development. Topics to be discussed include: common property resources, the economics of fishery regulation, socioeconomics, fish markets, and the fishery as part of the national and regional economy. Particular attention will be paid to current issues in the Atlantic Canada fishery.

Classes 1 1/2 hrs. a week. Seminars 1 1/2 hrs. a week. 1 semester.

362.1(.2) Natural Resource Economics

Prerequisite: Eco 201.1(.2) and 202.1(.2).

This course examines the principles governing the use of natural resources, and analyses the economics of natural resource industries such as fisheries, forestry and mining. Emphasis is placed on the economic importance of time, since resource conservation requires a balance between current and future use. Methods to achieve optimal social benefits through the economic regulation of resource exploitation will be addressed.

Classes 3 hrs. a week. 1 semester.

Note: Students with credit for Eco 360 obtained before the 1991-92 academic year will not be given credit for this course.

363.1(.2) Environmental Economics

Prerequisite: Eco 201.1(.2).

This course focuses on the application of economic principles to such environmental issues as air and water pollution, preservation of wildlife and wilderness areas, and the balance between economic activity and environmental health. The environmental impacts of fisheries, forestry, and mining are also discussed. Methods for environmental management are considered, particularly addressing the potential role of economic institutions and economic instruments. Some discussion of current Canadian policy issues is also undertaken.

Classes 3 hrs. a week. 1 semester.

Note: Students with credit for Eco 360 will not be given credit for this course.

406.1(.2) Canadian Economic History In an International Context

Prerequisite: Eco 306.1(.2) or permission of instructor.

This course provides an intensive examination of selected issues in the economic history of North America with an emphasis on the Canadian economy in an international context. Topics such as the wheat boom, National Policy, manufacturing finance, and Staple Theories will be included.

Classes 1 1/2 hrs. a week. Seminars 1 1/2 hrs. a week. 1 semester.

407.1(.2) Monetary Economics

Prerequisite: Eco 201.1(.2) and Eco 301.1(.2).

The nature and characteristics of central banks in general and the Bank of Canada in particular; monetary policy and its objectives. The control of the money supply; government operations and monetary policies; determinants and theory of the money supply; the development of monetary theory.

Classes 3 hrs. a week. 1 semester.

Note: Students who received a credit for this course when it was offered at the 300 level will not be permitted to retake the course and receive an additional credit.

409.1(.2) Econometric Modelling and Forecasting

Prerequisite: Eco 309.1(.2).

Theory and application for econometric models and their estimation. Emphasis will be placed on the techniques of econometric model-building and forecasting. Topics such as simultaneous equation models, time series models and forecasting will be included.

Classes 3 hrs. a week. 1 semester.

410.1(.2) Issues In Economic Development**[IDS 410.1(.2)]**

Prerequisite: Eco 300.1(.2) and Eco 310.1(.2).

Specific problems in economic development; emphasis on government policies, foreign aid, foreign trade and their impact on underdeveloped countries.

Classes 3 hrs. a week. 1 semester.

412.1(.2) History of Modern Economic Thought

Prerequisite: Eco 300.1(.2) and 301.1(.2).

The course traces the development of economic thought from the late 19th century (Marginalism) to the present and includes Keynesianism, Monetarism and Institutional Economics. Particular attention is paid to common themes and sources of divergence among economic doctrines.

Classes 3 hrs. a week. 1 semester.

414.1(.2) International Trade

Prerequisite: Eco 300.1(.2).

An introduction to the theory of international trade: comparative advantage, modern refinements, gains from trade, empirical relevance of trade models, tariffs and protection, economic integration, trade and growth.

Classes 3 hrs. a week. 1 semester.

Note: Students who received a credit for this course when it was offered at the 300 level will not be permitted to retake the course and receive an additional credit.

430.1(.2) Regional Economics

Prerequisite: Eco 301.1(.2) or permission of instructor if Eco 300.1(.2) has been completed.

An examination of the theoretical basis of interregional growth and disparities, methods of regional analysis and evaluation of policies and programs affecting regions. Topics include the nature and measurement of regional disparities, regional growth theory, interregional trade and mobility theory, regional economic analysis and regional economic policy.

Classes 3 hrs. a week. 1 semester.

Note: Students who received a credit for this course when it was offered at the 300 level will not be permitted to retake the course and receive an additional credit.

440.1(.2) Advanced Microeconomics

Prerequisite: Eco 304.1(.2).

Treatment of the major topics in microeconomic theory at an advanced level. Topics will include the theory of the firm, consumer behavior and distribution theory. Other topics which could be covered at the discretion of the instructor may include: welfare economics, theories of capital and interest, game theory and decision-making models.

Classes 3 hrs. a week. 1 semester.

441.1(.2) Advanced Macroeconomic Theory

Prerequisite: Eco 305.1(.2).

Treatment of some major topics in macroeconomic theory at an advanced level. Topics may include welfare economics, static macroeconomic models, demand for and supply of money, theories of interest, inflation, economic growth and business cycles.

Classes 3 hrs. a week. 1 semester.

450.1(.2) Urban Economics

Prerequisite: Eco 300.1(.2).

Economics of an urban economy: why it grows and how it copes with growth. Urban policies for transportation, housing, labour markets and public services are examined. Theories of location, city formation and urban spatial structure are examined.

Classes 3 hrs. a week. 1 semester.

Note: Students who received a credit for this course when it was offered at the 300 level will not be permitted to retake the course and receive an additional credit.

460.1(.2) Issues In Economic Development

This course analyses selected aspects of economic development. Issues related to debt, foreign direct investment, foreign aid, technology, late industrialisation, poverty and agricultural development may be covered. The course may take a specific regional focus.

490.1(.2) Seminar In Economics

Prerequisite: Eco 300.1(.2) and 301.1(.2).

This course deals with selected topics in economics. It is offered when in sufficient demand, and specific topics covered may vary depending on the interests of students and instructors.

492.1(.2) Directed Study

Prerequisite: Eco 201.1(.2) and 202.1(.2) and permission of instructor.

Intended to supplement or provide an alternative to the regular economics courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

591.0 Honors Seminar and Project

Prerequisite: admission to the honors program.

Students enrolled in the honors program are required to complete a project under the direction of a faculty member. This course is designed to enable the student to fulfil this requirement.

Classes and independent study. 2 semesters.

The following courses are available only to students registered in the Master of Business Administration Program and with permission of the MBA Director to students registered in other Master's programs.

500.1(.2) Economics of the Enterprise

An examination of the economic behavior of the consumer and the firm, including market demand and structure and the pricing and employment of factor inputs.

501.1(.2) Economics of Enterprise Environment

The course studies the determinants of and changes in the level of national income, monetary and fiscal theory, and international trade and finance theory and policy.

600.1(.2) Issues in Industrial Economics

Prerequisite: Eco 500.0.

This course deals with such topics as competition policy, technological change in industry, behavior under uncertainty, and the economics of regulation. It draws on theories of industry structure, conduct and performance, and emphasizes applications in the Canadian context.

600.1(.2) Seminar in Economics

Prerequisite: completion of all required 500 level courses or permission of MBA Director.

This course deals with selected topics in economics. It is offered when in sufficient demand, and specific topics covered may vary depending on the interests of students and instructors.

692.1(.2) Directed Study

Prerequisite: completion of all 500 level courses or permission of MBA Director, department chairperson, and instructor.

This course supplements and provides an alternative to the regular economics courses in order to meet the special needs and interests of students. It also provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

698.1(.2) Research Seminar in Economics

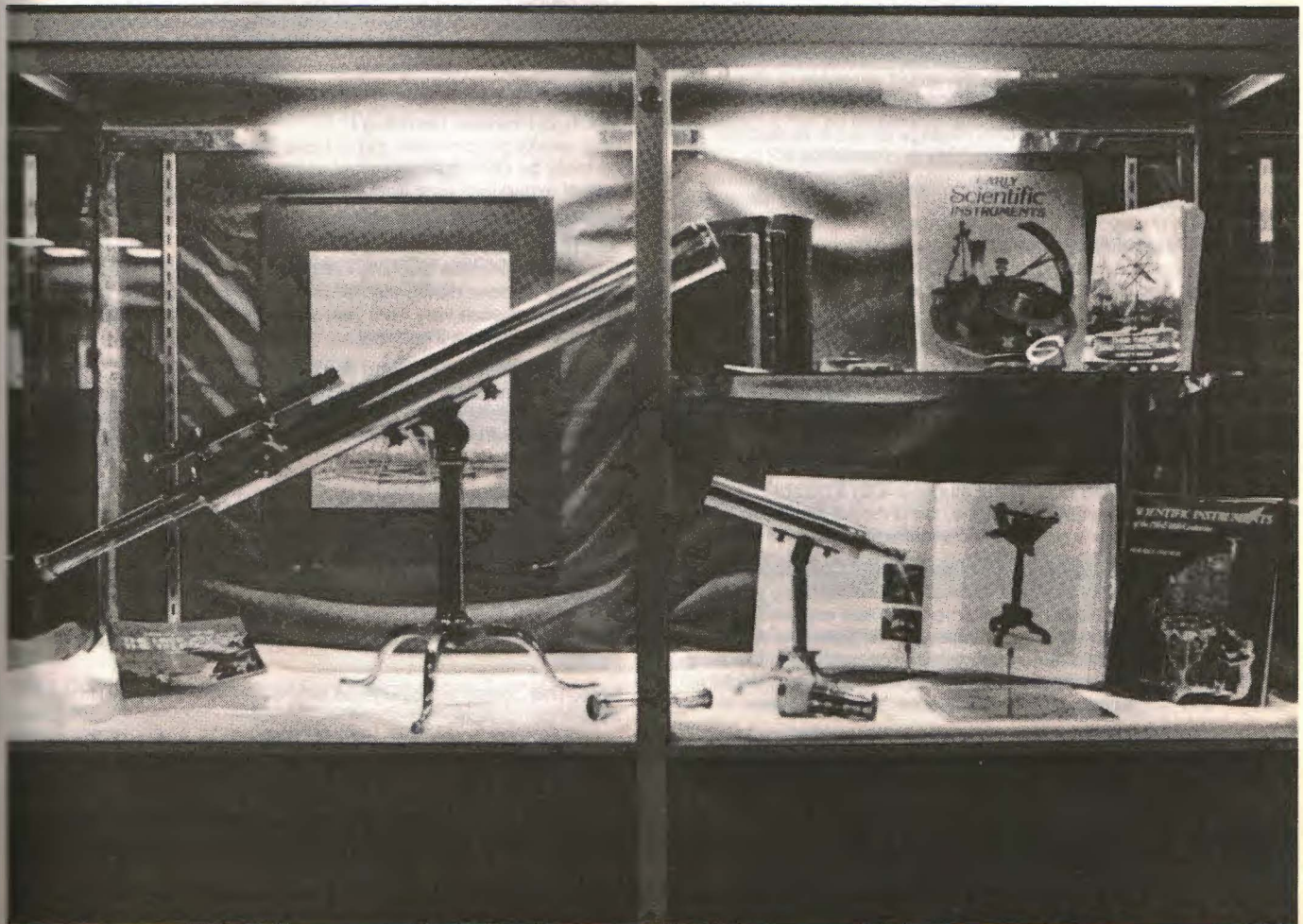
Prerequisite: completion of all 500 level courses of MBA Program or permission of MBA Director.

A study of research problems and methodologies in economics, with each student preparing and defending a research proposal of his/her own based upon a critical review of current literature. This course is designed to aid students in the development of their project course.

699.1(.2) Research Project in Economics

Prerequisite: Eco 698.1(.2) or permission of MBA Director.

Each student is required to complete a project involving the practical application of the research concepts and techniques used in economics, under the direct supervision of a faculty member. Interdisciplinary projects are acceptable.



Education (Edu)

Dean, Professor
Professors
Associate Professors

Assistant Professors
Adjunct Professors
Part-Time Professors

R. H. Bamsley
J. Haysom, T. Piper, D. Weeren
B. E. Davis, F. Dockrill
M. Herrick, M. MacMillan, F. Phillips,
D. Piper
B. Hanrahan, U. Kelly, R. Sargent
R. Courchene, E. Gatlinton
P. Carter, G. Clarke, B. Davison,
A. Dean, A. Dorrington, N. Ferguson,
R. French, B. Gomes, W. Gorman,
G. Gorveatt, D. Kaufman, A. Kilcher,
C. Mullalley, L. MacLeod, L. Naud,
D. Nichols, G. Patton, G. Perry,
G. Redden, A. Smith, J. Stone,
T. Sullivan, G. Walker, G. Young,
M. Vanderplaet

523.1(.2) Mathematics

Objectives, programs, methods in junior and senior high school mathematics.

524.1(.2) Second Language I

Principles and techniques of current methodology for teaching of French and other modern languages.

530.1(.2) Geography

Objectives, programs, methods in junior and senior high school geography.

531.1(.2) Junior High School Social Studies

This section focuses on history and civics at the junior high level.

534.1(.2) Social Studies: An Interdisciplinary Approach

Objectives, programs, methods for senior high school social studies courses that integrate a variety of fields - geography, history, economics, sociology, political science, etc. The 'local studies' approach is a principal focus.

540.1(.2) English: Secondary High School Level

This methods course will consider objectives and approaches to teaching the English curriculum components of literature, language/grammar, composition, speech/drama/media at the junior and senior high school levels.

541.1(.2) to 549.1(.2) Selected Special Methods

From time to time, the Faculty of Education will offer a selected special methods course which will reflect particular student needs or faculty expertise.

550.1(.2) Introduction to Special Education

Students will examine the nature of and need for special education. Current research findings are analyzed, and teaching approaches typically employed in secondary schools are critically evaluated.

590.0 Directed Study in Education (WMS 590.0)

This course provides an opportunity for students to undertake directed study in an educational area or topic relevant to their program if further study in a particular area is desirable or if it is needed to correct deficiencies which exist in their prior course-work program.

591.1(.2) Practice Teaching I

Four weeks practice teaching in Nova Scotia schools. This will normally be done during the first academic term. The details of school experience vary from year to year and are prepared by the Director of Practice Teaching.

592.1(.2) Practice Teaching II

Four weeks practice teaching in Nova Scotia schools. This will normally be done during the second academic term. The details of school experience vary from year to year and are prepared by the Director of Practice Teaching.

593.1(.2) Practice Teaching III

Four weeks practice teaching in Nova Scotia schools. This will normally be done during the April-May-June period. The details of school experience vary from year to year and are prepared by the Director of Practice Teaching.

595.1 Orientation to Teaching

Prerequisite: acceptance in Bachelor of Education program.

The following topics will be dealt with: Introduction to Practice Teaching, Ethics and Professional Practice, Legal Issues, School Operation, School Systems, Nova Scotia Department of Education, Nova Scotia Teachers Union, Community Programs and Resources, School Board's Expectations of Teachers, Securing a Teaching Position.

Note: This course will be offered over both semesters, i.e., from September to April.

Bachelor of Education

For general information on the Bachelor of Education program see Section 3. For specific information and instructions, obtain a copy of the Handbook from the secretary in the Faculty of Education.

Although courses are listed independently, the Faculty of Education strives to offer an integrated program.

501.0 Philosophy of Education

Via an existential perspective or a focus on educational relevance, exploration of the educational situation leads to applications to the curriculum, the school and student-teacher relationships.

502.0 Psychology of Education

A study of the nature, equipment, growth, development, evaluation and adjustment of the learner.

503.0 Classroom Processes

A course in professional studies designed to provide opportunities to critically examine various aspects of classroom practice: planning, establishing and maintaining control, features of different methodologies, student participation, student-teacher interaction, individualization, grouping procedures, etc.

504.0 History of Education

A study of facets of our educational heritage aimed at assisting in the formation of sound educational principles and practices.

Note: Each of the four courses above meets 3 hours a week, 2 semesters.

507.0 Sociology of Education (Soc 306.0)

Prerequisite: Soc 200 or enrolment in Education.

A study of major sociological approaches (both conceptual and methodological) to education in different societies, with special emphasis on Canadian society. The course will focus on topics such as relationship between family, education and society; education and inequality; the social organization of knowledge; education and social change; the politics of education.

508.0 Introduction to Comparative Education

This course is designed to acquaint students with a number of educational systems around the globe, the principal aim being to see Canadian education in a comparative perspective.

509.0 Analysis and Application of Educational Concepts

Concepts which identify selected aspects of good teaching will be clarified and their application to classroom practice explored. Identification and analysis of these concepts will provide a theoretical base for in-depth study of their application in strengthening teaching skills in the areas of lesson planning, the facilitation of meaningful learning and human interaction in the teaching situation.

521.1(.2) Secondary Reading

An introductory course in reading principles and methodology that can be utilized by a secondary school teacher in a content area (e.g., English, social studies, mathematics, science).

522.1(.2) Science

Objectives, programs, methods in junior and senior high school science.

Master of Arts in Education and Master of Education

The Faculty of Education offers the Master of Education and the Master of Arts in Education degrees. Please see Section 3 of this Calendar for the requirements for these two degree programs.

Students who enrol in "Thesis" courses (Edu 601.0/602.0 or 610.0) should be aware that these are evaluated and assigned letter grades at Saint Mary's University.

All full courses are three hours a week, two semesters, except where noted.

601.0/602.0 Master of Arts in Education Thesis

All students enrolled in the Master of Arts in Education must complete these two credits "thesis" courses. Each thesis and thesis supervisor must be approved by the Dean. Available only for students enrolled in the Master of Arts in Education degree program.

610.0 Master of Education Thesis

The Master of Education thesis, which is optional for students enrolled in the Master of Education degree program, provides students with a unique opportunity to choose, design and complete a significant project in the field of education. Each thesis and thesis supervisor must be approved by the Dean. Available only for students enrolled in the Master of Education degree program.

611.0 Research Skills for Practicing Educators

This course is aimed at increasing practicing educators' ability to understand and utilize published educational research and to enable them to design and conduct ad hoc educational research when needed. Topics covered will include the interpretation and use of educational research, construction of tests and questionnaires, making and testing hypotheses, the design of experiments, surveys, case studies, historical and theoretical research and basic statistical operations.

615.0 Media Studies and Education

This course is an introduction to the critical study of media forms and practices, i.e., advertising, television, rock videos, broadcast news, newspaper, film, etc., and the social relations suggested through such forms and practices. Underlying the course is the assumption that media can be treated as educational texts.

616.0 Gender and Education

This course provides an opportunity for students to explore the implications for education of feminist analyses of schooling, curriculum and pedagogy.

617.0 Curriculum Theory and Critical Pedagogy

This course provides a critical perspective on liberal and neo-conservative educational philosophies and traditional schooling practices in the production of unequal social relations. It is also a forum for the examination of possible alternative, pedagogical practices which might address such inequalities.

619.0 Curriculum In Practice

The focus of this course is on what teachers do in classrooms. Emphasis is given to considering ways in which teachers, supervisors and researchers might inquire into classroom life. This process of inquiry is seen as a cornerstone of professional development. (This course was previously entitled: The Examination of Classroom Practice.)

620.0 Curriculum Theory

This course is designed to develop an appreciation of the central and emergent ideas in curriculum theory. Participants will be encouraged to use these ideas in analyzing existing curriculum materials and in designing materials of their own choice. Course material will be related to the Nova Scotia List of Authorized Instructional Materials.

622.1 Curriculum In Historical Perspective (General) and

623.2 Curriculum In Historical Perspective (Nova Scotia)

These two half-courses address historical questions that need to be raised about today's curricula and current attempts at curriculum reform, e.g., origins of today's curricula, justification for departures from earlier practices, changes in the teacher's role in curriculum development. 622.1 draws on the history of western education generally, while 623.2 draws on the history of education in Nova Scotia, to shed light on current curricular issues.

624.0 Curriculum Development: Science

The course blends practical and theoretical aspects of curriculum design with particular reference to the teaching of science.

625.0 Instructional Media

This course will analyze the effectiveness of audio-visual media on instructional programs. Teachers will learn to understand, select, produce, and use appropriate media and materials to stimulate learning in their specific curricula.

627.0 Classroom Communication

The aim of this course is to improve teaching and learning in all subject classrooms by investigating the process and patterns of oral and written communication as they shape thinking and by planning curricula for the improvement of language skills for learning in every classroom.

629.0 Curriculum Implementation: Science

Teachers will be given the opportunity of examining, rehearsing, implementing and reviewing new science curriculum materials. Concurrently, related pedagogical matters will be explored, e.g., relating science to other subjects, responding to students' interest, grouping students.

633.0 Critical Pedagogy and the English Curriculum

This course utilizes critical educational theories and post-structuralist theories of language, texts and meanings to evaluate both traditional and popular forms of culture and to explore alternatives for the teaching of English.

635.1(2) Principles of Social Psychology and Education

A seminar course concerned with those aspects of social psychology which are of particular interest to teachers and school administrators. Discussion will focus on such topics as group behavior, leadership, conformity, attitudes and communication. Research findings as they apply to schools will be examined.

636.1(2) The Application of Social Psychology to Education

Students will present seminars on topics in social psychology of interest to them that apply to educational settings.

637.0 Effective Teaching and Personality Development

Prerequisite: permission of instructor.

A seminar course which will utilize biographical techniques to assist students in understanding how the development of personality affects the quality of teaching, along with other school responsibilities. Students will examine the contribution that past and present experience has on classroom and administrative practice.

638.1(2) Principles of Learning Theory in Education

A seminar course dealing with those aspects of learning theory as developed through the findings of experimental psychology that are particularly relevant to classroom teaching. Discussion will focus on such topics as reinforcement, punishment, discrimination, shaping, motivation, group processes, cognition, problem solving, intelligence, social development and testing.

639.1(2) The Application of Learning Theory in Education

Prerequisite: Edu 638.1(2).

Students will present seminars on topics in the psychology of learning of interest to them that apply to educational settings.

640.0 to 646.0; 647.1(2) to 649.1(2) Selected Topics Courses

From time to time the Faculty of Education will offer graduate level courses on selected topics which will reflect professional needs and/or faculty interests and expertise.

651.1(2) Comparative Education I

An examination of education in selected countries with an introduction to approaches used in the study of Comparative Education.

652.1(2) Comparative Education II

An examination of specific aspects of educational administration, curriculum, and the classroom practice in selected countries with the aim of suggesting improvements in one's own system.

655.0 Linguistics for Teachers

The focus of this course is on the relevance of language in educational settings. It examines the sound, word, sentence and meaning systems of English within the context of language teaching. Central concepts of sociolinguistics and psycholinguistics which relate to language in education will also be addressed. The course is intended for teachers of English as a second language but is also appropriate for teachers of English and language arts.

656.0 Curriculum and Instruction In Teaching English as a Second or Foreign Language

Intended for teachers of English as a second or foreign language (ESL/EFL), this course focuses on the curriculum and methods used in teaching English to non-native speakers both in Canada and abroad. Specific topics include the notion of method in foreign language teaching, the evaluation of popular teaching methods, teaching for communication, integrated language teaching, ESL/EFL in the content areas, and individual instruction.

657.0 Principles of Language Acquisition for Education

Intended primarily for teachers of English as a second or foreign language (ESL/EFL), this course focuses on the nature of language acquisition. An overview of first language acquisition, including the written language, is followed by a detailed examination of the variables involved in the acquisition of an additional language by older learners.

660.0 Educational Administration

The central purpose of this course is to develop understandings, knowledge, and competencies which are useful for educational administrators and other system personnel. The attempt is to meld the emerging concepts and principles of modern educational administration with the practical work contexts in which administrators, coordinators, teachers and students find themselves.

662.0 Educational Supervision

The purpose of this course is to develop knowledge and skills which are useful for teachers and educational supervisors in program planning, innovation and evaluation. Supervision is defined here as a planned program for the improvement of teaching and learning. The study of select literature and research is integrated with the perspective of the supervisor's role in program development.

666.0 Teaching Critical Thinking

This course examines the role of critical thinking and the teaching of critical thinking in the school. An attempt will be made to determine what critical thinking is and how it is done. Several methods being used in teaching critical thinking will be examined and practiced.

671.0 Social Issues and Education

Each year one or more social issues will be examined in depth as to their relevance to the influence upon educational practice in Nova Scotia. Issues that might be covered in any particular year include: sex differences and sexism, race differences and racism, ability differences and special education, public opinion and censorship, economic development and labour unrest, national identity and regional disparity, Quebec independence and educational opportunities for Acadians, social stability and socio-economic disparity.

673.1(.2) Innovations In Education I

A critical examination of selected past innovations in education aimed at isolating aspects of them which might be incorporated in future education programs.

674.1(.2) Innovations In Education II

A critical examination of selected current innovations in education intended to develop in the teacher and school administrator an understanding of and an appreciation for significant and promising practices which seem likely to affect the design of future education programs.

675.0 Global Issues and Education

Prerequisite: classroom teaching experience desirable.

This course is designed to enable teachers to bring global perspectives into their classrooms. The course has particular relevance for global and social studies teachers, but also provides ideas in global education across the curriculum. Participants will examine the international context and will seek to identify and resolve fundamental questions.

676.0 Education and Development

This course examines inter-related concepts of education and development. Education is not only the single biggest enterprise in many developing countries but is seen as the vehicle for higher social and economic well-being. This expectation, with its economic, political, social, and cultural implications, is critically examined within the process of development planning and implementation strategies.

680.1(.2) The Public School and Religious Education

This course examines the question of whether there are ways in which Nova Scotian public schools can legitimately and effectively contribute to the religious education of students.

681.1(.2) The Public School and Values Education

A rationale for values education and a repertoire of methods are derived in this course, through theoretical study and experimentation by the participants in their schools.

682.1(.2) The School In a Multi-Faith Society

In this course, the faiths and life-stances of students, teachers and our global society are considered as resources for a richer, more holistic education and enhanced values development.

684.0 Curriculum and Instruction: Social Studies

Prerequisite: certification. (Students should have had an undergraduate course in social studies education.)

A graduate level course designed to give in-service social studies teachers the opportunity of further developing their competencies in the areas of social studies curriculum and instruction. Considerable attention will be given to social inquiry in both its factual and valuative forms, and participants will be required to become familiar with a broad range of teaching approaches and curriculum projects.

685.0 Models of Teaching as Dynamics of Curriculum

Prerequisite: professional teaching experience.

This course takes the perspective that models of teaching reflect modes of thinking that provide the dynamic base for teaching and curriculum development. This course will examine models that provide teachers with structures that enhance creativity and problem solving abilities in students. The aim of the course is to assist teachers in gaining executive control over a number of "personal" models.

686.0 Models of Teaching for Instructional Design

Prerequisite: professional teaching experience.

This course aims to enhance instructional design by developing an expanded repertoire of models of teaching. In a study of the "information-processing" models, particular attention will be placed on models that teach systems of information, concept attainment, and mnemonic techniques. Teachers will be assisted in constructing applications of these models appropriate to their classrooms.

687.0 Computers and the Classroom Teacher

This course will focus on the theory and practice of using computers in the classroom. Students will consider current research and literature regarding the management of computer resources in various classroom settings. The implications of using computers in education and future trends in this area will be studied. Through "hands-on" experience, teachers will develop competence with a variety of educational computer applications. Application programs will include databases, spreadsheets, wordprocessors, graphics and telecomputing. Educational software will be used and evaluated. Student access to a computer is necessary in order to facilitate the completion of assignments and projects.

688.0 Models of Teaching: Developing a Repertoire

Prerequisite: Edu 685.0 or 686.0.

The aim of this course is to increase the educator's expertise in an expanded range of models and to facilitate a paradigm shift in teaching skills. Models from a social context, particularly jurisprudence, will be examined in respect to their theory and application. Workshops will concentrate on networking different models to design programs that respond to a variety of educational needs.

690.1(.2) to 693.1(.2) Individual Study

Prerequisite: registration is only by permission of professor and Dean of Education.

The course provides an opportunity for students to undertake special directed study in a disciplinary area or topic relevant to their program, especially in the event a course in the subject is not offered during the current session at Saint Mary's or at another university in the metropolitan area. More than one individual study course may be taken if the syllabus is different. Courses meet by arrangement.

Engineering (Egn)

Director, Associate Professor
Professors
Associate Professors

V. Sastry
W. P. Boyle, D. N. Swingler
V. Tamawski, D. Van Dyer

106.1 Engineering Design Graphics

Engineering drawing and sketching. Working drawings, standards and conventional practices. Projection Theory. Orthographic, oblique and isometric drawing and sketching. Introduction to perspective drawing. The engineering design process and its relationship to engineering graphics.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

107.2 Design and Descriptive Geometry

Principles and applications of descriptive geometry. Application to problems such as roadway cut and fill, contour maps, design of dams, outcrops of mineral veins, clearances and drawing developments of shapes. An introduction to the role of computers in handling and analyzing graphical data.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

120.0 Technology and Society

This course is designed for students who are not registered in engineering. The course includes: the complaint against technology; the history of technological change; response to technological change; the question of adequate precautions; and the interrelationship of technology with society.

Classes 3 hrs. a week. 2 semesters.

203.1(.2) Engineering Mechanics (Statics)

Prerequisite: Mat 200.0 (concurrently).

Fundamental concepts and principles of mechanics, statics of particles, equivalent force systems, equilibrium of rigid bodies, analysis of structures, friction, distributed forces, centroids, centre of gravity, moments of inertia.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

204.1(.2) Computer Science

Prerequisite: Mat 110.1(.2) and 111.1(.2).

Introduction to the digital computer and the computing process. Computer organization, information representation, and matching language. Basic data types, operations and expressions. Structure of algorithms and their flowchart representation. Repetitive calculations and arrays. Structure and control of subprocedures. Program optimization. Errors in numerical computation. FORTRAN 77 language.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

220.1(.2) Introduction to Microprocessors

Prerequisite: 100 level mathematics or physics; or computer programming course.

This course is geared toward those with a science/technical background who are interested in a fairly detailed introduction to the rapidly expanding world of microprocessors. The underlying aims are to develop some familiarity with microprocessor architecture and physical hardware; to become proficient in Assembler level programming; and to explore the application of program-control input/output operations to the control of simple external devices.

300.1 Dynamics of Particles

Prerequisite: Mat 300 (concurrently) and Egn 203.1(.2).

The objective of this course is to study the kinematics and kinetics of a particle. The course extends the principles developed in the course on statics. Both scalar and vector methods are used where appropriate. While three-dimensional problems are included, the emphasis is on two-dimensional problems. Topics: Kinematics of a particle, rectilinear and curvilinear motion, relative motion, Newton's Second Law; work and energy methods; impulse and momentum methods.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

302.2 Dynamics of Rigid Bodies

Prerequisite: Mat 300.0 (concurrently), Egn 300.1.

This course extends the concepts developed in Egn 300.1 to apply to rigid bodies. The emphasis will be on plane motion of rigid bodies.

Topics: kinematics of plane motion, kinetics of plane motion; kinematics and kinetics of three-dimensional motion.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

303.1(.2) Fluid Mechanics

Prerequisite: Mat 300.0 (concurrently), Egn 203.1(.2) and 204.1(.2).

Fluid properties, fluid statics and stability. Lagrangian and Eulerian methods of analysis. Application of the control volume of continuity, energy and momentum. Euler's equation of motion, Bernoulli's equation and applications. Linear momentum equation and applications. Dimensional analysis and dynamic similitude. Viscous effects in pipe flow. Introduction to boundary layers and drag on immersed bodies. Flow measurement techniques.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

304.1(.2) Mechanics of Deformable Bodies

Prerequisite: Egn 203.2, Mat 300.0 (concurrently).

An introduction to the techniques and theories involved in the analysis of the strength, deformation and stability of structural members and assemblies under the action of forces. Specifically, the object is to develop understanding of the relationships between loads applied to non-rigid bodies and the resulting stresses and strains. Topics include: stress and strain, axially loaded members, torsionally loaded members, flexural loading, combined loadings, column loading and finally an introduction to the Theory of Elasticity.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

306.1(.2) Engineering Thermodynamics

Prerequisite: Phy 221.0, Mat 300.0 (concurrently).

Energy and the first law, ideal gas, gas state equation, macroscopic properties of pure substances, properties and state, energy analysis of thermodynamic systems, entropy and the Second Law, thermodynamic relations, consequences and applications of the Second Law to thermodynamic systems.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

308.1(.2) System Dynamics (Electric Circuits)

Prerequisite: Phy 221.0, Mat 300.0 (concurrently).

The objective of this course is to introduce the student to the fundamental laws of electric circuits and circuit parameters, the concept of time-constants, impedances and admittances and general network theorems. Topics include: Kirchoff's Laws; Ohm's law and circuit parameters, resistive networks, loop and node equations; network theorems, super position, Thevenin-Norton; A.C. circuits, sinusoidal response, power, power factor, three-phase circuits; transients in simple circuits.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

English (Egl)

Chairperson, Associate Professor
Professors

J. K. Snyder
C. J. Byrne, R. H. Crowther
G. B. Hallett, W. Katz
R. A. MacDonald,
K. A. MacKinnon
R. Perkyne
G. Thomas, T. A. Whalen
J. Baker, L. Falk
T. E. Flynn, M. Harry
D. Pigot, A. T. Seaman
B. Bartlett, J. R. Perkin

Associate Professors

Assistant Professors

Introductory English

Egl 201.1(.2) English Composition and 202.1(.2) An Introduction to Literature are designed to meet the various needs of students entering the University from Junior or Senior Matriculation. They satisfy the requirement for an English course stipulated by the Faculties of Arts, Commerce and Science. Composition courses are divided into many sections to ensure as much individual attention to each student as possible. Classes meet three hours per week.

Advanced Courses

Students are advised not to take courses at the 400 level unless they have a quality point average of at least 2.50 in their previous work in English.

The standard prerequisites for entrance to courses above the 200 level are a pass in English 201.1(.2) and 202.1(.2) or permission of the department. For additional prerequisites in some courses, see the individual course descriptions.

All advanced courses meet three hours per week.

The Major Program

All English major and honors students will be assigned members of faculty as advisors with whom they can consult on all matters relating to their degree programs. Students who declare a major in English, or a double major in English and another subject area, should select their courses in consultation with the departmental advisors.

An English major consists of the following courses: (i) Egl 201.1(.2) and 202.1(.2); (ii) six additional courses, including at least four at the 400 level or higher, one of which must be Egl 400.0. Students are strongly advised to take Egl 400.0 in their second year.

The Minor Program

Students may declare a minor in English, creative writing, or linguistics.

Students who declare a minor in creative writing must take at least two creative writing courses, one of which is at the 400 level, and two more English courses beyond the 200 level.

Students who wish to major in English and minor in creative writing or linguistics must take eight English courses above the 200 level and fulfill the requirements of both programs. Further details on the linguistics minor can be obtained from Dr. Lilian Falk. Dr. Brian Bartlett is the Creative Writing Coordinator.

The Honors Program

All prospective honors students should refer to the section of this Calendar pertaining to honors degrees and apply to the Registrar for enrolment in honors after their first year in the University.

While students are encouraged to enrol formally in honors as early as possible, those who apply later will be considered if they have the requisite 3.00 average in their English courses.

Honors students must complete the requirements listed below. A slight adjustment in the honors English requirements will be made for those in a combined honors program.

1. Ten courses in English (they are listed here in recommended order):

- a. Egl 201.1(.2) and 202.1(.2)
- b. One 300 level English elective. Only one course at this level may be included in a student's minimum for honors. Any 400 level course may be substituted for this elective.
- c. Egl 400.0
- d. Egl 404.0
- e. Egl 406.0

- f. Egl 412.0 or 414.0
- g. Egl 416.0
- h. Egl 418.0 or 420.0
- i. Egl 440.0 or 428.0 or 432.0
- j. any combination of two of 444.1(.2), 445.1(.2), 446.1(.2) or 447.1(.2).

2. Prospective honors students must consult with the departmental Chairperson about admission to the program. After admission each candidate will work with the Chairperson in selecting an honors advisor; each year the student's course selection must be approved by his or her advisor.

3. Candidates must maintain an average of B (3.00) in their English courses.

4. Candidates may substitute an honors thesis in lieu of one of the 400 level electives.

Note: In the cases where courses have been renumbered or where a full course has been split into two half courses, a student who received a credit for the original course is not entitled to repeat the course in its new format for an additional credit.

201.1(.2) English Composition

A composition course designed to provide a thorough review of the basic principles of effective writing. The focus is on issues of grammar, rhetoric and logic in student writing and in examples from established practice. Some sections of this course are computer assisted.

202.1(.2) An Introduction to Literature

This course examines a variety of literary forms through the study of selected essays, fiction, drama, and poetry.

250.1(.2) Business English

Prerequisite: Egl 201.1(.2) and 202.1(.2).

Beginning with a review of English grammar, this course provides practice in writing clear, straightforward prose, in organizing ideas effectively and in dealing with the many forms of business writing - resumes, memos, letters and reports.

Note: Students who have previously earned a credit for Mgt 293.1(.2) or Com 293.1(.2) may not earn another credit for Egl 250.1(.2) and vice versa.

300.1, 301.2, 302.1, 303.2 Selected Topics

The subject matter of particular half-courses will be announced from time to time. These half-courses are designed to treat at an intermediate level authors and topics not dealt with in the other 300 level courses.

306.0 Cross-listed as Classics 306.0

308.1(.2) Development of English Prose Style

The course offers a close study of very short selections of prose writing from 1500 to the present. The passages will be studied in chronological order, with a view to observing developments in prose style in each period.

311.1(.2) Modern English Language

The course will examine the nature of modern English with reference to its syntax, grammar and vocabulary. Traditional grammar will be reviewed, and modern approaches to grammar and lexicography will be discussed.

312.1(2) Modern English Language in Canada

The course examines the background of Canadian English, the qualities which mark it as distinct from British and American English, and the regional varieties found within it, with emphasis on the speech of the Atlantic Provinces.

313.0 Narrative in Fiction and Film

A study of a number of important works of fiction that have been successfully adapted to film. Students consider the specific properties that are unique to each medium and the implications (formal, thematic, social and political) involved in translating from page to screen.

314.0 Film Criticism

The purpose of this course is to teach filmgoers how to read a film, to view it in the light of those basic critical principles and procedures which are regularly employed in the systematic study of literature.

315.1.(2) Masterpieces of Western Literature (Pre Renaissance)

An historical survey of the major works of Western civilization from classical Greece to the Renaissance.

316.1.(2) Masterpieces of Western Literature (Post Renaissance)

An historical survey of the major works of Western civilization from the Renaissance to the 20th century.

317.0 Writing by Women (WMS 317.0)

A course designed to examine some of the theoretical and practical concerns presented by women's writing. Both the nature of a women's tradition in literature and the scope and method of feminist literary criticism will be studied. The emphasis will be on literature of the 18th, 19th, and 20th centuries, but earlier writings will be considered as well.

318.1.(2) The Writer and Nature

Ranging from 18th century meticulous observers of the natural world through the Romantic poets to modern writers who envision an apocalyptically threatened environment, this course seeks to trace the shifts in literary approaches to nature within different English-speaking traditions and to follow the changing perceptions of the place of the human being within the natural landscape.

319.1.(2) The Literature of Everyday Life

Our everyday life is extensively mediated by newspapers and advertising as well as by publicity and propaganda of various kinds. Many people's imaginative lives are shaped and their opinions formed by a literature designed to reach those with minimal reading skills. This course will apply the tools of literary analysis to the forms of literature which surround most of us for most of the time and will examine the cultural place of reading in the late 20th century.

321.1.(2) Advanced Composition

A course in the writing and analyzing of expository prose. Emphasis will be placed on the use and understanding of the principal varieties of rhetorical modes and devices. This course is intended for those who are seriously interested in improving their writing.

Note: Students who have previously earned a credit for Egl 321.1.(2) may not also earn a credit for Egl 322.0 and vice versa.

322.0 Advanced Composition (Computer Assisted)

Additional prerequisite: typing skills.

The course introduces students to microcomputer word processing as a basic tool of composing and editing. Its purpose is to improve writing skills through the critical analysis and sensitive editing of the writing of peers and published authors. Emphasis is placed on the understanding and use of the principal varieties of rhetorical modes and devices.

Note: Students who have earned a credit for Egl 322.0 may not also earn a credit for Egl 321.1.(2) and vice versa.

323.1.(2) Introduction to the Practice of Criticism

This course provides an introduction to the discipline of literary criticism through extensive exercises in the practical criticism of selected extracts of poetry and prose.

324.1.(2) Introduction to the Theory of Criticism

This course provides an introduction to the major issues and theoretical approaches in the discipline of literary criticism. The main emphasis will be on reading selected critical texts from Plato to the present day.

325.0 Cross-listed as WMS 318.0**331.1.(2) History of Children's Literature**

A survey of children's literature to the end of the nineteenth century. The literature will be read and understood in its historical context. The emphasis will be on the works generally considered classics of children's literature.

332.1.(2) Children's Literature in the Modern Period

The emphasis in this course will be on books written for children from 1900 to the present.

334.0 The Literature of Modern Ireland

A study of the contradictions and fissures in modern Ireland as these are seen through the imagination of her writers. The writers studied will include W. B. Yeats, J. M. Synge, G. B. Shaw, Sean O'Casey, Maurice O'Sullivan, Liam O'Flaherty, James Joyce, P. U. Kavanaugh, Padraic Colum, Sean O'Faolain, James Stephens, J. B. Kane and Brian Freely.

335.0 Introduction to Folklore

This course surveys the various types of folklore (tale, song, riddle, proverb, etc.) within a context of ethnic and regional traditions. It will examine further (a) the relationship between folklore and written literature, (b) the problems of diffusion, collection, classification, and evaluation of folklore and (c) background materials from European and North American traditions.

341.1.(2) Introduction to Drama I

This course is a survey of representative plays from ancient Greece to 1700.

342.1.(2) Introduction to Drama II

This course is a survey of representative plays from 1700 to the present.

350.0 Contemporary American Fiction

A study of American fiction since World War II. Special attention is paid to such writers as Baldwin, Bellow, Heller, Malamud, Mailer, Salinger and Updike, partly because they interpret some important aspects of the national experience during the last three decades and partly because they raise basic questions about the aesthetics of fiction.

356.1.(2) The Development of Science Fiction to the Golden Age

The course will explore visionary and speculative literature ranging from early nineteenth century speculative fictions up to and including the so-called "Golden Age" of Science Fiction. Authors such as the following will be read: M. Shelley, Poe, Wells, Stapledon, Huxley, Orwell, Bradbury, Clarke, Heinlein, Asimov, Vonnegut and Reynolds.

357.1.(2) Recent Science Fiction

This course will look at the recent expansion of the genre through experiments with form and subject matter, and the influence of such movements as the New Wave and Cyberpunk. Authors to be studied will include such writers as Aldiss, Ballard, Brunner, Delaney, Ellison, Gibson, Haldeman, Herbert, LeGuin, Spinrad, Sterling, and Tiptree.

360.1.(2) World Literature In English: An Overview

This course will examine 20th century writers from a number of British Commonwealth and other English-speaking countries aside from Canada, the U.S. and Britain. Comparative perspectives will be emphasized.

361.1.(2) World Literature In English: Selected Focus

This course will focus on the development of English-language literature within the confines of a single country or geographically-proximate countries. Writers from England, the U.S. and Canada will not be considered except for comparative purposes.

365.0 The Modern Novella

A course designed to introduce the student to a wide range of short novels which illustrate both the rich diversity and the fundamental unity of concern which characterize the modern imagination and cultural consciousness.

371.1.(2) Contemporary Canadian Fiction

This course offers a study of Canadian prose fiction of the period from 1965 to the present.

372.1.(2) Contemporary Canadian Poetry

This course offers a study of Canadian poetry of the period from 1965 to the present.

375.1.(2) Writing Fiction I

Additional prerequisite: submission of samples of writing prior to registration and permission of creative writing coordinator.

A course in the many techniques, skills, goals and problems in writing fiction. The emphasis is on analyzing student stories in workshops, but lectures and writing exercises may also be included.

376.2 Writing Fiction II

Additional prerequisite: submission of samples of writing prior to registration and permission of creative writing coordinator.

This course encourages students to experiment with literary techniques and to develop their own writing style. Students will participate in workshops, read widely in the genre of the short story and be encouraged to rethink and revise their own fiction.

380.0 Literature of Atlantic Canada

An examination of the literature and literary background of Atlantic Canada. Emphasis in the first semester is on the 19th and early 20th centuries; in the second semester it is on contemporary writing.

381.0 Writing Poetry

Additional prerequisite: submission of samples of writing prior to registration and permission of creative writing coordinator.

This course provides students with an opportunity to write and workshop their own poetry. The great range of choices available to poets, in terms of form, rhythm, voice and diction, will be explored. The emphasis will be on student submissions, but the work of published poets will also be discussed.

382.0 Writing Plays

Additional prerequisite: submission of samples of writing prior to registration and permission of creative writing coordinator.

This course provides students with the opportunity to write and workshop their own plays. The literary aspects of drama, as well as its practical and production aspects, will be explored. Though the course focuses on student efforts, the works of classic and contemporary playwrights may also be discussed.

391.1.(2) The Study of Short Fiction

The course is designed to introduce students to short fiction as well as to the analytical concepts necessary for its critical appreciation and judgement.

392.1.(2) The Study of the Novel

This course is designed to introduce students to the novel in English as well as to the analytical concepts necessary for its critical appreciation and judgement.

395.0 An Introduction to Shakespeare

This course is designed primarily for non-English majors with an interest in Shakespeare. It studies in detail representative selections from the comedies, histories, tragedies, problem plays and last plays.

400.0 The Study of Poetry

Methods and problems in poetics and the reading and analysis of English poetry for the purpose of preparing students for advanced work. The study will be conducted within the context of a chronological presentation of poetry in English. In addition, the work of one poet will be studied in close detail.

402.0 History of the English Language

A survey of the development of the English language from its earliest stages to the present. Representative texts are used from each period so that students can acquire first-hand knowledge of the successive change in syntax, grammar and vocabulary.

404.0 Chaucer and the 14th Century

Additional prerequisite: Egl 400.0 (or may be taken concurrently).

A course dealing primarily with the poetry of Chaucer which is studied in the original Middle English. Students are required to do outside reading on literary influences and on life in 14th century England.

406.0 The Poetry and Prose of the English Renaissance

Additional prerequisite: Egl 400.0 (or may be taken concurrently).

This course is concerned with the development of English prose and poetry between the years 1550 and 1620.

408.1.(2) Drama and Society - Restoration to 18th Century

This course gives particular attention to the comedy of manners and its principal exponents such as Etherege, Wycherley, Congreve and Sheridan. Also studied are sentimental comedy, heroic and domestic tragedy, and the ballad opera, as well as the way social and political development affected the theatre.

409.1.(2) Drama and Society in the 19th Century

The study of drama and theatre in the Romantic era in relation to changing political and social conditions. The study includes melodrama, the influence of the actor-managers and the move towards realism. Also studied is the impact of European drama, particularly by Ibsen, on Shaw, Pinero and other British dramatists.

412.0 Restoration and 18th Century Literature

This course focuses on the various forms of English poetry and prose between 1660 and 1800. It includes poets such as Dryden, Finch, Pope, and Gray, and writers of prose such as Swift, Johnson, Burney and Boswell.

414.0 The Novel: Defoe to Austen

This course surveys the origin and development of the English novel during the 18th century. It includes the study of such novelists as Defoe, Fielding, Richardson, Smollett, Sterne, Goldsmith and Austen.

416.0 The Romantic Movement

Additional prerequisite: Egl 400.0 (or may be taken concurrently).

This course studies the origins and development of the English Romantic movement. Major emphasis will be placed on the works of Blake, Wordsworth, Coleridge, Shelley, Keats and Byron.

418.0 The 19th Century Novel

A study of the English novel in the social and historical context of the 19th century. Attention will be given to technical and stylistic developments, recurrent themes, major conventions, and various other concerns shared by novelists such as Austen, the Brontes, Thackeray, Dickens, Eliot, Hardy and James.

420.0 Victorian Poetry and Prose

The course is devoted to a critical study of the work of such representative poets as Tennyson, Browning, Arnold, Morris, Swinburne, Hopkins, Kipling, Hardy and Housman.

424.0 20th Century American Literature

A study of significant practitioners of 20th century American fiction and poetry. Important intellectual and cultural trends will be considered as they emerge from a close study of the texts.

425.0 Biography and Autobiography

A course focusing on the special features and problems of biographical writing such as subjectivity, bias, historical perspective and the problems of evidence. Students will be expected to read widely from an extensive reading list.

426.0 The Modern Novel

A close critical analysis of representative works of a number of prominent late 19th and 20th century novelists in the light of certain literary, cultural, socio-political and philosophic tendencies which have exercised a decisive influence in the formation of the modern imagination.

428.0 20th Century Poetry

Additional prerequisite: Egl 400 (or may be taken concurrently).

A study of 20th century poetry in English. British, American and Canadian poetry of the Modernist period and the post-World War II period is given special emphasis.

430.0 Scottish Literary Traditions

A selective examination of Scottish literary traditions from the late Middle Ages to the present. As required for particular writers, attention will also be paid to the Scots language and to cultural background.

432.0 The Development of English Canadian Literature

This course deals with the literature of Canada preceding the contemporary period (1965 to the present). A variety of novelists and poets influential in the formation of Canadian literary tradition are examined.

435.1.(2) 20th Century European Drama

A study of the principal European dramatists and theatre movements in the present century with emphasis on the ones that have most influenced drama written in English. Reference is made to works by such dramatists as Ibsen, Strindberg, Chekhov, Pirandello, Brecht, Beckett and Ionesco.

437.1.(2) Canadian Drama

This course traces the beginnings and follows the development of drama and theatre in Canada. It includes the study of works by Davies, Coulter, Reaney, Ryga, French and by Gelinat and Tremblay in translation.

438.1.(2) American Drama

This course traces the origins and principal developments of drama in the United States. Special reference is made to the work of leading dramatists, including O'Neill, Wilder, Miller, Williams, Albee, Wilson and Shepard.

440.0 Theory and Practice of Criticism

The course involves a general survey of the theoretical and historical backgrounds of literary criticism from the classical writers to such contemporary figures as Northrop Frye, Roland Barthes and Jacques Derrida. Its primary objective is to familiarize students with the basic intellectual tools required for interpreting and judging works of literature.

441.1(2) The Irish Short Story**[IRS 441.1(2)]**

This course will examine the short story as a major form in the fiction (in English) of Ireland, tracing its development from the Irish folktale to the sophisticated modern stories of internationally read practitioners such as Joyce, O'Connor, O'Faolain and Lavin.

442.1(2) Irish Drama**[IRS 442.1(2)]**

Irish dramatists from Farquhar and Sheridan to Shaw, O'Casey and Beckett will be studied from the point of view both of their contribution to theatre in the English-speaking world and of their special Anglo-Irish or native Irish cultural background.

443.1(2) Irish Poetry**[IRS 443.1(2)]**

Irish poets and poetry from ancient to modern times will be the subject matter of this course. Special emphasis will be placed on poets of the modern period from Yeats to Heaney, and the course will concentrate on the interaction of the patterns of Irish Gaelic sounds and images with those drawn from English language and culture.

444.1(2) Shakespeare I

The subject of this course is Shakespeare's comedies and romances.

445.1(2) Shakespeare II

The subject of this course is Shakespeare's history plays and problem plays.

446.1(2) Shakespeare III

The subject of this course is Shakespeare's tragedies.

447.1(2) Shakespeare's Contemporaries

This course studies selected plays by such writers as Kyd, Marlowe, Decker, Jonson, Beaumont and Fletcher and Webster.

448.1(2) Nineteenth Century American Literature from Emerson to Melville

This course is a survey of the major authors and works of American literature during the first half of the nineteenth century. Special emphasis will be given to Emerson, Thoreau, Hawthorne and Melville. Some attempt will be made to examine the historical and cultural influences exerted on the literature by the American Revolution and the Puritan sensibility.

449.1(2) Nineteenth Century American Literature from Whitman to James

This course is a survey of the major authors and works of American literature during the second half of the nineteenth century. Special emphasis will be given to Whitman, Dickinson, Twain and James. It will attempt to give the student a sense of the developing voices of the post-Civil War culture.

450.1(2) British Drama 1900-1955

The focus of this course is the dominant role of G. B. Shaw in the theatre of the first three decades of the 20th Century. Other playwrights studied include Granville Barker, Galsworthy, Barrie, Coward, Rattigan, Eliot and Fry.

451.1(2) British Drama since 1956

The "overnight revolution" in British Theatre in 1956 produced successive waves of outstanding dramatists who will be studied in the course, including Osborne, Pinter, Arden, Bond, Stoppard, Ayckbourn and Shaffer. The work of three major companies which helped to promote them, the Royal Court Theatre, the Royal Shakespeare Company and the National Theatre Company, will also be featured.

475.0 Writing Fiction - Advanced

Additional prerequisite: written permission of creative writing coordinator.

A course designed for students with some experience in writing fiction. Many aspects of the writer's craft, from the germination of a story to the polishing of a final draft, will be explored in workshops. This is not a course in writing popular or commercial fiction. Students who have not completed either Egl 375.1(2) or 376.2 may be asked to submit a sample portfolio of their work before registration.

550.0 Special Author**(WMS 550.0)**

Additional prerequisite: enrolment in the English honors program or special recommendation of the department.

This course provides the opportunity to study a particular author in considerable depth and detail, and requires some measure of independence and initiative in the student.

Tutorials by arrangement with supervisor. 2 semesters.

551.0 Special Subject**(WMS 551.0)**

Additional prerequisite: enrolment in the English honors program or special recommendation of the department.

This course provides the opportunity to study a particular subject or period in considerable depth and detail, and will require some measure of independence and initiative in the student.

Tutorials by arrangement with supervisor. 2 semesters.

English As A Second Language (ESL)

Course descriptions for this subject area are found at the conclusion of the Modern Languages and Classics Department.

Executive Master of Business Administration (EMB)

Director

Dr. Hermann Schwind

A complete description of this graduate program is found in Section 3 of this Calendar.

The following courses are available only to students registered in the Executive Master of Business Administration Program.

Year I: Fall Semester

EMB 511.1; 512.1; 514.1; and 522.1.

Winter Semester

EMB 513.2; 521.2; 523.2; and 524.2.

511.1(2) Managerial and Financial Accounting

This course is designed to improve students' decision-making abilities as managers using accounting information within organizations, and as managers interpreting and using externally published financial statements from other organizations. The use of accounting systems for planning of activities and control of operations with emphasis on the human behavioral aspects will be studied. The course will also develop and further the student's knowledge of accounting techniques and principles and their understanding of accounting data.

512.1(2) Organizational Behavior and Theory

This course is concerned with the behavior and attitudes of individuals and groups in organizations and with how organizations are structured to achieve their goals. The course relies heavily on the contributions of psychology, sociology and anthropology, and strong emphasis is placed in those management decisions that contribute to organizational effectiveness. Topics to be covered typically include leadership, motivation, job design reward systems, control systems, group-dynamics, communication and decision-making, designing jobs and reward systems, evaluating organizational effectiveness, conflict management, organizational culture, and change.

513.1(2) Marketing Management

The purpose of the course is to provide a systematic coverage of the marketing management, locally, nationally and globally - its major concepts, methods and models. In addition, the perspective of the course extends from the marketing concepts to marketing strategy: marketing's strategic role is emphasized, and the perspectives of the marketing mix are analyzed from a strategic angle. The course will, through case studies and class exercises, encourage familiarity with a range of concepts and techniques which can be used to develop effective strategies and plans.

514.1(2) Business Research Methods

This course covers the basic topics related to the collection, analysis and presentation of data for business decision-making. Topics include elementary notions of research and theory construction and statistical inferential, sample design, regression and correlation, model building, time series and index, and forecasting. The use of primary and secondary data sources will be addressed. The presentation of research results will emphasize the fundamentals of both written and oral communication techniques for effective presentation of business data/research results.

521.1(2) Corporate Finance

The objective of the course is to provide an integrated view of the financing and investment decision of the firm by focusing on how the value of a company is affected by the trade-offs between the returns and risks inherent in all financial decisions. Topics include agency theory signalling and financial compensation schemes and their impact on financial decision making. Students should complete the course having an in-depth appreciation of the nature of the financial markets within which the firm operates together with a solid working knowledge of a wide variety of financial decision techniques.

522.1(2) Managerial Economics

This course is designed to provide a foundation of economic understanding for use in managerial decision-making. The major microeconomic topics covered include demand, supply and pricing strategy under different market structures. The theory of demand and the concept of elasticity are developed with emphasis placed on interpreting the empirical estimates of these concepts. Production and cost in both the short run and long run are discussed, and the importance of these factors for managerial decision-making is

carefully considered. The appropriate firm pricing policy under perfect competition, monopoly, monopolistic competition and oligopoly is covered as well.

523.1(2) Operations Management

This course provides the student with a foundation in the concepts and techniques of operations management, especially the methods used for the planning, organizing and scheduling of operations in both manufacturing and other institutional settings. Students will be introduced to analytic decision making through such techniques as linear programming, decision analysis and simulation. Applications include inventory control, project management, production scheduling and resource allocation.

524.1(2) Human Resource Management

This course is about hiring and managing individuals at work. In broad terms, this course exposes a student to the theory and practice of procuring, developing, and utilizing the human resources of an organization. It will help that student to identify several individual, organizational, and environmental factors that influence people at work and which have a decisive influence on an organization's human resource policies. Specific topics dealt with will include: human resource planning, job analysis, recruitment and selection, orientation, training and development, performance appraisal, compensation management, elements of industrial relations, and quality of work-life improvement strategies.

Year II: Fall and Winter Semester

631.1(2) Management Information Systems

Information Systems play a critical role in the success of most enterprises. Managing the corporate information systems function has become very challenging, with rapidly changing issues and approaches, and greater requirement for information systems strategy to be aligned with business strategy. This course addresses the major management topics associated with managing the MIS function. Topics include user satisfaction and demand for information, managing service quality of MIS, the successful management of technology, the relationship between automation and productivity, data security, and justification of the MIS budget. Management issues in emerging topics such as office systems and microcomputers are also discussed.

632.1(2) International Capital Markets

The objective of this course is to understand the global nature of financial markets and the role of international banking. The course commences with a recapitulation of the make-up of a developed market financial system. Particular attention will be focused on the foreign exchange market. The interrelationships within the domestic system and its interdependence with the "world" system are illustrated and the apparent robustness of the system to withstand shocks is assessed, as well as its ability to innovate in the financial claims it can offer and the financial centres that have developed.

633.1(2) Policy I - Business Strategy

Course objectives: This course is designed to develop a general management perspective within the context of current strategic management concepts and techniques. The concept of strategy will be used as the theme to develop this course, and to assist in the integration of materials covered in other parts of the EMBA course activities. The primary teaching vehicle in this course will be the case method. Although some lectures will be given, concept development will take place through case discussions, readings and presentations. Background material will be provided by the instructor.

634.1(2) Business Research Project I

The object of this research project course is to give the group the opportunity to examine a particular problem in depth. The individual student's work will be supervised by a faculty member. Students will be required to present the findings of the project in the continuing Business Research Project II course, EMBA 646.1(2).

641.1(2) International Business

This course focuses on some critical issues facing the manager in the international business arena. Introductory sessions examine issues of international trade and foreign market penetration strategies such as exporting, licensing and joint ventures. The multinational enterprise and organizational problems in international operations are also discussed, including the management of foreign exchange rate risk. After discussing issues of strategy and structure in the

multinational enterprises, students will examine issues dealing with the nation-state, both in the developed world and in the less developed regions.

642.1(2) Policy II - Public Policy in Business

This course examines the operation of the macroeconomy and discusses the fiscal and monetary tools available to the central authorities to affect overall economic activity. The traditional Keynesian model is developed and the debate between the monetarists and the Keynesians is discussed. The purpose and the effect of government regulations of the business environment will be examined as well.

643.1(2) Industrial Relations (Elective)

This course will cover the analysis of structure, functions, and government of the Canadian union movement; application of theoretical models to contemporary problems in labour and industrial relations in Canada; a study of the impact of environmental factors on union management relations. Emphasis will be placed on institutional and behavioral aspects of industrial relations. An attempt will be made to identify the objectives, values and motivations of the various parties involved in collective bargaining and the role of industrial conflict and industrial harmony will be examined in the context of collective bargaining goals.

644.1(2) Financial Innovations (Elective)

This course will examine the pace of innovation, deregulation and resulting structural transformations that have occurred in financial markets. Attention will focus on new financial instruments, particularly those that are of an off-balance sheet commitment form. Note Insurance Facilities (NIFs), currency and interest rate swaps, currency and interest rate options, Forward Rate Agreements (FRAs), option strategies and index futures will be covered, and future trends in innovations will be addressed.

645.1(2) International Marketing (Elective)

This course is designed to provide students with insights into the nature and environmental perspectives of marketing across national boundaries and with those within foreign countries. Emphasis is placed on the analytical processes in international marketing decisions, as well as knowledge of tools and practices for structuring and controlling marketing programs related to international business. Case studies will be used extensively.

646.1(2) Business Research Project II

Business research requires the scientific development, planning, execution and reporting of a business research project. The research will be conducted and reported under the guidance of a faculty advisor. The project must be well grounded in the current literature, and the report should include a delineation of the problem, method, results, and conclusions. In this course, students will be required to present their research projects to the EMBA students and faculty.

690.1(2) Seminar In Business Studies

Prerequisite: completion of all required 500 level EMBA courses.

The course deals with selected topics in business. The topics to be covered will vary depending on the interest of the students and instructors.

691.1(2) Directed Study

Prerequisite: completion of all required 500 level EMBA courses and permission of EMBA Director, departmental chairperson, and instructor.

Intended to supplement or provide an alternative to the electives in order to meet the special needs and interests of students.



Finance and Management Science (Fin and Msc)

Chairperson, Associate Professor
Associate Professors

D. Connelly
T. Charles, M. Chew
P. Dixon, D. F. Gray,
J. Gregory, E. Lee
S. Amir-Khalkhali, F. Boabang
D. Dorp, H. Millar,
M. Mohd, T. M. Wang
D. Welch

Assistant Professors

Adjunct Professor

The Department of Finance and Management Science offers a variety of courses that may be classified as follows:

- those that deal directly with three of the primary functions of business - finance, data processing, and operations management; and
- those whose aim is to develop skills in management science - quantitative methods, computing, and statistics, which indirectly relate to all of the primary functions of business.

In addition to the core courses in quantitative methods (Msc 205, Msc 206, Msc 207), computing (Msc 325), and finance (Fin 360, Fin 361) that are required for the Bachelor of Commerce degree, the department offers a number of advanced courses. In particular, those students pursuing a B.Comm. degree with a major in business administration may elect to specialize in finance, management science, or data processing. These three programs, along with others available within the business administration major, are outlined in the Faculty of Commerce section of the Calendar.

In addition to the data processing program cited above, information on other computer-related degree programs may be found in the Faculty of Commerce and Faculty of Science sections of this Calendar.

At the graduate level, the department offers the core courses (Msc 506, Msc 507, Msc 521 and Fin 561) required of all students in year I of the MBA program, as well as a number of elective courses available at the 600 level in year II of the MBA program.

Finance (Fin)

260.1(.2) Personal Finance

A survey course designed to enable the student to better understand the considerations involved in the management of personal income savings, investments, mortgage analysis and tax planning.

Classes 3 hrs. a week. 1 semester.

Note: This course may not be taken for credit in the Bachelor of Commerce degree program.

360.1(.2) Business Finance I

Prerequisite: Msc 207.1(.2) (which may be taken concurrently) and Acc 242.1(.2).

A basic course in business finance introducing the student to the discipline and presenting financial analysis, working capital management, capital budgeting, the tax environment and the role of financial intermediaries. Microcomputers will be used to perform analyses.

Classes 3 hrs. a week. 1 semester.

361.1(.2) Business Finance II

Prerequisite: Fin 360.1(.2).

A continuation from Fin 360.1(.2) covering cost of capital, capital mix, capital and money markets, dividend policy, financial instruments and mergers, consolidations and bankruptcy. Microcomputers will be used to perform analyses.

Classes 3 hrs. a week. 1 semester.

362.1(.2) Principles of Real Estate and Appraisal

Prerequisite: Cml 301.1(.2), and (or concurrently) Fin 361.1(.2).

This course provides an introductory exposure to real estate in Canada. Subject areas that will be addressed include: real estate trends in Canada, financing of real estate, and an introduction to real estate appraisal.

Classes 3 hrs. a week. 1 semester.

363.1(.2) Principles of Insurance

Prerequisite: Cml 301.1(.2), and (or concurrently) Fin 361.1(.2).

This course introduces the student to the nature and management of risk. A survey of all types of insurance including life, general and liability are presented. Students will be introduced to the insurance industry from both an internal and external point of view. Special topics of consumer interest will also be addressed.

463.1(.2) Financial Management

Prerequisite: Fin 361.1(.2).

This course will deal with the problems of asset management. Topics will include working capital management, capital budgeting, required rates of return and evaluation of risk. Emphasis will be placed on the application of theory through the use of case studies.

Classes 3 hrs. a week. 1 semester.

464.1(.2) Corporation Finance

Prerequisite: Fin 463.1(.2) or permission of instructor.

This course examines the capital structure of the firm and the cost of capital in relation to the financing decision and dividend policy. Case studies will be used to examine the implications of the capital mix.

Classes 3 hrs. a week. 1 semester.

466.1 Investments

Prerequisite: Fin 361.1(.2).

This course presents an overview of the Canadian investment environment. A framework is developed for assessing the merits of various security investment alternatives, and a brief introduction to portfolio management is given. In this course, calculus and mainframe computers are used extensively.

Classes 3 hrs. a week. 1 semester.

467.2 Portfolio Management

Prerequisite: Fin 466.1.

A comprehensive analysis of the decision-making process of portfolio management. Major subject areas include the definition of objectives to accord with the preferences, plans, and obligations of major classes of investors, analysis of the likely risks and gains of investments, individually and by class of security, and the selection of portfolios which appear most likely to satisfy stated investment objectives.

Classes 3 hrs. a week. 1 semester.

476.1(.2) International Financial Management

Prerequisite: Fin 360.1(.2) and 361.1(.2).

This course is divided into three major parts. The first part provides a basic understanding of the forces that determine the relative values of currencies in the foreign exchange markets. Parts two and three focus on the firm with the financing of international operations and capital budgeting decisions.

Classes 3 hrs. a week. 1 semester.

490.1(.2) Seminar in Finance

Prerequisite: permission of chairperson or instructor.

This course deals with selected topics in finance. It is offered when in sufficient demand, and specific topics covered may vary depending on the interests of students and instructor.

Classes 3 hrs. a week. 1 semester.

492.1(.2) Directed Study

Prerequisite: permission of chairperson and instructor.

Intended to supplement or provide an alternative to the regular finance courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

Tutorial and independent study. 1 semester.

The following courses are available only to students registered in the Master of Business Administration program and with permission of the MBA Director to students registered in other Master's programs.

651.1(2) Business Finance

Prerequisite: Eco 500 or 501, Msc 506 or 507, Acc 540 or 548; or permission of MBA Director.

An introduction to financial management and the role of finance, both within the organization and the economy as a whole with emphasis on financial decision-making. The topics considered include investment decisions and subsequent financing, the costs of capital, the management of assets, and dividend policy.

663.1(2) Financial Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

Managerial in emphasis, this course examines financial planning and analysis, working capital management, capital budgeting techniques, and theories of cost of capital and valuation of the firm.

664.1(2) Corporate Financing

Prerequisite: Fin 663.1(2) or equivalent.

This course is also managerial in emphasis and covers material related to financing both the short and long term assets of the firm: bank borrowings, bonds, preferred stock, common stock, as well as mergers and consolidation.

666.1(2) Capital Markets

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

The purpose of this course is to discuss the management of investments. Although a strong theoretical treatment is adopted, the course is developed in the context of Canadian financial markets and available empirical work will be reviewed. Recent advances in option and bond markets will be developed and computer applications stressed. In addition, the asset-liability management of financial institutions - banks, mutual funds, insurance companies and public funds - will be reviewed.

667.1(2) Options, Futures and Swap Markets

Prerequisite: Fin 663.1(2) and Fin 666.1(2).

This course is intended to help students understand activities of the financial institutions in the market place and the types of financial innovations taking place in the market place. Topics covered include contemporary issues in the options and futures markets and applications: stock options, stock index options, foreign currency options, curb options, commodity futures, foreign exchange futures, interest rate futures, stock index futures and interest rate swaps. Applications to hedging strategies are also emphasized.

676.1(2) International Business Finance and Banking

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course is organized around two themes - (i) the concept of the multinational firm and the financial management decisions it takes in a multi-currency world - and (ii) the challenges faced in the international banking system of asset/liability management, offshore financial centres, external debt and rescheduling and increased regulatory and supervisory measures.

690.1(2) Seminar in Finance

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course deals with selected topics in finance. It is offered when in sufficient demand, and specific topics covered may vary depending on the interests of students and instructor. In the past these have included real estate, investment and portfolio management, and international banking.

692.1(2) Directed Study

Prerequisite: completion of all 500 level required courses and permission of MBA Director, departmental chairperson, and instructor.

Intended to supplement or provide an alternative to the regular finance courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

698.1(2) Research Seminar in Finance

Prerequisite: students registered full-time must take Fin 666.1(2) concurrently.

A study of research problems and methodologies in finance, with each student preparing and defending a research proposal of his/her own based upon a critical review of current literature. This course is designed to aid students in the development of their project course.

699.1(2) Research Project in Finance

Prerequisite: Fin 698.1(2), completion of Fin 666.1(2) and either Fin 663.1(2) or Fin 676.1(2), or permission of MBA Director.

Each student is required to complete a project involving the practical application of the research concepts and techniques used in finance, under the direct supervision of a faculty member. Interdisciplinary projects are acceptable.

Management Science (Msc)**205.1(2) Introduction to Quantitative Methods for Commerce I**

Prerequisite: Mat 110.1(2) and Mat 112.1(2) or Grade XII mathematics or equivalent.

This course illustrates applications of basic mathematical techniques in break-even analysis, data manipulation, aggregate planning and financial planning. Topics include linear functions, linear inequalities, the simplex method, compound interest, annuities and depreciation.

Classes 3 hrs. plus recitation session 1 1/2 hrs. a week. 1 semester.

Note: This is the same course as Eco 205.1(2).

206.1(2) Introduction to Quantitative Methods for Commerce II

Prerequisite: Mat 110.1(2) and Mat 112.1(2) or Grade XII mathematics or equivalent.

The purpose of this course is to provide a basic understanding of the dynamics of non-linear functions as they relate to the use of scarce resources for profit maximization. Students will be exposed to the basic methods of calculus and the basic concepts of probability as they relate to decision making in an uncertain environment.

Classes 3 hrs. plus recitation session 1 1/2 hrs. a week. 1 semester.

Note: This is the same course as Eco 206.1(2).

207.1(2) Introductory Statistics for Commerce

Prerequisite: Msc 206.1(2).

This course is designed to introduce some common decision aids for coping with uncertainty. Topics include: data collection, summarization and presentation, reporting and interpreting the accuracy of results, evaluating the effectiveness of a decision and determining relationships among factors for the purpose of prediction. Examples will be drawn from accounting, economics, marketing, management, finance and production.

Classes 3 hrs. plus recitation session 1 1/2 hrs. a week. 1 semester.

Note: This is the same course as Eco 207.1(2).

301.1(2) Operations Research

Prerequisite: Msc 207.1(2) and 325.1(2).

This course provides a survey of various operational research models available to management decision-makers. Emphasis is placed on the selection and formulation of appropriate models, as well as the analysis and interpretation of their computer-generated solutions. Topics covered include: resource allocation, inventory management, and transportation and other network problems.

Classes 3 hrs. a week. 1 semester.

303.1(2) Statistical Analysis for Business and Economics

Prerequisite: Msc 207.1(2).

This course provides a further study of the statistical concepts introduced in Msc 207. It develops a working knowledge of such statistical tools as chi-square tests on contingency tables, multiple regression analysis, time series, and analysis of variance as applied to a variety of business and economic problems with the aid of computerized data analysis.

Classes 3 hrs. a week, 1 semester.

Note: This is the same course as Eco 303.1(2).

316.1(2) Management of Service Operations

Prerequisite: Mgt 281.1(2), Msc 205.1(2) and 207.1(2).

This course is designed to provide an overview of problems arising in provision of services in such areas as health care, banking, hospitality industries, transportation, etc. Topics covered include forecasting, location analysis, layout design, capacity planning, workshift scheduling, vehicle routing, quality control and inventory control.

Classes 3 hrs. a week. 1 semester.

317.1(2) Management of Manufacturing Operations

Prerequisite: Mgt 281.1(2), Msc 205.1(2) and 207.1(2).

This course is designed to provide an overview of problems arising from the production and supply of goods and services. Problem areas include: forecasting, distribution, plant layout, inventory management, quality management, planning of large projects and scheduling. Emphasis will be on problem identification and the evaluation of alternative solution strategies.

Classes 3 hrs. a week. 1 semester.

322.1(2) Computer Simulation

Prerequisite: Msc 325.1(2) and Msc 207.1(2).

Management techniques using the computer to model real world systems; heavy reliance on statistical modelling including parameter estimation and tests of significance; emphasis on the process from problem definition through data analysis to model validation and verification; interpretation of results and strategy or action recommendations; quality of output format in terms of its management information value is stressed. Students will use FORTRAN subroutines to construct a simulation language as tailored to their own simulation problem.

Classes 3 hrs. a week. 1 semester.

324.1(2) The Use of COBOL in Data Processing

Prerequisite: Msc 325.1(2) or CSC 226.1(2).

COBOL program organization, file organization, description and accessing, edit, sort, file maintenance and report writing programs, arrayed data, integration concepts, multi-programming concepts.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

325.1(2) Introduction to Computers

This course is an introduction to computers and their use in a business environment. The emphasis of the course is learning the use of common business software packages and programming. Other topics will include computer hardware and software, data processing and information systems.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: Credit for CSC 101.1(2) towards a Bachelor of Commerce degree will be given only if taken prior to Msc 325.1(2).

326.1(2) Database Programming

Prerequisite: Msc 324.1(2) or permission of instructor.

This course covers programming business applications in a current database language. Also covered is a survey of data structures used in business applications and how they are implemented in common software packages.

Classes 3 hrs. a week. 1 semester.

402.1(2) Operations Research Methods and Applications

Prerequisite: Msc 301.1(2).

The model-building techniques and optimization methods introduced in Msc 301 are discussed in detail, and utilized in realistic management science case studies. Methods considered will include dynamic programming, nonlinear programming, Monte Carlo simulation and stochastic optimization. An emphasis will be placed on comparing the relative advantages of each operations research method, and selecting appropriate techniques for a given management problem.

Classes 3 hrs. a week. 1 semester.

424.1(2) COBOL II

Prerequisite: Msc 324.1(2).

This course is a continuation of Msc 324, aiding the student in developing flowcharting skills and programming capabilities specifically in the COBOL language.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

426.1(2) Computer Configurations

Prerequisite: Msc 324.1(2) or 326.1(2); and Acc 323.1(2); or permission of chairperson.

In this course the student gains a basic knowledge of computer hardware and software needed to run standard business applications. The hardware topics provide the background needed for making management decisions with respect to small business computer requirements. The software topics emphasize ways to maximize the efficient use of computers in small business.

Classes 3 hrs. a week. 1 semester.

436.1(2) Advanced Topics in Business Computing

Prerequisite: Msc 426.1(2) or permission of chairperson.

This course deals with current advanced topics in business data processing. The specific topics will vary depending on the interests of the students and the instructor.

Classes 3 hrs. a week. 1 semester.

490.1(2) Seminar in Management Science

Prerequisite: permission of chairperson or instructor.

This course deals with selected topics in management science. It is offered when in sufficient demand, and specific topics covered may vary depending on the interests of students and instructor.

Classes 3 hrs. a week. 1 semester.

492.1(2) Directed Study

Prerequisite: permission of chairperson and instructor.

Intended to supplement or provide an alternative to the regular management science courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

Tutorial and independent study. 1 semester.

The following courses are available only to students registered in the Master of Business Administration program and with permission of the MBA Director, to students registered in other Master's programs.

506.1(2) Introductory Decision Analysis I

The objectives of this course are to provide a basic understanding of (i) rational decision-making under uncertainty and (ii) the methods of statistical analysis. The approach taken in the course, and also in Msc 507, focuses on the logical process of assimilating quantitative information and the formulation of appropriate models in the context of case problems.

507.1(2) Introductory Decision Analysis II

Prerequisite: Msc 506.1 or permission of instructor.

This is a continuation of Msc 506 with emphasis on the methods of linear programming as applied to the allocation of scarce resources. Problems of queuing and inventory management are also considered.

521.1(2) Computers in Business

This course acquaints the student with concepts relevant to the use of computers in business as well as the role of the computer in the management process. Special emphasis is placed on the logic and programming of a computer, interactive procedures using computer terminals, and the use of the computer as a management decision-making tool.

603.1(2) Statistical Applications in Management Science I

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course brings together many of the theories and skills which the student has learned and uses them in designing, conducting, analyzing, and reporting the results of research designs. Statistical techniques used are: chi-square, analysis of variance, and multiple regression. Extensive use is made of computer-oriented statistical packages.

604.1(2) Statistical Applications in Management Science II

Prerequisite: Msc 603.1(2).

This course is a further study of the application of research design, statistical techniques, and reporting procedures to actual research problems. Statistical techniques used are: multivariate analysis of variance, factor analysis, discriminant analysis, and cluster analysis.

615.1(2) Operations Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A foundation in the concepts and techniques of operations/production management, dealing with methods used for the planning, organizing and scheduling of operations in both industry and other institutional settings.

636.1(2) Data Processing Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

In this course, concepts of business computer management (including hardware, software, personnel, data and procedures) needed in the development and acquisition of a computerized information system are covered.

690.1(2) Seminar in Management Science

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course deals with selected topics in management science. It is offered when in sufficient demand, and specific topics covered may vary depending on the interests of students and instructor.

692.1(2) Directed Study

Prerequisite: completion of all 500 level courses and permission of MBA Director, departmental chairperson, and instructor.

Intended to supplement or provide an alternative to the regular management science courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

698.1(2) Research Seminar in Management Science

Prerequisite: students registered full-time must take Mkt 678.1(.2) concurrently.

A study of research problems and methodologies in management science, with each student preparing and defending a research proposal of his/her own based upon a critical review of current literature. This course is designed to aid students in the development of their project course.

699.1(2) Research Project in Management Science

Prerequisite: Msc 698.1(.2), completion of a Msc 600 level course, or permission of MBA Director.

Each student is required to complete a project involving the practical application of the research concepts and techniques used in management science, under the direct supervision of a faculty member. Interdisciplinary projects are acceptable.



Geography (Gpy)

Chairperson, Professor
Professors
Associate Professors
Assistant Professor

H. Millward
D. Day, R. McCalla
P. J. Ricketts, B. Robinson
N. Jones

General Information

In its broadest sense geography studies the relationship between people and their surroundings. It derives much of its educational value from its interdisciplinary approach to such relationships. At the same time it is a subject of practical importance in such fields as urban and regional planning, resource development, industrial location, marketing research and environmental management. The Geography Department has developed four major programs. The first is a general major which will be of particular interest to teachers and prospective geography teachers. The second structured major is for people interested in the field of urban and regional development. The third major is in coastal and marine studies while the fourth is in environmental studies.

Departmental Policy

1. The department regards Gpy 201.1(.2) and 202.1(.2) as service courses for the university in general and basic introductory courses for geography majors and honors students. Higher level courses are designed to serve the interest of geography majors but may be of interest to students in cognate areas. In some cases, the department may allow a student from a cognate area to take the course without the stated prerequisite: for example, economics students may be admitted to Gpy 321.1(.2); 331.1(.2); and 341.1(.2). Similarly, history majors may be allowed to take Gpy 429.1(.2).

2. The course content in most geography courses is cumulative.

3. Where a prerequisite is specified, a student wishing to take the course must have obtained at least a C grade in the stated prerequisite.

4. Normally 300 and 400 level courses are not open to students in their first year at university.

5. Students may enter courses without the stated prerequisites, providing they have permission of instructors.

6. Because program changes occur from time to time with renumbered or restructured courses, students are advised that they are not eligible to take a course for credit if they already have a credit for a comparable course, even if that course was taken at a different level or under a different number.

General requirements for majors

1. To obtain a major in geography a student must complete the equivalent of seven university credits in geography.

2. The following courses are required for the major:

a. Gpy 201.1(.2) and 202.1(.2).

b. Three of Gpy 326.1(.2), Gpy 336.1(.2), Gpy 356.1(.2), Gpy 366.1(.2), and Gpy 446.1(.2), although students are encouraged to take more than three.

c. The equivalent of a full course credit at the 400 level.

d. Three and a half other full course equivalents in geography.

3. In order to graduate with a major in geography, a student must obtain a quality point average of at least 2.00 in geography courses counting towards the major.

4. All majors must follow a program of study established in conjunction with, and approved by, a member of the Department of Geography and must have the program approved by the department at the beginning of each year.

5. For more complete information on the geography program, the student should obtain a copy of Notes and Guidelines for Geography Students from the departmental secretary.

6. All majors should purchase a copy of Goode's World Atlas or the Oxford World Atlas (paperback version).

7. Gpy 326.1(.2), 336.1(.2), 356.1(.2), 366.1(.2) and 446.1(.2) are normally open only to declared geography majors and minor program students.

A Geography Major with a Minor in Geology

A student may, with approval by the Chairperson of the Department of Geography, major in geography with a minor in geology by fulfilling the following requirements:

1. (a) In addition to fulfilling all the requirements for a geography major, students must complete four full credits in geology, of which at least two must be at the 300 level or higher;

(b) courses that are cross-listed between geography and geology may only count towards the geology minor if they are taken as geology credits (if they are taken as geography credits they can only apply to the geography major).

2. Students accepted into the geology minor program will be allowed to count all four geology credits towards their Arts degree requirements.

Honors Program

1. To be admitted to the honors program a student must have a B standing in geography courses and have completed one year at the university. The candidate must have obtained satisfactory grades in non-geography courses.

2. To complete the program students must complete the following courses in geography:

a. Gpy 201.1(.2) and 202.1(.2).

b. Gpy 326.1(.2) and Gpy 336.1(.2).

c. Two of Gpy 356.1(.2), Gpy 366.1(.2), and Gpy 446.1(.2).

d. Gpy 406.1(.2) and Gpy 416.1(.2).

e. Gpy 526.0.

f. Seven other full course equivalents in geography.

3. Each year a student's program, including electives, must be approved by the Department Chairperson, and each year a B average in geography courses must be maintained.

4. Complete details regarding the program and honors research project are contained in *Notes and Guidelines for Geography Students and Regulations for Presentation, Submission and Marking of the Honors Research Project*.

5. In addition, students must meet the general Faculty of Arts requirements for honors students.

Co-operative Education Program

The department offers a co-operative education program for regular and honors students. In addition to meeting the general academic regulations which apply to co-operative education and those regulations which apply to majors and honors students in geography, the department specifies the following regulations:

1. Major students in the co-operative education program must complete satisfactorily three work terms. The normal sequence of academic study terms and work terms with the academic co-operative education core term is:

Fall	Winter	Summer	Fall	Winter	Summer
1A	1B	H	2A	2B	W1
Fall	Winter	Summer	Fall	Winter	
C	W2	W3	3A	3B	

Notes: 1A, 1B, 2A ... = Academic Terms; H = Home; W1, W2, W3 = Work Terms.

C = Academic Co-operative Education Core Term.

Terms C and W2 can be switched given departmental approval.

2. It is possible to combine honors and co-operative education by fulfilling satisfactorily requirements for both programs. For exact details, see the departmental Co-operative Education Coordinator.

3. Normally at least two half credits from Gpy 326.1(.2), 336.1(.2), 356.1(.2), 366.1(.2), and 446.1(.2) must be completed before the commencement of the first work term.

4. The academic co-operative education core term requires students to complete five half course credits approved from a departmental list of courses available from the departmental Co-operative Education Coordinator. One of these courses must be Gpy 346.1(.2).

Minor Program In Geography

It is possible to minor in geography by completing the equivalent of four full course credits in geography. These courses should include Gpy 201.1(.2) and 202.1(.2), and two of 326.1(.2), 336.1(.2), 356.1(.2), 366.1(.2), and 446.1(.2).

Geology/Geography Combined Program

This degree program offers B.Sc. and B.Sc. honors degrees, under the general requirements of the Faculty of Science. For full details, please consult the Department of Geology section of this Calendar.

201.1(.2) Introduction to the Physical Environment

This course is an introduction to physical geography through a systematic study of the Earth's physical environment. The characteristics and processes of our physical environment are examined, including climate and weather, soils and vegetation, and the origin, nature and distribution of landforms and water bodies.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester.

202.1(.2) The Human Use of the Environment

This course is an introduction to the geographic study of human environments. The distribution, explanation and analysis of human geographic patterns are discussed. The course shows how people have modified Earth's surface to transform nature, relocating and dislocating it for human use. Case studies or problems at global through local scales are used for illustrative purposes.

Classes 3 hrs. a week. 1 semester.

300.0 Geography of Canada

Prerequisite: at least 5.0 full university courses (or half course equivalents).

Canada as a geographical entity in a physical, cultural, political and economic context is discussed. Topics for discussion include: the concept of region, the physical environment and its influence on human activity, resources and their distribution, the location and functions of Canadian settlements, and regional disparities. Case studies are taken from various regions of the country.

Classes 3 hrs. a week. 2 semesters.

302.0 The Geography of World Affairs

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

The course introduces students to various facets of geography and to different approaches to geographical analysis, through a study of major world problems including conflicts over the division of land, sea and outer space; relationships between population growth and resources; food supply and health problems; natural hazards; the effects of climatic change; levels of economic development; ethnic and religious conflicts.

Classes 3 hrs. a week. 2 semesters.

303.1(.2) Natural Environments

Prerequisite: Gpy 201.1(.2).

This course presents a global approach to the study of physical geography. The characteristics of the major natural environments of the world will be examined, from polar deserts to equatorial rainforests. Emphasis is placed on climatology, soils, vegetation and geomorphology, and some of the major human impacts are discussed.

Classes 3 hrs. a week. 1 semester.

304.1(.2) Environmental Management

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

This course examines modern policy approaches to the management of environmental resources and landscapes. Specific environments and selected management issues focusing on the natural environment (such as soil erosion, water pollution, and natural hazards) will be examined, together with methods of environmental planning and impact assessment.

Classes 3 hrs. a week. 1 semester.

308.0 Geography of the United States

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

A geographical analysis of the United States. The first part of the course will discuss the following topics: the physical framework, population distribution and trends, the location of economic activities, and regional interaction in the United States. This will be followed by an analysis of geographical patterns and characteristics of selected

regions. The course will include a discussion, from the viewpoint of geography, of some of the major problems of present-day U.S.A.

Classes 3 hrs. a week. 2 semesters.

311.1(.2) Rural Geography

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

Examines the nature of rural settlement and land use in various cultural and technological settings. Emphasis is placed on agricultural patterns, and the changing organization of the countryside in modern societies. Topics include frontier settlement; land surveys; village morphology; land abandonment; farm enlargement and fragmentation; forestry, mining, and recreational uses; commuting; and conflicts over multiple land use and scenic preservation.

Classes 3 hrs. a week. 1 semester.

312.1(.2) Urban Land Use

Prerequisite: Gpy 202.1(.2).

The course analyzes the pattern of land use and the process of land use change in the city. Topics include: measurement and classification of land use; land use mix; models of the internal structure of cities; land values and land use zoning; the characteristics and use of residential, commercial, manufacturing land in cities; public and semi-public land; the impact of public policies on urban land use.

Classes 3 hrs. a week. 1 semester.

313.1(.2) Geomorphology

[Geo 373.1(.2)]

Prerequisite: Gpy 201.1(.2) or Geo 200.0.

The study of geomorphological processes and related landforms, with an emphasis on fluvial activity. Processes of weathering, soil formation, slope development and river action will be discussed. Laboratory work will include methods of field and data interpretation, soil analysis, sediment analysis and geomorphological mapping.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester. Some field work may be required.

314.0 The Oceans: A Physical Geography

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

This course begins with a study of the role of the oceans in the global environment. It considers the origin, nature, and distribution of ocean relief features, the principles and patterns of water circulation, and factors affecting the distribution and abundance of marine life. The implications of global climatic changes such as the Greenhouse effect on the oceanic environment will be considered, as well as the effects of the physical geography on human use of the oceans.

Classes 3 hrs. a week. 2 semesters.

319.0 Cultural Ecology

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

Introduction to the study of the relationship between people and their environment, ranging from hunting and gathering societies to the industrial revolution.

Classes 3 hrs. a week. 2 semesters.

320.0 Geography of Europe

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

An analysis of the physical, social, cultural and economic characteristics and problems of the region. Consideration will be given to external and internal relationships of the region and to the problems of and prospects for the region's economic development.

Classes 3 hrs. a week. 2 semesters.

321.1(.2) Geography of Manufacturing

Prerequisite: Gpy 202.1(.2) or Eco 201.1(.2).

The course concerns the identification of key factors, and a discussion of their influence, in the geographical distribution and location of manufacturing industries. Both location theory and case studies are used to analyze the location of these industries. Examples include iron and steel, motor vehicles, and oil refining.

Classes 3 hrs. a week. 1 semester.

322.1(.2) Systems of Cities

Prerequisite: Gpy 202.1(.2).

Examines cities as nodes in a system, which interact both with each other and with the regions surrounding them. Emphasis is placed on changes in the function and importance of cities, and on implications for regional planning. Topics include urban functions, central place theory, the urban hierarchy, urban system development, transport and communication linkages, urban growth rates, metropolitan dominance, commuting zones, and the planning of city systems.

Classes 3 hrs. a week. 1 semester.

324.0 Ocean Use and Management

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

A geographical study of the present and future uses of the oceans. Examination of the development and spread of new and traditional oceanic uses will focus attention on management issues. Course will include mineral and energy exploitation, fish production, fish "ranching" and mariculture, shipping, recreational uses, military uses, and ocean dumping. Regional case studies will be used to illustrate evolving concepts of oceanic management, including the use of computerized information systems.

Classes 3 hrs. a week. 2 semesters.

325.1(.2) Stratigraphy and Sedimentation

[Geo 325.1(.2)]

Prerequisite: Gpy 201.1(.2) or Geo 200.0. (This cross-listed course is described in the Geology section of this Calendar).

326.1(.2) Statistical Methods for Geographers

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

This course introduces students to methods and problems in the collection, description, and analysis of geographic data. Included are descriptive and inferential statistics for spatial data, regression and correlation, analysis of patterns, and use of statistical package programs.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester.

330.1(.2) Geography of China

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

An analysis of the physical, social, cultural and economic characteristics and problems of the region. Consideration will be given to external and internal relationships of the region and to the problems of and prospects for the region's economic development.

Classes 3 hrs. a week. 1 semester.

331.1(.2) Geography of Natural Resources and Energy

Prerequisite: Gpy 201.1(.2) and 202.1(.2) or Eco 201.1(.2).

The course begins by defining natural resources and discussing their geographical distribution on a world scale. It also considers their influence on economic development, settlement patterns, and world trade flows. Aspects of resource conservation and resource management are discussed. Particular emphasis is placed on energy: its distribution, influence and use.

Classes 3 hrs. a week. 1 semester.

332.1(.2) Geography of Transportation

Prerequisite: Gpy 202.1(.2).

This course provides an overview of the geographic study of transportation. Topics for consideration include: the causes of movement, measurement of distance, the cost of transportation and its influence in economic geography, the analysis of transportation networks, and the modelling of transportation flows. All transport modes are considered but emphasis is placed on land and air transport.

Classes 3 hrs. a week. 1 semester.

336.1(.2) Principles of Cartography

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

An introduction to the design, compilation, and construction of maps and diagrams. Topics include map projections, scale change and generalization, lettering, symbolization, graphs, and colour. The major types of thematic mapping (proportional symbols, isopleths and choropleths) are studied.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester.

340.1(.2) Geography of Nova Scotia

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

This course explores the geographical diversity of the province, with particular emphasis on interrelationships between physical and human patterns. A section on the physical environment is followed by a discussion of settlement, cultural patterns, and economic development. Current issues of resource development, industrial reorganization, environmental management, and land use planning are addressed.

Classes 3 hrs. a week. 1 semester.

341.1(.2) Marketing Geography

Prerequisite: Gpy 202.1(.2) or Eco 201.1(.2).

The course examines the location of wholesale, retail, and service establishments, both in theory and practice. Historical marketing systems (fairs, periodic markets, market towns, and the mercantile system) are studied and contrasted with central place theory and other location models. Spatial competition for markets is considered at the inter-urban, and local levels, and the design and location of planned shopping centres is examined.

Classes 3 hrs. a week. 1 semester.

346.1(.2) Directed Study for Co-operative Education Students

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

The course relates the student's co-operative education work experience to fundamental concepts in theoretical and applied geography. Particularly, the course focuses on the role of geography and geographers in the private business and public administration sectors.

Seminar 3 hrs. a week. 1 semester.

Note: This course is open only to students enrolled in the co-operative education program.

350.0 Geography of the Soviet Union

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

An analysis of the physical, social, cultural and economic characteristics and problems of the region. Consideration will be given to external and internal relationships of the region and to the problems of and prospects for the region's economic development.

Classes 3 hrs. a week. 2 semesters.

354.1(.2) The Oceans: A Political Geography

Prerequisite: one of Gpy 314.0 or Gpy 324.0.

A geographical examination of the role of the sea in international affairs, the evolution of ideas on the organization of ocean space, maritime boundaries, problems of boundary delimitation, and the use of the sea in military affairs.

Classes 3 hrs. a week. 1 semester.

356.1(.2) Remote Sensing of the Environment

Prerequisite: Gpy 201.1(.2) and 202.1(.2).

A study of the principles and techniques used in the interpretation of air photographs and satellite imagery. The application of remote sensing to land use analysis and environmental management is stressed.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester.

364.1(.2) Geography of Shipping

Prerequisite: Gpy 202.1(.2).

The course considers the spatial dynamics of the world shipping industry. Topics for discussion include: theories of international trade, oceanic shipping's importance to world trade, bulk trade patterns, general cargo trade patterns, the changing time-space relationships associated with increasing ship size and new types of ships and the importance and development of the world's merchant fleet with particular emphasis on Canada.

Classes 3 hrs. a week. 1 semester.

366.1(2) Field Techniques and Research Methods

Prerequisite: Gpy 201.1(2) and 202.1(2).

Topics include: the nature of geographic problems, formulating a research plan, locating and measuring field phenomena, spatial sampling designs, and questionnaire designs. Students will learn basic methods of field surveying, including triangulation and levelling.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester.

374.1(2) Geography of Ports

Prerequisite: Gpy 202.1(2).

The course considers the seaport as a modern transport node. Topics for discussion include: locational characteristics of ports; the "gateway" functions vs. the terminal function of port cities; the process of hinterland penetration and foreland development; and port competition and planning.

Classes 3 hrs. a week. 1 semester.

384.1(2) Fisheries Development and Management

Prerequisite: one of Gpy 314.0 or Gpy 324.0, or ACS 310.0.

An analysis of recent trends in world fisheries production, processing, and consumption is followed by a review of policies and strategies for fisheries development in advanced and less developed countries. Fisheries management issues associated with exclusive economic zones, the high seas, and transboundary resources will be illustrated by case studies from, for example, the North Atlantic, South Pacific, and Caribbean.

Classes 3 hrs. a week. 1 semester.

390.1(2) Geography of Southeast Asia

Prerequisite: at least 5.0 full courses (or half course equivalents) from a university.

An analysis of the physical, social, cultural and economic characteristics and problems of the region. Consideration will be given to external and internal relationships of the region and to the problems of and prospects for the region's economic development.

Classes 3 hrs. a week. 1 semester.

396.1(2) Seminar in Theoretical Geography

Prerequisite: seniors and honors students in geography.

Students will be made familiar with major advances in theoretical and philosophical aspects of geography.

Classes 3 hrs. a week. 1 semester.

413.1(2) Coastal Geomorphology

Prerequisite: Gpy 313.1(2).

The course discusses both the physical processes which operate in the coastal zone and the resulting forms of these processes. Particular emphasis is placed on the action of waves and tides in the formation of coastal features. The effects of wind and people acting as geomorphological agents and the classification of coasts are considered.

Classes 3 hrs. a week, including lab and practical work. 1 semester. Some field work may be required.

414.1(2) Coastal Management

Prerequisite: Gpy 304.1(2) and the equivalent of one other full credit in geography at the 300 level.

Using a problem oriented approach, attention will be focused on the resource attributes of the coastal zone, the spatial organization of use that it supports and the areal impacts and conflicts that can occur at this land-sea interface. Techniques of resource evaluation will be reviewed. Concepts associated with the spatial aspects of coastal resource management will be discussed.

Classes 3 hrs. a week. 1 semester. Some field work may be required.

416.1(2) Seminar in Applied Geography

Prerequisite: seniors and honors students in geography.

Role of the geographer and geographical studies in fields such as environmental, regional and urban planning; resource management; mapping and surveys; and marketing.

Classes 3 hrs. a week. 1 semester.

423.1(2) Glacial Geomorphology

Prerequisite: Gpy 313.1(2) or Geo 373.1(2).

The study of geomorphological processes and landforms in glaciated environments. Emphasis will be placed on explanations and

descriptions of glacial processes and glacial landform development in various physical environments. Glacial history will form a minor component of the course.

Classes 3 hrs. a week including lab and practical work. 1 semester.

429.1(2) Urban Historical Geography

Prerequisite: the equivalent of one full 300 level geography course.

The geography of the city (its morphology and function) is employed as an indication of the landscape impression produced by various historical periods (conceived as cultures) during the evolution of urban forms in Europe and North America. Examples are taken in historical sequence from Greek to Industrial times.

Classes 3 hrs. a week. 1 semester.

432.1(2) Social Geography of the City

Prerequisite: Gpy 312.1(2).

Examines the location of residential areas in cities, and the differentiation and segregation of those areas by income, occupation, race, ethnic status, and religion. Emphasis is placed on the historical evolution of social patterns, on the link between social areas and the physical fabric of the city, on competition between groups for amenity locations and facilities, and on conflicts over noxious facilities.

Classes 3 hrs. a week. 1 semester.

434.1(2) The Northwest Atlantic

Prerequisite: one of Gpy 314.0 or Gpy 324.0 or ACS 310.0.

A geographical analysis of the physical environment of the Northwest Atlantic Ocean and of the evolution of political jurisdiction in the region provides the framework for a study of fisheries development, offshore oil and gas exploration, shipping, and other marine uses. Problems of regional oceanic management will also be studied.

Classes 3 hrs. a week. 1 semester.

442.1(2) Urban Planning

Prerequisite: Gpy 312.1(2).

Examines the physical and environmental planning of urban areas, with special reference to current practice in Nova Scotia. Topics include the emergence of modern town planning, the Planning Act, planning process, structure plans, general and partial urban allocation models, municipal plans, zoning, subdivision control, site planning, urban renewal, and new towns. The costs and benefits of planning are appraised.

Classes 3 hrs. a week. 1 semester.

443.1(2) Periglacial Geomorphology

Prerequisite: Gpy 313.1(2).

The study of geomorphic processes which have shaped and are shaping the world's cold environments. Canada's northern areas provide many excellent examples of these processes. Emphasis will be placed on frost action, mass movements, and the character of permafrost. Additional consideration will be given to the application of geomorphic knowledge to northern development.

Classes 3 hrs. a week. 1 semester.

446.1(2) Computer Mapping and Geographic Information Systems

Prerequisite: Gpy 336.1(2).

Introduces students to the principles and practice of inputting locational information to the computer, storing and manipulating it, and outputting it in the form of maps. Topics include digitizing (vector and raster formats), data structures, data manipulation, output devices, and software for image analysis, projections, and thematic mapping. Familiarity with a computer programming language would be an asset.

Classes 2 hrs. and lab 2 hrs. a week. 1 semester.

452.1(2) The Geography of Urban Transportation

Prerequisite: one of Gpy 312.1(2), Gpy 332.1(2), or 364.1(2).

This course focuses on patterns and processes of movement within cities. Topics for consideration include: the role of transportation in shaping urban form, transportation problems in cities today, the urban transportation planning process, patterns of public transit and automobile use, environmental impacts of urban transportation, the communications-transportation trade off.

Classes 3 hrs. a week. 1 semester.

456.0 Directed Study

Prerequisite: permission of chairperson.

An instructor will guide a student in topics of special interest that have been decided upon after consultation between student and instructor. The topics will be part of the special research interest of the instructor and of mutual interest to student and instructor.

465.1(.2) Sedimentology

[Geo 465.1(.2)]

Prerequisite: Gpy 325.1(.2) or Geo 325.1(.2).

This cross-listed course is described in the Geology section of this Calendar.

466.1(.2) Directed Study

Prerequisite: permission of chairperson.

An instructor will guide a student in topics of special interest that have been decided upon after consultation between student and instructor.

526.0 Honors Research Project

Prerequisite: honors standing in geography.

Honors students will be assigned to a research advisor who will guide the student in the formulation of the research proposal, the methodology to be followed during the course of the research and in the analysis and write-up of the research findings.



Geology (Geo)

Chairperson, Professor
Professors
Associate Professor
Assistant Professor
Adjunct Professors

G. Pe-Piper
J. Dostal, Q. A. Siddiqui
J. Waldron
J. V. Owen
D. Keppie, G. Williams

The Department of Geology offers programs of study for students enrolled in the degree of Bachelor of Science with concentration in geology and for those registered in the degree of Bachelor of Science with major and honors in geology.

The courses of the core program for a student majoring in geology are: Geo 200.0, 211.1, 213.2, 312.1, 313.2, 322.0, 325.1, 413.1 and 441.1(.2) and 442.1(.2). Students are required to take at least one additional geology credit for a minimum total of seven full courses in the department.

The core courses for the honors program, in addition to those for majors, are 550.0 and one other credit in geology at the 500 level. Honors students must take sufficient additional geology courses for a minimum total of ten credits; Physics 221.0 and one credit in chemistry at the 200 level are also required.

Students entering the major and honors programs in geology normally would initially take Geo 200.0, 211.1 and 213.2. Other science students interested in geology would take Geo 200.0. Geo 204.0 and Geo 205.0 are designed chiefly for students in Commerce, Education and Arts including Atlantic Canada Studies. Three courses, Geo 200.0, 204.0, and 205.0, give a broad survey of the discipline. Only one of these courses may be taken by science students as a science elective. In exceptional cases where a student has taken Geo 204.0 with high standing, that course may, with the permission of the department, be accepted in the geology core program in lieu of Geo 200.0. Under special circumstances, some prerequisites for 300, 400 and 500 level courses may be waived with the permission of the department. It is strongly recommended that all geology major and honors students take Geo 300.1(.2).

Students should seek the advice of the department as to their elective and supporting courses. The supporting science courses in geology programs are, firstly, physics and chemistry; biology may also be elected.

Senior students are encouraged to participate in the research projects being carried out in the department.

Geology/Geography Combined Program

This program offers B.Sc. and B.Sc. honors degrees, under the general requirements of the Faculty of Science. The geology/geography major program requires a minimum grade of C in all geology and geography courses. The geology/geography honours program requires (a) a minimum grade of C in all geology and geography courses; and (b) a minimum quality point average of 3.00 in these same courses.

1. Geology/Geography Major (B.Sc.)

a. Geology Department Requirements (total 5.0 credits)

- (i) Compulsory core courses (total 4.0 credits)
- | | |
|---------------|--------------------------------|
| Geo 200.0 | Principles of Geology |
| Geo 211.1 | Mineralogy |
| Geo 213.2 | Optical Mineralogy |
| Geo 312.1 | Igneous Petrology |
| Geo 322.0 | Palaeontology |
| Geo 325.1(.2) | Stratigraphy and Sedimentation |
- (ii) At least 1.0 credit from:
- | | |
|---------------|------------------------------|
| Geo 313.2 | Metamorphic Petrology |
| Geo 413.1(.2) | Structural Geology |
| Geo 441.1(.2) | Economic Mineral Deposits I |
| Geo 442.1(.2) | Economic Mineral Deposits II |

b. Geography Department Requirements (total 5.0 credits)

- (i) Compulsory core courses (total 3.0 credits)
- | | |
|---------------|--|
| Gpy 201.1(.2) | Introduction to the Physical Environment |
| Gpy 202.1(.2) | The Human Use of the Environment |
| Gpy 303.1(.2) | Natural Environments |
| Gpy 313.1(.2) | Geomorphology |
| Gpy 326.1(.2) | Statistical Methods |

One of:
Gpy 336.1(.2) Cartography, or
Gpy 356.1(.2) Remote Sensing

- (ii) At least 2.0 credits from:
- | | |
|---------------|----------------------------------|
| Gpy 304.1(.2) | Environmental Management |
| Gpy 314.0 | The Oceans: A Physical Geography |
| Gpy 324.0 | Ocean Use and Management |
| Gpy 413.1(.2) | Coastal Geomorphology |
| Gpy 414.1(.2) | Coastal Management |
| Gpy 423.1(.2) | Glacial Geomorphology |
| Gpy 433.1(.2) | Periglacial Geomorphology |

A maximum of one of Gpy 336.1(.2) Cartography, Gpy 356.1(.2) Remote Sensing, Gpy 366.2 Field Techniques and Research Methods, or Gpy 446.1(.2) Computer Mapping and Geographic Information Systems.

2. Geology/Geography Honors Program (B.Sc. Hons)

In addition to the above requirements, honors students must complete:

- (a) Geo 550.0 Honors Project or Gpy 526.0 Honors Research Project
(b) 1.0 additional credit in geology at 500 level
(c) 1.0 additional credit in geology above 200 level
(d) 2.0 additional credits in geography above 200 level
(e) the following 4.5 courses which may be taken in whole or in part before the honors year:

- | | |
|---------------|---------------------------------------|
| Geo 313.1(.2) | Metamorphic Petrology |
| Geo 413.1(.2) | Structural Geology |
| Geo 441.1(.2) | Economic Mineral Deposits I |
| Geo 442.1(.2) | Economic Mineral Deposits II |
| Gpy 356.1(.2) | Remote Sensing |
| Gpy 413.1(.2) | Coastal Geomorphology |
| Gpy 423.1(.2) | Glacial and Periglacial Geomorphology |
| Gpy 406.1(.2) | Seminar in Theoretical Geography |
| Gpy 416.1(.2) | Seminar in Applied Geography |

In the honors B.Sc. geology/geography program, topics for honors theses should be approved by both departments and may be carried out in either department.

In addition to the traditional program of study, the Department of Geology offers a Co-operative Education program in Geology (COEG). A description of the co-operative program can be found later in this section.

200.0 Principles of Geology

The Earth as a dynamically evolving planet and how we study it; its rocks and minerals; surface processes of erosion and deposition by water, wind and glacial ice; the fossil record and measurement of time; internal processes active within the Earth that give rise to volcanoes, earthquakes, continental drift, and the generation of new ocean floors. Geological evolution of North America.

Laboratories include field trips, geological maps and mapping, and recognition of minerals and rocks.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

201.1(.2) Geology for Engineers

Physical geology; rock forming minerals, igneous, metamorphic and sedimentary rocks. Diastrophism, geological processes. Introduction to Earth history, identification of rock forming minerals and rock types. Interpretation of geological and topographic maps and aerial photographs.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

204.0 The Earth: Atlantic Canada Perspective

Towards an understanding of the Earth around us and the processes which affect it, using examples drawn from the geology of Atlantic Canada. Earth history as traced through rock and fossil records. Plate tectonics and how it has affected the Atlantic region through geologic time. Recognition and interpretation of surface features of the Earth, and the materials of which it is made. Economic mineral resources and environmental changes affecting Atlantic Canada. This course is intended mainly for non-science students including those in Atlantic Canada Studies.

Classes 3 hrs. a week. 2 semesters.

205.0 Environmental Geology: Atlantic Canada Perspective

This course examines the geological principles that apply to environmental problems, and will focus on current issues of concern in the Atlantic Provinces. Topics covered may include: global environmental cycles, the greenhouse effect and sea-level change; constraints on resource exploitation, including tidal power, offshore petroleum and mining; impact of pollution and waste disposal on groundwater; health effects of bedrock geology including arsenic and radon; and the role of geology in community planning.

Classes 3 hrs. a week. 2 semesters.

Note: Only one of Geo 200.0, 204.0, and 205.0 can be used to satisfy the Bachelor of Science requirements 4a, 4b, 5a, or 5b.

211.1 Mineralogy

Prerequisite: Che 101.0 and Phy 111.0 or equivalents and Geo 200.0 (all of which may be taken concurrently).

A systematic study of minerals including their crystallography, structure, chemical compositions, physical properties and identification.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

213.2 Optical Mineralogy

Prerequisite: Geo 211.1 and 200.0 (which may be taken concurrently) or permission of department.

Optical properties of minerals. Determinative mineralogy with emphasis on the optical methods of mineral identification. Petrography of the more common rocks.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

300.1(.2) Field Methods

Prerequisite: Geo 200.0 and attendance at field camp.

This integrated lecture-laboratory-field course gives essential practice in basic field techniques used by geologists including recording observations, surveying and geological mapping. Data collection and preliminary work for the course must be carried out in advance, during approximately 10 days attendance at field camp.

Classes 3 hrs. a week plus fieldwork. 1 semester.

305.1(.2) Geophysics

Prerequisite: Phy 221.0 or equivalent.

The physics of the Earth, including rotation, gravity, seismology and internal structure, magnetic and electrical properties, radioactivity, and the Earth's heat. Geophysical exploration of the Earth's crust, including seismic refraction, seismic reflection, magnetic, gravity and electrical methods.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

312.1(.2) Igneous Petrology

Prerequisite: Geo 200.0 and Geo 213.2.

The mineralogical and chemical characteristics of igneous rock associations. The origin of magmas and igneous rocks. Classification, petrography, tectonic setting and origin of igneous rocks. Laboratory work involves hand specimen and microscopic investigation of igneous rocks.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

313.1(.2) Metamorphic Petrology

Prerequisite: Geo 200 and 213.2.

Description, classification and interpretation of metamorphic rocks. Progressive metamorphism of mafic, pelitic and carbonate rocks. Introduction to chemographic analysis, geothermobarometry, and reaction balancing methods. Laboratory work involves the study of metamorphic rocks in hand sample and thin section.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

320.1(.2) History of Life

Prerequisite: permission of department.

An account of the 3500 million-year history of life on earth, including theories of the origin of life, and modes of preservation of organisms as fossils. It also covers the phenomenon of evolution and some major patterns and crises in the history of life.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

321.1(.2) Palaeontology

Prerequisite: permission of department.

The morphology, classification and stratigraphic ranges of the main groups of invertebrate fossils. Emphasis is placed on the uses of fossils in elucidating stratigraphy, the environment under which strata accumulated, and world geography in those times.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

325.1(.2) Stratigraphy and Sedimentation

[Gpy 325.1(.2)]

Prerequisite: Geo 200.0 or Gpy 201.1(.2).

Introduction to modern sediments, processes of sedimentation and the origin of sedimentary structures. Interpretation of sediments and sedimentary rocks in the light of comparison with selected modern environments. Deposition of strata, correlation, and the definition of stratigraphic units. The geological time scale. Unconformities, stratigraphic sequences, and the interpretation of the stratigraphic record.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

326.1(.2) Sedimentary Petrology

Prerequisite: Geo 325.1(.2) and Geo 213.2 (which may be taken concurrently).

The composition of sediments and sedimentary rocks. Rocks of biological and chemical origin: interpretation of environments of deposition in carbonates, evaporites, siliceous and iron-rich sediments. Weathering and the origin of clastic sedimentary particles. Mudrocks, sandstones, and conglomerates and their interpretation. Laboratory methods for the study of sedimentary rocks.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

330.1(.2) Introduction to Micropalaeontology

Prerequisite: permission of department.

Techniques for the collection, preparation and identification of microfossils. Major groups of microfossils and their industrial use, especially in the petroleum industry.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

355.0 Analytical Chemistry for Chemists and Geologists

[Che 332.1(.2)/333.1(.2)]

Prerequisite: Che 201.0.

An integrated lecture-laboratory course at the intermediate level with emphasis on analytical methods of importance to chemists and geochemists.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

373.1(.2) Geomorphology

[Gpy 313.1(.2)]

Prerequisite: Geo 200.0.

The study of geomorphological processes and related landforms, with an emphasis on fluvial activity. Processes of weathering, soil formation and characteristics, landsliding and slope development will be discussed. Laboratory work will include methods of field and data interpretation, soil analysis, sediment analysis and geomorphological mapping.

Classes 3 hrs. and lab 1/2 hr. a week. 1 semester.

413.1(.2) Structural Geology

Prerequisite: Geo 200.0.

Structures produced by deformation in the Earth's crust, including fabrics, folds, faults, and shear zones. Geometric, kinematic, and dynamic analysis of structures. Use of geometric and stereographic projection techniques in the interpretation of geological structures and geological maps. Introduction to stress and strain. Structures characteristic of selected tectonic environments, including rifts, thrust belts, and zones of strike-slip movement.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

414.1(.2) Global Geology

Prerequisite: Geo 312.1, 313.2, and 413.1 (which may be taken concurrently).

Major features of the Earth: core, mantle, crust, lithosphere, asthenosphere, oceans and atmosphere. Plate tectonics, and the evidence for plate movements. Characteristics of major geological features of the Earth: ocean floor, continental margins, plate boundaries. Ancient orogens and their plate tectonic interpretation.

Nature of the Archean and Proterozoic lithosphere. Global change and the evolution of the oceans and atmosphere through geological time. Areas of specific emphasis may vary from year to year.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

441.1(.2) Economic Mineral Deposits I

Prerequisite: Geo 200.0 and 312.1(.2).

This course provides an introduction to the geological characteristics, classification, and distribution of the principal ore deposits. Topics will also cover ore-forming processes, the principles and application of geology, geochemistry, and geophysics to mineral exploration, property evaluation and reflected light microscopy of ore samples.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester

442.1(.2) Economic Mineral Deposits II

Prerequisite: Geo 441.1(.2).

The course examines the geology, mineralogy, economic geology and origin of major types of metallic and some non-metallic ore deposits in Canada and elsewhere. Laboratory includes hand specimen and microscopic investigation of suites of samples from the deposits.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

450.1(.2) Advanced Igneous Petrology

Prerequisite: Geo 312.1.

Genesis of magmas, magma types, petrographic provinces and their distribution in time and space and their relations to their tectonic setting. Differentiation indices, variation diagrams, distribution trends of major and trace elements. Equilibrium and fractional crystallization in selected synthetic systems and their application to natural systems. Study of selected suites of igneous rocks.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

451.1(.2) Advanced Metamorphic Petrology

Prerequisite: Geo 313.2.

The topics covered in this course include phase equilibria in metamorphic systems, stability of metamorphic minerals and mineral assemblages, study of individual metamorphic facies using type examples, and the concept of facies series and the petrogenetic grid.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

453.1(.2) Principles of Geochemistry

Prerequisite: Geo 200.0.

Principles of distribution of elements in the solar system, in rocks, and in minerals. Chemical processes of geological importance. Chemical interpretation of geological processes in aqueous environments, diagenesis, igneous and metamorphic rocks.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

454.1(.2) Applied Geochemistry

Prerequisite: Geo 453.1(.2).

The application of geochemistry to prospecting for minerals and oil fields; methods of sampling and analysis; statistical evaluation of geochemical data; cycling of geochemical species in the environment.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

462.1(.2) Micropalaeontology of Ostracoda and Foraminifera

Prerequisite: Geo 322.0 or 330.1 (which may be taken concurrently).

A detailed study of Ostracoda and Foraminifera with particular reference to their morphology, taxonomy, ecology, and biostratigraphy. The use of these microfossils in oil exploration will be emphasized.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

465.1(.2) Sedimentology

[Gpy 465.1(.2)]

Prerequisite: Geo 325.1(.2) or Gpy 325.1(.2).

Dynamics of fluid flow and transport of sediment by air, water and ice. Analysis of modern sedimentary environments including terrestrial, lacustrine, marginal marine, and marine systems. Analysis of ancient sedimentary facies and their environmental interpretation, with emphasis on clastic sediments.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

466.1(.2) Petroleum Geology

Prerequisite: permission of department.

The origin, migration and accumulation of oil and natural gas. Types of oil bearing structures and basic principles in oil exploration.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

475.1(.2) Cross-listed as Gpy 423.1(.2)

Prerequisite: Geo 373.1(.2).

476.1(.2) Cross-listed as Gpy 443.1(.2)

Prerequisite: Geo 373.1(.2)

513.1(.2) Tectonics

Prerequisite: 5th year honors standing.

Geometric and kinematic analysis of plate movements, using geological and geophysical data. Properties of the lithosphere and asthenosphere. Geological evolution of continental margins. Case-studies in the structure and tectonic evolution of orogenic belts, integrating geology, geophysics and geochemistry. Tectonic setting of igneous and metamorphic suites. Tectonic evolution of North America.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

518.1(.2) Precambrian Geology

Prerequisite: 5th year honors standing or permission of department.

General characteristics of Precambrian rocks throughout the world. The lithology, tectonics and chronology of the Canadian Precambrian shield. Evolution of the early crust of the Earth. Special problems of Precambrian geology.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

530.1(.2) Directed Study in Geology

Prerequisite: 5th year honors standing or permission of department.

Intended to supplement or provide an alternative to the regular geology courses in order to meet the special needs and interests of students. The course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

Classes 72 hrs. per semester; classes and labs.

540.1(.2) Special Topics in Geology

Prerequisite: 5th year honors standing or permission of department.

Readings and discussions of current literature in geology on selected topics. Such topics as plate tectonics, geochemistry, statistics in geology, isotope geochemistry, petrogenesis, ore genesis, may be included.

Classes 72 hrs. per semester; classes and labs.

550.0 Honors Project

Prerequisite: honors standing and permission of department.

Research project carried out under the supervision of one member of the department or jointly by more than one faculty member. Originality of the research project is emphasized.

565.1(.2) Advanced Sedimentology

Prerequisite: 5th year honors standing.

Detailed study of selected depositional environments and sedimentary facies. Analysis of sedimentary strata including Canadian examples. Quantitative methods of facies analysis and the application of statistical methods in sedimentology. Methods for the analysis of subsurface sedimentary and stratigraphic sequences. Areas of specific emphasis may vary from year to year.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Co-operative Education in Geology (COEG)

This program, which is available at both the major and honors level, integrates on-the-job experience and academic studies. Upon completion of one of the COEG programs, the student receives the Bachelor of Science degree in geology, at the major or honors level, with the added qualification of "Co-operative Education".

Entrance to the program is determined at the end of the first semester of the first year and will be based on the student's grades. Final decision on admission to the program will be at the end of the second semester. The students are expected to apply for the program. The school year is divided into 3 four-month terms (September-December, January-April and May-August) and the student is required to complete a series of academic terms (AT) and work terms (WT) as outlined in the following schemes.

B.Sc. with Geology Major (COEG)

Year	Term		
	Sept.-Dec	Jan.-Apr.	May-Aug.
1 (N.S. Grade XII or equivalent)	AT	AT	-
2 (Sophomore)	AT	AT	WT*
3	AT	AT	WT
4	AT	WT	WT
5	WT	AT	

* Optional

- Year 1 is equivalent to N.S. Grade XII: students receiving advanced standing in 5.0 Grade XII subjects enter the program at Year 2.

- program consists of 8 academic terms (AT) and 4 or 5 work terms (WT) spread over almost 5 years (4 years from N.S. Grade XII).

- students must satisfy the same academic requirements as non co-operative students for a major degree.

Honors B.Sc. In Geology (COEG)

Year	Term		
	Sept.-Dec	Jan.-Apr.	May-Aug.
1 (N.S. Grade XII or equivalent)	AT	AT	-
2 (sophomore)	AT	AT	WT*
3	AT	AT	WT
4	AT	WT	WT
5	AT	WT	WT
6	AT	AT	

* Optional

- Year 1 is equivalent to N.S. Grade XII: students receiving advanced standing in 5.0 Grade XII subjects enter the program at Year 2.

- program consists of 10 academic terms and 5 or 6 work terms spread over almost 6 years (5 years from N.S. Grade XII)

- students must satisfy the same academic requirements as non co-operative students for an honors degree.

In general, the COEG programs take one year longer to complete than the corresponding traditional programs but the academic content is the same. Students may, with the permission of the department, transfer from the COEG programs to the non co-operative programs at any time. Transfers from the traditional programs to COEG are not permitted after the spring term of Year 2. Fees for the COEG program are as follows:

- Students pay for their academic courses as they take them; and
- Students pay a fee equivalent to a half credit for a work-term they undertake. This amount is paid to the Business Office within one month of the start of the work-term.

Placement for work terms is arranged by the department in consultation with the student and the employer. The student's salary and benefits will be determined by the policies of the employer. A faculty advisor is available throughout the year to assist students concerning their studies and work terms. Work term reports are required and graded and, along with the employer's assessment, form the basis for a final grade for the work term (pass/fail). A student who fails a work term will not be permitted to continue in the COEG program.



History (His)

Chairperson, Associate Professor
Professors

B. Kiesekamp
D. O. Carrigan, E. Haigh
C. Howell, J. H. Morrison,
J. Reid, R. Twomey,
G. F. W. Young
R. Bollini, J. Lee, W. Mills
M. Vance

Associate Professors
Assistant Professor

Departmental Policy

To obtain a major concentration in history, students must complete at least 6.0 full university history courses (or half course equivalents). These must include:

- a. His 400.0
- b. 1.0 course at the 500 level
- c. the remaining 4.0 courses are to be selected to include at least 2.0 at the 300 level chosen from different geographical and subject areas as defined below:
 - (i) North America.
 - (ii) Europe (including Britain, Russia and the U.S.S.R., Classical Greece and Rome), and the History of Science.
 - (iii) The Third World.

The program of each student must be approved by the department.

All prospective honors students should refer to the section of this Calendar pertaining to honors degrees and apply to the Registrar for enrolment in that program after their first year at the University.

Candidates for an honors degree must satisfy the requirements of the major program. They must also complete one additional full history course equivalent at the 300 level; two additional courses at the 500 level, and His 500.0 (the honors essay). The program of each student must be approved by the department.

All students majoring in history are strongly advised to take two university courses in a foreign language. In the case of students concentrating in Canadian history, French is specified as the recommended language.

Graduate students should refer to the material entitled "Master's Degree" which is found in Section 3 of this Calendar.

General Course Description

- a. History courses numbered on the 200 level are survey courses open to students with no university credits in the discipline. They are normally lecture courses; some combine lectures with small tutorial group meetings.
- b. To register for a course on the 300 or 400 level, a student must have at least one university course in history, though it need not necessarily be in the same area of the discipline. Exceptions may be made only with the permission of the Chairperson. 300 and 400 level courses are usually structured to consist of both lectures and seminars.
- c. History courses on the 500 level are normally seminar courses designed for advanced work by history majors and honors students in their junior and senior years, and for M.A. candidates.
- d. History courses on the 600 level are graduate courses. Courses on the 300 level may often be taken for graduate credit and are designated as having two numbers in the Calendar; for example, 340.0 (640.0). Graduate students taking such courses will be expected to attain a higher level of achievement and may be required to do additional assignments.
- e. With renumbered or restructured courses, students are advised that they are not eligible to take a course for credit if they already have a credit for a comparable course, even if that course was taken at a different level.

201.0 Civilization In the West

A course designed to explore the origins and development of the characteristic political, legal, and cultural institutions of Western Civilization and its impact on other cultures.

203.0 The Twentieth Century

An historical approach to the major problems of our time. Emphasis will be placed upon the backgrounds to World Wars I and II, the emergence of the United States as a world power, the Communist Revolution and its impact and the problems of industrial society.

209.0 East Asia: From Prehistory to Modern Times

This course introduces students to an old but vibrant civilization that is becoming increasingly important in today's world. In addition to the cultural heritage which the countries of East Asia, i.e., China, Korea, Japan, share in common, this course will examine distinct historical experiences of each country and the transformation of East Asia in modern times.

221.0 The British Experience - from Primeval Beginnings to the Modern Age

This course explores the great landmarks and concerns of British history - in politics, in social and economic institutions and practices, in culture and ideas - during two thousand years of change and continuity.

231.0 Canada to Confederation

This course will examine early Canadian history from the time of the first Indian-European contact up until Confederation. Emphasis will be placed on the development of New France/Lower Canada, Upper Canada, and the West. Political, social, and economic themes will be considered.

Note: Students who have received credit for His 230.0 may not enrol in this course.

232.0 Canada: Confederation to the Present

The shape of political culture in modern Canada. The debate between the advocates of the nation state and of federalism and the impact of industrialization, regionalism, war and depression on that debate.

Note: Students who have received credit for His 230.0 may not enrol in this course.

240.0 North American Social History

An introductory survey of Canadian and American social history. Topics such as crime, the permissive society, marriage and the family, prejudice and discrimination, and social welfare will be examined in historical perspective.

250.0 The United States to 1877

A course dealing primarily with the major themes of American history from the colonial period to the Civil War and Reconstruction; the origins and nature of American government, politics, and society; the origins of slavery and racism; expansion. These themes will be approached through a study of the major groups and events in American history (the New England Puritans, the Founding Fathers, Southern slaveholders; the American Revolution, the Civil War), as well as major political figures from Thomas Jefferson to Abraham Lincoln.

251.0 The United States: 1877 to the Present

A course concerned with the impact of modern industrialism on American society since 1877. Included is an analysis of the changing nature of American foreign policy, new relationships between business, labour and agriculture, and the impact of industrialism on liberal democratic thought and culture.

303.0 (603.0) Tudor and Stuart England

This course is a survey of English history from the accession of Henry Tudor in 1485 to the Restoration in 1660. It includes an examination of the Tudor monarchy, the nature, causes and effects of the English Reformation, the Elizabethan Age, the constitutional conflicts during the reigns of James I and Charles I, the Civil War, the establishment of the Commonwealth and the Cromwellian Protectorate.

304.0 (604.0) Europe 1848-1989

An examination of the political, social, and economic history of Continental Europe focusing on France, Germany and Italy from the Revolutions of 1848 to the end of the Cold War. In particular, the social and economic developments underlying the forces of Liberalism, Imperialism, Socialism, Fascism, and Communism, as well as the causes and consequences of World Wars I and II will be considered in some detail.

305.0 (605.0) History of Russia and the U.S.S.R.

An introductory survey beginning with the establishment of Kievan Russia and ending with a glance at Soviet society in the 20th century.

306.0 (606.0) Images and European History

Since its beginning, Western culture has been accompanied by pictures as both illustration and vindication. This is a course about pictures and what can be pictured. Students will deal with much already familiar to them, and sources will range from St. Augustine to the photographers of the Farm Security Administration.

307.0 (607.0) Science in the West Since 1500 A.D.

An examination of the development of western science, concentrating on the period between the Scientific Revolution and the end of the 19th century. The emphasis will be on science as a cultural and intellectual phenomenon.

309.0 (609.0) The Old World and the New: Transformations of European Ideals in Canada and the United States

The European confidence in the nation as the vehicle for the largest aspirations of men in community. Qualifications and revisions of this ideal in North America. War, the structure of law, the limits of rational government. Topically organized, the course will draw from the history of the 18th, 19th and 20th centuries.

310.0 (610.0) Anglo-American History: Studies in Pre-Industrial Labour and Culture, 1600-1865

This course examines "pre-industrial" working people (slave and "free") from a comparative perspective. It begins with an overview of the various historical stereotypes of American and English crowds in the 18th century, American slaves from the 17th to the 19th centuries, the English radical and working class movements at the time of the American Revolution. It then looks at the political, economic and cultural lives and attitudes of these groups. Was there a distinctive "popular culture" in history? Did common people have significant ideas and play an active role in the making of history?

311.0 (611.0) Health, Sport and Leisure in Victorian Society

This course deals with the concern for healthy bodies and minds in Victorian Britain and North America. It will address a range of issues including the professionalization of medicine and psychiatry, attitudes toward body and mind, the preoccupation with moral and physical degeneracy, the rise of organized sport, and the notion of social regeneration.

312.0 (612.0) Medieval Europe: the Birth and Progress of a Great Civilization

With the decline of Imperial Rome, Europeans were obliged to recreate for themselves the basic institutions and practices of a viable society. The course is concerned with their endeavours and achievements, from the first onslaught of the barbarian hordes to the heights of Medieval culture and onward to the dawn of the Renaissance.

313.1(.2) [613.1(.2)] The First British Empire

A study of British colonial expansion from Elizabeth I to George III. This course will concern itself with British overseas endeavours of the "First British Empire", and with Britain's conflicts with the rival overseas empires of Spain, Portugal, Holland and France.

Note: Students who have received credit for His 305.0 may not enrol in this course.

314.1(.2) [614.1(.2)] The British Empire—Commonwealth

A study of British imperial expansion and decline in the 19th and 20th centuries. This course will concern itself with the theory and practice of imperialism of the "Second British Empire", and with the economic basis of British power.

Note: Students who have received credit for His 305.0 may not enrol in this course.

316.1(.2) [616.1(.2)] Africa in the 19th Century, Intrusion and Conquest

This course will outline the nature, values and history of traditional African societies; it will examine the intrusion, partition and conquest of those societies by Europeans in the 'Scramble for Africa'.

Note: Students who have received credit for His 321.0 (621.0) may not enrol in this course.

317.1(.2) [617.1(.2)] Africa in the 20th Century, Colonialism and Independence

An examination of the activities of the colonial powers in governing the territories and peoples which they had acquired in the 'Scramble'. The course will also study the reactions of Africans to colonialism and the factors which led to independence.

Note: Students who have received credit for His 321.0 (621.0) may not enrol in this course.

318.0 (618.0) The United States in the 20th Century

A history of the United States in the 20th century with the main emphasis on political development.

319.0 (619.0) Canadian-American Relations

This course will examine basic developments in Canadian-American relations. Political as well as social, economic and religious trends will be analyzed. Some opportunity will be afforded students to use the vast quantity of primary source material at the Public Archives of Nova Scotia.

320.0 (620.0) The Atlantic Provinces and New England 1534-1974

An examination of the relationship of New England and the Atlantic Provinces undertaken from a comparative point of view. This course deals with political, economic and religious trends common to the experience of both communities.

322.0 (622.0) South Africa

A study of the complex relationships and conflicts arising from different cultures, religions and skin colours from the 17th century to the "apartheid" state of the mid-20th century.

323.0 (623.0) China Before 1800

This course studies the history of China from the earliest times to the end of the 18th century. The first term covers up to around A.D. 960; the remainder is dealt with in the second term. Special attention will be paid to the changes in cultural, institutional and societal patterns over the time.

324.0 (624.0) Traditional Japan: History and Culture

Following the history of Japan from the beginning to the middle of the 19th century, this course will study the shaping of cultural, institutional and social features which exert a powerful influence down to this day. The emphasis will be on understanding the factors which have given Japan a distinct outlook and the Japanese a strong sense of uniqueness.

325.0 (625.0) Asian Crossroads: Southeast Asia from 1600 to Independence

This course will concentrate on the vibrant and sometimes turbulent countries of Southeast Asia. This area, including Burma, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam, has been a confluence for commercial trade and cultural influence for centuries. The course will begin with the indigenous kingdoms and societies, trace European, American, and Asian expansionism and the resultant resistance to it, and examine the rise of the nationalist movements leading to independence in the second half of this century.

326.1(.2) [626.1(.2)] History of West Africa: 1600 to 1960

This course will examine the age of African empires, the European intrusion and imperial expansion, the Islamic revolution, and the slave trade through to independence in the 1960s. The course will also include some analysis of methodology used in African history including archaeology and oral tradition.

329.0 (629.0) History of Canada 1849-1920

This course deals with the problems arising from the attempt to build a British North American nation in the age of Macdonald and Laurier.

330.0 (630.0) American Social and Intellectual History

Broadly defined, a study primarily of the political and social thought of a variety of groups in American history from the colonial period to the present. Special emphasis on the history and current status of the American conservative, radical and liberal traditions. Groups, ideas, themes may differ from year to year.

331.0 (631.0) The American Revolution, 1763-1789

A consideration of the causes and consequences of the American Revolution from several viewpoints - including military, political, social, economic, religious - and the Loyalist experience.

332.0 (632.0) Canadian Social History, 1760-1930

This course will trace the development of British North America from a group of predominately agricultural, rural French-English colonies to an industrialized, urban, mixed-ethnic nation. Particular attention will be given to the process of Canadianization and the impact of industrialization on social institutions, working conditions, cultural activities, political ideas and economic development between 1867-1930.

333.0 (633.0) History of Canada in the 20th Century

A course designed to examine the emergence of Canada's social, political and economic structures in the 20th century. Some attention will also be given to Canada's role as an emerging world power, her

relationship with the United States and her role within the British Empire and Commonwealth.

334.0 (634.0) Myth and History: The Problem of Interpreting Human Existence

Man's search for meaning. The life of man in relation to his own past and that of his communities; the question put to Marc Bloch: "Papa, what good is history?" Students in this course co-register in Rel 306.0.

339.0 (639.0) Russia and the U.S.S.R. since 1917

This course will deal with Russia and the Soviet Union from the abdication of Tsar Nicholas II to the post-Khrushchev period. There will be an attempt made to examine the discrepancies between the theory of communism and its practice, and the possible reasons for that discrepancy. Some time will be spent considering the situation of religion, culture and the arts in the U.S.S.R.

340.0 (640.0) History of the Atlantic Provinces

Commencing with the earliest European contact with the region, this course will concentrate on the period after the beginning of permanent settlement. Special emphasis will be given to Nova Scotia as an area of severe clashes between the Indian and European cultures, of intense English-French rivalry, and later of the problems in adopting traditional British models of government, settlement, and society to a colonial region.

342.0 (642.0) China in Revolution: 1840 to the Present

Chinese history since the middle of the 19th century has been one of continuous turmoil and upheaval. In addition to probing into the major developments and the factors responsible for them, this course will examine social, economic and cultural changes which have come about as a result.

343.0 (643.0) To the Great War

Between the time of Napoleon and World War I, Europeans came to agree to a remarkable extent on a lexicon of political concepts such as honor, duty, citizen/subject, nation and democracy. This course will examine these and similar concepts, particularly the consensus with respect to war as both a supreme test of the community and the agency of its freedom. Emphasis is on Britain, France and Germany.

344.0 (644.0) History of Nova Scotia

This course will examine political, economic and intellectual aspects of Nova Scotian development.

346.1(.2) [646.1(.2)] Black Heritage in Maritime Canada

This course will provide a historical survey of the Black population in Maritime Canada, its origins, socio-economic conditions and evolution to the present.

347.0 (647.0) Blacks in Canada

A course dealing with Black history in Canada to the present. Issues to be addressed include Black immigration and settlement, slavery, Black Loyalism, colour and prejudice, religion and education, characteristics and institutions of the Black community, Black identity, and contemporary institutions and values.

349.0 (649.0) Canadian Labour History

An examination of the development of labour in Canada in both its institutional and non-institutional forms, during the years 1800 to 1960. Topics will include the frontier labourer, growth of trade and industrial unions, conditions of living and working, class structure, women in the workplace, farmer-labour coalitions, worker education, the labour press, and strike activity.

350.0 (650.0) Cross-listed as Classics 303.0

351.0 (651.0) Cross-listed as Classics 304.0

360.0 (660.0) A History of Women in the Western World

A survey which examines the role of women in western civilization from the post Roman and early Christian world to the 20th century. This course will especially concern itself with an historical perspective of women's participation in the social and economic life of their communities.

361.1(.2) [661.1(.2)] Canadian Business History, 1820-1867

Between 1820 and Confederation, British North Americans came to accept the view that the development of an enterprising business sector was necessary for the survival of a British nationality in North America. This course will examine the origins of this consensus and the impact it had on the way the business community conducted its affairs in the period 1820 to 1879.

362.1(.2) [662.1(.2)] Canadian Business History, 1867-1920

In this period, corporate business in Canada increasingly came to identify its objectives and goals with those of the nation. This course will examine how this self-understanding determined both the corporate strategy of the business sector and the contribution it made to society at large.

372.1(.2) [672.1(.2)] Common History: Sources and Methodology

This course will examine local history with particular reference to the Atlantic Region. Documentary and non-documentary sources will be examined and methodology for local history research established. This course will be of interest to those who have an interest in local, ethnic and family history.

373.1(.2) [673.1(.2)] Voices of the Past: Oral Research Methodology

This course examines historical methodology with particular attention to the use of oral research. In areas where there is little documentation, such as labour, ethnic or community history, oral research is of vital importance and represents, in an age of instant communication, an integral part of contemporary history. The theoretical and practical use of oral sources will be examined and methodology, technique and interviewing experience will be included with particular reference to the Atlantic region.

374.0 (674.0) Hanoverian to Victorian Britain

In the modern age Britain was transformed from a small island nation on the fringes of Europe to a leading world power. This course will examine the origin and consequences of this transformation by charting the progress of political, social and economic change.

375.0 (675.0) Modern Latin America

A survey of the emergence and historical development of the Latin American nations since their independence from Spain and Portugal in the early 19th century. The course will focus especially on the political, economic and social evolution of the more populous nations.

376.1(.2) [676.1(.2)] Special Topics: U.S. History, 1800-1930

Further details are available from the Chairperson of the Department.

377.1(.2) [677.1(.2)] - 379.1(.2) [679.1(.2)] Selected Topics in History

The subject matter of particular half courses will be announced from time to time. They will cover aspects of history in one or more of the three major geographical areas of North America, Europe and the Third World. The topics to be examined will be determined by the instructor.

385.0 (685.0) The Third World Since 1500 (IDS 385.0)

Prerequisite: a course in history.

Selected African, Asian and Latin American societies will be examined especially with regard to the impact of European expansion and conquest since 1500 on what is now called the Third World. The resistance of the Third World to colonialism will provide a context for understanding the forces and events which led to independence (post 1945) and the rise of the 'global village' of the 1990s.

391.0 (691.0) East Asia and the West

This course studies the relationship between East Asian countries and the West in both historical and contemporary settings. The course will cover such topics as trade, cultural exchange, Christian missions in East Asia, the European expansionism and colonialism in East Asia. The course will try to establish not only the nature of East-West relationships throughout history but also the place of East Asia in world history.

392.0 Modern Japan

This course studies the history of Japan from the revolution in 1867 to the present. The emphasis will be on the developments which made a feudal and isolated society emerge as a premier industrial power and a modern democracy.

393.0 (693.0) History of British North America, 1763-1867

This course will examine the major social, economic, religious and intellectual trends evident in British North America in the period following the Treaty of Paris of 1763. Special attention will be given to the rise of national consciousness and of civil religion in Canada West and to the impact these developments had on French and Maritime Canada.

394.1(.2) [694.1(.2)] The Emergence of Modern Korea

This course studies the history of Korea from the opening of the country in the late 19th century to the present. The turbulent experience of the Koreans, which included the colonial domination by Japan, the partition of the country, and a civil war, will be examined against the backgrounds of Korea's own past as well as the global situation.

395.1(.2) [695.1(.2)] Ireland, 1600-1985: From the Plantations to the "Troubles"**[IRS 395.1(.2)]**

This course will concentrate on Ireland's transition from a colony, for English and Scottish settlers, to an independent state in the European community. Emphasis will be placed on the cultural and political legacy of the 17th century plantations, as well as the consequences of Irish nationalism for Britain and its empire. The development of the "Ulster Question" will be examined in the last section of the course.

Classes 1 1/4 hrs. and seminar 1 1/4 hrs. a week. 1 semester.

396.1(.2) [696.1(.2)] China and Japan In the 20th Century: Ideology, State and Society

This course compares and contrasts the experiences of China and Japan in the 20th century. The emphasis will be on the causes and consequences of the rise of such ideologies as nationalism, fascism and socialism in these countries.

398.0 (698.0) Early Celtic Britain

Romans, Anglo-Saxons, Vikings, Normans and the English - Celtic Britain was pressured by them all. This course will examine the history of the three Celtic kingdoms - Ireland, Scotland and Wales - with an emphasis on their shared culture and experience, as well as their varying success at resisting English domination.

399.0 (699.0) The Lingering Death of Imperial Britain, 1870-1982

This course will outline Britain's late nineteenth century decline. Emphasis will be placed on transitions - "new imperialism" to decolonization; industrial supremacy to collapse; Labour socialism to Thatcherism. The particular impact of two world wars and the rise of Scottish and Welsh nationalism will be explored.

400.0 (600.0) Introduction to the Study of History

This course addresses the nature of historical study, that is, the theories, methods, principles and problems associated with the discipline of history. It examines the following basic areas of historical inquiry: the purposes of historical study; the relevance of the past; the relationship between the past and present; the nature and validity of historical knowledge; the relationship of history to other disciplines; and the current state of historical explanations and of historical explanation as such.

500.0 The Honors Essay

Prerequisite: admission to the final year of the honors program.

History honors students are required to submit and defend a substantial essay to be selected and prepared in conjunction with a faculty advisor.

Classes: Individual study and the supervision of a faculty advisor.

502.0 Local History: Halifax, A Case Study

Prerequisite: registration in major or honors program in history or permission of instructor.

This course will examine the theoretical and methodological approaches to the study of local history using Halifax as a model. Oral and archival research will be utilized and the case study will be placed in the broader perspective of social history themes of ethnicity, labour, family and women's studies.

511.0 Modern East Asia, Selected Problems In Modernization

Prerequisite: His 209.0.

The influence of the West on the modernization efforts of China and Japan during the 19th and 20th centuries.

515.0 Seminar In Historiography

Prerequisite: senior or graduate standing.

A specific historical period or topic will be selected by the instructor and each student will be assigned a particular historian or historical school for the purpose of writing a paper. The seminar will address a variety of historical viewpoints and demonstrate the influence of one's milieu on the writing of history.

517.0 Seminar In Modern British History

A seminar on selected topics in the history of modern Britain, 1660-1870, intended for senior students in history. Topics for consideration will be chosen by the instructor and students will be required to present papers to the seminar for discussion, criticism and evaluation.

518.0 Seminar In Early Modern History

Prerequisite: senior standing or permission of instructor.

A seminar on selected topics in the history of Early Modern Europe, 1450-1800, intended for senior students in history. Topics for examination will be selected by the instructor and students will be required to research and write a major paper on the subject and present it to the seminar for discussion and criticism.

519.0 Seminar in Modern European History

A seminar on selected topics in the history of modern Europe, 1800 to present, intended for seniors, honors and graduate students in history. Topics to be examined will be selected by the instructor; students will be required to research and write a major paper on the topic selected, and present it to the seminar for discussion and criticism.

520.0 The Two World Wars

This course will consider the origins of each of the two world wars of the early 20th century, and the diplomacy, war-aims, and conduct of the war by each of the principal belligerents. The first semester will be devoted to World War I and the second semester to World War II.

522.0 Seminar in North American History

A seminar on some aspects of North American history (Canadian, American, or comparative) intended for senior students in history. Topics to be examined will be determined by the instructor. Among them will be: nationalism, religion, reform/radicalism, slavery, liberal democracy and culture, regional history, populism and progressive reform.

523.0 Seminar on North American Social History

Prerequisite: a course in history or one of the social sciences.

This seminar will offer an in-depth study of the historical background of specific social problems. Research topics will be selected from the following subject areas: crime, the permissive society, marriage and the family, prejudice and discrimination, and social welfare.

535.0 Northeastern North America, 1480-1720

Prerequisite: enrolled in major or honors program in history or permission of instructor.

This course will examine the history of native and Euro-american societies, and the interaction between them, in the era of early contact and colonization. "Northeastern North America" will be defined to include the territories known to Europeans by 1720 as Newfoundland, Acadia/Nova Scotia, New England, New York and Canada.

560.0 History and Society: The Atlantic Provinces Seminar

Prerequisite: honors or graduate standing.

This course, intended for Master's students in Atlantic Canada Studies and honors students and M.A. candidates in history, addresses the nature of historical inquiry into issues relating to the social and economic history of the Atlantic region. Topics to be covered will include regional culture, gender and race, the family, processes of development and underdevelopment, scientism and professionalization, health, recreation and sport. Students who have completed His 560.0 are not eligible to enrol in ACS 660.

589.1(.2) Reading Course in History - Selected Topics In Irish History

Prerequisite: permission of instructor.

An independent reading course in selected topics in Irish history, primarily social, political and intellectual history in the 18th and 19th centuries. Topics include: Irish popular and radical movements and ideas in a transatlantic context; Ireland in the Age of the Democratic Revolutions; the Irish in America and Canada; Irish political institutions and political culture. Readings, consultations, and final paper.

590.1(.2)-599.1(.2) Reading Courses in History

Prerequisite: permission of instructor.

Each reading course will be organized by the instructor(s) involved. In general, each course will be centred round a specific theme, and the students will be expected, through their reading, to be familiar with all aspects of the chosen area. Examinations and/or papers will be required at the end of each course.

690.0 Thesis Research

Prerequisite: graduate standing.

The students will be engaged in research for and the writing of an M.A. thesis under the supervision of an advisor.

Cross-Listed Courses

Certain courses offered by the Departments of Modern Languages and Classics, Anthropology and Religious Studies may, in special circumstances, be cross-listed and counted in a student's history concentration. In such cases, the student must obtain the department's permission.



International Development Studies (IDS)

Committee on International Development Studies

H. Veltmeyer, Coordinator	Sociology
J. Ahiakpor	Economics
P. Arya	Economics
G. Barrett	Sociology
P. Bowles	Economics
G. Cameron	International Development Studies
J. Chamard	Management
T. S. Chan	Marketing
T. Charles	Finance/Management Science
L. Christiansen-Ruffman	Sociology
P. Connelly	Sociology
H. Das	Management
D. Day	Geography
J. C. Dodds	Finance/Management Science
J. Fiske	Sociology
S. Halebsky	Sociology
A. Harvey	Economics
J. Jaquith	Anthropology
J. Lee	History
M. MacDonald	Economics
J. H. Morrison	History
A. Mukhopadhyay	Economics
A. O'Malley	Sociology
I. Okraku	Sociology
H. Falston	Sociology
J. Sagebien	Marketing
R. Sargent	Education
H. Schwind	Management
L. Van Esch	Marketing
S. Wein	Philosophy
J. Woolfrey	International Education Centre

The undergraduate program in International Development Studies is offered collaboratively between Saint Mary's and Dalhousie Universities. "Development" is a broad concept and refers to problems that range from the socioeconomic impact of a new hydroelectric dam to the rapid changes in family structure and sex roles that often occur during periods of rapid demographic and economic change. As the list of recommended courses below demonstrates, "development" has political, social, cultural, economic and historical dimensions. The International Development Studies program combines theoretical insights and practical skills from both the social sciences and the humanities. The goal is to help students take a multidisciplinary approach to problems of development and the possibilities for change in countries that loosely comprise what has been termed The Third World in the context of an increasingly global political economy.

A program in International Development Studies can be taken towards a B.A. degree or B.A. honors at either university. A degree in International Development Studies can also be combined with a degree in one of the major disciplines involved in the program. Joint major concentrations can be worked out by consultation with an International Development Studies Coordinator and the relevant department at either university.

In addition to the general University requirements for a B.A. degree, the following requirements will also apply to a program in International Development Studies:

The Major Program

a. appropriate first year (200 level) courses including, as per Faculty of Arts regulation 3-d, at least one of the following full course (or half course equivalents) social science electives: Ant 200.0, Eco 201.1(.2)/Eco 202.1(.2), Pol 200.0, and Soc 200.0.

b. the equivalent of six full-year courses approved for the program, of which

- (i) two must be IDS 300.0 and IDS 400.0;
- (ii) at least one must be Eco 310.1(.2); Eco 411.1(.2); Soc 385.1(.2); or Soc 386.1(.2);
- (iii) the remainder must involve at least two established disciplines within IDS; and
- (iv) five must be at the 300 level or above, with at least one seminar at the 400 level exclusive of IDS 400.0.

The Minor Program

The equivalent of four full-year courses (or half course equivalents) approved for the program, of which

- a. one must be IDS 300.0;
- b. one must be Eco 310.1(.2), Eco 411.1(.2), Soc 385.1(.2), Soc 386.1(.2);
- c. the remainder must include at least two disciplines within IDS.

The Honors Program

All candidates for the B.A. (honors) degree in International Development Studies must complete no fewer than ten full courses or equivalent courses from the International Development Studies program, of which

- a. three must be IDS 300.0, 400.0 and 500.0;
- b. two must be Eco 310.1(.2), Eco 411.1(.2), Eco 312.1(.2), Eco 315.1(.2), Soc 385.1(.2), Soc 386.1(.2);
- c. a minimum of two courses must be taken in at least two different established disciplines within International Development Studies;
- d. eight must be at the 300.0 level or above, with at least one seminar at the 400 level exclusive of IDS 400.0;
- e. courses must be approved by a program advisor or the Coordinator.

Although not officially required, it is strongly recommended that students in IDS gain competency in an appropriate second language.

Listing of Approved Courses (asterisk marks core courses in specific disciplines which should be taken before others in these disciplines)

Anthropology

- 201.0 Woman: A Cultural Perspective
- 300.0 Culture and Society
- 310.0 Applied Anthropology: Culture Change and Development
- 315.0 Peasant Society and Culture
- 320.0 World Ethnography
- 325.0 Ethnology: Oceania
- 335.0 Psychological Anthropology

Asian Studies

- 410.2 Special Topics on Japan

Economics

- *310.1(.2) Development Economics
- 312.1(.2) History of Economic Thought
- 313.1(.2) International Finance
- 315.1(.2) Comparative Economic Systems
- 323.1(.2) Soviet-Type Economies
- *410.1(.2) Issues in Economic Development
- 414.1(.2) International Trade

Finance and Management Science

- 476.1(.2) International Financial Management

Geography

- 302.0 Geography of World Affairs
- 330.1(.2) Geography of China
- 390.1(.2) Geography of Southeast Asia

History

- 209.0 East Asia: From Prehistory to Modern Times
- 316.0 Africa in the 19th Century, Intrusion and Conquest
- 317.0 Africa in the 20th Century, Colonialism and Independence
- 322.0 South Africa
- 323.0 China Before 1800
- 341.0 China and Japan in the 20th Century
- 342.0 China in Revolution: 1840 to the Present
- 375.0 Modern Latin America
- *385.0 The Third World Since 1500
- 391.0 East Asia and the West
- 511.0 Modern East Asia, Selected Problems in Modernization

Management

- 488.1(.2) International Business Management

Marketing

- 375.1(.2) International Marketing

Modern Languages and Classics

- 305.0 Culture and Society of the Dominican Republic

Philosophy

- 325.1(.2) Ethical Issues in International Development

Political Science

- 305.0 International Relations
 322.1(.2) Politics of International Trade
 *340.0 The Politics of the Developing Areas
 341.0 Government and Politics in East Asia
 418.0 International Law
 553.0 International Studies Seminar

Religious Studies

- 312.1(.2) Jesus and Liberation
 341.1(.2) Political Theology: East and West
 347.1(.2) Ecology and Religion

Sociology

- 319.0 Reform and Revolution in Latin America
 331.1(.2) Modernization and Aging
 333.0 Social Movements
 380.0 Third World Urbanization
 *385.1 Problems of Development
 *386.2 Sociology of Developing Societies
 387.1(.2) Women in Development
 394.0 Rural Society
 401.1(.2) Fisheries Development in the Third World
 403.0 Revolution and Change: A Case Study: Cuba
 416.0 Religion in Developing Societies
 420.0 Comparative Regional Development
 422.1(.2) Gender and Development: Theory and Method
 423.1(.2) Gender and Development: Policy Issues
 425.0 Corporate Power and the World Economy
 447.1(.2) Work and Empowerment of Women in India

300.0 Introduction to Development Studies

Prerequisite: one of Ant 200.0, Eco 201.1(.2)/202.1(.2), Pol 200.0, Soc 200.0.

This course will introduce students to the scope and nature of Development Studies. Its main emphasis will be on various theories of development and social change in under-developed and developing countries, and on the lines of research associated with these theories. Students will review the contributions that various disciplines have made to development studies; and they will examine the ways in which these interact and complement each other in the explanation of changing conditions and societies in under-developed and developing countries.

320.0 Development Studies Through Canada World Youth and Crossroads International

Prerequisite: assignment with Canada World Youth (hereafter CWY).

This course is intended for CWY and Crossroads International participants who wish to earn academic credit related to their work in the Third World. It includes predeparture tutorials. CWY registrants will receive supervised readings in development studies and directions for field observations. They will be required to keep a journal on their observations and to prepare a research proposal for which they will collect materials while in the Third World. On returning to Canada they will communicate regularly with their advisor as they prepare a brief report on their field experience and an original research paper for evaluation.

386.1(.2) Cross-listed as Soc 386.1(.2)**400.0 Seminar In Development Studies**

Prerequisite: IDS 300.0.

In this course students will begin to apply some of the theoretical perspectives and analytical tools of Development Studies or one of its related disciplines to a selected problem of development in one particular region of the world; selected regions include Southern Africa, Tropical Africa, North Africa and the Middle East, South-East Asia, South Asia, the Caribbean and Latin America. Theoretical and policy implications and various case studies will be discussed. Presentations of student work will be preceded by presentations by faculty associated with the Development Studies Consortium.

420.1(.2) - 421.1(.2) Special Topics In Development Studies

Prerequisite: IDS 300.0.

This course will investigate in some depth a particular topic or set of topics in Development Studies. The specific topic(s) will vary from year to year, depending on the availability of visiting scholars, invited research fellows, or the research plans of associated faculty.

422.1(.2) [622.1(.2)] Cross-listed as Soc 422.1(.2)/WMS 422.1(.2)**423.1(.2) [623.1(.2)] Cross-listed as Soc 423.1(.2)/WMS 423.1(.2)****450.0; 451.0; 452.1(.2)-455.1(.2) Directed Studies**

Prerequisite: IDS 300.0 or permission of coordinator.

These courses provide an opportunity for students to study, in depth, topics not normally covered by regular course offerings. Students are expected to demonstrate some initiative and independence.

470.1(.2) [570.1(.2)] Environment and Development

Prerequisite: IDS 300.0 or permission of instructor.

This seminar will explore the implications for world economic development of the rising tide of "environmental problems", as well as the question of what "economic development" might mean in the context of tackling the growing disruption of the global ecosystem. The importance of a sociological and political-economic analysis of the problems of environmental disruption will be emphasized as the basis for understanding the threat which environmental problems pose for the very existence of human kind and certain patterns of economic development.

485.1(.2) Cross-listed as Soc 385.1(.2)**500.0 Honors Essay In Development Studies**

Prerequisite: IDS 400.0.

Master of Arts in International Development Studies

The graduate degree program is based on a core program of policy-oriented courses in the field of International Development Studies in addition to offerings by associated academic departments, primarily economics, sociology, and history, but also anthropology, political science, geography, education, international business (management and marketing), and finance and management science.

The interdisciplinary program of courses offered in International Development Studies has as its primary focus an analysis of the problems experienced by developing countries in the Caribbean, Latin America, Asia and Africa; and of the social, cultural, economic, historical and political structures and forces that underlie and produce these problems. Another concern of the program is with the development strategies pursued by groups of people and governments in these developing countries. An evaluation of the different models and strategies for national development that countries pursue in an increasingly global context is an important feature of the program.

The graduate program of study will be useful to those seeking employment in national and international settings, as knowledge of the Third World is increasingly needed in many departments of the federal government (CIDA, External Affairs), international development agencies, refugee and immigration services, non-governmental organizations like Oxfam and CUSO, and professions such as teaching, journalism, development planning, administration, and business.

Detailed requirements for the Master of Arts in International Development Studies are found in Section 3 of this Calendar.

Courses approved for the Master's Program:

IDS 510.0	Seminar on International Development
IDS 520.1(.2)-620.1(.2)	Methodology of Research and Analysis
IDS 530.1(.2)	Contemporary Development Planning
IDS 540.1(.2)-545.1(.2)	Special Topic in International Development
IDS 547.1(.2)	Work and Empowerment of Women in India
IDS 550.1(.2)-555.1(.2)	Directed Readings
IDS 560.1(.2)	Field Research Project
IDS 570.1(.2)	Environment and Development
IDS 600.0	Development in a Global Context
IDS 610.1(.2)	Problems of Development
IDS 622.1(.2)	Gender and Development: Theory and Method
IDS 623.1(.2)	Gender and Development: Policy Issues

Courses offered by associated departments at Saint Mary's University:

Eco 409.1(.2)	Economic Modelling/Forecasting
Eco 410.1(.2)	Issues in Economic Development
Eco 414.1(.2)	International Trade
Eco 490.1(.2)	Seminar in Economics
Eco 501.1(.2)	Economics of Enterprise Environment

Eco 690.1(.2)	Seminar in Economics
Edu 651.1(.2)	Comparative Education: Britain and the Commonwealth I
Edu 652.1(.2)	Comparative Education: Britain and the Commonwealth II
Edu 653.0	Comparative Education: USA, Middle and Far East
Edu 654.0	Comparative Education: Europe, USSR, Latin America
Edu 675.0	Global Issues and Education
Edu 676.0	Education and Development
Fin 676.1(.2)	International Finance and Banking
His 616.1(.2)	Africa in the 19th Century: Intrusion and Conquest
His 617.1(.2)	Africa in the 20th Century: Colonialism and Independence
His 622.0	South Africa
His 623.0	China Before 1800
His 641.0	China and Japan in the 20th Century
His 642.0	China in Revolution: 1840 to the Present
His 675.0	Modern Latin America
His 680.0	Latin America in the 20th Century
His 685.0	The Third World Since 1500
His 691.0	East Asia and the West
Mgt 681.1(.2)	International Business Management
Mkt 675.1(.2)	Multinational Marketing
Soc 420.0	Comparative Regional Development
Soc 421.0	Gender and Development: Policy Issues
Soc 425.0	Corporate Power and the World Economy

510.0 Seminar in International Development

Students will be expected to formulate a project on a problem of international development and present it, by stages, in a seminar of honors and first-year Master's students. Students are expected to demonstrate initiative and capacity for self-directed research. Those who have received credit for IDS 500.0 cannot take this course.

520.1(.2) Research Methodology

Basic techniques of research design and quantitative/qualitative analysis are reviewed and applied to a selected range of development problems.

530.1(.2) [630.1(.2)] Contemporary Development Planning

This course is designed to examine the approach to development planning in various contemporary contexts. First, the origins, expectations, methods and achievements of planning in the period 1950-1975 are analyzed. After surveying the next decade of disenchantment with national planning, the realities of development planning are assessed in the context of the mixed economy, centralized state-control, democratic socialism, and IMF management. How to plan on the basis of different development strategies is then examined, before concluding with an assessment of the effectiveness, limitations and future of development planning. Students who have taken IDS 545.1(.2) Contemporary Development Planning, cannot take this course.

540.1(.2)-545.1(.2) Special Topics in International Development

These courses will investigate in some depth a particular topic or set of topics in international development. Specific topics will depend on availability of visiting scholars, invited speakers and research plans of associated faculty.

547.1(.2) Cross-listed as Soc 447.1(.2)

550.1(.2)-555.1(.2) Directed Readings

These courses provide an opportunity for students to pursue in depth topics not normally covered by regular course offerings. Students are expected to demonstrate some initiative and independence.

560.1(.2) Field Research in Development

This course will provide an opportunity for students to pursue a supervised research program in the field. The research and project report must be approved by the Coordinator of the IDS Program.

570.1(.2) Described above as 470.1(.2).

600.0 Development in a Global Context

This course places the dynamics and problems of third world development in a global context and reviews the theoretical, historical and policy issues involved. Students are expected to apply a set of these issues in a specific regional setting.

610.1(.2) Problems in International Development

A seminar in which faculty and graduate students will present their research and review general questions of research design and analysis. Students will also present progress reports on their thesis proposal, approval of which by the instructor and a designated second reader is the principal course requirement.

620.1(.2) Research Methodology

Basic techniques of research design and quantitative/qualitative analysis are reviewed and applied to a selected range of development problems. Those who have received credit for IDS 520.1.2 cannot take this course.

640.1(.2)-645.1(.2) Special Topics in International Development

These courses will investigate in some depth a particular topic or set of topics in international development. Specific topics will depend on availability of visiting scholars, invited speakers and research plans of associated faculty.

650.1(.2)-655.1(.2) Directed Readings

These courses provide an opportunity for students to pursue in depth topics not normally covered by regular course offerings. Students are expected to demonstrate some initiative and independence.

660.1(.2) Field Research in Development

This course will provide an opportunity for students to pursue a supervised research program in the field. The research and project report must be approved by the Coordinator of the IDS Program.

Irish Studies (IRS)

C. Byrne, Professor
P. Ó. Siadhail

Coordinator
The Thomas D'Arcy
McGee Chair

The Minor Program

At the present time the University offers a minor program in Irish Studies but not a major.

The following program constitutes a minor in Irish Studies according to the "Requirements for the Degree of Bachelor of Arts" as stated above in Section 3:

IRS 201.1(.2) An Introduction to Modern Irish
IRS 202.1(.2) Modern Irish Language

and the equivalent of at least another three full courses.

201.1(.2) An Introduction to Modern Irish

This course will introduce students to Modern Irish, with emphasis on the spoken and written forms.

202.1(.2) Modern Irish Language

Prerequisite: IRS 201.1(.2) or permission of instructor.

This course will develop the student's ability to speak, write and read Modern Irish.

304.0 An Introduction to Scottish Gaelic

This course provides an introduction to Scottish Gaelic, a language that holds the key to an essential part of Scotland's cultural heritage. Emphasis will be placed on the language in both its spoken and written forms.

305.1(.2) An Introduction to Mediaeval Welsh Language

Mediaeval Welsh, a P-Celt language, is a valuable tool in the study of the Celtic tradition, giving the student an insight into the non-Gaelic mediaeval cultures of Wales and southern Scotland, and the related culture of Brittany.

306.1(.2) An Introduction to Mediaeval Welsh Literature

Prerequisite: IRS 305.1(.2) or permission of instructor.

This course will introduce students to the literature of the most important of the non-Gaelic Celtic languages, Welsh. Of the group of P-Celt languages, Welsh is the only one with a large extant collection of early and mediaeval literature. The traditions, motifs and metaphors of such works as *The Gododdin* and *The Four Branches of the Mabinogi* are very similar to those of Gaelic (Irish and Scottish) literature. Where they differ, it is largely as a result of early contact with Anglo-Norman culture. A study of Welsh literature, therefore, leads to an enhanced understanding of the Celtic identity.

307.0 Celtic Literature and Atlantic Canada

This course will focus on the following themes: the nature of traditional oral and written Celtic literature, aspects of the history of Celtic scholarship, the literary response to the changes in British and European Celtic culture leading to the emigrations in the 18th and 19th centuries, the survival of the Gaelic language and Gaelic culture in Newfoundland and the Maritimes into the 20th century, and the Irish, Scottish and Welsh contributions to the literary arts in the Atlantic Provinces.

308.0 Irish-Canadian Literature

This course will examine writers of Irish and Irish-Canadian background who have made significant literary contributions in Canada. The first semester will deal with early emigrant poets like Donnchadh Ruadh MacConmara and Standish O'Grady, with Canadian folk poets in the Irish tradition such as Lawrence Doyle, Larry Gorman, and Johnny Burke, with figures like Thomas D'Arcy McGee, Mary Ann Sadlier and Cornelius O'Brien, and with the image of the Irish in Canadian literature. The second semester, focusing on the 20th century, will treat authors like Morley Callaghan, Leo Kennedy, Margaret Duley, Edward McCourt, Sheila Watson, Brian Moore, Harry Boyle, Dennis Patrick Sears, Alden Nowlan, Leo Simpson and George McWhirter.

310.0 Introduction to Old Irish

Prerequisite: one Celtic language.

An introduction to Classical Old Irish with grammar and readings.

325.1(.2) Intermediate Irish I

Prerequisite: IRS 201.1(.2)/202.1(.2).

A continuation of elementary Irish, with emphasis placed on students attaining a firm grasp of spoken Irish. In addition, students will continue their study of the history and development of the Irish language.

326.1(.2) Intermediate Irish II

Prerequisite: IRS 325.1(.2) or permission of instructor.

Building upon the skills acquired while studying elementary Irish and Intermediate Irish I, students will concentrate on refining their command of the Irish language. A variety of aural sources and written texts will be used.

350.1 The Irish Musical Tradition

A survey of Irish folk music from pre-Christian times to the twentieth century. Areas under investigation shall include folk music as it relates to the wider background of Irish history; folk instruments; song-airs and singers; the structure and ornamentation of Irish folk music; and the role of Irish folk music in its nation's current musical scene. A knowledge of musical notation and terminology is not a prerequisite.

390.1(.2) Reading Course in Irish Studies: Selected Readings on Contemporary Ireland

The emphasis in this course will be on the political and social movements which led to the present Republic of Ireland. The politics of repeal, the Home Rule movement, the growth of extreme republicanism and the transition to independence will be included.

395.1(.2) Cross-listed as His 395.1(.2)

401.1(.2) Advanced Modern Irish I

Prerequisite: IRS 302.1(.2).

This course will deal with modern spoken and written Irish, with emphasis on acquiring a facility in spoken Irish.

402.1(.2) Advanced Modern Irish II

Prerequisite: IRS 401.1(.2).

This is an intensive course designed to develop further the student's ability to speak and write modern Irish.

407.1(.2) The Recovery of the Gaelic Past

Prerequisite: IRS 302.1(.2) and a minimum grade of C in Egl 202.1(.2).

This course will trace the process by which the Anglo-Irish discovered and translated the Gaelic literary heritage. It will examine, among other things, the publication of James MacPherson's fraudulent Ossian poems and the work of scholars and translators such as Charles O'Connor, Charlotte Brooke, John O'Donovan and Eugene Curry. The course will also look at English reaction to these developments as reflected in Matthew Arnold's "On the Study of Celtic Literature".

408.1(.2) The Romantic Popularization of the Gaelic Past

Prerequisite: IRS 302.1(.2) and a minimum grade of C in Egl 202.1(.2).

This course will look at the process by which the new awareness of the Gaelic literary heritage fostered by the efforts of the scholars was exploited by the 19th century creative writers in Ireland. The focus of the course will be on the work and careers of writers such as James Hardiman, James Clarence Mangan and Samuel Ferguson, as well as on Charlotte Brooke, who begins the process, and Standish James O'Grady, whose work marks its end.

430.1(.2) Irish Folklore

A comprehensive study of folklore in Ireland. All aspects of folklore will be examined, with special emphasis on the storytelling, song, and folk drama traditions.

441.1(.2) Cross-listed as Egl 441.1(.2)

442.1(.2) Cross-listed as Egl 442.1(.2)

443.1(.2) Cross-listed as Egl 443.1(.2)

450.1(2) Modern Gaelic Literature in Translation

Prerequisite: permission of instructor.

This course will cover works in translation by prominent 20th century writers in Irish. Emphasis will be placed on the prose writings of Pádraic Ó Conaire, Máirtín Ó Cadhain, the Blasket Island writers and modern Gaelic poetry.

451.1(2)-453.1(2) Special Topics in Irish Studies

Prerequisite: permission of coordinator of the Irish Studies Program.

These courses will investigate in depth a specific topic or set of topics in Irish Studies. The topics will vary from year to year.

457.0 Cross-listed as Pol 457.0



Linguistics (Lin)

The minor in linguistics and the linguistics course are administered by the Department of Modern Languages and Classics.

Committee on Linguistics

R. Cosper, Coordinator

L. Falk

K. Flikeid

W. Grennan

M. Harry

J. Jaquith

V. Tobin

D. Piper

T. Piper

Sociology

English

Modern Languages and
Classics

Philosophy

English

Anthropology

Modern Languages and
Classics

Education

Education

The Minor Program

The minor in linguistics offers students the opportunity to gain insight into the functioning of language as a system through an introduction to linguistic theory and training in the methods of linguistic analysis. It also serves as the gateway to the numerous practical applications of linguistics. Linguistics provides the groundwork for the teaching and learning of languages, as well as sign languages and computer languages. It forms the basis for the understanding of bilingualism, for language planning in multilingual countries, for developing tools for increasing literacy, and for enhancing the efficiency of translation services. Linguistics is also useful in the field of special education in the understanding and treatment of language disorders and reading problems.

To minor in linguistics, students must complete the following courses:

a. The equivalent of three full courses from among the following:

Ant 390.0	Linguistic Anthropology
Egl 311.1(.2)	Modern English Language
Egl 312.1(.2)	Modern English Language in Canada
Egl 402.0	History of the English Language
Fre 320.1(.2)	French Phonetics
Fre 340.1(.2)	Linguistic Study of French
Fre 440.1(.2)	Canadian French: Sociolinguistic Perspectives
Lin 300.0	Introduction to Linguistic Analysis
Phi 402.1(.2)	Philosophy of Language I: Linguistic Meaning
Phi 403.1(.2)	Philosophy of Language II: Speech-Act Theory
Soc 338.1(.2)	Language Change and Social Change
Soc 339.1(.2)	The Sociology of Language
WMS 318.0	Language and Gender

b. The equivalent of one additional full course selected with the advice of the Program Coordinator.

It is up to the individual departments to determine how often each of these courses will be offered. Students are advised to consult with the Coordinator as to the availability of courses when planning their minor. Students cannot count the same course for a major in any discipline and for a minor in linguistics.

300.0 Introduction to Linguistic Analysis

Natural languages are systematic and this course will examine how this fact makes human communication possible. A basic introduction to modern methods of linguistic analysis, the course will enable students to understand the structure of their own language and to compare it with other languages. By familiarizing them with the basic concepts of linguistics, the course will prepare students for more advanced or specialized courses in this area. Credit for this course will not be given to students who have previously taken a more comprehensive linguistics course, in particular Ant 390.0 (Linguistic Anthropology).

Management (Mgt)

Chairperson, Professor
Professors

S. G. Pendse
J. C. Chamard, H. Das
P. Fitzgerald, F. C. Miner
H. F. Schwind
G. A. Badawi
W. Greer, R. Summers
T. H. Wagar
R. Stuart-Kotze

Associate Professor
Assistant Professors

Adjunct Professor

The Department of Management offers two programs to business administration majors: Management as well as Human Resource Management and Industrial Relations.

In addition to meeting the general requirements for the Bachelor of Commerce degree, the following courses are required for each of these programs.

Human Resource Management and Industrial Relations Program

Junior Year

Mgt 385(1/2) Human Resource Management
Mgt 386(1/2) Industrial Relations
Eco 339(1/2) Labor Economics
Eco 340(1/2) Human Resources Economics
Free elective, 200 level or above (1/2)

Senior Year

Mgt 481(1/2) Organization Theory: Structure, Process,
Analysis and Design
Mgt 483(1/2) Interpersonal Behavior I
Non-Commerce electives (2)
Free electives, 200 level or above (1 1/2)

Note: If Eco 339 and/or Eco 340 were used to satisfy the required economics electives in the sophomore year, the number of free electives is increased to 1 or 1 1/2 as appropriate.

Management Program

Junior Year

Msc 316(1/2) Management of Service Operations, or
Msc 317(1/2) Management of Manufacturing Operations
Accounting elective (1/2)
Marketing elective (1)
Commerce elective (1/2)

Senior Year

Mgt 385(1/2) Human Resource Management
Mgt 386(1/2) Industrial Relations
Mgt 481(1/2) Organization Theory: Structure, Process,
Analysis and Design
Finance elective (1/2)
Non-Commerce electives (2)
Free elective, 200 level or above (1/2)

281.1(.2) Introduction to Business Management

Prerequisite: freshman standing or permission of chairperson.

The purpose of this course is to introduce the student to the various aspects of business in the Canadian environment. Emphasis will be placed on the functional areas of marketing, production, finance, and the individual in the organization. In addition, the process of management will be outlined and evolving changes in management practices discussed. Current issues such as social responsibility, business ethics and the role of business in the community will be examined. Teaching methods will include lectures, group presentations and discussions of cases as well as other exercises.

Classes 3 hrs. a week. 1 semester.

301.1(.2) Work and Alienation

Prerequisite: completion of at least ten university courses.

This is an interdisciplinary seminar which explores the issue of quality of work life in both capitalist and communist societies. The issue will be examined from the perspectives of business administration, the humanities, and the social sciences.

Classes 3 hrs. a week. 1 semester.

383.1(.2) Organizational Behavior I

Prerequisite: Mgt 281.1(.2).

This part focuses on the micro aspects of organizational behaviour. Topics covered include human needs and motivation, learning, perception, and attribution, as these relate to individuals and groups in organizations. Teaching methodology includes lectures, discussions and case analysis.

Classes 3 hrs. a week. 1 semester.

384.1(.2) Organizational Behavior II

Prerequisite: Mgt 383.1(.2).

This course is a continuation of Mgt 383.1(.2). It focuses on macro aspects of organizational behaviour. Topics covered include group processes and their relationship to effectiveness, intergroup cooperation and conflict, organizational character, structure, environment and culture, leadership, communication, decision making and organizational change and development.

Classes 3 hrs. a week. 1 semester.

385.1(.2) Human Resource Management

Prerequisite: Mgt 281.1(.2) and 384.1(.2).

A study of the conceptual and practical aspects of the human resource management function in organizations, with a special emphasis on business organizations. The course focuses on the major issues, procedures and problems involved in human resource planning, recruitment and selection, compensation, training and development, and maintenance of human resources.

Classes 3 hrs. a week. 1 semester.

386.1(.2) Industrial Relations

Prerequisite: Mgt 281.1(.2) and 384.1(.2).

An introduction to the field of industrial relations. It focuses on the impact of collective bargaining in management/labor relations. Topics covered include the historical development, structure, and operation of labor unions, the process and contents of negotiations and the settlement of union/management disputes.

Classes 3 hrs. a week. 1 semester.

388.1(.2) Business and its Environment

Prerequisite: Mgt 384.1(.2) or permission of instructor; and Mgt 281.1(.2); and Eco 201.1(.2)/202.1(.2).

Business and its economic and political environment, the social responsibilities of business.

Classes 3 hrs. a week. 1 semester.

391.1(.2) Women in Management

[WMS 391.1(.2)]

Prerequisite: completion of at least ten university courses.

The course will examine issues faced by managers as women become a large proportion of the workforce: changing roles and status, sex roles differences, legal implications, corporate politics, and career planning.

Classes 3 hrs. a week. 1 semester.

481.1(.2) Organization Theory: Structure, Process, Analysis and Design

Prerequisite: Mgt 384.1(.2).

In a systems context, the first phase of the course will expose the student to different concepts of formal organization. The second phase will involve the application of concepts using various design approaches and configurations.

Classes 3 hrs. a week. 1 semester.

483.1(.2) Interpersonal Behavior I

Prerequisite: Mgt 384.1(.2).

This course studies and attempts to improve the kinds of interpersonal competence that can contribute to the effectiveness of an administrator. By focusing on the causes of misunderstandings between persons and reducing the causes of such misunderstandings, the course attempts to improve an individual's interpersonal skills as a member of an organization.

Classes 3 hrs. a week. 1 semester.

484.1(2) Interpersonal Behavior II

Prerequisite: Mgt 483.1(2).

The course is designed to give further understanding of interpersonal behavior in an organizational context. It will give students the opportunity to practice interpersonal skills and gain further theoretical insights.

Classes 3 hrs. a week. 1 semester.

485.1(2) Wage and Salary Administration

Prerequisite: Mgt 385.1(2).

This course is designed to integrate compensation systems with employment planning, career development, and organizational planning concepts.

Classes 3 hrs. a week. 1 semester.

486.1(2) Personnel Staffing, Training and Development

Prerequisite: Mgt 385.1(2).

The course deals with the theoretical and practical issues of matching job requirements with personal characteristics and the assessment, counselling, training and development of human resources.

Classes 3 hrs. a week. 1 semester.

487.1(2) Small Business Opportunities

Prerequisite: Fin 361.2 and Mkt 370.1(2).

The objective of the course is to stimulate informed interest in creating and managing a small business; the course includes the investigation of new business opportunities, capital requirements and sources, information systems, marketing and tax considerations.

Classes 3 hrs. a week. 1 semester.

488.1(2) International Business Management

Prerequisite: Mgt 384.1(2).

An introduction to the nature of environment of international business management including the study of multinational corporations, intercultural differences and their effects on management style and policy and execution. The focus of discussion and presentation will be on management systems in North and South America, Europe, the Communist Bloc, Middle East, South-East Asia, China, and Japan.

Classes 3 hrs. a week. 1 semester.

489.1(2) Strategic Management

Prerequisite: Fin 361.1(2), Mkt 370.1(2), Mgt 384.1(2) and one additional full credit at the 300 level from Acc, Eco, Mgt, Fin, Mkt, or Msc.

This is a "capstone" course that attempts to utilize all the business disciplines (management, marketing, finance, accounting, etc.) in an effort to identify, diagnose, and recommend appropriate action for real managerial problems. It is hoped that through this course, students will gain a better understanding of the complexity and interrelationship of modern managerial decision making. It is also hoped that this exposure will facilitate the students' ability to analyze complex problem situations.

Classes 3 hrs. a week. 1 semester.

490.1(2) Seminar In Management

Prerequisite: Mgt 384.1(2) and permission of instructor.

The course deals with selected topics in the management area. The topics to be covered will vary depending on the interests of the students and instructors.

Seminar 3 hrs. a week. 1 semester.

492.1(2) Directed Study

Prerequisite: permission of departmental chairperson and instructor.

Intended to supplement or provide an alternative to the regular management courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

Tutorial and independent study. 1 semester.

493.1(2) Business-Government Relations In Canada

Prerequisite: Mgt 384.1(2) or permission of instructor.

This course deals with the various ways in which business and government in Canada influence each other: examines the causes

and consequences of increased government involvement in business, describes and assesses the various responses of business managers to government involvement, and develops an understanding of the interrelationships between government and corporate actions.

Classes 3 hrs. a week. 1 semester.

494.1(2) Entrepreneurship: Theories and Concepts

Prerequisite: Fin 360.1(2).

Through lectures and seminars, this course covers the nature of entrepreneurship, theories of entrepreneurship, characteristics and behaviors of entrepreneurs, the entrepreneur as catalyst for economic activity, application of the concepts of entrepreneurship to public and non-profit enterprises both large and small, entrepreneurship in developing and developed economies.

Classes and seminar 3 hrs. a week. 1 semester.

495.1(2) Small Business Performance Improvement

Prerequisite: Acc 348.1(2) and Mkt 370.1(2).

This course uses lectures and case analysis to develop students' ability to diagnose operating and other problems of small businesses and to develop workable solutions to the problems.

Classes 3 hrs. a week. 1 semester.

496.1(2) Collective Bargaining

Prerequisite: Mgt 386.1(2).

An examination of the process of collective bargaining and its role in management-union relations. The course examines the nature of negotiation, its characteristics, the roles of power, persuasion, communication, social structure, negotiating strategies and tactics, and negotiators' personalities. Grievance handling as a form of negotiation is also examined.

Classes 3 hrs. a week. 1 semester.

497.1(2) Issues in Industrial Relations

Prerequisite: Mgt 386.1(2).

An examination of some of the important issues related to industrial relations. Examples include employment statutes, human rights legislation, collective bargaining in the public sector, and the settlement of management-union disputes. Topics may be slightly varied depending on emerging issues and the interests of instructor and students.

Classes 3 hrs. a week. 1 semester.

499.1(2) Senior Management Perspectives

Prerequisite: fourth year Commerce student and permission of instructor.

This course involves a series of guest speakers who have senior management experience from business, political, and non-profit organizations. Speakers present talks and topics related to interests. Each presentation will be followed by an open discussion.

Classes 3 hrs. a week. 1 semester.

The following courses are available only to students registered in the Master of Business Administration program and with permission of the MBA Director to students registered in other Master's programs.

585.1(2) Organizational Behavior I

This part focuses on the micro aspects of organizational behaviour. Topics covered include human needs and motivation, learning, perception, and attribution, as these relate to individuals and groups in organizations. Teaching methodology includes lectures, discussions, and case analysis.

586.1(2) Organizational Behavior II

Prerequisite: Mgt 585.1(2).

This course is a continuation of Mgt 585.1(2). It focuses on macro aspects of organizational behaviour. Topics covered include group processes and their relationship to effectiveness, intergroup cooperation and conflict, organizational character, structure, environment and culture, leadership, communication, decision making and organizational change and development.

681.1(.2) International Business Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

The course focuses on the nature and environment of international business management, including the study of multinational corporations and joint ventures and their impact on the host country, inter-cultural differences and their effects on management style, policy, and execution.

682.1(.2) Compensation Theory and Administration

Prerequisite: Mgt 685.1(.2) or permission of MBA Director.

The focus of this course will be on the historical development of wage and salary administration, fundamentals of job and employee evaluation, motivation theories and how they relate to reward systems, job satisfaction, the relationship between reward and performance, basic compensation systems (including fringe benefits), managerial compensation, and wage and salary administrative controls.

683.1(.2) Management of Interpersonal Relations

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course aims at improving the individual's ability to interact productively with others in two-person and small group relationships. It seeks to develop an individual's awareness of how a person's behavior affects and is affected by that of others.

684.1(.2) Management of Organizational Design and Development

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A study of the evolution of organizational design and the use of current techniques in organizational development. Emphasis is placed upon understanding how the evolution of organizational structures has affected our present ones and how current research can be utilized to improve and develop them in the future.

685.1(.2) Strategic Human Resource Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

An investigation of the role of the personnel manager and the changes in the nature of responsibilities brought about by changes in the legal and technological environments of organizations. The course deals mainly with human resource planning, selection, and compensation and the development of the human resources of the organization.

686.1(.2) Labor-Management Relations

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

An examination of the role of the labor-management functions in the organization and the changing interplay between management, union and public policy, focusing on some of the main legal, behavioral and institutional issues in collective bargaining.

687.1(.2) Small Business Opportunities

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

The objective of the course is to stimulate informed interest in creating and managing a small business. The course includes the investigation of small business opportunities, capital requirements and sources, information systems, marketing and tax considerations.

688.1(.2) Social Issues In Business

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course will foster an awareness of the social impacts of business activity and decision making. Social costs and corporate social responsibility will be examined. Various social issues and the manner in which management might respond to societal expectations will be discussed.

689.1(.2) Strategic Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course focuses attention on the role of the senior management function to develop and implement strategy in the context of the resources. It draws upon case material based on companies of differing sizes, technologies and degrees of diversification. By providing an insight into the problems and responsibilities faced by general management at the senior level, it seeks to provide an overall perspective for the remainder of the program.

690.1(.2) Seminar In Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

The course deals with selected topics in the management area. The topics to be covered will vary depending on the interests of the students and instructors.

Seminar 3 hrs. a week. 1 semester.

692.1(.2) Directed Study

Prerequisite: completion of all 500 level required courses and permission of MBA Director, departmental chairperson, and instructor.

Intended to supplement or provide an alternative to the regular management courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

695.1(.2) Small Business Performance Improvement

Prerequisite: completion of all 500 level required courses and permission of MBA Director.

This course uses lectures and case analysis to develop students' abilities to diagnose operating and other problems of small business and to develop workable solutions to the problems.

698.1(.2) Research Seminar In Management

Prerequisite: completion of all 500 level required courses and permission of MBA Director, departmental chairperson, and instructor.

A study of research problems and methodologies in management, with each student preparing and defending a research proposal of his/her own based upon a critical review of current literature. This course is designed to aid students in the development of their project course.

699.1(.2) Research Project In Management

Prerequisite: Mgt 698.1(.2) or permission of MBA Director.

Each student is required to complete a project involving the practical application of the research concepts and techniques used in management, under the direct supervision of a faculty member. Interdisciplinary projects are acceptable.

Marketing (Mkt)

Chairperson, Associate Professor L. Van Esch
 Associate Professors T. S. Chan, T. Musial
 Assistant Professors L. Rieber, C. Vaughan
 Lecturer J. Sagebien

The Department of Marketing offers a program for business administration majors which, in addition to the general requirements for a Bachelor of Commerce degree as outlined in Section 3 of this Calendar, requires students to take Mkt 376.1(.2) (Consumer Behavior), 378.1(.2) (Marketing Research), and 479.1(.2) (Marketing Policy) and three additional electives (1 1/2 credits). For additional information, students should consult the departmental Chairperson and/or faculty advisors. The department administers the managerial communications courses [Com 293.1(.2); Com 475.1(.2); and Com 675.1(.2)] described earlier in this Calendar.

370.1(.2) Introduction to Marketing

Prerequisite: Bus 280.0 or Mgt 281.1(.2) and Eco 201.1(.2) and 202.1(.2).

A study of principles and fundamental concepts of marketing and marketing management: pricing, promotion, merchandising, distribution structure and marketing research.

Classes 3 hrs. a week. 1 semester.

371.1(.2) Retailing

Prerequisite: Mkt 370.1(.2) or permission of chairperson.

A comprehensive study of the activities involved in marketing goods and services directly to the ultimate consumer. Other areas studied will be evolution of retailing, retailing within the marketing channels, shopping behavior and various retail trends.

Classes 3 hrs. a week. 1 semester.

372.1(.2) Marketing Communication and Promotions Management

Prerequisite: Mkt 370.1(.2).

This course examines the marketing communication process. Various models of interpersonal communication and mass communication are examined. The major focus of the course will be a management of the promotion function within the firm as it specifically applies to integrating advertising, sales promotion, publicity, public relations, and personal selling activities. Emphasis will be placed on the structure, strategic planning, and evaluation of effectiveness of promotional strategy.

Classes 3 hrs. a week. 1 semester.

373.1(.2) Management of Marketing Channels

Prerequisite: Mkt 370.1(.2).

A study of the marketing distribution system, retailing and wholesaling, merchandising, and relevant legislation.

Classes 3 hrs. a week. 1 semester.

374.1(.2) Sales Management

Prerequisite: Mkt 370.1(.2).

A study of the managerial problems involved in sales management, including the recruitment, training, compensation and motivation of sales personnel and the control and integration of the individual selling effort.

Classes 3 hrs. a week. 1 semester.

375.1(.2) International Marketing

Prerequisite: Mkt 370.1(.2).

An introduction to the nature and environment of international marketing including the study of the international consumer, product policy, distribution, promotion, research and management.

Classes 3 hrs. a week. 1 semester.

376.1(.2) Consumer Behavior

Prerequisite: Mkt 370.1(.2).

A study of the nature of consumer behavior, the foundation of consumer research, consumer market segments, consumer attitudes.

Classes 3 hrs. a week. 1 semester.

377.1(.2) Industrial Marketing

Prerequisite: Mkt 370.1(.2).

A study of the marketing functions of industrial producers whose products are employed in the manufacture of other products or become part of other goods and services; behavior of industrial, governmental and institutional buyers.

Classes 3 hrs. a week. 1 semester.

378.1(.2) Marketing Research

Prerequisite: Msc 207.1(.2) and Mkt 370.1(.2).

This course deals with the managerial, conceptual and technical aspects of marketing research. Technical problems in data collection will be covered in depth. Specific statistical techniques for data analysis will not be taught, but conceptual issues in the application of techniques learned in Msc 207.1(.2) will be covered. The course will require the use of one or more of the Micro Computer Labs (including the MacIntosh Lab) and the Main Frame (VAX Computer). On completion of the course, a student should be able to formulate and execute research as well as to evaluate research reports prepared by others.

Classes 3 hrs. a week. 1 semester.

470.1(.2) Ethical Issues in Marketing Management

Prerequisite: two half courses in marketing beyond Mkt 370.1(.2) or 4th year standing.

The course introduces students to a study of the moral and social consequences of marketing decisions on the major stakeholder groups with whom marketing managers must deal. These groups include customers and clients, channel members, suppliers, governments at all levels, as well as public-interest groups and society at large. Students will learn how to discuss critically these issues and assess the different obligations and responsibilities they owe to each group.

472.1(.2) Advertising Management

Prerequisite: Mkt 370.1(.2); 372.1(.2); and 376.1(.2). (The latter course may be taken concurrently.)

This course provides an introduction to the techniques of advertising as an integral part of the marketing communications process. Fundamentals covered in the course will include: procedures for creating advertising appeals, advertising management, advertising research, methods of allocation for advertising budgets, practices of advertising agents, media selection and planning, evaluation of the success of advertising campaigns.

476.1(.2) Current Topics in Marketing

Prerequisite: 1.5 courses in marketing beyond Mkt 370.1(.2) or permission of instructor.

The main objective of this course is to provide some insight into the dramatic nature of both the domestic and international marketing environment. Students will gain an appreciation for the changing marketplace and the challenges these changes pose for marketers. The focus will be on practical problems and how marketers can address these in a complex environment.

479.1(.2) Marketing Policy

Prerequisite: at least three half courses in marketing beyond 370.1(.2), one of which must be Mkt 376.1(.2) (Consumer Behavior); or permission of chairperson.

Managerial in focus, this course is devoted to analyzing opportunities, studying marketing activity and its organization, planning the marketing program and controlling the marketing effort. This is a "capstone" marketing policy course which is designed to integrate the material learned in the prerequisite upper-division marketing courses.

490.1(.2) Special Topics in Marketing

Prerequisite: two half courses in marketing beyond 370.1(.2).

An in-depth study of selected topics in marketing. Topics selected for discussion are at the discretion of the instructor with approval of the department. Issues to be discussed may include such topics as marketing productivity, marketing auditing, marketing models, social issues in marketing. Topics will vary from year to year. The course may be repeated for credit when topics vary.

492.1(.2) Directed Study

Prerequisite: permission of chairperson and instructor.

Intended to supplement or provide an alternative to the regular marketing courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the students some measure of independence and initiative.

Tutorial and independent study. 1 semester.

The following courses are available only to students registered in the Master of Business Administration program and with permission of the MBA Director to students registered in other Master's programs.

571.1(.2) Marketing Management: An Overview

A course providing managerial introduction to the fundamentals of marketing with primary focus on the planning, organizing, and controlling of product, price, distribution, promotion, and public policy strategies, in both domestic and international markets.

670.1(.2) Ethical and Social Analysis in Marketing Decisions

Prerequisite: completion of all 500 level required courses or permission of the MBA Director.

This course studies the application and integration of ethical and social analysis in marketing decisions. It also considers whether, when, and how to recognize and reconcile the interests of diverse groups of marketing stakeholders when making marketing decisions. The groups include customers and clients, channel members, suppliers, governments at all levels, as well as public-interest groups and society at large.

672.1(.2) Marketing Communications: Planning and Strategy

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A study of communications theory as it applies to the role of interpersonal and mass communication media in marketing. Emphasis is placed on the formulation, coordination and evaluation of the effectiveness of advertising, personal selling, sales promotional, and public relations strategies.

673.1(.2) Marketing Distribution: Planning and Strategy

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A systematic analysis of the decision-making factors underlying the development of effective distribution policies and strategies. The course focuses on the institutions and functions of the marketing channel with emphasis placed on distribution regulation, direct selling, retail, wholesale and physical distribution functions.

675.1(.2) Multinational Marketing

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A comprehensive survey of the nature and environment of multinational marketing. This course focuses on the marketing management aspects of multinational business. Emphasis is placed on developing analytical decision-oriented abilities in the area of multinational pricing, product, policy, distribution, promotion, research and development and market segmentation.

676.1(.2) Consumer Behavior: Decision-Making Applications

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

An examination of the buying behavior of individuals as it is affected by psychological and sociological influences. Emphasis is placed on the understanding of how such behavioral-science concepts as social class, reference group, perception, attitude, motivation, personality and learning can contribute to the improvement of marketing decision-making.

677.1(.2) Industrial Marketing Management

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

This course studies the management of the marketing processes among industrial product producers, institutional, industrial and government consumers. Methods of procurement, such as buying centres and various buyer/seller relationships, are examined.

678.1(.2) Marketing Research

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A study of the decision-making application of marketing research techniques and procedures. Emphasis is placed on research design, sampling, data collection, analysis and presentation. The course will require the use of one or more of the Micro Computer Labs (including the MacIntosh Lab) and the Main Frame (VAX Computer).

679.1(.2) Marketing Policy

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

A comprehensive, integrated study of marketing management. Primary focus is placed on the analysis and solution of complex marketing problem situations. The course also includes several seminar discussions on contemporary issues such as multinational marketing, consumerism, and marketing regulation.

690.1(.2) Seminar in Marketing

Prerequisite: completion of all 500 level required courses or permission of MBA Director.

An in-depth study of selected topics. Selections for discussion are at the discretion of the instructor, with approval of the department. Issues to be discussed may include such topics as marketing productivity, marketing auditing, marketing models, social issues in marketing. Topics will vary from year to year. The course may be repeated for credit when topics vary.

692.1(.2) Directed Study

Prerequisite: completion of all 500 level required courses and permission of MBA Director, departmental chairperson, and instructor.

Intended to supplement or provide an alternative to the regular marketing courses in order to meet the special needs and interests of students, the course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

698.1(.2) Research Seminar in Marketing

Prerequisite: completion of all 500 level required courses and permission of MBA Director, departmental chairperson, and instructor. Students may register for Mkt 678.1(.2) concurrently.

A study of research problems and methodologies in marketing, with each student preparing and defending a research proposal of his/her own based upon a critical review of current literature. This course is designed to aid students in the development of their project course.

699.1(.2) Research Project in Marketing

Prerequisite: Mkt 698.1(.2), completion of Mkt 678.1(.2), or permission of MBA Director.

Each student is required to complete a project involving the practical application of the research concepts and techniques used in marketing, under the direct supervision of a faculty member. Interdisciplinary projects are acceptable.

Mathematics and Computing Science (Mat)

Chairperson, Associate Professor	W. Finden
Professors	B. L. Hartnell, M. T. Kiang, R. L. Kruse
Associate Professors	A. S. Finbow, F. L. Hughes, P. Muir, P. Scobey, Y. P. Singh
Assistant Professor	K. J. MacLeod

The Mathematics and Computing Science Department offers a broad range of courses, including introductory courses intended for students with little mathematical background; preparatory courses for students intending to enter fields requiring mathematics or computing science; and specialized courses for more advanced mathematics and computing science students.

Introductory Courses

Mat 118.1(.2) is a remedial course designed for students with a weak mathematical background who need to review topics usually covered in high school algebra.

CSC 101.1(.2) is an introduction to computer programming designed for the student with little mathematical background and no previous experience with computers, who may have only casual interest in programming or needs only limited knowledge for application in other subjects.

Note: The above courses are not allowed as credit towards a major or concentration in mathematics.

Preparatory Courses

Mat 110.1(.2)/111.1(.2)/112.1(.2) are accepted as the equivalent of Grade XII mathematics. Mat 110.1(.2)/111.1(.2) are intended primarily for students entering natural sciences or mathematics, and includes emphasis on trigonometry as well as algebra. Mat 112.1(.2) is intended primarily for students in commerce and the social sciences, omits trigonometry, and concentrates instead on applicable finite mathematics.

Mat 200.0 is the first course in calculus, and Mat 310.1(.2) and Mat 311.1(.2) combined form the natural calculus sequel.

Mat 320.1 provides an introduction to linear algebra, while further topics in linear algebra are covered in Mat 321.2.

The CSC 226.1(.2)/227.1(.2) sequence is intended to be a first course for all students who intend to pursue further studies in computing science.

Specialized Courses

Students may obtain a degree which has a special emphasis in one of the areas indicated below by choosing the majority of their optional courses from those listed following the area of selection:

Special Emphasis in Pure Mathematics:

Mat 370.1(.2); 401.1(.2); 402.1(.2); 420.1(.2); 421.1(.2); 426.1(.2); 427.1(.2); 430.1(.2); 432.1(.2); 436.1(.2); 437.1(.2); 441.1(.2); and 442.1(.2).

Special Emphasis in Applied Mathematics:

Mat 308.1(.2); 309.1(.2); 315.1(.2); 316.1(.2); 401.1(.2); 402.1(.2); 405.1(.2); 406.1(.2); 408.1(.2); 409.1(.2); 414.0; 415.1(.2); 416.1(.2); 445.0; 456.1(.2); and 457.1(.2).

Special Emphasis in Computing Science:

All courses in computing science at 300 level or above except CSC 387.1(.2) and 388.1(.2).

Requirements for Majors in Mathematics and Computing Science (effective September 1985)

A major in mathematics and computing science is offered for students working towards the degrees of B.A. and B.Sc. and for students of above average ability working towards the degrees of B.A. (Honors) and B.Sc. (Honors).

The entering student without advanced placement in mathematics should complete Mat 110.1(.2)/111.1(.2) in the first year.

The departmental requirements for a major in mathematics and computing science are:

1. Mat 200.0
2. CSC 226.1(.2) and 227.1(.2)
3. Mat 310.1(.2) and 311.1(.2)
4. Mat 320.1(.2) and 321.1(.2)

5. A minimum of four (two in case of combined major) additional credits in mathematics and computing science from courses chosen by the student in consultation with the department. These courses must be numbered 205 or above and at least two (one in case of combined major) must be numbered 400 or above.

Requirements for Honors in Mathematics and Computing Science (effective September 1985)

The honors program is designed for mathematics and computing science majors of above average ability. Mathematics and computing science majors in their sophomore year with an overall quality point average of at least 2.50, and with a quality point average of at least 3.00 in their mathematics and computing science courses, should consider enrolling in the honors program, and are advised to consult with the department before making a final decision.

The departmental requirements for honors in mathematics and computing science are:

1. Mat 200.0
2. CSC 226.1(.2) and 227.1(.2)
3. Mat 310.1(.2) and 311.1(.2)
4. Mat 320.1(.2) and 321.1(.2)
5. A minimum of seven (four in case of combined honors) additional credits in mathematics and computing science from courses chosen by the student in consultation with the department. These courses must be numbered 205 or above, and at least four (two in case of combined honors) must be numbered 400 or above.

Note: Students must obtain formal departmental approval of their program at the time of their declaration to enter the major or honors program, as well as for any subsequent changes.

Requirements for Major in Computing Science and Business Administration

Students interested in the above program should contact the Department of Mathematics and Computing Science or the Dean of Science. This program requires the following courses from this department: Mat 200.0, CSC 226.1(.2), CSC 227.1(.2), Mat 305.1(.2), Mat 320.1(.2), CSC 327.1(.2), CSC 328.1(.2), CSC 341.1(.2), CSC 342.1(.2), CSC 461.1(.2) and CSC 462.1(.2). Additional information may be found in the Faculty of Science section in this Calendar.

Co-operative Education Program for Computing Science Students (COES) and Computing Science and Business Administration (COEB)

These programs are designed for those students who wish to gain work experience in computing science and computing science and business administration while attending university.

The general requirements for these co-operative education programs are found in the Faculty of Science portion, Section 3 of this Calendar, and as follows:

The required courses are identical to those in the non co-op honors program, with the exception of work term reports (students in the co-op program are required to write a work term report at the end of each work term). Work term reports are graded on a pass/fail basis.

The overall structures of the co-op programs are as follows (with AT denoting an academic term, and WT denoting a co-op work term):

Year	Fall	Winter	Summer
1	AT1	AT2	WT1 (optional)
2	AT3	AT4	WT2
3	WT3	AT5	WT4
4	AT6	WT5	WT6
5	AT7	AT8	

Students interested in the above program should contact the Co-op Coordinator, Department of Mathematics and Computing Science.

Credit for Duplicate Courses

No student may receive credit for both Mat 110.1(.2)/111.1(.2) and Mat 110.1(.2)/112.1(.2), and no student who has received credit for an advanced mathematics or computing science course may later receive credit for a mathematics or computing science prerequisite to the course without permission of the department. With renumbered or restructured courses, students are advised that they are not eligible

to take a course for credit if they already have a credit for a comparable course, even if that course was taken at a different level or under a different number.

Mathematics (Mat)

110.1(.2) Algebra

Prerequisite: Nova Scotia Grade XI Mat 431 (or equivalent).

Elementary set theory and the real number system. Factorization. Inequalities, absolute values, and interval notation. Techniques of solving a variety of equations and inequalities in a single variable. The Cartesian Plane and representation of ordered pairs of real numbers. Elements of analytic geometry. Relations, functions, and graphs, with emphasis on the polynomial, exponential, and logarithmic functions.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 100.0 or Mat 113.0.

Classes 3 hrs. plus recitation sessions 1 1/2 hrs. a week. 1 semester.

111.1(.2) Precalculus

Prerequisite: Mat 110.1(.2).

Trigonometry, inverse trigonometric functions. Complex numbers. Polynomial and rational functions. Matrices, determinants, and system of equations. System of inequalities. Sequences and series. Permutations, combinations, and the Binomial Theorem. Mathematical induction.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 100.0 or Mat 113.0.

Classes 3 hrs. plus recitation sessions 1 1/2 hrs. a week. 1 semester.

112.1(.2) Mathematics for Commerce and the Social Sciences

Prerequisite: Mat 110.1(.2).

Polynomials and rational functions. Matrices, determinants, and systems of equations. Systems of inequalities. Introduction to linear programming. Sequences and series. Permutations, combinations and the Binomial Theorem. Probability. Emphasis throughout on the skills needed to solve "word problems".

Note: No credit will be given for this course simultaneously with or subsequent to Mat 100.0 or Mat 113.0.

Classes 3 hrs. plus recitation sessions 1 1/2 hrs. a week. 1 semester.

118.1(.2) Remedial Mathematics

Prerequisite: none.

This course is designed for students with weak mathematical backgrounds. It reviews most topics usually covered in high school algebra and may be taken concurrently with Mat 110.1(.2).

Credit for this course may be obtained simultaneously with or prior to credit given for Mat 110.1(.2), but not subsequent to credit given for Mat 110.1(.2).

Classes 3 hrs. plus 1 hr. tutorial a week. 1 semester.

200.0 Calculus I

Prerequisite: Mat 110.1(.2)/111.1(.2) or Nova Scotia Mat 441 (or equivalent).

Functions, limits and continuity. The derivative and the indefinite integral. The definite integral and fundamental theorem of calculus. Continuity and its relation to differentiability and integrability. Techniques of differentiation and integration for algebraic, exponential, logarithmic and trigonometric functions. Numerical integration. Simpson's Rule and Trapezoidal Rule. Applications of the derivative and the definite integral, including: tangent and normal lines; related rates; Rolle's and the mean value theorems; local extrema, concavity and their aid in plotting graphs; area under a curve; volumes of revolution; work and arc length.

Classes 3 hrs. plus recitation sessions 1 1/2 hrs. a week. 2 semesters.

207.1(.2) Survey of Statistics

Prerequisite: Mat 200.0 (or concurrently).

This course will provide an overview of several topics in probability and statistics that students intending further studies in computing science will find particularly useful.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for Mat 315.1(.2).

Classes 3 hrs. plus recitation session 1 1/2 hrs. a week. 1 semester.

301.1(.2) Introduction to Vectors, Matrices and Complex Numbers for Engineering Students

Prerequisite: Mat 310.1(.2) (or concurrently).

Algebra of matrices. Rank and inverse matrices. Theory of linear systems. Cramer's rule and use of determinants. Algebra of complex numbers, polar forms and DeMoivre's Theorem. First order differential equations. Linear differential equations with constant coefficients and methods of variation of parameters. Introduction to Laplace Transforms.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for Mat 405.1(.2).

Classes 3 hrs. a week. 1 semester.

305.1(.2) Survey of Discrete Mathematics

Prerequisite: Mat 200.0.

This course will provide an overview of several topics in discrete mathematics which are of particular interest to students intending further studies in computing science.

Classes 3 hrs. plus recitation session 1 1/2 hrs. a week. 1 semester.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 205.1(.2)

308.1(.2) [CSC 308.1(.2)] Numerical Analysis I

Prerequisite: Mat 200.0 and CSC 101.1(.2) or 226.1(.2), or equivalent programming experience.

A discussion of errors in numerical analysis. Theoretical and practical considerations of numerical procedures in non-linear equations in one variable including polynomial equations, in systems of linear equations and systems of non-linear equations. A brief discussion of vectors, matrices and norms.

Classes 3 hrs. a week. 1 semester.

309.1(.2) [CSC 309.1(.2)] Numerical Analysis II

Prerequisite: Mat 308.1(.2) or permission of instructor.

Theoretical and practical considerations of numerical procedures in function approximations including splines, interpolation and least squares and in numerical integration.

Classes 3 hrs. a week. 1 semester.

310.1(.2) Intermediate Calculus I

Prerequisite: Mat 200.0.

Hyperbolic and inverse hyperbolic functions, the conic sections, parametric equations, the calculus of parametric equations, polar coordinates, area, tangent lines and arc lengths in polar coordinates, vectors in three dimensions, operations with vectors, dot and cross products, lines in space, planes, quadric surfaces, cylindrical and spherical coordinate systems, derivatives and integrals of vector valued functions, tangent and normal vectors, motion in space. Indeterminate forms and l'Hôpital's rule, improper integrals, the limit of a sequence, monotone sequences, convergence tests for positive series, absolute and conditional convergence, power series, algebraic operations on power series, differentiation and integration of power series. Taylor and Maclaurin series. Taylor's theorem with remainder, approximation by Taylor's polynomials.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 300.0.

Classes 3 hrs. plus recitation sessions 1 1/2 hrs. a week. 2 semesters.

311.1(.2) Intermediate Calculus II

Prerequisite: Mat 310.1(.2).

Limits and continuity of functions of several variables, partial derivatives, the Chain Rule, directional derivatives and gradient vector, the total differential, tangent planes and normals to a surface, higher order partial derivatives, extrema of functions of two variables. The double integrals, iterated integrals, double integrals in polar coordinates, applications of double integrals, the triple integral, triple integrals in cylindrical and spherical coordinates, applications of triple integrals vector fields, divergence and curl of vector fields, line integrals, path-independent line integrals.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 300.0.

Classes 3 hrs. plus recitation sessions 1 1/2 hrs. a week. 2 semesters.

315.1(2) Introduction to Statistics I

Prerequisite: Mat 200.0.

This course is designed to provide a mathematical basis for fundamental statistical concepts. It assumes a good knowledge of Calculus I and deals with the following topics: elementary set theory, set functions, probability, conditional probability, Bayes Theorem, translation of set functions to point functions by using random variables; binomial, Poisson, hypergeometric and other discrete distributions, mathematical expected values, moments, characteristic functions, Chebychev's inequality and distributions of functions of random variables; the χ^2 , F , and T distributions.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 314.0.

Classes 3 hrs. a week. 1 semester.

316.1(2) Introduction to Statistics II

Prerequisite: Mat 315.1(2).

Continuous distributions, gamma and beta densities, normal distribution sampling from a normal distribution and distribution functions of functions of sample values, estimation theory, maximum likelihood and least squares estimation, confidence intervals and prediction intervals, correlations and regression theory, statistical dependence and its analysis, hypothesis testing theory and tests of significance, curve fitting theory.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 314.0.

Classes 3 hrs. a week. 1 semester.

320.1(2) Linear Algebra I

Prerequisite: Mat 200.0.

This course presents the basic concepts and techniques of linear algebra, including Gaussian elimination, matrix algebra, vector spaces, orthogonality and inner products, together with various applications and computational methods.

Classes 3 hrs. plus recitation sessions 1 hr. a week. 1 semester.

321.1(2) Linear Algebra II

Prerequisite: Mat 320.1(2).

This course continues Mat 320.1(2) with further concepts and theory of linear algebra. Topics include determinants, linear transformations and their matrix representation, change of basis and similarity, eigenvalues and eigenvectors, canonical forms, with applications to linear differential equations and quadratic forms.

Classes 3 hrs. plus recitation sessions 1 hr. a week. 1 semester.

370.1(2) Problem-Solving Seminar

Prerequisite: permission of instructor.

A study will be made of advanced problem solving techniques and strategies. These will be applied to a wide variety of problems taken from several areas of mathematics.

Seminar 3 hrs. a week. 1 semester.

401.1(2) Sequences, Series and Improper Integrals

Prerequisite: Mat 311.1(2).

Infinite sequences and series, convergence tests, grouping and rearrangements, sequences and series of functions, pointwise and uniform convergence, power series, double sequences and series, differentiation under the integral sign, improper single and double integrals, functions defined by improper integrals, Fourier series and transforms.

Classes 3 hrs. a week. 1 semester.

402.1(2) Vector Calculus

Prerequisite: Mat 311.1(2) and 320.1(2).

Curves and surfaces, directional derivatives, gradient, divergence, curl, differentiable functions from R_n to R_m , Jacobians, change of variables in multiple integrals, inverse of transformations and the implicit function theorem, line and surface integrals, the integral theorems of Green, Gauss and Stokes.

Classes 3 hrs. a week. 1 semester.

405.1(2) Differential Equations I

Prerequisite: Mat 311.1(2) or permission of instructor.

First order differential equations, linear differential equations with constant coefficients, Laplace transforms, linear differential equations with variable coefficients (series solutions), applications.

Classes 3 hrs. a week. 1 semester.

406.1(2) Differential Equations II

Prerequisite: Mat 405.1(2) and Mat 320.1(2) or permission of instructor.

Systems of differential equations, boundary value problems, Sturm-Liouville problems, Fourier series, simple classical partial differential equations.

Classes 3 hrs. a week. 1 semester.

408.1(2) [CSC 408.1(2)] Advanced Numerical Analysis I

Prerequisite: Mat 309.1(2) or permission of instructor.

Theoretical and practical considerations of numerical analysis in the eigenvalue-eigenvector problem and in the solutions of ordinary differential equations.

Classes 3 hrs. a week. 1 semester.

409.1(2) [CSC 409.1(2)] Advanced Numerical Analysis II

Prerequisite: Mat 408.1(2).

Theoretical and practical considerations of numerical analysis in the solutions of ordinary and partial differential equations.

Classes 3 hrs. a week. 1 semester.

414.0 Statistical Simulation Theory

Prerequisite: Mat 316.1(2) or equivalent.

Students are introduced to statistical modelling, simulation languages, validation of model analysis, input and output data analysis, random number generation, Monte Carlo studies, elementary queuing theory, optimal performance theory and optimal selection theory. Emphasis is on statistical simulation theory rather than on program writing.

Classes 3 hrs. a week. 2 semesters.

415.1(2) Mathematical Statistics

Prerequisite: Mat 311.1(2) and a course in the Pascal computer programming language.

This course studies mathematical foundations of statistics, including both parametric and non-parametric inferences. Emphasis is placed on the properties of random variables and their distributions. The estimation of parameters by using sample statistics and tests of related hypotheses are included. Applications to computer science are studied.

Classes 3 hrs. a week. 1 semester.

416.1(2) Mathematical Probability

Prerequisite: Mat 415.1(2).

The aim of the course is to introduce students to mathematical (non-measure-theoretic) foundations of probability and elements of stochastic processes. The topics include conditional probabilities, conditional distributions, characteristic functions, limit theorems, Markov chains and Markov processes, birth and death processes and elementary queuing theory.

Classes 3 hrs. a week. 1 semester.

420.1(2) Abstract Algebra I

Prerequisite: Mat 321.1(2) or permission of instructor.

The study of algebraic structures, such as groups, rings, fields, posets, graphs, or universal algebras. The major emphasis will be on derivation of theory, with inclusion of applications and examples.

Classes 3 hrs. a week. 1 semester.

421.1(2) Abstract Algebra II

Prerequisite: Mat 420.1(2) or permission of instructor.

The further study of algebraic structures and their applications.

Classes 3 hrs. a week. 1 semester.

426.1(2) Introduction to Combinatorics

Prerequisite: Mat 311.1(2) or 320.1(2) or permission of instructor.

This course will introduce the student to various enumeration techniques and will include such topics as permutations and combinations, recurrence relations and generating functions. Various finite structures and their applications will also be studied.

Classes 3 hrs. a week. 1 semester.

427.1(2) [CSC 427.1(2)] Computational Methods in Graph Theory

Prerequisite: Mat 311.1(2) or 320.1(2) or permission of instructor.

This course discusses various graph theoretic algorithms and their application to different problems. Topics to be discussed will be chosen from the following: the connector problem, the shortest path problem, the Chinese Postman problem and Euler trails, matchings and their applications to the personnel and optimal assignment problems, coloring problems (with reference to timetabling) and flows in networks.

Classes 3 hrs. a week. 1 semester.

430.1(2) Set Theory

Prerequisite: Mat 311.1(2) or 320.1(2).

Basic set theory will be developed using one of the widely accepted axiom systems. Alternate systems will be discussed. The topics will include: set operations, cardinality, ordered sets, well ordering, cardinal and ordinal numbers, and the axiom of choice.

Classes 3 hrs. a week. 1 semester.

432.1(2) Elementary Topology

Prerequisite: Mat 311.1(2) and 321.1(2); Mat 430.1(2) is recommended.

This course will begin with a study of the topology of metric spaces. Topics will include bounded and totally bounded sets, completeness and fixed point theorems. Following this, abstract topological spaces will be studied.

Classes 3 hrs. a week. 1 semester.

436.1(2) Theory of Functions of a Complex Variable I

Prerequisite: Mat 310.1(2) and 311.1(2).

The complex plane. Elementary transformations and mappings, analytic functions, infinite series and uniform convergence. Differentiation and integration in the complex plane, residue. Harmonic functions, entire and meromorphic functions. Some principles of conformal mapping theory.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 435.0.

Classes 3 hrs. a week. 1 semester.

437.1(2) Theory of Functions of a Complex Variable II

Prerequisite: Mat 436.1(2).

A continuation of Mat 436.1(2). Further study of analytic functions and conformal mapping theory.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 435.0.

Classes 3 hrs. a week. 1 semester.

441.1(2) Real Analysis I

Prerequisite: Mat 310.1(2) and 311.1(2).

Sets, functions and relations, the real number field, the least upper bound axiom, countability, sequences and subsequences, accumulation points, metric spaces, continuous functions, compactness and connectedness, series of functions, uniform convergence, integration and differentiation of series of functions.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 440.0.

Classes 3 hrs. a week. 1 semester.

442.1(2) Real Analysis II

Prerequisite: Mat 441.1(2).

Further topics on metric spaces. Baire Category Theorem, Arzela-Accoli Theorem, the Stone-Weierstrass Theorem, Picard existence Theorem for differential equations, Lebesgue Measure, the Lebesgue Integral.

Note: No credit will be given for this course simultaneously with or subsequent to Mat 440.0.

Classes 3 hrs. a week. 1 semester.

445.0 Introduction to Operations Research

Prerequisite: Mat 311.1(2) and Mat 320.1(2).

The course will discuss mathematical models of real world problems together with a variety of recently developed mathematical programming techniques for their solution. Some theory will be presented but emphasis will be on the problem-solving approach and actual implementation of various problem-solving methods on the computer.

Classes 3 hrs. a week. 2 semesters.

Note: Students who have received credit for Mat 335.0 may not register in this course.

456.1(2) Introduction to Applied Mathematics I

Prerequisite: Mat 311.1(2) and 301.1(2) or permission of instructor.

Leibnitz rules for repeated derivatives of a product, differentiation under the sign of integration, beta and gamma functions, Hankel functions, Legendre polynomials, the convolution theorem and singularity functions for Laplace transforms, physical meaning and applications of curl, divergence and integral theorems.

Classes 3 hrs. a week. 1 semester.

457.1(2) Introduction to Applied Mathematics II

Prerequisite: Mat 311.1(2) and 301.1(2) or permission of instructor.

Orthogonal curvilinear coordinate systems and transformation of Laplacian to cylindrical and spherical polar coordinates. Method of residues for contour integration. Properties of orthogonal functions and eigenvalue expansions. Derivation of the Laplace equation, the wave equation and the heat equation. Methods of solution for various geometrical and boundary conditions.

Classes 3 hrs. a week. 1 semester.

490.1(2) to 499.1(2) Directed Study in Mathematics

Prerequisite: permission of instructor.

This course is intended to supplement or provide an alternative to the regular mathematics courses in order to meet the special needs and interests of students. The course provides an opportunity to study a particular subject in detail and requires from the student some measure of independence and initiative.

Computing Science (CSC)**101.1(2) Basic Programming and Computer Concepts**

Prerequisite: none.

An elementary introduction to computer programming intended for the student with no previous experience. Study of the BASIC computer language with practice in writing and running several programs. Discussions of the capabilities and applications of modern computers.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 125.1(2), CSC 226.1(2), and CSC 227.1(2).

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

226.1(2) Introduction to Computer Programming I

Prerequisite: Mat 111.1(2) or Nova Scotia Mat 441 (or equivalent).

This course teaches the fundamentals of algorithm development, stressing the technique of top-down design. Emphasis will be placed on writing programs that are highly modularized and that exhibit good programming style. Pascal or another suitable programming language will be presented; also included is a brief overview of the organization of a computer system.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

227.1(2) Introduction to Computer Programming II

Prerequisite: CSC 226.1(2).

This course stresses the continuing development of skills in algorithm design using the technique of top-down design. Emphasis will be placed on the writing of modular programs exhibiting good programming style. The fundamentals of algorithm analysis will be presented. These principles will be applied to writing larger computer programs in the language introduced in CSC 226.1(2). Advanced

aspects of this language will be treated, and a brief look at a second high-level programming language may be included. Other topics to be covered in the course are simple data structures, basic search and sorting techniques and recursion.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

308.1(2) [Mat 308.1(2)] Numerical Analysis I

See description under Mat 308.1(2) in the listings of mathematics courses.

309.1 [Mat 309.1(2)] Numerical Analysis II

See description under Mat 309.1(2) in the listings of mathematics courses.

327.1(2) Computer Organization and Assembly Language Programming

Prerequisite: CSC 226.1(2) and 227.1(2).

This course considers basic concepts of computer organization and assembly language programming. Topics covered include hardware components, integrated systems, data representation, assembly language programming, data manipulation and structures, and I/O programming. Assignments and labs will require the use of available computer equipment.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 326.0.

328.1(2) System Architecture

Prerequisite: CSC 327.1(2).

This course continues the coverage of CSC 327.1(2) and considers basic computer structures, addressing methods, the processing unit, microprogrammed control, I/O organization, computer arithmetic and main memory.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 326.0.

332.1(2) Survey of Programming Languages

Prerequisite: CSC 226.1 and 227.2.

Lectures provide an introduction to some of the key concepts underlying all programming languages, emphasizing general principles rather than details of any particular language. Topics will include history and evolution of programming languages; programming language design goals; the place of programming languages in the programming environment; virtual vs. actual machines; data representation, type checking and data sharing; control structures; mechanisms that support modularity; storage management; syntax, semantics and language translation; automata as language recognizers; programming language paradigms. The laboratory component of the course will provide enough hands-on experience to give students a minimal working knowledge of at least three of the following languages: C, C++, Modula-2, Ada, LISP, SCHEME, Prolog, Smalltalk.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

341.1(2) Data Structures and Software Engineering I

Prerequisite: CSC 227.1(2).

This course emphasizes the importance of data structures in program design and performance. Fundamentals of data structures and algorithm analysis and comparison will be presented. The course will survey a number of common classes of data structures, along with a variety of information processing algorithms based on these structures. The concept of data abstraction will be emphasized throughout and some attention will also be given to related concepts in software engineering.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: No credit will be given for this course simultaneously with or subsequent to CSC 325.0 or CSC 345.0.

342.1(2) Data Structures and Software Engineering II

Prerequisite: CSC 341.1(2).

This course introduces additional data structures, and further develops the concepts and methods introduced in CSC 341.1(2), with continued emphasis on algorithm analysis, abstraction, and software engineering.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: No credit will be given simultaneously with or subsequent to CSC 325.0 or CSC 345.0.

387.1(2) Scientific Uses of Microcomputers I

Prerequisite: Mat 200.0.

Course coverage includes an introduction to microcomputer architecture, acquisition of data and control of experiments, computerized communication and access to information and use of databases.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

388.1(2) Scientific Uses of Microcomputers II

Prerequisite: Mat 200.0.

Course coverage includes an introduction to microcomputer graphics, image analysis, computerized communication and access to information.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

408.1(2) [Mat 408.1(2)] Advanced Numerical Analysis I

See description under Mat 408.1(2) in the listing of mathematics courses.

409.1(2) [Mat 409.1(2)] Advanced Numerical Analysis II

See description under Mat 409.1(2) in the listing of mathematics courses.

421.1(2) Data Communication

Prerequisite: CSC 328.1(2).

This course presents a practical introduction to data communications. Topics covered include point-to-point communications, the telephone system, wide area networks, and local area networks. Subtopics include the UART, line analysis tools, synchronous protocols, bus networks, and ring networks.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

422.1(2) Microcomputer Architecture and Programming

Prerequisite: CSC 431.1.

Topics to be covered include: microprocessor technology and evolution, basic microcomputer organization, addressing modes and programming operations, programming and architecture of specific microcomputer systems.

424.1(2) Topics in Advanced Data Communications

Prerequisite: CSC 421.1(2) or permission of instructor.

An in-depth examination of current and future trends in data communications. Topics to be covered include: multimedia, ISDN, the DARPA (DOD) Protocol suite (including IP), gateway designs, and hypermedia.

426.1(2) Distributed Systems

Prerequisite: CSC 431.1(2) and 421.1(2).

This course examines the design, structure, and use of systems having interacting processors. Topics include concurrency and synchronization, architectural support, messages vs. remote procedure calls vs. shared memory, structural alternatives, coupling, naming and binding, verification and validation issues, load balancing and scheduling, appropriate applications.

427.1(2) Cross-listed as Mat 427.1(2)

431.1(2) An Introduction to Operating Systems I

Prerequisite: CSC 327.1(2) and 328.1(2).

The fundamental principles of modern operating system design are presented. Some of the specific topics which will be covered are: processor management, real and virtual storage organization and management, resource allocation, deadlock handling, concurrent processes, interprocess communication and synchronization, and protection problems.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 451.1(2).

432.1(2) Introduction to Operating Systems II

Prerequisite: CSC 431.1(2).

This course continues the survey of topics begun in CSC 431.1(2).

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 451.1(2).

434.1(2) Programming Language Translation

Prerequisite: CSC 431.1(2) and 462.1(2) or permission of instructor.

This course offers an in-depth study of the principles and design aspects of programming language translation. The major components of a compiler are discussed; lexical analysis, syntactic analysis, type checking, code generation, and optimization. Alternative parsing strategies are presented and compared with respect to space and time tradeoffs. Subtopics include ambiguity, data representation, recovery, symbol table design, binding, compiler generation tools, syntax directed editors, linkers, loaders, incremental compiling, and interpreters.

Classes 3 hrs. and lab 3 hrs. a week.

451.1(2) Topics in Theoretical Computing Science I

Prerequisite: permission of instructor.

According to the interests of students and instructor, this course surveys topics from theoretical computing science such as algorithm analysis, automata, abstract machine theory, complexity theory, data and algorithm abstraction, and mathematical linguistics.

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 471.1(2).

452.1(2) Topics in Theoretical Computing Science II

Prerequisite: permission of instructor.

This course continues the survey of topics begun in CSC 451.1(2).

Note: No credit will be given for this course simultaneously with or subsequent to credit given for CSC 472.1(2).

461.1(2) Database Systems

Prerequisite: CSC 341.1(2) and 342.1(2), or equivalent.

This course discusses database architecture, database management, relational algebra, relational calculus and other selected topics which may include distributed databases. A major project will be included in this course.

462.1(2) File Structures

Prerequisite: CSC 341.1(2) and 342.1(2).

This course continues the study of the organization of information on external storage devices within a computer system, begun in CSC 341.1(2) and CSC 342.1(2). The course will include an overview of schemes for compact storage of information, a fairly extensive survey of single-key access methods, with particular attention given to adaptive methods, and a survey of multi-key access methods. Also included will be some discussion of advanced sort and merge algorithms for external memory. A brief overview of several file-structure systems may also be presented.

463.1(2) Numerical Software Engineering I

Prerequisite: CSC 308.1(2), 309.1(2), 341.1(2) and 342.1(2).

This course will study the software development process in the area of numerical software from a software engineering perspective. Emphasis will be placed on software development and implementation aspects of a variety of numerical algorithms. The course will also examine a substantial number of software packages including some which are currently available in some of the large commercial software libraries, as well as a number of published software packages which have yet to appear in libraries and even a few experimental codes which have not yet appeared in the literature. The main project in the course will be the development of a large software package by the class working as a programming team in a selected area of numerical algorithms. Other projects to be undertaken during the course include the modification of one or more existing mathematical software packages and the critical analysis of several existing software packages. A number of assignments related to the software packages considered will also be given.

464.1(2) Numerical Software Engineering II

Prerequisite: CSC 463.1(2).

This course will continue the study of numerical software engineering begun in Numerical Software Engineering I.

471.1(2) Computer Graphics

Prerequisite: One credit each in Math at the 300 level and in one CSC course at the 300 level; and permission of the instructor.

An overview of the principles and methodologies of computer graphics, including the representation, manipulation, and display of two- and three-dimensional objects. Subtopics include characteristics of display devices (e.g., raster, vector); representing primitive objects (lines, curves, and surfaces) and composite objects; two- and three-dimensional transformations (translation, rotation, scaling); hidden lines and surfaces; shading and coloring; interactive graphics and the user interface; animation techniques.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

474.1(2) Information Retrieval

Prerequisite: CSC 341.1(2) and 342.1(2) or permission of instructor.

This course is designed to complement CSC 461.1(2) and considers manipulations on a bibliographic database. Topics to be covered include an introduction and basic definitions, inverted file structures, automatic indexing, prototype systems, retrieval and refinements and natural language processing.

482.1(2) Introduction to Artificial Intelligence

Prerequisite: CSC 341.1(2) and 342.1(2).

This course will include the following topics: (1) introduction to general concepts: natural intelligence, Turing's test, short history of A.I.; (2) problem solving: reduction and graphs, problem solvers, reasoning programs; (3) game playing: game trees and heuristic search (minimax, statistic evaluation, alpha-beta technique); (4) theorem proving: first order predicate calculus, theorem proving techniques (resolution, heuristic search strategies), solving problems with theorem provers; (5) natural language programming; (6) recognition: texture analysis, image enhancement and line detection, region perception and object perception; (7) introduction to logical languages and programming in Prolog.

491.1(2) to 499.1(2) Special Topics in Computing Science

Prerequisite: permission of instructor.

This course covers advanced topics in computing science chosen according to the interests of the students and instructor, and requires some measure of independence and initiative from the student.

Seminar 3 hrs. a week. 1 semester.

Modern Languages and Classics

Egyptian (Egp) - Classics (Cla) - Latin (Lat) - Greek (Gre) - French (Fre) - German (Ger) - Spanish (Spe) - Chinese (Chl) - Italian (Ita) - English As a Second Language (ESL)

Chairperson, Professor

A. J. Farrell

Classics

Associate Professors

G. T. Thomas, V. McB. Tobin

French

Associate Professors

P. Bernard, K. Filkoid

Assistant Professors

J. Cauville, A. Murphy,

G. Nahrebecky

L. Bistodeau

Lecturer

German

Assistant Professor

M. Heukæufer

Spanish

Professor

A. J. Farrell

Egyptian

Associate Professor

V. McB. Tobin

Department Policy - Modern Languages and Classics

The Department of Modern Languages and Classics offers major programs in Classics, French, German, and Spanish; language and literature courses in Greek, Latin, and ancient Egyptian; introductory language courses in Chinese, Italian, and Modern Greek; and English as a Second Language.

The program in Classics is comprised of courses of instruction in languages, literature, history, culture and civilization. One of the language courses may be used to satisfy the 3-b requirement of the Faculty of Arts while the other courses in Classics may be used to satisfy the 3-c requirement.

Recognizing the significance of the cultural links between the classical civilizations of Greece and Rome and their later European descendants, the department encourages its students to explore language as an evolving tool of communication and expression. Students majoring in Classics are strongly advised to study at least one of the classical languages; Latin is a valuable asset for students majoring in French, Spanish or German.

The student's eligibility to enrol in language and literature courses, and in specific sections of those courses, is determined by the department in light of the student's ability level in the language concerned, previous course work completed at university or elsewhere, and overall size of the course or section of a course.

The Department of Modern Languages and Classics supports a policy of regular class attendance by students. Frequent, unexplained absences from class will result in a lowering of the final grade in a manner to be determined by each faculty member.

Students who have received an advanced standing credit in one of the languages taught by the department (French, Spanish, German, Italian, Chinese, Latin, Greek and ancient Egyptian) cannot take and receive credit for first level language courses at Saint Mary's University. Therefore, they should register in second level or intermediate level language courses. Students enrolling in any French course below the 300 level will be required to take a placement test (unless they have previously taken a French course at this University at the 200 level). This test is administered on the first day of classes. Attendance at this first class is required.

a. Major concentrations

Students intending to major in Classics, French, German, or Spanish are required to consult the chairperson of the department for advice about, and approval of, their academic programs. Where appropriate, supporting courses offered by other departments will be suggested. The following general requirements apply:

Classics: A major in Classics consists of at least six courses, four of which must be at the 300 level or above. In addition, at least one university course is required in an ancient language, e.g., Greek, Latin, Egyptian, or Hebrew.

The following are recommended as core courses for the major:

Cla 201.1(.2)	Mythology of Greece and Rome, I
Cla 202.1(.2)	Mythology of Greece and Rome, II
Cla 203.1(.2)	Art in Greece and the Ancient Near East
Cla 204.2(.1)	Art in Rome and Christian Europe to the 14th Century

Cla 301.0	Classics in Translation
Cla 303.0	History of Greece
Cla 304.0	History of Rome
Cla 306.0	The Epic
Cla 310.0	History of Israel
Cla 316.0	History of Egypt
Cla 352.1(.2)	Women in Antiquity
Cla 405.0	Advanced Reading and Tutorial

French: A major in French normally consists of at least six university credits in French beyond Fre 200.0. Both Fre 300.0 and Fre 301.0 are compulsory. At least two of the six credits must be made up of courses at the 400 level; one of these 400 level credits must be chosen from among the following group of courses which centres on the literature of the French-speaking world: 405.1(.2), 412.1(.2), 414.0, 415.0, 419.0, 420.0, 424.0, 426.1, 427.2, 428.1(.2), and 429.1(.2).

Fre 100.0, 110.0, and 200.0 cannot be counted for the French major. Potential French majors with a strong background in French are urged to begin their university French studies with courses beyond French 200.0. Students interested in preparing themselves for teaching French are strongly advised to seek advice on course selection and career opportunities from the Chairperson early in their studies at Saint Mary's.

Major in Spanish

A major in this language is worked out in consultation with the professor concerned, and is predicated upon the Faculty of Arts regulations governing major programs.

Major in German

A major in German Studies consists of at least six courses. Four compulsory courses in German language/literature will include Ger 100.0, 200.0, and two courses at the 300 or 400 level. The remaining two courses may be taken in German language/literature, or may be courses given in English and taken from other departments. Those courses will stress German history, cultural roots, and civilization, and can only be taken after consultation with the Co-ordinator of German Studies or the Chairperson of Modern Languages and Classics.

b. French language courses

In an effort to provide the students with the language course which best suits their needs, a placement test is administered during the first day of class in Fre 110.0, 200.0, and 250.0. Fre 100.0 is primarily intended for students who have never taken French, although it is also available to students whose placement test scores indicate that they would greatly benefit from the course. Students who have already taken a university course in French elsewhere are asked to consult the department before registering for a course in French.

c. French courses on the 300 and 400 level

These courses are normally taught in French. 400 level courses are offered by rotation.

d. Language skill courses in French

The following courses are especially recommended to students interested in acquiring conversational ability or special skills in French:

Fre 230.1(.2)	Fre 330.0
Fre 231.1(.2)	Fre 400.1(.2)
Fre 301.0	Fre 421.0
Fre 321.1(.2)	Fre 430.0
Fre 325.1(.2)	

Students are advised that each professor has the right to institute a lab component as part of the normal course requirements. These labs may involve practice sessions in the Language Learning Centre and/or time spent in conversation with a designated language monitor.

e. Minor in Linguistics

The minor in linguistics is described in this section of the Academic Calendar under the heading of "Linguistics".

f. Certificate of Proficiency in French for Non-Majors

The Department of Modern Languages and Classics offers a program in French designed to build the students' ability to communicate effectively in the language, both orally and in writing,

and directed to the attainment of the Certificate of Proficiency in French. The certificate is granted by the University in recognition that the student has attained a level of comprehension and fluency sufficient to understand most conversation between native speakers and to sustain conversation on most topics.

The program consists of four courses specifically chosen for their direct applicability to this goal. The courses are normally four of the following: Fre 200.0, 230.1(.2), 231.1(.2), 250.0, 301.0, 320.1/321.2, 325.1(.2), and Fre 400.1(.2). Students qualified to enter the program at a higher level will take Fre 250.0, 301.0, two of 320.1(.2), 321.1(.2), 325.1(.2), 400.1(.2), and either Fre 421.0 or 430.0. Students who anticipate making use of their skills in French in the commercial world would be well advised to substitute Fre 330.0 for 320.1(.2) and 321.1(.2) in the sequences detailed above. In special cases, however, exceptions may be made regarding both the number and types of courses taken. After successfully completing the program of study approved by the department, the student will take a comprehensive oral and written examination.

The Certificate of Proficiency in French will be awarded by the University through the office of the Registrar. The student's transcript will bear a separate entry showing that the certificate has been awarded and recording the grade attained in the comprehensive examination.

Year Abroad at the Université Catholique d'Angers, France

The department offers a year-abroad program of study at the Université Catholique d'Angers, France. It consists of a month-long intensive French language session in September, followed by two semesters of course work (mid-October through mid-June) in language and in subjects chosen from among a variety of courses including phonetics, linguistics, French civilization, history and literature, music and art history, etc. Normally students who successfully complete the September pre-university session and the two semesters of course work receive five university credits at Saint Mary's. Lodging is arranged with local families in Angers, meals are available at the university restaurant, and a full program of cultural and recreational activities is offered.

A one month program is offered in July, designed specifically for intensive work in spoken and written French and benefitting from the presence of French language monitors selected by the Université d'Angers.

The approval of the Department of Modern Languages and Classics, of the Dean of Arts, and of the Dean of Faculty (if other than Arts) is required for students to participate in this study-abroad program. To be eligible to participate in this program, and in other study programs at other French universities or at other francophone universities, students must have completed at least 1.0 credit in French at Saint Mary's University and must have obtained a minimum grade of B in French at Saint Mary's at the 200 level or above. With the approval of the Department of Modern Languages and Classics, a study year abroad at another French university or a French university in Quebec may be substituted for the one in Angers.

Latin (Lat)

100.0 Introduction to Latin

A course in the essentials of Latin for students who have not completed matriculation Latin.

Text: Goldman, Nyenhuis, *Latin Via Ovid*.

Classes 3 hrs. a week. 2 semesters.

Note: Students who received an advanced standing credit in Latin are not eligible for enrolment in this course.

201.0 Intermediate Latin

Prerequisite: Lat 100.0 or equivalent.

This course aims to enhance the development of good techniques of Latin-English translation and of rendering English into idiomatic Classical Latin. A variety of Latin authors and the continued study of Latin grammar will be utilized to achieve those objectives.

Classes 3 hrs. a week. 2 semesters.

302.0 Latin Prose Writers

Prerequisite: permission of instructor or Lat 201.0.

Students will be asked to translate and comment upon selections from different periods of Latin prose, e.g., Cicero's Letters, Apuleius' *Metamorphoses*, Latin Vulgate. Also continued study of Latin grammar.

Classes 3 hrs. a week. 2 semesters.

404.0 Advanced Reading

Prerequisite: permission of instructor.

A tutorial course, the content of which may be varied according to the needs and interests of the student. Directed readings and research.

Greek (Gre)

100.0 Introductory Ancient Greek

An introductory course covering the major grammatical points of the ancient Greek language. This course will be followed in succeeding years by more advanced courses in the reading and interpretation of classical authors.

Classes 3 hrs. a week. 2 semesters.

Note: Students who received an advanced standing credit in ancient Greek are not eligible for enrolment in this course.

200.0 Second Year Ancient Greek

Prerequisite: Gre 100.0.

An application of the major grammatical points of the ancient Greek language through the reading of selected works of classical authors:

- i. Homer, *Iliad*
- ii. Xenophon, *Anabasis*
- iii. the dramatists
- iv. lyric poetry

Classes 3 hrs. a week. 2 semesters.

Ancient Egyptian (Egp)

300.0 Classical Egyptian

Prerequisite: none, but students are advised to consult with instructor before registering.

An intensive study of the language and grammar of Middle Egyptian, the classical language of ancient Egypt. Students will examine the grammatical possibilities of the language and receive intensive exercise in the decipherment and interpretation of the hieroglyphs.

Classes 3 hrs. a week. 2 semesters.

Note: Students who have an advanced standing credit in Ancient Egyptian are not eligible for enrolment in this course.

400.0 Readings in Middle Egyptian

Prerequisite: Egy 300.0.

Students will read, analyze and interpret selected texts from Middle Egyptian, e.g., Coffin Texts, *Sinuhe*, Book of the Dead, *The Dispute Between a Man and his Ba*, *The Eloquent Peasant*, etc.

Classes 3 hrs. a week. 2 semesters.

450.0 Readings in Old and Late Egyptian

Prerequisite: Egy 300.0.

Selected readings from the Pyramid Texts, the Amarna Texts, Horus and Seth, the Mes Inscription, the Deir el-Medineh ostraca, etc. Students will be introduced to the analytic forms of the Late Egyptian language as opposed to the synthetic forms of Middle Egyptian.

Classical Literature and Civilization (Cla)

200.0 The Classical Civilizations of Greece and Rome

A general introduction to the civilizations of ancient Greece and Rome with particular regard to history, political organization and cultural contribution to modern western society.

Classes 3 hrs. a week. 2 semesters.

201.1(.2) The Mythology of Greece and Rome, I

The course deals with the nature of mythology and the subject matter of the principal myths of Greece and Rome, e.g., the stories of Oedipus and his family, the different tales of the underworld, the Greek and Roman gods. Where possible the students are also encouraged to look at later versions and adaptations of the ancient tales.

Classes 3 hrs. a week. 1 semester.

202.1(2) The Mythology of Greece and Rome, II

The course deals with the nature of mythology and the subject matter of some of the principal myths of Greece and Rome; e.g., the myth of Theseus and the Labyrinth, the labors of Hercules, the wanderings of Aeneas.

Classes 3 hrs. a week. 1 semester.

203.1(2) Art in Greece and the Ancient Near East

Aided by slides, films and reproductions of artistic pieces in addition to lectures and readings, the class will examine the origins, developments and particular interests of artists in Mesopotamia, Egypt and Greece to the end of the Hellenistic world.

Classes 3 hrs. a week. 1 semester.

204.1(2) Art in Rome and Christian Europe to the 14th Century

This course takes up the development of ancient art after the Hellenistic Greek world. It will show by readings, slides, films, tapes and lectures how earlier themes and techniques in art were carried on and modified by the Romans and by the Christians whose art grew out of a pagan background.

Classes 3 hrs. a week. 1 semester.

306.0 The Epic

(Egl 306.0)

Prerequisite: Egl 201.1/202.2 or equivalent.

A study of various major national epics with a view towards understanding the works themselves, the cultures they represent, and the characteristics of the oral and written epic as art forms. Central to the course will be a detailed analysis of the Iliad, Odyssey, and Aeneid.

Classes 3 hrs. a week. 2 semesters.

352.1(2) Women in Antiquity I

[WMS 352.1(2)]

Medea's passion, Aspasia's intellect, and the famous Cleopatra's tragic brilliance are all present in the women of antiquity. This course will examine the ways in which women of different social classes lived in the ancient Near East and Greece. The development of women's roles and relationships between men and women will be considered in the context of history, religion, myth, and literature.

Classes 3 hrs. a week. 1 semester.

353.1(2) Women in Antiquity II

[WMS 353.1(2)]

Roman women were doctors, artists, large landowners, beloved wives and mothers. Some, like Dido and Lesbia, were subject matter for famous poets. In this course we will also examine how the development of Christianity in the Roman Empire both softened some abuses against women and aggravated others. From archaeology, literature, and religion, this course examines women's lives from Hellenistic times until the end of the Roman Empire.

401.1(2) Directed Study, I

A half credit course open to students who wish to pursue a special topic or topics in Classics through tutorials, independent study, and research. The availability of this course depends upon the agreement of a particular faculty member who is prepared to direct the tutorial and study program.

402.1(2) Directed Study, II

A half credit course open to students who wish to pursue a special topic or topics in Classics through tutorials, independent study, and research. The availability of this course depends upon the agreement of a particular faculty member who is prepared to direct the tutorial and study program.

Ancient History (Cla)**303.0 History of Greece**

(His 350.0)

Prerequisite: a university course in classics or history or the permission of instructor.

An intensive study of ancient Greek history from the time of the early Cycladic and Minoan societies to the end of the classical polis about 400 B.C. Students will consider the development of religion, art, literature, and something of social history, as well as study the development of Athenian democratic society. This course may also be used as a history credit.

Classes 3 hrs. a week. 2 semesters.

304.0 History of Rome

(His 351.0)

Prerequisite: a university course in classics or history or the permission of instructor.

Ancient Roman and Italian history from the early Palaeolithic and Neolithic finds known to archaeology, a study of the Etruscans, the Republic in glory and decline, and the advent of the Principate under Augustus. Subject matter and emphasis can vary in different years. This course may also be used as a history credit.

Classes 3 hrs. a week. 2 semesters.

310.0 History of Israel

(Rel 309.0)

A study of the history of the ancient Hebrew kingdoms of Israel and Judah from the earliest settlements in Palestine to the fall of Jerusalem in 70 A.D.

Classes 3 hrs. a week. 2 semesters.

316.0 History of Egypt

A detailed study of the history and culture of ancient Egypt from the pre-dynastic period (c. 3300 B.C.E.) until the Greek conquest (332 B.C.E.). As well as political history, the course will consider mythology and religion, art and architecture, and selections from the literature of Egypt (e.g., Pyramid Texts, Coffin Texts, Egyptian epic and fiction).

Classes 3 hrs. a week. 2 semesters.

Classics: Guided Study

405.0 Advanced Reading and Tutorial

Prerequisite: permission of instructor.

A course based on directed readings and research. The contents of the course will be determined by the specific interests of the professor and the students involved. Students will have the opportunity to pursue in depth their individual interests in the field of Classics, and will meet regularly with a member of the department to discuss their research. To register in this course students must demonstrate a satisfactory background in Classics or the Ancient World of the Near East and an ability to do independent research.

Classes: tutorial 3 hrs. a week. 2 semesters.

Modern Languages - French (Fre)**100.0 Introduction to the French Language**

A course for students beginning the study of French. The basic structures of the language will be studied, with special emphasis on spoken French. Students completing this course cannot receive credit for Fre 110.0. Students who have received an advanced standing credit in French are not eligible for enrolment in this course.

Classes 3 hrs. a week plus lab. 2 semesters.

110.0 Basic French

Prerequisite: Placement Test.

An introductory course for students who have had some formal training in French but not enough to justify their admission to French 200.0 as demonstrated on the placement test. The aim of the course is to enable the students to progress more rapidly than would be the case if they took Fre 100.0. Students who received an advanced standing credit in French are not eligible for enrolment in this course.

Classes 3 hrs. a week plus lab. 2 semesters.

200.0 Intermediate French, I

Prerequisite: Placement Test.

A student enrolling in this course must have an advanced standing credit in French or already possess an equivalent knowledge of French, as demonstrated on the placement test. A general language course for non-majors interested in the continued development of their listening, speaking, reading and writing skills. Emphasis is placed on the student's ability to function orally in realistic contexts. Taught in French. This course cannot be counted for the French major.

Classes 3 hrs. a week plus lab and/or tutorials, as needed. 2 semesters.

230.1(2) French Communication Skills

Prerequisite: Fre 200.0 or equivalent.

This course builds on language skills acquired in other French courses to enhance the student's ability to communicate in French. Oral activities predominate during class time, with written assignments consisting of prepared presentations and dialogues to be corrected, improved, and revised until appropriate for use in class.

Classes 3 hrs. a week. 1 semester.

231.1(2) French Reading and Writing Skills

Prerequisite: Fre 200.0 or equivalent.

This course focuses on improving students' ability to understand and produce written texts. It is designed to complement more general French courses by concentrating on the enhancement of reading and writing abilities. The course helps students acquire greater ease of comprehension and expression through study of contemporary texts and application of specific writing techniques.

Classes 3 hrs. a week. 1 semester.

250.0 Intermediate French, II

Prerequisite: Placement Test or Fre 200.0 (or its equivalent) with a minimum grade of C.

Oral and written French, including composition, translation, conversation and a review of grammar based on contemporary texts. This is an intensive course designed for students with a strong background in French. Normal requirement and starting point for all majors. Taught in French.

Classes 3 hrs. a week plus lab. 2 semesters.

300.0 Introduction to Literature Written in French

Prerequisite: Fre 250.0 or permission of department.

A selection of modern writing in French drawn from poetry, fables, short stories, drama and novels. The purpose of this course is to teach students to read literary language, to grasp structural relationships, and to interact with various works in terms of theme, character portrayal and rhetorical devices.

Note: This course is required of all students who intend to major or honors in French.

Classes 3 hrs. a week. 2 semesters.

301.0 Composition and Conversation

Prerequisite: Fre 250.0 or permission of department.

A practical course intended to continue the development of the student's ability to speak and write French. Contemporary written texts will provide a basis for discussion and writing on cultural and literary topics. Grammatical points will be detailed as necessary through translation and other exercises. This course is compulsory for all students who intend to major in French.

Classes 3 hrs. a week plus lab. 2 semesters.

305.1(2) Acadian Language and Culture

Prerequisite: Fre 250.0 or equivalent.

This course relates the current linguistic situation in the Acadian communities of the Atlantic Provinces to the social and historical situation which has influenced the development of the French language in these areas. The course has a strong practical component intended to help students identify the specific structures of this variety of French. Authentic recordings of Acadian speakers are analyzed, as well as films and literary texts. A general objective of the course is to enhance students' knowledge of the socio-cultural background of the Acadian speech communities.

Classes 3 hrs. a week. 1 semester.

320.1(2) French Phonetics

Prerequisite: Fre 250.0 or equivalent, or permission of instructor.

An introduction to articulatory phonetics with application to French. Standard (International) French will be used as a reference point. The objective of the course is to increase pronunciation and speaking skills.

Classes 3 hrs. a week plus lab. 1 semester.

321.1(2) Writing in French

Prerequisite: Fre 250.0 or equivalent, or permission of instructor.

A course for students beyond the intermediate level who wish to improve their command of French by means of vocabulary enrichment, reading of non-literary texts and a variety of writing activities. Knowledge of intermediate level grammar is assumed.

Classes 3 hrs. a week. 1 semester.

325.1(2) French Speech Strategies: Managing Conversation

Prerequisite: Fre 250.0 or permission of instructor.

Classroom practice in developing strategies for use in conversations. By means of application activities, students learn how to initiate, maintain and close conversations, how to communicate and respond to needs, feelings, opinions, plans, etc. Recommended for students interested in perfecting their communicative skills in spoken French.

Classes 3 hrs. a week. 1 semester.

330.0 French for Business

Prerequisite: permission of instructor.

A course designed to familiarize students with the business vocabulary and commercial correspondence of French-speaking countries.

Classes 3 hrs. a week. 2 semesters.

340.1(2) Linguistic Study of French

Prerequisite: Fre 250.0 or permission of department.

The principles of linguistic analysis are introduced through a study of the French language from a broad range of approaches. While becoming aware of the specific structure of French, the student will gain general insight into how a language functions. The course also examines the relationship between language patterns and social and geographic diversity, as illustrated by the French Canadian linguistic situation. The course will be given in English, but presupposes competence in French.

Classes 3 hrs. a week. 1 semester.

400.1(2) French Speech Strategies: Perfecting Oral Skills

Prerequisite: Fre 325.1(2) or permission of instructor.

An examination of speech acts and discursive features of language-use found in real situations. Students practice how to structure and manage conversations at an advanced level in order to attain a higher level of oral proficiency. Students will participate in demonstrations, simulations, role-playing and problem-solving activities. Of particular interest to current or prospective teachers of French.

Classes 3 hrs. a week. 1 semester.

405.1(2) Acadian Literature and Society

Prerequisite: French credit on 300 level or permission of instructor.

This course traces the evolution of Acadian society through a study of literary genres including novels, short stories, theatre, poetry, chronicles, folklore, oral tradition, as well as artistic modes of expression other than literature. A variety of texts and visual material is used to present the socio-historical background and the contemporary cultural situation.

Classes 3 hrs. a week plus lab. 1 semester.

412.1(2) Literature and Society of French Canada

Prerequisite: Fre 300.0 or Fre 301.0 or permission of department.

This course provides an overview of French Canadian literature, through a study of its major works. Various aspects of the cultural background are presented, including language, religion, music, film and art. The course also examines the historical evolution leading to the particular situation of present-day Quebec and that of French-speaking minority groups throughout Canada, through the analysis of literary works related to these themes.

Classes 3 hrs. a week. 1 semester.

414.0 Evolution of the French Novel

Prerequisite: Fre 300.0 or permission of instructor.

An examination of the principal stages in the development of the French novel. Summer reading is strongly advised.

Classes 3 hrs. a week. 2 semesters.

415.0 The French Theatre

Prerequisite: Fre 300.0 or permission of instructor.

A study of some of the major works of French dramatic literature.

Classes 3 hrs. a week. 2 semesters.

419.0 French Canadian Novel

Prerequisite: Fre 300.0 or permission of instructor.

A study of the origins until 1930. Comparative development of the Canadian novel and popular tradition. The course is also designed to acquaint students with the ideas of writers from 1930 to the present day.

Classes 3 hrs. a week. 2 semesters.

420.0 20th Century Novel

Prerequisite: Fre 300.0 or permission of instructor.

In the 20th century the novel has become the most prominent, if not the most significant, literary genre. What is the secret of its appeal for the modern sensitivity? The novels to be studied in this course, reflecting as they do both the depth and the diversity of the form, may provide an answer to this question.

Classes 3 hrs. a week. 2 semesters.

421.0 Comparison of English and French Stylistics

Prerequisite: Fre 301.0 or permission of instructor.

A course designed to increase the student's knowledge of French beyond vocabulary and grammar and to enable them to grasp the similarities and divergences between French and English. The course involves practice in French/English translation and emphasizes the theoretical aspects of French and English stylistics which aid in establishing a method for translation.

Classes 3 hrs. a week. 2 semesters.

423.0 Independent Study

Prerequisite: permission of instructor.

A tutorial course open to students who wish to study a particular subject or author largely through independent reading and research. Registration to this course is made after consultation with a member of the department who will organize the program of studies.

424.0 Special Author

Prerequisite: permission of instructor.

A tutorial course open to students who wish to study a particular author largely through independent reading and research. Registration to this course is made after consultation with a member of the department who will organize the program of studies.

425.0 Women's Literature In France and French Canada (WMS 425.0)

Prerequisite: Fre 300.0 (for French majors); or Egl 202.1(.2) or another literature course and proficiency in French (for WMS majors and other students).

430.0 Advanced French Grammar

Prerequisite: a 300 level course [Fre 321.1(.2) is recommended] or permission of instructor.

A systematic study of French grammar, involving both theory and application. Of particular interest to teachers of French.

Classes 3 hrs. a week. 2 semesters.

431.1(.2) Directed Study, I

A half credit course open to students who wish to study a special author or subject through tutorials, independent study and research. The availability of this course depends upon the agreement of a particular faculty member who is prepared to direct the readings and study.

432.1(.2) Directed Study, II

A half credit course open to students who wish to study a special author or subject through tutorials, independent study and research. The availability of this course depends upon the agreement of a particular faculty member who is prepared to direct the readings and study.

440.1(.2) Canadian French: Sociolinguistic Perspectives

Prerequisite: a 300 level French course or permission of instructor.

This course will examine the major features which distinguish Canadian French from European French, as well as the characteristics of the different varieties of French spoken in Canada, in particular Acadian and Quebecois French. The relationship between language and society will be studied both as a source of

linguistic change and as a determining factor in current speech patterns. Authentic recorded speech samples will be used to illustrate the various aspects studied and will also serve to familiarize students with the French language as spoken in Canada.

Classes 3 hrs. a week. 1 semester.

Modern Languages - German (Ger)**100.0 Introduction to the German Language**

An introductory language course for those beginning the study of German. Basic linguistic structures will be studied with particular emphasis on the oral aspects.

Classes 3 hrs. a week plus 1 hr. language lab a week. 2 semesters.

Note: Students who received an advanced standing credit in German are not eligible for enrolment in this course.

200.0 Intermediate German

Prerequisite: Ger 100.0 (or equivalent) with a minimum grade of C.

A continuation of elementary German, with emphasis on grammar, conversation, and reading.

Classes 3 hrs. a week plus 1 hr. language lab a week. 2 semesters.

302.0 Advanced Oral and Written German

Prerequisite: Ger 200.0 or permission of instructor.

This course offers an opportunity to build upon and refine students' ability to comprehend and to communicate effectively in German. Slides, tapes and videos will be used to supplement course materials.

Classes 3 hrs. and lab 1 hr. a week. 2 semesters.

304.0 German Culture and Civilization

Readings, lectures, slide showings and films on the culture and civilization of Germany. The course will move from the early tribal periods to the present, looking at political and social history, literature and art, philosophy and science. This course is offered in English.

Note: This course fulfils the Arts humanities 3-c requirement but does not fulfil the 3-b requirement.

Classes 3 hrs. a week. 2 semesters.

305.0 Introduction to German Literature

Prerequisite: Ger 200.0 or permission of instructor.

A chronological survey of the major periods of German literature from the Baroque Age to modern times. The course will provide the student with an introduction into literary analysis and interpretation and at the same time expand the student's knowledge of the German language.

Classes 3 hrs. a week. 2 semesters.

310.0 Modern German Literature

Prerequisite: Ger 200.0 or permission of instructor.

A study of trends in modern German literature. Poetry, plays and short stories will be read and analyzed.

Classes 3 hrs. a week. 2 semesters.

400.0 German Contemporary Literature

Prerequisite: Ger 200.0 or permission of instructor.

A study of significant prose and dramatic works in German literature from 1945 to the present.

Classes 3 hrs. a week. 2 semesters.

405.0 Independent Study

Prerequisite: permission of instructor.

This course is intended for advanced students who have a good working knowledge of German, a special interest in German literature and who want to study a particular author through directed, independent readings.

Classes 2 hrs. a week. 2 semesters.

Modern Languages - Spanish (Spa)**100.0 Introduction to the Spanish Language**

Designed to offer a firm initial competency in speaking and writing Spanish. This course requires regular attendance and a willingness to participate.

Classes 3 hrs. a week and lab 3 1/2 hrs. a week. 2 semesters.

Note: Students who have an advanced standing credit in Spanish are not eligible for enrolment in this course.

200.0 Intermediate Spanish

Prerequisite: Spa 100.0 (or equivalent) with a minimum grade of C.

A continuation of elementary Spanish, with emphasis on comprehension, conversation, reading and writing.

Classes 3 hrs. a week plus language lab. 2 semesters.

202.1(.2) Aspects of Latin American Culture and Civilization

This course provides an introduction to selected aspects of cultures and civilizations of this complex and fascinating world area. It focuses on the legacy of native, pre-Columbian civilizations and their Spanish conquerors, particularly as expressed in the literatures of Argentina, Mexico, and Peru. Readings, class discussions, and student participation in English. This course does not satisfy the Arts requirement 3-b, but does satisfy the Arts requirement 3-c as a humanities credit.

Classes 3 hrs. a week. 1 semester.

203.1(.2) Spanish Culture and Civilization

This course examines selected aspects of Spanish civilization and cultural activity from the earliest times to the present. Drawing its materials mainly from Spanish literature, but considering as well achievements in the visual arts, music, and architecture, the course offers a survey of the unique contributions of Spain to Western culture. Readings, class discussions, and student participation in English. This course does not satisfy the Arts requirement 3-b but does satisfy Arts requirement 3-c as a humanities credit.

Classes 3 hrs. a week. 2 semesters.

302.0 Advanced Oral and Written Spanish

Prerequisite: a sound knowledge of Spanish grammar.

This course offers an opportunity to build upon and refine the student's ability to comprehend and to communicate effectively in Spanish. A variety of aural sources and written texts will be used.

Classes 3 hrs. a week. 2 semesters.

305.0 Culture and Society of the Dominican Republic

Prerequisite: Spa 200.0 or equivalent (with a minimum grade of B) and permission of the instructor.

This course, of six weeks' duration, takes place in Santo Domingo, the Dominican Republic (approximate dates: last week of April until the end of May). Lectures, readings, and field work will be conducted in Spanish. Under the supervision of Saint Mary's University faculty and under the direction of Dominican professors as well as professionals working in the respective areas of interest, students will examine four broad aspects of culture and society in the Dominican Republic: Dominican society, politics, and economics; women in development; art and popular culture; and the popular church movement. A final research paper will be submitted at the conclusion of the course.

Classes: 50 hours. Seminar: 15 hours.

402.0 Contemporary Latin-American Literature

Prerequisite: a 300 level course in Spanish or equivalent. Open to major students only.

The course examines a selection of the principal literary movements and works in 19th and 20th century Spanish American literature. In the first term, attention is directed to Romanticism, gauchesque literature, and the cultivation of the short story and of the novel. The beginnings of Modernism and the poetic activity of the 20th century are explored during the second term.

Classes 3 hrs. a week. 2 semesters

403.1(.2) Pre-Cervantine Spanish Prose

Prerequisite: full-credit at the 300 level in Spanish or equivalent.

A study of representative Spanish prose works from the Middle Ages through 1600, as a background for the major literary innovations of Miguel de Cervantes.

404.1(.2) Cervantes

Prerequisite: a full credit at the 300 level in Spanish or equivalent.

A study of a selection of the prose works of Miguel de Cervantes, with emphasis on *Don Quixote*, the first modern novel.

Classes 3 hrs. a week. 1 semester.

405.0 20th Century Spanish Literature

Prerequisite: permission of instructor.

An examination of the poetry, drama, and novel of 20th century Spain.

Texts: Readings from Lorca, Lafont, Cela, Arrabal and other writers.

Classes 3 hrs. a week. 2 semesters.

423.1(.2) Independent Study

Prerequisite: permission of instructor.

A tutorial course open to students who wish to study a particular topic, subject, or author largely through independent reading and research. Registration in the course is made after consultation with the appropriate member of the department, who will organize the program of studies.

Tutorial 3 hrs. a week. 1 semester.

424.1(.2) Independent Study

Prerequisite: permission of instructor.

A tutorial course open to students who wish to study a particular topic, subject, or author largely through independent reading and research. Registration in the course is made after consultation with the appropriate member of the department, who will organize the program of studies.

Tutorial 3 hrs. a week. 1 semester.

Modern Languages - Chinese (Chi)

100.0 Introductory Modern Chinese

An introduction to spoken and written modern Chinese (Mandarin). Conversational drill and comprehension exercises in classroom and laboratory provide practice in pronunciation and in the use of the basic patterns of speech. The Chinese ideographs are introduced and studied in combinations. Reading progresses from prepared materials to selections from contemporary writings, including the newspaper.

Classes 3 hrs. a week. 2 semesters.

Note: Students who have received an advanced standing credit in Chinese are not eligible for enrolment in this course.

200.0 Intermediate Modern Chinese

Prerequisite: Chi 100.0.

A continuation of Chi 100.0, this course is intended to develop proficiency in both oral and written Chinese with emphasis on comprehension. Textbooks, newspapers, magazines, and modern short stories will be extensively used, especially in the second semester, to help students acquire the ability to read and write. The abbreviated forms used in the People's Republic of China will also be introduced.

Classes 3 hrs. a week. 2 semesters.

Modern Languages - Greek (Gre)

101.0 Modern Greek

An introductory level class for those who have little or no background in the language. The class will aim at enabling the student to understand and communicate in Modern Greek at a basic level. Attention will be given to both oral and written work. Films, tapes, slides, magazines and newspapers will be used to enhance student interest.

Classes 3 hrs. a week. 1 semester.

201.0 Modern Greek

Prerequisite: Gre 101.0.

An intermediate level class for those students who have passed the introductory level class in Modern Greek or its equivalent, or who have a basic knowledge of the language. The purpose of the class will be to develop a sound working knowledge of Modern Greek, both oral and written, including mastery of the basic vocabulary and the major grammatical elements.

Classes 3 hrs. a week. 2 semesters.

Modern Languages - English as a Second Language (ESL)

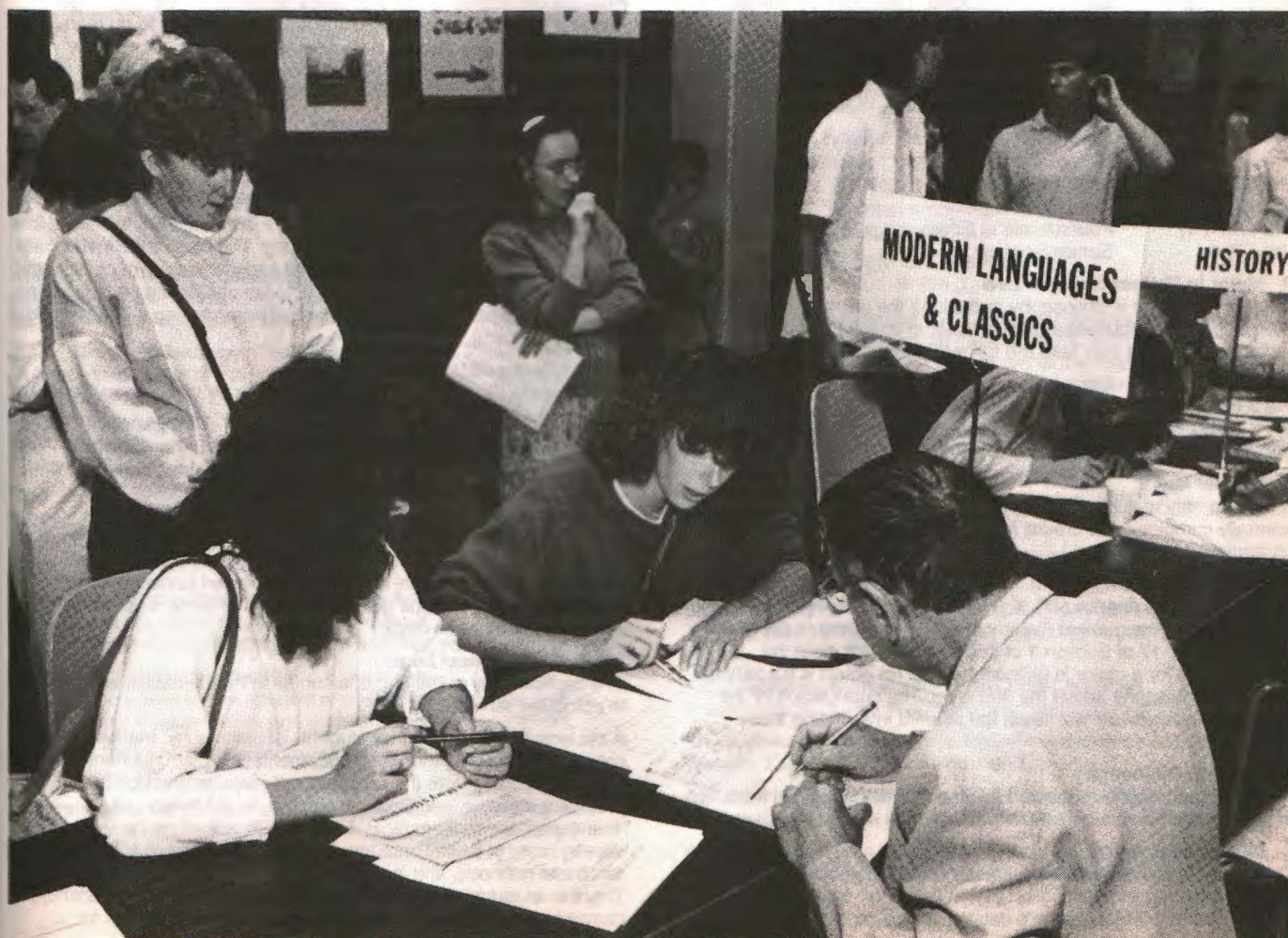
100.0 English as a Second Language

Prerequisite: native language other than English; recommendation of the English, Modern Languages and Classics, or other academic department; and permission of instructor.

The aim of the course is to help students to function effectively in university by increasing competence in reading and listening comprehension, fluency in speech, and accuracy in writing.

Classes 3 hrs. a week-2 semesters.

Note: Before registering for this course, students must pass the Test of English Language Competence. Please see academic regulation 23 which pertains to this requirement.



Philosophy (Phi)

Chairperson, Associate Professor	S. Wein
Professor	A. P. Monahan
Associate Professors	W. Grennan, P. March R. C. Marshall
Assistant Professors	R. N. Ansell, J. Blair, S. Crooks

General Information

The Department of Philosophy offers a full range of undergraduate courses. Students may obtain an honors degree in philosophy, be a philosophy major, or do a minor in philosophy. Students should consult with the undergraduate advisor to arrange a selection of courses that fits their individual interests and meets department requirements. In addition, the department offers a Pre-Law option and a Master's degree.

Philosophy 200.0 is the only philosophy course that satisfies regulation 3-b of the Faculty of Arts' degree requirements.

1. Major in Philosophy

Students majoring in philosophy must complete 6.0 credits, at least 4.0 of which must be above the 200 level. At least 3.0 credits must be taken from the following list of core courses.

Phi 302.0	Ethics
Phi 326.0	Philosophy of Mind
Phi 310.0	Political Philosophy
Phi 314.0	Intermediate Logic
Phi 315.0	Mathematical Logic
Phi 345.1(.2)	Greek Philosophy: the Presocratics and Plato
Phi 346.1(.2)	Greek Philosophy: Aristotle, the Hellenists
Phi 402.1(.2)	Philosophy of Language I: Linguistic Meaning
Phi 403.1(.2)	Philosophy of Language II: Speech Act-Theory
Phi 406.0	The Theory of Knowledge
Phi 440.1(.2)	Medieval Philosophy: Early Period to 12th Century
Phi 441.1(.2)	Medieval Philosophy: 13th, 14th Centuries
Phi 442.1(.2)	Early Modern Philosophy: The Rationalists
Phi 443.1(.2)	Early Modern Philosophy: The Empiricists
Phi 444.1(.2)	Later Modern Philosophy: Kant
Phi 455.1(.2)	Existentialism: the 19th Century: Kierkegaard, Nietzsche
Phi 456.1(.2)	Existentialism: the 20th Century: Jaspers, Marcel, Camus, Sartre
Phi 465.0	Analytic Philosophy
Phi 471.1(.2)	Meta-Ethics
Phi 472.1(.2)	Foundations of Ethics
Phi 479.0	Senior Seminar

2. Major in Philosophy: Pre-Law

Students majoring in philosophy and taking the pre-law option must complete all the requirements for a major in philosophy. It is recommended that they take the following courses:

Phi 200.0	Basic Logic
Phi 302.0	Ethics
Phi 332.1(.2)	Philosophy of Law
Phi 333.1(.2)	Ethical Issues and the Law

3. Double Major

A student may major in philosophy and another subject. The student normally completes 6.0 credits in philosophy and should consult the undergraduate advisor.

4. Honors Program

To qualify for the degree of B.A. (Honors) in philosophy, a student must: (a) meet the general Faculty of Arts' requirements set out in regulations 11-17 of Section 3 of this Calendar; (b) meet the requirements for a major in philosophy; and (c) obtain 4.0 additional credits in philosophy above the 300 level. The chairperson or the undergraduate advisor will assist the student in selecting these courses.

5. Minor in Philosophy

A minor in philosophy requires a minimum of 4.0 credits, at least two of which must be above the 200 level.

6. Master's Program

The general requirements for a Master of Arts in philosophy are set out in the Faculty of Arts section of this Calendar. Students contemplating doing a Master's degree should contact the department's graduate advisor.

200.0 Basic Logic

The aim of the course is practical rather than theoretical: to enable the student, in practice, to do such things as define terms accurately, construct sound arguments, identify fallacious thinking and adopt a scientific approach to problem solving. No special knowledge or abilities are presumed, and students should take the course as early as possible in their program.

201.0 Introduction to Philosophy

Philosophy covers a wide variety of issues and questions with which any educated person will wish to be acquainted such as: law, morality, justice; the problems of freedom; the nature of what is mental, what physical; death; the nature of knowledge, scepticism, rationality; theism, agnosticism, atheism. Philosophy does, and ought to, play an important role in the education of doctors, lawyers, scientists, statesmen, educators, writers, theologians, and others. The introductory course is designed to acquaint students with the field of philosophy by covering some of these problems, and to encourage them to develop their own critical intelligence through a study of major past and present contributions toward the solution of these problems.

244.1 Human Freedom

The traditional problems of free will and political freedom. Different concepts and conceptions of freedom and liberation. An examination of some contemporary thought on freedom and liberation.

245.2 Philosophies of Life

An examination of the major philosophies of life and an assessment of the reasons for and against their adoption. Consideration will be given to various forms of collectivism and individualism and to various views of what is ultimately worth striving for.

302.0 Ethics

An introduction to moral philosophy designed to lead the student to examine the foundations of their moral positions. To this end historical and contemporary answers by philosophers to questions such as the following will be examined: What ought I to do morally, and why ultimately ought I to do it? Are ethical positions simply relative: (a) to a person? (b) to a society? What is the relation between science and morality? Why be moral?

310.0 (610.0) Political Philosophy

Prerequisite: a philosophy or political science course.

An examination of some philosophical concepts basic to any philosophy of politics: society and social obligations, the common good, the individual and individual rights, law, freedom, tolerance and repression, popular consent, sovereignty. The course will investigate the relationship, if any, between ethics and philosophy of politics and, with reference to contemporary experience of differing state systems, raise the question of whether the expression "making a better world" has any meaning.

314.0 Intermediate Logic

Prerequisite: Phi 200.0 or 315.0 (which may be taken concurrently).

This course continues and develops the work of Philosophy 200.0. It offers students of all faculties opportunities for further growth in reasoning skills, in part through supervised practice in the logical appraisal of extracts from a variety of important writings. Some branches of logic are developed beyond the level of Philosophy 200.0. The complete predicate calculus (with identity) is applied to arguments of ordinary English. Inductive logic, and practically significant areas of logical theory are developed considerably. Scientific method and the general methods of some other disciplines are analyzed in some depth.

315.0 Mathematical Logic

Prerequisite: one of Phi 200.0, a course in mathematics, or a course in computer science.

A systematic introduction for students of philosophy, mathematics or computer science to the most fundamental topics of mathematical logic, proceeding from the propositional calculus, through the predicate calculus, and Boolean algebra, to set theory (as a 'foundation' for mathematics). Emphasis is placed on the development of facility and rigour in the use of natural deductive and axiomatic methods, and in the use of semantic tableaux and trees. There is an examination of such metalogical topics as consistency, completeness and decidability. Some attention is also paid to

practical applications, such as circuit simplification, computerization of problem solving and formalization of theory.

317.1 (.2) Philosophy of Economics

This course examines the basic assumptions on which economic theory rests, asks whether economics is a science, and explores the extent to which economic analysis can be used in other areas (for example, in medicine and the law). No knowledge of economics is presupposed or required.

325.1(.2) Ethical Issues in International Development

This course will examine the ethical problems raised by international development. Among the issues addressed will be the extent to which those who are well off have a duty to aid those in need, the limits to which it is morally acceptable to place conditions on the receipt of aid, the rights of those receiving development assistance to preserve and protect their culture, and what justification can be found for the various schools of thought on how to organize development programs.

326.0 (626.0) Philosophy of Mind

Prerequisite: an introductory course in philosophy and/or psychology would be helpful.

This course will examine what, if anything, is unique about a human. Are they just an animal or a little lower than the angels? The most complex machine of all or an integrated unity of mind and body? A self-organizing system developed through a long process of evolution or a unique product of special creation? Various philosophical and psychological theories will be discussed, but special emphasis will be given to those of S. Freud and B. F. Skinner.

331.1(.2) The Ethics of Business and Public Administration

Prerequisite: open to majors in philosophy, economics, political science, and sociology, as well as students in the Faculty of Commerce.

An examination of the extent to which business and bureaucratic objectives can, must or do conflict with moral objectives, and of the extent to which such organizations as business and the civil service can be brought into harmony with moral objectives. An examination of the aspects of ethical theory relevant to the above issues, and how theory needs to be developed to address them adequately.

332.1(.2) Philosophy of Law: Ethics and the Law

Prerequisite: students must have completed a minimum of 5.0 university credits.

Fidelity to the law, the distinction between moral and legal rights/duties, theories of punishment and the legislation of morality.

333.1(.2) Philosophy of Law: Jurisprudence

Prerequisite: students must have completed a minimum of 5.0 university credits.

Natural Law Theory, legal positivism, separability thesis, relation between law and morality, legal interpretation, the economic analysis of the law, and legal skepticism.

345.1 Greek Philosophy: The Presocratics and Plato

A brief examination of the origins of ancient Greek philosophy in the works of speculative cosmologists and the subsequent shift in interest from nature to humanity as initiated by Socrates and developed in the works of Plato. Most of the course will consist of reading Plato's major dialogues, including his Republic.

346.2 Greek Philosophy: Aristotle, The Hellenists

A brief examination of Aristotle's views on drama, psychology, knowledge, ethics, and politics, to be followed by a brief study of Stoicism, Epicureanism, and Plotinus.

348.1 Aesthetics: The Work of Art, The Artist

This course considers works of art as the product of creative artists, and problems about the interpretation and criticism of works of arts.

349.2 Aesthetics: The Aesthetic Experience

This course analyzes the concept of aesthetic experience and its relations to the appreciation and understanding of works of art.

352.1(.2) [652.1(.2)] Philosophy of Science

Prerequisite: Phi 200.0.

An introduction to the main problems of the philosophy of science designed to familiarize students with some of the contemporary analyses of scientific concepts and methods.

360.0 Philosophy of Literature

This course involves making a critical assessment of philosophical positions found in selected contemporary stories, plays and novels. It should interest students who are intrigued by the philosophical significance of some literature.

Texts: Readings in selected literature reflecting contemporary issues, e.g., Dostoevsky, Camus, Orwell, Hemingway, Iris Murdoch, Margaret Atwood, Virginia Woolf, Margaret Laurence.

371.1(.2) [671.1(.2)] Medical Ethics

Advancing medical technology has created moral issues that cannot be settled simply on the basis of medical facts. Both the medical profession and society as a whole must make value decisions before life and death issues such as abortion, euthanasia, and treatment of the insane can be settled. This course is intended to help the student reach reasoned conclusions on these issues through clarification and appraisal of arguments.

380.0 (680.0) Philosophical Issues in Feminism (WMS 380.0)

Prerequisite: at least 1.0 credit in philosophy or permission of instructor.

The course will examine the nature of the contemporary movement of feminism, and examine and evaluate arguments for and against this movement within the major traditions of political and social philosophy. To this end it will examine such basic concepts as justice, equality, freedom, rights, power and happiness, and discuss some of the practical questions raised by feminists.

402.1(.2) [602.1(.2)] Philosophy of Language I: Linguistic Meaning

Prerequisite: one full credit in philosophy at the 300 level.

A critical examination of the major theories of linguistic meaning, including the sentence-meaning/speaker's meaning distinction, and related topics such as the relation of language to thought.

403.1(.2) [603.1(.2)] Philosophy of Language II: Speech-Act Theory

Prerequisite: one full credit at the 300 level.

A detailed study of the speech-act theory of language use with additional attention given to such notions as reference and predication.

406.0 (606.0) Theory of Knowledge

Prerequisite: one full credit in philosophy.

An attempt to analyze the various concepts of human knowledge and to find the limits of that knowledge. Traditional approaches to problems in the theory of knowledge will be considered as well as current work, including the ethics of belief.

416.0 Advanced Logic and Methodology

Prerequisite: Phi 314.0 or 315.0.

This largely tutorial course continues and develops the work of Phi 314.0 or 315.0. Depending on their academic orientation, participating students select one or two of the following groups of disciplines: natural sciences, social sciences, humanities, business administration, or logic and mathematics. Works, or portions of works, from the selected disciplines are subjected to detailed, rigorous logical analysis. More general methodological issues arising in the selected disciplines are also investigated. These issues include the nature, soundness and value of various methods and approaches.

440.1 Medieval Philosophy: Early Period to 12th Century

Prerequisite: a course in philosophy or permission of instructor.

An examination of the major philosophical doctrines and currents in Western Europe from the period of Augustine to the end of the 12th century.

441.2 Medieval Philosophy: 13th, 14th Centuries

Prerequisite: a course in philosophy or permission of instructor.

An examination of the major philosophical doctrines and currents in Western Europe in the 13th and 14th centuries.

442.1 Early Modern Philosophy: The Rationalists

Prerequisite: a course in philosophy or permission of instructor.

A critical examination of works by Descartes, Spinoza and Leibniz with attention focused on their theories of knowledge and metaphysics.

443.2 Early Modern Philosophy: The Empiricists

Prerequisite: a course in philosophy or permission of instructor.

A critical examination of works by Locke, Berkeley and Hume with attention focused mainly on their theories of knowledge, meaning, and perception.

444.1 Later Modern Philosophy: Kant

Prerequisite: a course in philosophy or permission of instructor.

A lecture and seminar course dealing with Kant's epistemological and moral philosophy.

445.2 Later Modern Philosophy: The German Idealists

Prerequisite: a course in philosophy or permission of instructor.

A lecture and seminar course dealing with the works of some of the German philosophers characterized as "Idealists" in virtue of their similar reactions to Kant. Fichte and Hegel will receive special attention.

454.1(.2) [654.1(.2)] Philosophy of History

Prerequisite: a course in philosophy or permission of instructor.

A critical study of the philosophical views on the course of human history (its pattern, purpose and value) and an examination of the aim, nature and validity of historical knowledge.

455.1 Existentialism: The 19th Century: Kierkegaard, Nietzsche

Prerequisite: a course in philosophy or permission of instructor.

A lecture and seminar course examining the 19th century origins of the existentialist movement in contemporary philosophy, with specific investigation of the writings of Kierkegaard and Nietzsche.

456.2 Existentialism: The 20th Century: Jaspers, Marcel, Camus, Sartre

Prerequisite: a course in philosophy or permission of instructor.

A lecture and seminar course examining the 20th century expression of the existentialist movement in philosophy through study of the writings of Jaspers, Sartre, Marcel and Camus.

465.0 (665.0) Analytic Philosophy

Prerequisite: at least 1.0 credit in philosophy or permission of instructor.

A lecture and seminar course that examines the origins, expressions, and significance of the contemporary analytic movement in philosophy.

471.1(.2) [671.1(.2)] Meta-ethics

Prerequisite: one full credit in philosophy above the 200 level.

The course investigates the moral concepts that are used in the formulation and evaluation of ethical theories, including: 'morality', 'moral value', 'virtue', 'vice', 'moral right', 'moral obligation', 'justice', and 'good'.

472.1(.2) [672.1(.2)] Foundation of Ethics

Prerequisite: one course in philosophy above the 200 level.

The course will involve the study of the nature of moral judgements and the logic of moral reasoning.

479.0 (679.0) Senior Seminar

Prerequisite: permission of department.

The subject matter of the seminars is determined by consultation between instructor and students.

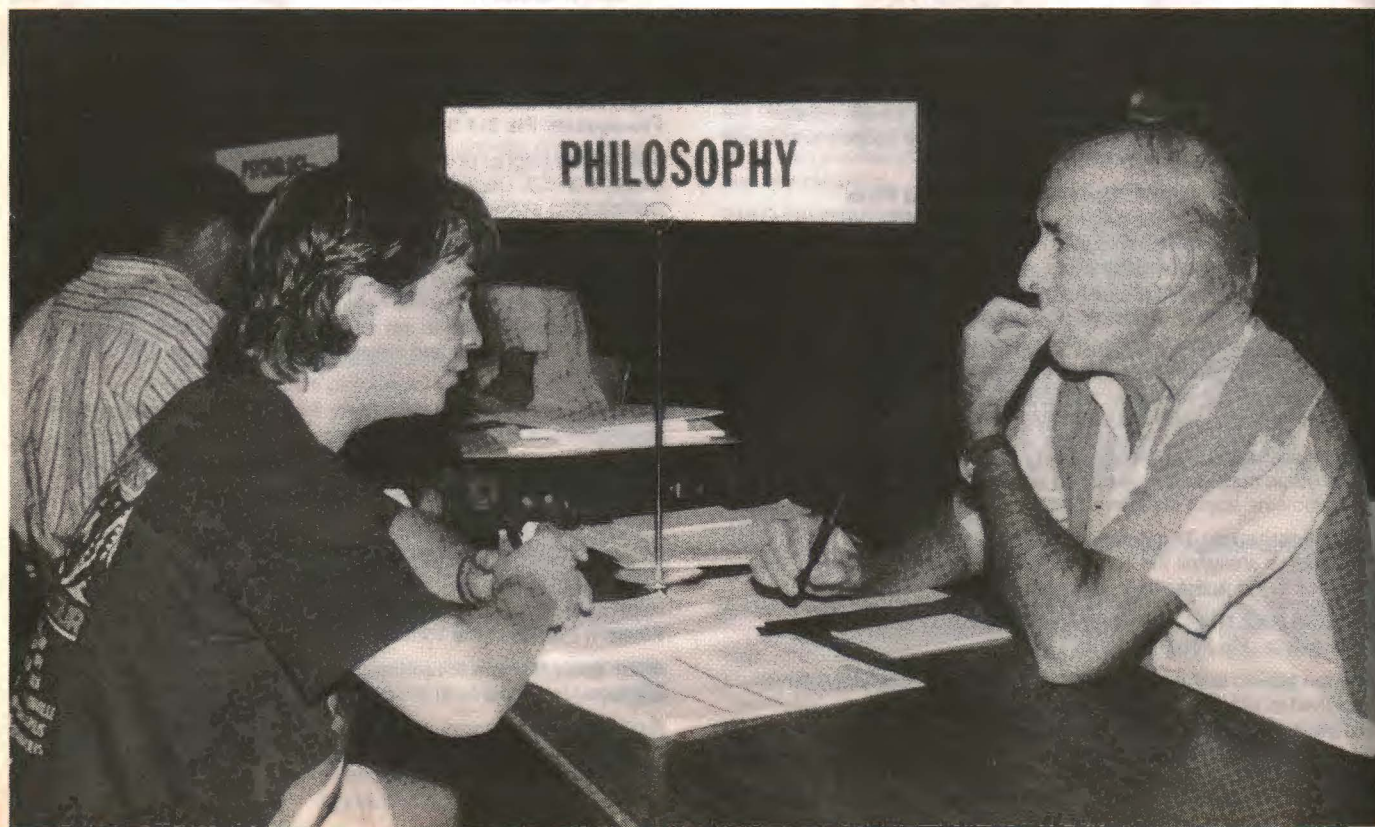
491.0-495.0; 496.1(.2)-499.1(.2); 685.1(.2)-689.1(.2); 690.0-695.0**Reading Courses in Philosophy**

Prerequisite: permission of instructor.

The subject matter of this course will be determined by the student in consultation with the instructor.

696.0-697.0 Master's Thesis

These course numbers accommodate the thesis research and writing as required by the Department of Philosophy for any student proceeding to the Master of Arts degree in philosophy.



Physics (Phy)

Chairperson, Associate Professor B. C. Reed
 Professors W. Loric, D. S. Murty
 Associate Professor K. Fillmore
 Assistant Professor R. Coms

Considered to be the most fundamental of the natural sciences, physics deals with the observation and modelling of phenomena on scales from the subatomic to the cosmological. In the broadest sense, physicists seek to enunciate physical laws and propose mathematical models of natural phenomena consistent with experimental evidence.

With their training in identifying underlying phenomena, in the application of analytic and computational skills, and especially in critically analyzing problems, students of physics are uniquely qualified to pursue careers or postgraduate studies in a wide variety of fields - particularly in a high-technology society where basic and applied science touch every aspect of human life. The aerospace, communications, energy and health care fields are all areas of employment for physics graduates at all degree levels.

Contingent on general science degree requirements, students may choose to follow one of the core programs listed below. Any departures from the program schemes must receive departmental approval. All prerequisites are strictly enforced, except that students not majoring or concentrating in physics may substitute alternative prerequisites for courses at the 300-level or higher, at the discretion of the Physics Department. Students who fail the laboratory component of a course will fail the course.

a. Physics Concentration

First Year
Phy 111.0 Mat 110.1(.2)/111.1(.2)

Second Year
Phy 221.0 Mat 200.0

Third & Fourth Years

Any eight half-courses in physics (in accordance with science degree requirements) from:

Phy 311.1(.2)	Phy 431.1(.2)
Phy 321.1(.2)	Phy 432.1(.2)
Phy 322.1(.2)	Phy 438.1(.2)
Phy 331.1(.2)	Phy 439.1(.2)
Phy 332.1(.2)	Phy 451.1(.2)
Phy 353.1(.2)	Phy 471.1(.2)

An elective in physics, or mathematics, or astronomy

b. Physics Major

First Year
Phy 111.0 Mat 110.1(.2)/111.1(.2)

Second Year
Phy 221.0 Mat 200.0

Third Year
Phy 311.1(.2) Phy 332.1(.2)
Phy 321.1(.2) Phy 353.1(.2)
Phy 322.1(.2) Mat 310.1(.2)/311.1(.2)
Phy 331.1(.2)

Fourth Year
Phy 431.1(.2) Phy 439.1(.2)
Phy 432.1(.2) Phy 451.1(.2)
Phy 438.1(.2) Phy 471.1(.2)

c. Honors Physics Program

The honors program in physics consists of the above major courses plus sufficient additional courses approved by the department and satisfying the general requirements for an honors degree.

Astrophysics Program

An astrophysics program is offered jointly with the Department of Astronomy. The program demands a minimum grade of C in all physics and astronomy courses taken. The program of study must be approved by the Department of Astronomy and the Department of Physics.

This program is subject to the approval of the Maritime Provinces Higher Education Commission.

d. Astrophysics Major

First Year
Phy 111.0 Mat 110.1(.2)/111.1(.2)

Second Year
Ast 202.0 Mat 200.0
Phy 221.0 Egl 201.1(.2)/202.1(.2)

A science elective, normally Che 201.0

Third Year
Ast 301.1(.2)* Phy 331.1(.2)
Ast 302.1(.2)* Phy 332.1(.2)
Phy 321.1(.2) Mat 300.0
Phy 322.1(.2)

A humanities elective

Fourth Year
Ast 401.1(.2)* Phy 432.1(.2)
Ast 402.1(.2)* Phy 438.1(.2)
Phy 353.1(.2) Phy 439.1(.2)
Phy 431.1(.2) Phy 451.1(.2)

A science elective, normally physics or mathematics, or a humanities elective (if required for graduation)

*Upper year courses in astronomy are cycled. The order of taking Ast 301/302 and Ast 401/402 may be reversed without loss of continuity.

e. Honors Astrophysics Program

First, second, third and fourth years are identical to the astrophysics major program.

Fifth (Honors) Year
Phy 500.0**

2 additional full courses (or 4 half courses) in physics not taken previously, chosen in consultation with the Chairperson of the Department of Physics

2 science electives, chosen in consultation with the Chairperson of the Department of Astronomy

**Thesis topic should be in the area of astrophysics.

111.0 General Physics

Prerequisite: Mat 110.1(.2)/111.1(.2) (concurrently).

Introduction to mechanics, sound, heat, electricity and light.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

221.0 University Physics

Prerequisite: Phy 111.0 or Grade XII physics; Mat 200.0 (concurrently).

Topics will include mechanics, heat, sound, light, electricity, radioactivity and nuclear energy.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

230.0 Medical Physics

Prerequisite: sophomore standing, Mat 110.1(.2)/111.1(.2).

This course is designed for pre-medical, pre-dental and other life science students. Topics will include: mechanics, temperature and heat, kinetic theory of gases, optics, electricity, radio-activity, electronics, the nucleus. Principles will be applied to such areas as bones, lungs and breathing, eye and vision, diagnostic use of x-rays and radio-therapy.

Note: Credit will not be given for both Phy 230.0 and Phy 111.0. Phy 230.0 may be used as a prerequisite to Phy 221.0.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

261.1(.2) Digital Electronics

Prerequisite: Phy 111.0 or Grade XII physics, Mat 110.1(.2)/111.1(.2) or senior matriculation mathematics.

Introduction, including theory and experimentation, to digital circuits, including microprocessors. In general, the course introduces the student to digital electronics as part of contemporary scientific activity.

Classes 2 hrs. and lab 2 hrs. twice a week in evenings. 1 semester.

263.1(.2) Digital and Microprocessor Electronics

Prerequisite: Phy 261.1(.2).

An introduction to the microprocessor as an instrument in scientific activity, in which data is acquired, processed, and then utilized. Control of the microprocessor will be in both machine language and BASIC. The electronics associated with connecting peripheral devices to the microprocessor will be emphasized.

Classes 2 hrs. and lab 2 hrs. twice a week in evenings. 1 semester.

311.1(.2) Experimental Physics

Prerequisite: Phy 221.0 and Mat 300.0 (concurrently).

Measurement techniques and data analysis applied to the general field of physics. Topics will include Fast Fourier transform (FFT), signal averaging, correlation, and synchronous detection.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

321.1(.2) Optics

Prerequisite: Phy 221.0; Mat 300.0 concurrently.

Geometrical Optics: image formation by spherical surfaces, thin and thick lenses, lens aberrations, telescopes, microscopes. Physical optics: speed of light, dispersion, interference, diffraction, resolving power of optical instruments, polarization.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

322.1(.2) Electricity and Magnetism

Prerequisite: Phy 221.0; Mat 300.0 concurrently.

Electric and magnetic fields and their corresponding potentials, properties of conductors and insulators, Lorentz force and applications, resistance, capacitance and inductance in AC circuits. The lab will introduce the student to the use of a variety of electric and electronic measuring instruments.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

331.1(.2) Classical Mechanics I

Prerequisite: Phy 221.0; Mat 300.0 concurrently.

Introduction to vector analysis, work, potential energy, principle of virtual work, the damped harmonic oscillator, the forced harmonic oscillator.

Classes 3 hrs. a week. 1 semester.

332.1(.2) Classical Mechanics II

Prerequisite: Phy 331.1(.2).

Motion of a particle under the action of a central force, deduction of the law of force from Kepler's Laws, the two-body problem, motion of a system of particles, motion of a particle in an accelerated reference system, generalized coordinates, holonomic and non-holonomic constraints, degrees of freedom. Lagrange equations.

Classes 3 hrs. a week. 1 semester.

353.1(.2) Thermophysics

Prerequisite: Phy 221.0; Mat 300.0 (concurrently).

Temperature, internal energy, first and second laws of thermodynamics, entropy, state functions and the resulting Maxwell relations, kinetic theory, Maxwell distribution, transport phenomena.

Classes 3 hrs. a week. 1 semester.

431.1(.2) Electromagnetic Theory I

Prerequisite: Phy 322.1(.2) and Mat 300.0.

Development of the theory of electric and magnetic fields and Maxwell's equations in non-polarized media, leading to applications such as waveguides.

Classes 3 hrs. a week. 1 semester.

432.1(.2) Electromagnetic Theory II

Prerequisite: Phy 431.1(.2).

Development of the theory of electric and magnetic fields and Maxwell's equations in polarizable media, including an introduction to a relativistic formulation of the Maxwell equations.

Classes 3 hrs. a week. 1 semester.

438.1(.2) Atomic Physics

Prerequisite: Phy 321.1(.2), 322.1(.2) and Mat 300.0.

Atoms, electrons, radiations, the nuclear atom, x-rays, and atomic structure, quantum theory of radiation, special theory of relativity,

group velocity, and wave velocity. Mass spectrometers, atomic spectra and atomic structure, the nucleus and isotopes.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

439.1(.2) Nuclear Physics

Prerequisite: Phy 438.1(.2).

Natural radioactivity and the radioactive laws, artificial nuclear disintegration, artificial radioactivity, alpha-decay, beta-decay, and gamma-decay, nuclear reactions, nuclear forces, nuclear fission, nuclear energy sources, particle accelerators.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

451.1(.2) Mathematical Physics

Prerequisite: Phy 332.1(.2) and Mat 300.0.

Introduction to mathematical techniques, from a physics point of view. Relevant to problems in classical mechanics, quantum mechanics and electromagnetic theory. Topics to be drawn from vector analysis, differential equation, complex analysis, Fourier analysis, transform theory and elementary statistics.

Classes 3 hrs. a week. 1 semester.

471.1(.2) Introduction to Quantum Mechanics

Prerequisite: Phy 438.1(.2) and Phy 451.1(.2) concurrently.

Historical background, necessity for wave mechanics, Schrodinger's equation, potential wells and barriers, scattering, energy eigenfunctions, linear operators and expectation values, Harmonic oscillator, WKB approximation, Hydrogen atom, transition rules, perturbation theory.

Classes 3 hrs. a week. 1 semester.

Note: All 500 level courses will be offered after consultation with the department.

500.0 Research Thesis

Prerequisite: honors standing, fifth year.

Research project carried out by the student under supervision of a member of the department. The project may be in the area of astrophysics, in which case the student may be supervised by a member of the Astronomy Department. The student will submit a thesis and defend it orally.

Directed study: 6 hrs. a week. 2 semesters.

540.1(.2) Topics in Theoretical Physics I

Prerequisite: Phy 451.1(.2).

Topics include fluid dynamics, elasticity, tensor calculus, and the theory of relativity.

Classes 3 hrs. a week. 1 semester.

541.1(.2) Topics in Theoretical Physics II

Prerequisite: Phy 540.1(.2).

Advanced topics in theoretical physics to be selected upon consultation with the students.

Classes 3 hrs. a week. 1 semester.

542.1(.2) Thermodynamics

Prerequisite: Phy 353.1(.2) and Phy 451.1(.2).

Fundamental principles of thermodynamics and their application to equilibrium and non-equilibrium systems.

Classes 3 hrs. a week. 1 semester.

543.1(.2) Statistical Mechanics

Prerequisite: Phy 353.1(.2) and Phy 451.1(.2).

The macro and grand canonical ensembles, Bose-Einstein and Fermi-Dirac Statistics, applications to real gases, electrons in metals and cryogenic systems.

Classes 3 hrs. a week. 1 semester.

544.1(.2) Intermediate Quantum Mechanics

Prerequisite: Phy 471.1(.2).

Interpretive postulates of quantum mechanics, operators with continuous spectra, uncertainty principle, equation of motion, Dirac notation.

Classes 3 hrs. a week. 1 semester.

545.1(.2) Advanced Quantum Mechanics

Prerequisite: Phy 544.1(.2).

Angular momentum, spin, Pauli principle, perturbation theory, Born approximation, elastic and inelastic scattering, Dirac relativistic equation.

Classes 3 hrs. a week. 1 semester.

553.1(.2) Upper Atmosphere

Prerequisite: Phy 432.1(.2) and Phy 451.1(.2).

Meteorological conditions in the lower stratosphere, structure and circulation of the upper stratosphere and mesosphere, the sun's radiation and the upper atmosphere, composition of the stratosphere and mesosphere, composition and structure of the thermosphere, heat transfer and radiative processes, atmospheric tides and winds in the lower thermosphere, introduction to some other aeronomic problems, transport properties in the upper atmosphere.

Classes 3 hrs. a week. 1 semester.

554.1(.2) Introduction to Solid State Physics

Prerequisite: Phy 471.1(.2).

Crystal structure, lattice vibrations, free electron Fermi gas, band structure, properties of simple metals, semiconductors and insulators, superconductivity.

Text: Blakemore, *Solid State Physics*.

Classes 3 hrs. a week. 1 semester.

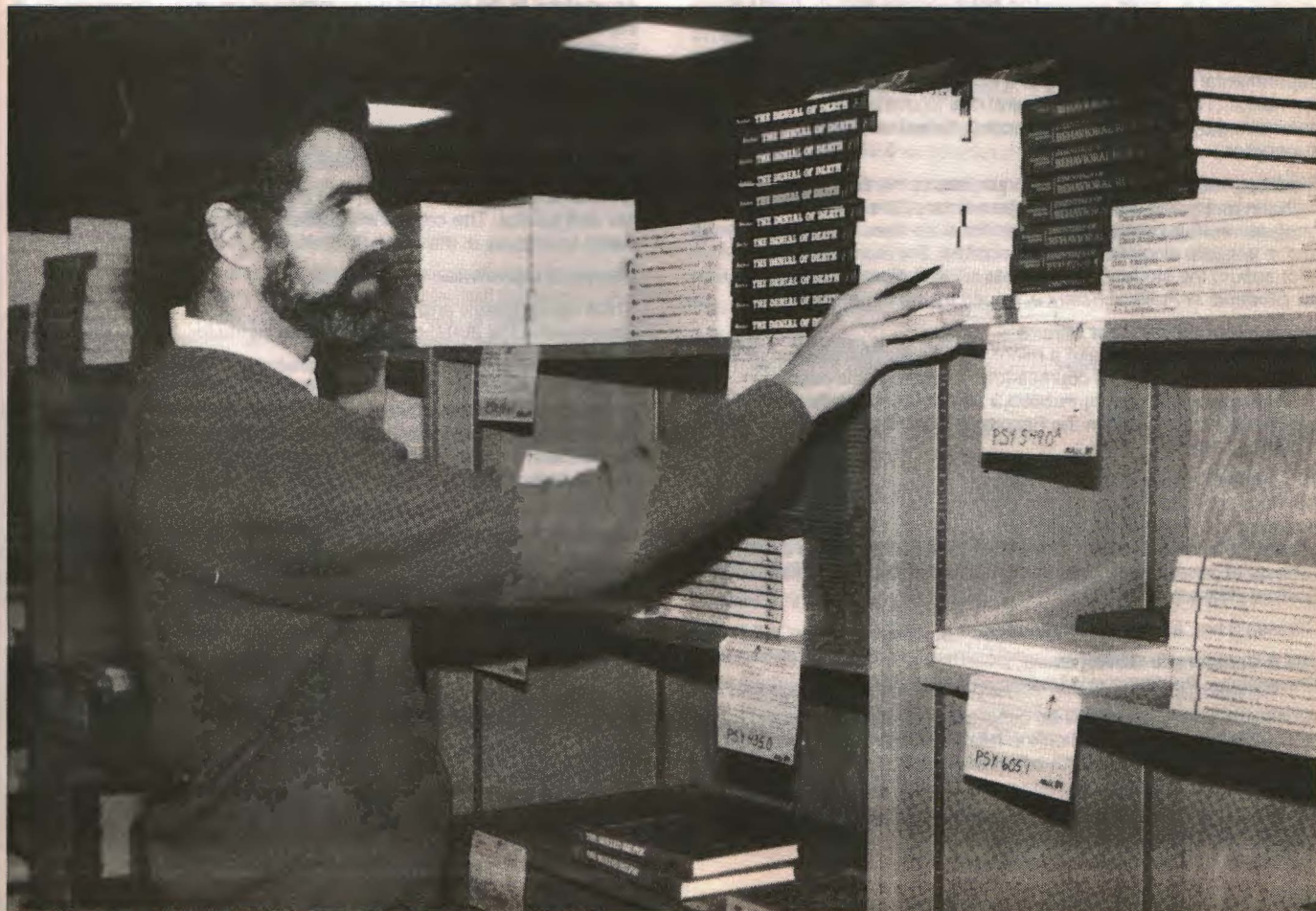
555.1(.2) Topics in Advanced Nuclear Physics

Prerequisite: Phy 439.1(.2) and Phy 451.1(.2).

Some selected topics in nuclear physics will be discussed. Topics will be oriented towards research problems.

Reference: K. Siegbahn, *Alpha-Beta-Gamma Ray Spectroscopy*, Vol. 1 and 2, (North-Holland).

Classes 3 hrs. a week. 1 semester.



Political Science (Pol)

Chairperson, Professor
Professor
Assistant Professors

R. G. Landes
E. J. McBride
T. Arseneau, G. Chauvin
D. Naulls, L. Preyra, M. Royak
E. Keeble

Lecturer

Departmental Policy for Majors

Students who intend to complete a major concentration in political science must take a minimum of seven full courses (or half course equivalents) in political science, including Pol 200.0 and 304.0. (With the permission of the department, students may be permitted to take another course in lieu of political science.) The department also strongly recommends (but does not require) that a student take Pol 401.0 and at least one seminar at the 500 level in one or more subfields of the discipline, as listed in the department's *Notes and Guidelines for Students in Political Science*.

Departmental Policy for Honors

Applications for admission to the political science honors program must be submitted to the Honors Program Committee, which has the following objectives: (a) evaluate applications for admission to the honors program in political science; (b) seek out potential candidates and encourage them to apply for admission to the honors program in political science; (c) assist political science honors students in selecting their supervisors from the department.

Candidates should normally complete the formalities for admission to the political science honors program not later than Christmas of their senior year as a regular political science major.

A student, in order to be admitted to, and remain in, the political science honors program must have and maintain an overall average of B, with no grade below C.

An honors student also must enrol in and complete at least two seminars at the 500 level.

Honors students must take a number of courses, approved in consultation with their supervisor, in cognate disciplines over and beyond the B.A. prerequisites. Pol 401.0 (Scope and Methods) is strongly recommended to all honors students.

Honors students must pass a general oral examination before a departmental board consisting of a minimum of two departmental members. (The scope of the general oral examination will be determined by the department, in consultation with the student's supervisor.)

Students are reminded that the requirements mentioned above for both the major and/or honors programs constitute a minimum. If graduate work is contemplated, additional courses in political science and in cognate disciplines will be required. For more complete information, the student is advised to consult *Notes and Guidelines for Students in Political Science*, issued by the department.

Departmental Policy for Minors

Students who intend to take a minor in political science must receive credit for at least four full courses (or half course equivalents) in political science, including Pol 200.0 and Pol 304.0. Additional requirements are found in the Faculty of Arts' regulation 8 in Section 3 of this Calendar.

200.0 Introductory Political Science

An introduction to the scope and methods of political science. The nature of the state will be examined, as well as the various purposes advanced for its existence. The student will be introduced to various aspects of government, political parties, international relations and political philosophies.

Classes 3 hrs. a week. 2 semesters.

302.0 Democratic Government

Prerequisite: Pol 200.0 or permission of instructor.

An examination of fundamental concepts in democratic theory. Special emphasis is placed on the relationship between theory and practice. Four commonwealth countries (Canada, Britain, Australia and New Zealand) serve as the source of examples of the practice of politics in Western democracies.

Classes 3 hrs. a week. 2 semesters.

303.0 Government and Politics in the Soviet Union

Prerequisite: Pol 200.0 or permission of instructor.

A study of the institutions and processes of the Soviet political system. Special consideration will be given to the tensions generated by the Soviet system, as well as the progress of and prospects for reform.

Classes 3 hrs. a week. 2 semesters.

304.0 Canadian Government and Politics

Prerequisite: Pol 200.0 or permission of instructor.

A study of Canadian constitutional democracy, encompassing an analysis of both political institutions and political behavior.

Classes 3 hrs. a week. 2 semesters.

305.0 International Relations

Prerequisite: Pol 200.0 or permission of instructor.

A survey of and introduction to the study of international relations. The first term will concentrate on the following topics: nationalism and the rise of the nation-state; elements and evaluation of a nation's power; the balance-of-power system in the classical and nuclear age; international law; and the United Nations. The second term will concentrate on foreign policy decision-making and current foreign policy problems of the major powers.

Classes 3 hrs. a week. 2 semesters.

306.0 Government and Politics in Western Europe

Prerequisite: Pol 200.0 or permission of instructor.

A study of the institutions and politics of the major national political systems of Western Europe, as well as a consideration of the progress and problems of European integration.

Classes 3 hrs. a week. 2 semesters.

307.0 Provincial Government and Politics

Prerequisite: Pol 200.0 or permission of instructor.

An analysis of the role and development of provincial governments in the Canadian federal system, with particular reference to Nova Scotia.

Classes 3 hrs. a week. 2 semesters.

309.0 Law and Politics: The Political Dimensions of the Legal Process

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the practical and theoretical connections between law and politics. The course will concentrate on the contemporary public law issues in the United States, Britain and Canada.

Classes 3 hrs. a week. 2 semesters.

310.0 Government and the Media

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the influence of government policy, especially as set out in federal and provincial legislation, on the growth and operation of the mass media in Canada. Particular attention will be given to the continuing debate over television and radio regulation and ownership, restraints on film and the press, and problems raised by new technology, e.g., pay-TV, cable channels and communication satellites.

Classes 3 hrs. a week. 2 semesters.

312.0 Government and Politics in the United States

Prerequisite: Pol 200.0 or permission of instructor.

An analysis of the American political system in terms of the interrelationship of characteristics salient in the political culture, the social base, the constitutional order, the governmental structure and the policy process, with special emphasis on the political party system, voting behavior, and the Presidency.

Classes 3 hrs. a week. 2 semesters.

315.0 Canadian Foreign Policy

Prerequisite: Pol 200.0 or permission of instructor.

An examination of Canadian foreign policy, with a focus on the content of that policy and on the nature of the decision-making process itself.

Classes 3 hrs. a week. 2 semesters.

317.0 Constitutional Theory

Prerequisite: Pol 200.0 or permission of instructor.

A comparative examination of selected sources and authorities respecting fundamental law in the American, British and Canadian traditions. The course will provide students of constitutional law with a theoretical basis for the analysis of constitutions and relevant judicial decisions.

Classes 3 hrs. a week. 2 semesters.

320.0 Local and Urban Government and Politics

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the development and functions of local government, with a special focus on Canada.

Classes 3 hrs. a week. 2 semesters.

321.1(2) International Organization

Prerequisite: Pol 200.0 or permission of instructor.

A study of international organizations and the many challenges they face, including issues related to security matters, arms control, social cooperation, and economic development, with a special emphasis on the United Nations. In order to highlight the complexity of international decision-making, the course may also include a simulation of a United Nations Committee at work.

Classes 3 hrs. a week. 1 semester.

322.1(2) Politics of International Trade

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the main themes and issues in the international trading community, with an emphasis on the relations between and among developed and developing states.

Classes 3 hrs. a week. 1 semester.

327.0 Government and Politics in the Middle East

Prerequisite: Pol 200.0 or permission of instructor.

A comparative study of the governments and politics of Middle Eastern countries, with an emphasis on the analysis of the fundamental political and socio-economic changes that are occurring in the area and attempting to shape its modernizing pace.

Classes 3 hrs. a week. 2 semesters.

330.0 Introduction to Public Administration

Prerequisite: Pol 200.0 or permission of instructor.

A study of the structure and operation of the administrative branch of government, both in theory and practice. Included will be an examination of the evolution of the Canadian federal public administration and public service, with some attention for comparative purposes to related experiences in other nations. The administrative responsibilities and powers of the modern state will be assessed and a sampling of recent organizational theories will be undertaken.

Classes 3 hrs. a week. 2 semesters.

335.0 History of Political Thought

Prerequisite: Pol 200.0 or permission of instructor.

A historical survey of the most important political ideas from the classical period of the Golden Age of Athens to this century. The interaction between socio-political conditions and ideas will be stressed.

Classes 3 hrs. a week. 2 semesters.

340.0 The Politics of the Developing Areas

Prerequisite: Pol 200.0 or permission of instructor.

An examination of problems of political development in Asian and African states, in the context of their modernization processes, with special reference to factors responsible for the emergence of authoritarian governments.

Classes 3 hrs. a week. 2 semesters.

341.0 Government and Politics in East Asia

Prerequisite: Pol 200.0 or permission of instructor.

A study of government structures and political dynamics in mainland China, Southeast Asia and Japan, with emphasis on current trends in the Chinese system.

Classes 3 hrs. a week. 2 semesters.

348.0 Comparative Voting Behavior

Prerequisite: Pol 200.0 or permission of instructor.

From a comparative perspective, a study of the nature of voting and electoral behavior in Canada, the United States, Britain and selected other countries.

Classes 3 hrs. a week. 2 semesters.

401.0 Scope and Methods of Political Science

Prerequisite: Pol 200.0 or permission of instructor.

An introduction to the concerns and methodologies of modern political science. Included will be a discussion of theories and approaches developed by the empirical school of political scientists.

Classes 3 hrs. a week. 2 semesters.

418.0 International Law

Prerequisite: Pol 200.0 or permission of instructor.

A study of the features of public international law as they have developed and have been invoked in diplomatic practice, international law adjudication, and national courts.

Classes 3 hrs. a week. 2 semesters.

419.0 Comparative Constitutional Law

Prerequisite: Pol 200.0 or permission of instructor.

A comparative analysis of constitutional systems, this course focuses upon the theory and exercise of judicial review, in the context of either Canadian and American constitutional law, or European constitutional practice. It combines lectures, collateral readings, and the case method.

Classes 3 hrs. a week. 2 semesters.

425.0 Spying and International Politics

Prerequisite: Pol 200.0 or permission of instructor.

An analysis of the development, role, techniques, and impact of spying on the conduct of international relations.

Classes 3 hrs. a week. 2 semesters.

440.0 Canadian-American Relations Since World War II

Prerequisite: Pol 200.0 or permission of instructor.

This course focuses on an analysis of Canadian-American relations since 1945. The course examines different theoretical approaches to the relationship, as well as a variety of case studies to evidence the nature and extent of Canada-U.S. relations both in the bilateral context and in the multilateral context.

Classes 3 hrs. a week. 2 semesters.

445.0 Introduction to Public Policy

Prerequisite: Pol 200.0 or permission of instructor.

A critical analysis of public policy formation, the content of public policies, and impact upon society.

Classes 3 hrs. a week. 2 semesters.

446.0 Comparative Political Parties

Prerequisite: Pol 200.0 or permission of instructor.

A comparative analysis of the changing structures and functions of selected parties and party systems.

Classes 3 hrs. a week. 2 semesters.

447.1(2) Canadian Political Parties

Prerequisite: Pol 200.0 or permission of instructor.

The purpose of this course is to identify and explain continuity or change in Canadian political party beliefs and behaviour. Particular emphasis will be placed on the ability of political parties to adapt to social change and to meet challenges posed by new social movements and interest groups.

Classes 3 hrs. a week. 1 semester.

450.1(2) Women in Canadian Politics

Prerequisite: Pol 200.0 or permission of instructor.

This course is designed to introduce students to the topic of women's participation in Canadian politics. The course is divided into three sections beginning with a historical overview of women's political gains in Canada from the late 1800's to 1990, followed by an introduction to feminist theory, and finally an examination of women as voters, party workers, and candidates within the political system.

Classes 3 hrs. a week. 1 semester.

455.0 Canadian Defence Policy

Prerequisite: Pol 200.0 or permission of instructor.

This course examines the evolution of Canadian defence policy and the ideas, structures, and processes which shape the formulation of defence policy in Canada. Particular emphasis will be placed on new issues on the national security agenda and how Canada ought to deal with them.

Classes 3 hrs. a week. 2 semesters.

457.0 Politics and Government in Ireland (IRS 457.0)

Prerequisite: Pol 200.0 or permission of instructor.

A survey of Irish history will lead to more detailed consideration of British administration in Ireland, and of government in the Republic of Ireland and in Northern Ireland.

Classes 3 hrs. a week. 2 semesters.

460.1(2) Classical Political Thought

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the political ideas of the Greeks and Romans of the Classical period. Plato, Aristotle, Thucydides, Polybius, Cicero and others will be studied.

Classes 3 hrs. a week. 1 semester.

461.1(2) Political Thought of the Renaissance and Reformation

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the political ideas of the Renaissance period in Europe. Dante, Machiavelli, More, Luther, Calvin and the French religious pamphletists will be examined.

Classes 3 hrs. a week. 1 semester.

462.1(2) Early Modern Political Thought

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the political ideas of the seventeenth and eighteenth centuries. Hobbes, Locke, Montesquieu, Rousseau, Burke and Hume will be studied.

Classes 3 hrs. a week. 1 semester.

463.1(2) Modern Political Thought

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the modern liberal and socialist traditions. Bentham, J. S. Mill, T. H. Green, Karl Marx, Lenin and some of their respective disciples will be studied.

Classes 3 hrs. a week. 1 semester.

470.0 Empirical Democratic Theory

Prerequisite: Pol 200.0 or permission of instructor.

An examination of the findings of modern behavioral research and their impact on the theory and practice of democratic government. Particular attention will be given to the interplay between classical democratic theory and current political science research.

Classes 3 hrs. a week. 2 semesters.

490.0 Directed Readings in Political Science

Prerequisite: Pol 200.0 or permission of instructor.

This course is organized by an individual faculty member in agreement with the department as a whole, and is designed to supplement or provide an alternative to regular courses in political science, according to the special needs and interests of the student.

Classes 3 hrs. a week. 2 semesters.

495.1(2) - 499.1(2) Selected Topics in Political Science

Prerequisite: Pol 200.0 or permission of instructor.

The subject matter of particular half courses will be announced from time to time by the department. These courses will analyze specialized areas of political science not normally covered in our regular departmental offerings.

Classes 3 hrs. a week. 1 semester.

500.0 Honors Reading Course

Prerequisite: restricted to honors students in political science.

Through examinations, papers, and extensive readings, honors students will use this course to prepare themselves for the required honors oral examination.

Classes 2 hrs. a week. 2 semesters.

550.0 Seminar in the History of Political Thought

Prerequisite: permission of instructor.

An intensive study of major trends in political thought, ancient and modern, with special attention to contemporary political doctrines and ideologies, their transformation and interrelation in the course of history and their interrelation with social and political conditions.

Classes 2 hrs. a week. 2 semesters.

551.0 Canadian Government Seminar

Prerequisite: Pol 304.0 or permission of instructor.

An analysis of selected aspects of Canadian politics and government, using a comparative approach. Topics include: political culture, interest groups, political parties, voting behavior, Parliamentarians, and bureaucracy. This seminar emphasizes student presentations and group discussions.

Classes 2 hrs. a week. 2 semesters.

552.0 Seminar in Comparative Government

Prerequisite: permission of instructor.

Conceived as a work-study group, this seminar is designed for students interested in the use of the comparative method in the analysis of contemporary national political systems.

Classes 2 hrs. a week. 2 semesters.

553.0 International Studies Seminar

Prerequisite: permission of instructor.

A seminar on the contemporary interaction of the major powers, with special consideration of selected world problems, tensions, trends and developments.

Classes 2 hrs. a week. 2 semesters.

554.0 Seminar in Political Behavior

Prerequisite: permission of instructor.

An analysis of the behavioral movement in political science. Particular attention will be given to the problems of political strategy and political conflict.

Classes 2 hrs. a week. 2 semesters.

555.0 Seminar in Public Law

Prerequisite: Pol 418.0 or 419.0 or permission of instructor.

An advanced study of public law. This seminar will involve students in an examination of various aspects of public law, with special emphasis on the role of judges in the process of law development.

Classes 2 hrs. a week. 2 semesters.

Psychology (Psy)

Chairperson, Professor
Professors

D. Bruce
V. Catano, J. Chadwick-Jones
J. Darley, K. Hill
R. Koropasky, I. Lenzer
G. Pretty, P. Street, B. Vulcano
H. Chipuer
C. Hayes, R. O'Day,
C. Mate-Kole

Associate Professors
Assistant Professor
Adjunct Professors

The Psychology Department offers a broad range of courses and programs that are designed to meet the needs of students from a variety of backgrounds with varying degrees of interest in psychology. Psychology is normally begun at the sophomore level. Introduction to Psychology (201.0) is a broad survey of the discipline and is a prerequisite for all other psychology courses. The department offers major and honors programs leading to both the B.Sc. and B.A. degrees as well as a M.Sc. program in applied psychology.

Psychology as an Elective Subject

Students who are not intending to major in psychology normally register in 200 level and 300 level courses. However, students who meet course prerequisites or obtain permission of the course instructor may also register in 400 level courses. Arts students who wish to minor in psychology, commerce students seeking to fulfil degree requirement 4-c, and science students seeking to fulfil degree requirements 4-b, 6-b, or 10-c should contact the Psychology Chairperson to arrange a program of study relevant to their individual needs.

Psychology as a Major Program

Psychology is both a natural and a social science. Consequently, students may pursue a program of studies leading to either a B.Sc. or a B.A. degree while majoring in psychology. In addition to the general degree requirements specified in the Faculties of Arts and Science sections of this Calendar for the B.Sc. and B.A. degrees, the department requires a compulsory core program consisting of seven full course credits including the introductory course (201.0), Learning (301.0), Psychological Statistics and Experimental Design (305.0) – a minimum final grade of C (2.00) is mandatory for each of these courses for majors – and at least two full 400 level course credits. A minimum average grade of C (2.00) in psychology courses is required for psychology majors. Students who intend to declare a major in psychology should consult the Psychology Chairperson to determine which program, B.Sc. or B.A., is best suited to their career goals.

Psychology as an Honors Program

The Psychology Department offers programs leading to either a B.Sc. Honors or a B.A. Honors degree. Both programs are designed for students of above-average ability who wish to proceed to graduate work in psychology, or related areas, or intend to pursue careers in psychology. These honors programs follow the general regulations of the Science and Arts Faculties, respectively, as stated in this Calendar. For admission to the honors program in psychology, students must have a minimum cumulative quality point average of 3.00 and should have completed Psy 301.0 and Psy 305.0. Two departmental regulations, in addition to those specified under psychology as a major program, are that honors students take Psy 549.0 (Honors Seminar) and that of the minimum 10 full psychology course credits required to graduate, at least six be at the 400 level or above.

It is recommended that those students who wish to proceed to graduate work take at least one course at the 400 level from each of the following five areas:

General/Experimental - 401.1(2), 402.0, 406.0, 412.0, 421.1(2)
Physiological - 404.0, 405.0
Developmental - 415.0, 431.1(2), 450.1(2), 460.1(2)
Social/Personality - 416.1(2), 417.1(2), 433.0, 498.0
Applied - 411.0, 418.1(2), 419.1(2), 435.0, 440.0, 485.1(2), 486.1(2)

Honors students should consult with the Department Chairperson, or their thesis advisor, to determine a program of study that is appropriate to their future plans.

Psychology as a Graduate Program

The department offers a Master of Science degree in applied psychology with concentrations in clinical and industrial/organizational psychology. Students are admitted with full-time or part-time status. Applications must be received by March 1. First year students who wish to change their status after they have received notice of their admission must make this request to the Chairperson before June 1. Change in status must be approved by the department. Requirements for the M.Sc. program for full-time and part-time status students are detailed elsewhere in this Calendar. Undergraduate students who wish to gain admittance to the M.Sc. program should note that a normal entrance requirement is an honors degree or its equivalent. Undergraduates should also be aware that there are a limited number of placements available in the program and that competition for these positions is extremely high. Additional information on the program may be obtained by contacting the Graduate Program Coordinator in the Psychology Department.

201.0 Introduction to Psychology

Prerequisite: sophomore standing.

The science of behavior and mental processes, methods and measurement, psychological basis of behavior, maturation and development, individual differences and intelligence, personality, sensory processes and perception, learning, memory and thinking, motivation and emotion, social and clinical psychology, applications of psychology.

Each person taking this course may act as a subject for psychological experiments for a certain number of hours. A minimum final grade of C is required for psychology majors.

Classes 3 hrs. a week. 2 semesters.

301.0 Psychology of Learning

Prerequisite: Psy 201.0. The student is advised to take Psy 305.0 concurrently.

Classical and instrumental conditioning will be studied as examples of the learning process in animals and humans. Topics will include acquisition, reinforcement, punishment, extinction, aversive conditioning, stimulus control of behavior, discrimination, and complex problem solving. Different theoretical approaches to learning will be discussed. Students are given an opportunity to examine various learning principles in laboratory experiments involving human and animal subjects. A minimum final grade of C is mandatory for majors.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

303.0 Motivation and Emotion

Prerequisite: Psy 201.0.

An analysis of the factors underlying and directing behavior, starting with basic biological drives (thirst, hunger, sex, etc.) and proceeding to more complex motivational and emotional states. The study of emotions will include a description of how different emotions are experienced, an analysis of bodily changes accompanying different emotional states, and a look into how these states are expressed in verbal and non-verbal behavior.

Classes 3 hrs. a week. 2 semesters.

305.0 Psychological Statistics and Experimental Design

Prerequisite: Psy 201.0 and a 100 level mathematics course or equivalent. The student is advised to take Psy 301.0 concurrently.

Importance of statistics in psychology, probability and probability distributions, binomial and normal distributions, characteristics of distributions, measures of central tendency and variability, sampling and hypothesis testing, and non-parametric statistics. The designing of experiments in psychology in the light of the above, the variation of factors and observation of changes in responses, interpretation of results based on experimental design and application of the relevant statistics. A minimum final grade of C is mandatory for majors.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

Note: Students risk failing this course if Grade XII math (or equivalent), or Mat 110.1(2) and 111.1(2) or Mat 112.1(2) has not been completed.

306.0 Psychobiology

Prerequisite: Psy 201.0.

An examination of how biological events shape human behavior. Topics include evolution, the genetic properties of behavior, the parent-child relationship, origins of language, emotions and motivation, sexual, and aggressive behavior.

Classes 3 hrs. a week. 2 semesters.

310.1(.2) Introductory Social Psychology I

Prerequisite: Psy 201.0.

The history of this major branch of psychology is outlined showing how the scientific study of interpersonal behavior has progressed, up to the present, in theory and methodology. The aim of this course is to give an understanding of basic concepts, assumptions and contemporary theories in social psychology and to give a sound acquaintance with the logic and procedures for formally testing these theories.

Classes 3 hrs. a week. 1 semester.

311.1(.2) Introductory Social Psychology II

Prerequisite: Psy 201.0.

This second course in social psychology introduces the student to the research methods and paradigms which have been developed over fifty years of work in this major branch of academic psychology. Some of these methods are now applied to current Canadian problems such as bilingualism, language, and group relations. Discussion of these special issues is intended to exemplify research models and to throw light on the general questions and controversies of the discipline.

Classes 3 hrs. a week. 1 semester.

320.0 Engineering Psychology

Prerequisite: Psy 201.0.

Principles of human behavior as applied to the optimal design of equipment, tasks, work environments, and systems. Topics will include: person-machine systems, information systems, control systems, human performance. The application of engineering psychology methods to contemporary social problems, e.g., education, medicine, law enforcement, city planning, highway and transport design.

Classes 3 hrs. a week. 2 semesters.

326.0 Introduction to Industrial Organizational Psychology

Prerequisite: Psy 201.0.

An introduction to the methods and problems in industrial/organizational psychology. Representative topics will be drawn from the areas of organizational behavior, personnel psychology, human factors, and consumer behavior.

Classes 3 hrs. a week. 2 semesters.

330.0 Child Development

Prerequisite: Psy 201.0.

An introduction to development psychology including a consideration of genetic and prenatal factors in development, socialization, sexual differentiation, and cognitive development.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

332.1(.2) Adolescent Development

Prerequisite: Psy 201.0.

An examination of the biological, cognitive, and personal growth of adolescents. Topics include physical growth patterns, development of interpersonal relationships, cognitive growth, and theories of adolescent development.

Classes 3 hrs. a week. 1 semester.

333.0 Abnormal Psychology

Prerequisite: Psy 201.0. Concurrent registration in Psy 301.0 and Psy 305.0 is advised.

Examination of theoretical, research, and applied aspects of abnormal psychology. Consideration will be given to the description, origin, and planned change of maladaptive functioning. Topics may include the role of social, economic, and political factors in disorder, the history of the area, professional roles.

Classes 3 hrs. a week. 2 semesters.

347.1(.2) The Psychology of Longevity and Aging

Prerequisite: Psy 201.0.

This course is an overview of the neuropsychological, physiological, clinical and personological aspects of the later phases of life. Normal and abnormal patterns of aging are examined. Topics include research from neuropsychology, neuroanatomy, personality, clinical psychology, gerontology and geriatrics.

Classes 3 hrs. a week. 1 semester.

348.1(.2) Psychology of Gender Roles [WMS 348.1(.2)]

Prerequisite: Psy 201.0.

An examination of the psychology of gender role differences; gender role identity as determined by biological and environmental factors. Effects of gender role conformity on communication, personal adjustment, relationships, work behavior and mental health will be discussed.

Classes 3 hrs. a week. 1 semester.

349.1(.2) Drugs and Behavior

Prerequisite: Psy 201.0.

Effects of psychoactive drugs on normal and abnormal behavior and on consciousness. Explanations are in terms of brain functioning. Discussion of methods used in the study of drug effects on animals and humans.

Classes 3 hrs. a week. 1 semester.

393.0 The Psychology of Adjustment and Growth

Prerequisite: Psy 201.0.

This course focuses on a framework for studying positive behaviors and how psychological principles apply to adult development. In particular, the course covers topics that aid understanding how life challenges threaten effective functioning and covers issues concerning human adjustment and psychological growth.

Classes 3 hrs. a week. 2 semesters.

401.1(.2) Analytic Techniques for Applied and Experimental Psychology

Prerequisite: Psy 305.0.

Extended coverage of material introduced in Psy 305.0. Topics will include multi-factor, between-subject and within-subject experimental designs, and observational or correlational designs. The analysis of data from these designs will be considered in relation to measurement problems encountered in applied and experimental psychology. Both empirical and simulated experiments will provide examples for practice and discussion.

Classes 3 hrs. a week. 1 semester.

402.0 Psychology of Sensation and Perception

Prerequisite: Psy 305.0.

An examination of how sensory systems (e.g., vision, audition) abstract and process information from the physical world and the resultant effect on awareness and attention. Topics include neural communication and organization, receptor and cortical processes, coding mechanisms, specification of the stimulus, perception of brightness and color, perceptual memory, form perception and recognition, perception of space, time and motion, extra-sensory perception, perceptual illusions.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

404.0 Introduction to Physiological Psychology

Prerequisite: Psy 301.0 and 305.0.

Introduction to neuroanatomy of the brain. Neural mechanisms of sleep, arousal and attention; physiological basis of learning, language and motivation. Physical control of the mind through electrical stimulation of the brain and through drugs.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

405.0 Human Neuropsychology

Prerequisite: psychology majors with senior standing.

Conceptions of human brain-behavior relationships. The effects of various types of brain lesions on human behavior. Implications for theories of higher mental functions. Study of neuropsychological assessment techniques.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

406.0 Ethology

Prerequisite: Psy 301.0 or 305.0 or 306.0.

An examination of human and animal behavior: comparative development of social and emotional behavior, evolution, reflexive behavior, courtship, mating, and parental behavior.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

411.0 Industrial/Organizational Psychology

Prerequisite: Psy 326.0.

Extended coverage of material introduced in Psy 326.0. Lectures are designed to explore the application of psychological concepts to problems encountered in work environments. Topics may include organizational environments, leadership, communication, motivation, decision-making, personnel selection, training and performance, industrial relations and occupational health and safety.

Classes 3 hrs. a week. 2 semesters.

412.0 Human Information Processing

Prerequisite: Psy 301.0 and 305.0.

An examination of the processes by which sensory inputs are transformed, reduced, elaborated, stored, recovered and used. The course may include topics such as contemporary theories of perception and memory, psycholinguistics, computer simulation of cognitive processes, models of information processing, concept learning and formation, and decision making processes.

Classes 3 hrs. and lab 3 hrs. a week. 2 semesters.

414.1(2) Social Psychology of Nonhuman Primates

Prerequisite: Psy 201.0 and 310.1(2) or 311.1(2).

Increasing interest in the sociobiology of nonhuman primate social behavior has led to a vast increase in the number of empirical studies carried out since the 1960s. The course considers major areas of social behavior such as: (1) mother-infant relationships and play, (2) pro-social activities, e.g., social grooming, pair formation, coalitions and alliances, (3) communication and social signals, and (4) dominance and hierarchies. Methods and theories to explain primate social behavior are examined in relation to existing methods and theories in social psychology. The comparison with and relevance for human behavior is a central issue for study.

Classes 3 hrs. a week. 1 semester.

415.0 Developmental Clinical Neuropsychology

Prerequisite: Psy 301.0 and 305.0.

Study of neuropsychological disorders in children. Topics include the hyperactive syndrome, disorders in language, in auditory and visual processing, and in attention. Study of tests for the assessment of the various disorders.

Classes 3 hrs. a week. 2 semesters.

416.1(2) Experimental Social Psychology I

Prerequisite: Psy 301.0, 305.0, and either 310.1(2) or 311.1(2).

Theories, research methods and applications in social psychology are covered in the lecture course together with laboratory experiments designed to investigate social interactions and communication in dyads.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: Students who have received credit for Psy 410.0 may not enrol in this course.

417.1(2) Experimental Social Psychology II

Prerequisite: Psy 301.0, 305.0, and either 310.1(2) or 311.1(2).

Current social issues and such topics as social conformity, aggression, cooperation and exchange are covered in lectures together with laboratory experiments on these topics and on social communication in groups.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: Students who have received credit for Psy 410.0 may not enrol in this course.

418.1(2) Environmental Psychology I

Prerequisite: Psy 301.0 or 305.0.

An examination of the evolutionary and biological background of humans relative to present urban environment. Territoriality, space and human movements, privacy and crowding.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: Students who have received credit for Psy 413.0 may not enrol in this course.

419.1(2) Environmental Psychology II

Prerequisite: Psy 418.1(2).

Architectural design of housing, offices, and hospitals. Perception of the city, cognitive maps, the sonic environment, the street and its social functions. Stress in the urban environment.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

Note: Students who have received credit for Psy 413.0 may not enrol in this course.

420.1(2) Social Psychology of Nonhuman Primates II

Prerequisite: Psy 201.0; 310.1(2) or 311.1(2).

The cognitive capacities of nonhuman primates are examined in relation to international social behavior and strategies documented in current literature. The general areas of play, aggression, and consortship studies are described for rhesus monkeys, baboons, chimpanzees and gorilla: all of which highlight general principles which are appropriate for the understanding of human behavior.

Classes 3 hrs. a week. 1 semester.

421.1(2) History of Psychology

Prerequisite: Psy 301.0 and 305.0.

An examination of the development of psychology as a science. Consideration is given to controversies and recurrent themes in psychological theory and method, to the evolution of sub-disciplines within the field, and to the life and work of major figures in psychology's history.

Classes 3 hrs. a week. 1 semester.

431.1(2) Social Development in Children

Prerequisite: Psy 301.0 and 330.0 (which may be taken concurrently).

An examination of socialization and the development of individual differences in children and adolescents. There will be an emphasis on the development of prosocial behavior and attitudes, such as cooperation, altruism, and moral development. Other probable topics include aggression, egocentrism, television and the child, and child-rearing influences on development.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

432.0 Psychology and Religion

(Rel 460.0)

Prerequisite: psychology majors with senior standing or students who are enrolled in the major, minor, or honors program in religious studies.

A study of various aspects of common interest to religion and psychology: values, images of humanity, the psychological functions of religion. Discussion of phenomena such as faith healing, glossolalia, transcendental experiences, conversion, meditation, and issues such as freedom and responsibility, attitudes towards the body, the role of sin and guilt in personal distress. Prior religious knowledge and experience are advantageous.

Classes 3 hrs. a week. 2 semesters.

433.0 Personality Theory and Research

Prerequisite: psychology majors with senior standing.

A review of contemporary theories of personality through intuitive, rational, historical, and empirical methods.

Classes 3 hrs. a week. 2 semesters.

435.0 Clinical Psychology

Prerequisite: Psy 333.0 and psychology majors with senior standing.

A review of the origins, development, organization, practice and future of clinical psychology with an emphasis on theory and research in counselling and psychotherapy. Also included will be an examination of the design and implementation of improvement programs, consultation, diagnostics, reporting methods, professional training, organization and ethics, relations to other professions.

Classes 3 hrs. a week. 2 semesters.

436.1(.2) Psychology of Art I

Prerequisite: psychology majors with senior standing.

A study of theories and research on the psychological principles underlying the perception of the arts of painting and sculpture. The review will include a psychological interpretation of creative processes and art as emotional communication.

Classes 3 hrs. a week. 1 semester.

437.1(.2) Psychology of Art II

Prerequisite: psychology majors with senior standing.

A study of theories and research on the psychological principles underlying the perception of the arts of literature and music. Both contemporary perspectives and major traditions within psychology will be emphasized. The reviews will also include a psychological interpretation of creative processes, of art as emotional communication, and of the role of art in the broader context of personality and society.

Classes 3 hrs. a week. 1 semester.

440.0 Psychological Tests and Measurements

Prerequisite: Psy 201.0, 305.0, 333.0, and 433.0 (which may be taken concurrently).

This course examines psychological measurement and the construction of scales and tests. Tests in common use, for example, intelligence, aptitude, ability, personality and pathology tests, are reviewed. These tests are also evaluated in terms of reliability and validity. The ethics of testing is also considered.

Classes 3 hrs. and lab 1 1/2 hrs. a week. 2 semesters.

445.0 The Psychology of the Unconscious

Prerequisite: Psy 333.0 or 440.0.

An introduction to the psychological unconscious and its status in contemporary psychology. The course will include the study of the processes and products of imagination as a means of understanding the psychological experience of the person. Materials drawn from dreams, visions, fairy-tales, stories, drama and other literary texts, expressive movement, the visual arts, hypnotic and other altered states, and projective techniques will be examined in the context of research and theory on symbol and image. The use of fantasy in diagnosis and therapy is also examined.

Classes 3 hrs. a week. 2 semesters.

449.0 Senior Seminar

Prerequisite: senior standing and permission of the department.

Applications for this course must be made in March of the junior year to the Chairperson of the Department of Psychology.

An individual research and/or reading course in psychology.

Classes and lab 6 hrs. a week. 2 semesters.

450.1(.2) Behavior Problems of Children

Prerequisite: Psy 301.0 and a minimum grade of C in Psy 330.0.

A review of problems exhibited by children in home and educational settings (e.g., autism, depression, hyperactivity, learning disabilities). Approaches to treatment will also be discussed.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

460.1(.2) Development in Human Infancy

Prerequisite: Psy 330.0 or permission of instructor.

An examination of the development of behavioral processes of the human infant. Surveys of recent research in infant learning, visual and auditory perception, social and cognitive development.

Classes 3 hrs. a week. 1 semester.

485.1(.2) Behavioral Analysis and Change

Prerequisite: Psy 301.0.

A review of learning theory as it applies to behavior therapy. Survey of behavior modification techniques including relaxation training, counter conditioning, assertive training, token economies, modelling, shaping and aversive techniques. Comparison with traditional, dynamic theories and applications.

Classes 3 hrs. and lab 1 1/2 hrs. a week. 1 semester.

486.1(.2) Advanced Behavioral Analysis and Change

Prerequisite: Psy 301.0 and 485.1(.2).

Cognitive behavior therapy. Self-directed behavior therapy. Biofeedback and special topics: hypnosis, smoking, alcoholism, stress reduction, obesity, and mood change.

Classes 3 hrs. and lab 1 1/2 hrs. a week. 1 semester.

490.1(.2) Introduction to Health Psychology

Prerequisite: Psy 201.0 and 305.0.

This course focuses on understanding how psychological factors contribute to the promotion and maintenance of good physical health, to the prevention and treatment of physical illness, and to the development of psychological well-being.

Classes 3 hrs. a week. 1 semester.

498.0 Community Psychology

Prerequisite: Psy 305.0.

Delivery systems of psychological services: social services, agencies, institutions and private practicing professionals. Epidemiological surveys. Preventative psychiatry. Community psychology. Interventions: individual-social-systems interventions and intersystem relationships.

Classes 3 hrs. a week. 2 semesters.

549.0 Honors Seminar

Prerequisite: fifth year honors standing.

A research course in psychology. It is expected that the student will produce an honors thesis based on work in this course. The course is required for fifth year honors students.

Classes and lab 6 hrs. a week. 2 semesters.

601.0 Advanced Psychological Statistics and Research Design

Prerequisite: graduate standing.

Statistics applied to psychological research: statistical inference, hypothesis testing, analysis of variance including simple and advanced experimental designs, correlation, and an introduction to regression along with other multi-variate methods. Also to be presented will be the logic of experimental and quasi-experimental methods including naturalistic approaches to hypothesis testing.

603.1(.2) Advanced Assessment

Prerequisite: graduate standing.

Study of the principles of psychological testing: reliability, validity, and interpretation of test scores. Analysis of these principles with respect to selected tests most frequently encountered in practical settings. Students are expected to become proficient in the use of these tests.

604.1(.2) Clinical Assessment

Prerequisite: graduate standing.

A study of assessment procedures commonly used in clinical and counselling settings for planning and evaluating case management. Students will acquire skills in the administration and interpretation of selected instruments, and will practice integrating results in the form of psychological report writing.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

605.1(.2) Assessment of Work Behavior

Prerequisite: graduate standing.

A study of the assessment techniques used to select, place, evaluate, and counsel personnel. Procedures used to measure job satisfaction, motivation, and leadership are also discussed. Students are expected to become proficient in the use of the selected test instruments.

606.1(.2) Neuropsychological Assessment

Prerequisite: graduate standing.

Study of the most frequently used tests in the assessment of brain damage. Discussion of the validity of these tests for the different diagnoses of functional and organic disorders of patients encountered in neuropsychiatric settings.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

610.1(.2) Applied Multivariate Analysis

Prerequisite: graduate standing.

This course assumes a working knowledge of the primary univariate statistical techniques, specifically point estimators, univariate inferential tests, correlation, and analysis of enumerative data. From that base, this course examines the purposes, uses, analysis and inter-relatedness of a sample of the following multivariate techniques: Hotellings T^2 , multivariate analysis of variance and post-hoc procedures, factor analysis, discriminant analysis, and canonical correlation. Considerable use will be made of at least one of the major computerized statistical packages.

615.1(.2) Social Skills and Mental Health

Prerequisite: graduate standing.

The social skills training approach. The analysis of social behavior. Development and deficiency in social skills: a review of the evidence. Changing social behavior. Outcome studies of skills training: a review. Assessment and training. The training manual.

620.1(.2) Topics In Engineering Psychology

Prerequisite: graduate standing.

Selected topics related to the application of experimental psychology to the study of human factors involved in work, e.g., the description, evaluation and/or design of jobs and equipment, the psychophysiology of human performance, system development, person-machine interactions, accidents and safety.

625.1(.2) Topics In Industrial Psychology

Prerequisite: graduate standing.

An intensive study of current theories and research on a topic selected from the following: employee selection, placement, and evaluation; applied motivation; leadership; communication; decision-making; training in industry.

640.1(.2) Field Research Methods

Prerequisite: graduate standing.

Research methods as currently applied to a variety of clinical and organizational problems. These methods consist of such special techniques as interviewing programs, their design and concentration, the analysis of interview material, questionnaire construction and administration, attitude surveys, non-participant and participant observational studies, naturalistic observations and field experiments.

650.1(.2) Community Psychology

Prerequisite: graduate standing.

A survey of the function of professional psychology in the community. Study of the design, implementation, and evaluation of programs, review of epidemiological research, study of social service agencies and clinical settings, institutions, alternative delivery systems. The ethics and politics of the mental health enterprise.

655.1(.2) Counselling and Psychotherapy

Prerequisite: graduate standing.

A study of short-term counselling and psychotherapy techniques. Emphasis will be placed on what the counsellor actually does. Single case methods for evaluating process and outcome will be reviewed. Consideration will be given to contemporary issues concerning values and ethics.

Classes 3 hrs. and lab 3 hrs. a week. 1 semester.

660.1(.2) Behavior Therapies

Prerequisite: graduate standing.

Study and training in the application of the principles and technology of behavior modification to a variety of human problems. Consideration will be given to biofeedback, modelling, contingency contracting, and token economies. Students will be expected to identify target behaviors and carry out modification procedures. The results of projects will be reported in suitable form for class presentation and discussion.

665.1(.2) Topics In Applied Child Psychology

Prerequisite: graduate standing.

Principles of development applied to children's behavior in community settings. Possible topics include methods of assessment and observation of children, psychological and educational counselling, behavior modification, and special problems in conducting research with children. Course content will vary from year to year and will be guided by student needs and interests. May be repeated once for course credit.

670.1(.2) Special Seminar: Topics

Prerequisite: graduate standing.

Presentation of topics not covered in the regular graduate curriculum, offered according to student interest and the availability of qualified faculty. May be repeated for credit once.

676.1(.2) Geroneuropsychology

Prerequisite: graduate standing.

Neuropsychology spans the growing fields of gerontology and geriatrics. This course focuses on recent developments in the neuropsychology of aging and the dementias, as well as on normal and pathological aging of the central nervous system.

680.1(.2) Psychological Disorders

Prerequisite: graduate standing.

Intensive study of theory and research addressed to the description, classification, etiology and development of psychopathology.

690.0 Practicum and Directed Readings

Prerequisite: graduate standing.

Supervised training in the application of psychological principles, techniques, and instruments, in various practical settings. Students are expected to accumulate at least 500 hours of practicum training coordinated with relevant readings.

695.0 Thesis

Prerequisite: graduate standing.

Experimental research or field study conducted under the supervision of an advisory committee.

Religious Studies (Rel)

Chairperson, Associate Professor
Professors
Associate Professor

P. Bowlby
L. F. Murphy, S.J., E. Stiegman
S. A. Armstrong

The Religious Studies Department offers courses on the religious dimension of human life. In fulfilling that task the curriculum includes courses in three areas:

1. Comparative Religion

The comparative study of religion includes courses on the major religious traditions of the world as well as courses which compare characteristics of religious life across several religious traditions.

2. Thematic Studies In Religion

Thematic courses are offered as a way to explore various disciplines and their approach to the study of religion or to engage in a debate around a theme structured to include both religious and non-religious views. Such courses may examine a theme comparatively in order to show the views of different religious traditions or a theme may be presented in terms of a debate between religious and non-religious understandings.

3. The Christian Tradition

By virtue of its charter and history, Saint Mary's University has a special responsibility to teach courses on Christianity. The Religious Studies Department fulfils that purpose by offering a number of courses on the Bible, on issues of debate within the Christian Tradition, and the formative role of Christianity in Western Culture and Tradition.

Electives

Students seeking an elective may take any religious studies course at the 200 or 300-level.

Degree Requirements

Religious studies courses at the 200 or 300 level satisfy a humanities requirement in the Arts Faculty; free electives in the Commerce Faculty and the two humanities requirements in the Faculty of Science.

A Minor In Religious Studies

A minor in religious studies may be declared by taking four religious studies courses. Two of the courses must be at the 300 level. An overall grade-point average of 2.00 must be maintained in the four courses.

A Major In Religious Studies

Students majoring in religious studies must fulfil the following requirements:

1. the equivalent of six full courses in the department;
2. two of the six courses at the 400 level;
3. an overall quality point average of 2.00 in the courses counted toward the major;
4. at least one course from each of the three general areas in the department: Comparative Religion, Thematic Studies in Religion, the Christian Tradition.

Advanced 400 Level Courses for Majors and Honors Students in Religious Studies

All religious studies courses at the 300 level are also given a 400 number. The 400 number is to be used only by religious studies majors and honors students to indicate the courses in their program taken at an advanced level. Requirements for these 400 level advanced courses are approved by the department and normally involve reading a supplementary bibliography and preparing more advanced writing assignments than are required of students taking courses at the 300 level. A student may not receive credit for a course at both the 300 and 400 levels.

Honors in Religious Studies

Religious Studies offers an honors program in conformity with the Faculty of Arts requirements for an honors degree. In addition to those requirements, an honors student must complete four full courses (or half course equivalents) at the 400 level and a department honors seminar (590.0-595.0). An honors essay will be written in conjunction with the honors seminar.

Admission to an honors program normally requires departmental approval no later than the beginning of a student's junior year. A 3.00 average in religious studies courses is required for admission to, and continuation in, the honors program.

Student Counselling

Majors and honors students must have their religious studies courses approved by the Department Chairperson on an annual basis. In some instances, majors and honors students will be requested to take prerequisites for departmental courses. Suggested prerequisites are kept on file in the department. With renumbered or restructured courses, students are advised that they are not eligible to take a course for credit if they already have a credit for a comparable course, even if that course was taken at a different level.

Notes: (i) Students may also take elective courses at the 300 level without a prerequisite.

(ii) With renumbered or restructured courses, students are advised that they are not eligible to take a course for credit if they already have a credit for a comparable course, even if that course was taken at a different level.

Introductory Courses

201.0 The Religious Dimension of Human Life: Introduction to Religious Studies

There are many common life experiences (for instance, the quest for personal identity, the encounter with death, suffering, loneliness, sexuality, wonder, good and evil) which most men and women have sought to address in the context of an organized religion. In addition to studying these experiences which point toward the religious dimension in human life and the ways in which several religions have dealt with them, we shall also look at some secular approaches to the same experiences.

Classes 3 hrs. a week. 2 semesters.

202.0 Introduction to Comparative Religion: When Great Religions Meet

The biblical faiths of Judaism and Christianity took shape against the background of other Near-Eastern religions. Zen Buddhism emerged out of the encounter between Chinese religious traditions and Indian Buddhism. After looking at various examples of meetings between religions, the course will examine how religions develop in the encounter with other traditions and how living religions interpret other faiths. These themes will form an introduction to comparative religion.

Classes 3 hrs. a week. 2 semesters.

203.1(.2) Introduction to the Bible: Old Testament

A critical approach to the Bible, involving an inquiry into the cultural and historical context of biblical literature, the meaning and relevance of the Bible for today.

Classes 3 hrs. a week. 1 semester.

204.1(.2) Introduction to the Bible: New Testament

A critical approach to the New Testament of the Bible, involving an inquiry into the cultural and historical context of biblical literature, the meaning and relevance of the Bible for today.

Classes 3 hrs. a week. 1 semester.

300 and 400 Level Courses

301.1(.2) [401.1(.2)] Power and Weakness

All power may corrupt, but who wants to be powerless? This course will explore and contrast biblical and contemporary notions of power. Concepts of the nature and use of power in human experience are crucial for every religious and quasi-religious approach to life. In this course, special attention will be given to the ways in which biblical notions of power and weakness represent a reversal of more ordinary understandings.

Classes 3 hrs. a week. 1 semester.

302.1(.2) [402.1(.2)] Wisdom and Foolishness

No one likes to be thought a fool - still less to be one. This course will explore and contrast biblical and contemporary notions of foolishness. An understanding of where and how wisdom is to be found is central to most religious and quasi-religious approaches to life. In this course, special attention will be given to the ways in which biblical notions of wisdom and foolishness represent a reversal of more ordinary understandings.

Classes 3 hrs. a week. 1 semester.

303.1(.2) [403.1(.2)] Christian Origins

This course treats the formation and development of Christianity as seen through the New Testament and other early Christian texts. It studies the life of Jesus, the origin of the Church, its separation from Judaism, its struggle against Hellenistic religion and philosophy, its early beliefs, morals, and worship.

Classes 3 hrs. a week. 1 semester.

304.1(.2) [404.1(.2)] The New Testament and the End of the World

The New Testament speaks about the destruction of the world, antichrist, judgment, resurrection, a new heaven and a new earth. The course studies Apocalyptic themes in the Gospels, Letters, and Revelation and various interpretations of this literature. Is it possible to know when the end of the world is to come? Or what the next world will be like?

Classes 3 hrs. a week. 1 semester.

305.1(.2) [405.1(.2)] Women In Christian Scripture and Tradition [WMS 305.1(.2)]

This course calls attention to the unconventional attitude of Jesus toward women; it studies the prominence of women in the New Testament, in contrast to early restrictions of their leadership roles. Did Christianity conform, from the beginning, to patriarchal society, betraying its own insight that in Christ "there is neither male nor female" (Galatians 3:28). Has Christian tradition legitimated male dominance? What can the cause of women's equality hope for from Christianity?

Classes 3 hrs. a week. 1 semester.

308.1(.2) [408.1(.2)] The God Question

Two problems are studied in this course: the idea of God and the existence of God. Contemporary approaches to these questions will involve the student also in such issues as the nature of language about the sacred, and mythology in religious scriptures.

Classes 3 hrs. a week. 1 semester.

309.0 (409.0) History of Israel (Cla 310.0)

A study of the history of the ancient Hebrew kingdoms of Israel and Judah from the earliest settlements in Palestine to the fall of Jerusalem in 70 A.D.

Classes 3 hrs. a week. 2 semesters.

310.1(.2) [410.1(.2)] Reason or Belief?

The question of religious faith is approached here by placing the subject, or the religious mind itself, under study: What problems have the social sciences presented to the believer? How can one interpret human experience? How might one know if a God revealed himself or herself? Is natural science an obstacle to faith?

Classes 3 hrs. a week. 1 semester.

311.1(.2) [411.1(.2)] Jesus of Nazareth

Jesus of Nazareth: Did Jesus really exist? What did he teach? Why was he killed? What does the resurrection mean? In examining these questions, the course will survey the many responses to Jesus' question, "Who do men say that I am?"

Classes 3 hrs. a week. 1 semester.

312.1(.2) [412.1(.2)] Jesus and Liberation

How has the life and teaching of Jesus made justice the central issue in Christianity today? What is liberation theology in the third world? Is capitalism opposed to the teaching of Jesus? What is Jesus' teaching about the poor, the oppressed, human rights and violent revolution?

Classes 3 hrs. a week. 1 semester.

316.0 (416.0) Cross-listed as Anthropology 350.0**317.0 (417.0) Cross-listed as Sociology 317.0****319.1(.2) [419.1(.2)] God and Evil**

What are we to make of evil? If God is both all-powerful and all-good, why is there evil in the world? Must there be evil in order for there to be good? Is there any way to make sense of evil? We will examine Christian and non-Christian approaches to the problem of evil as expressed in a variety of works of fiction and non-fiction.

Classes 3 hrs. a week. 1 semester.

320.0 (420.0) Cross-listed as Anthropology 349.0**321.1(.2) [421.1(.2)] Marriage: Contemporary Experience and Religious Meaning**

The course explores religious meanings in marriage, seen as contemporary experience more than as classic symbol. Besides treating the foundations of love, communication, and partnership between the sexes, it may study present day departures from established patterns. At the centre is a theology of marriage, but also an explicit consideration of the crisis in this area of religious thought.

Classes 3 hrs. a week. 1 semester.

322.1(.2) [422.1(.2)] Intimacy In Marriage: Religious Dimensions

Not all good marriages are equally intimate, or intimate in the same ways. This course studies the many facets of intimacy, the barriers to it and the communication skills that promote it. Throughout, the rich meanings of marital intimacy are sought principally in biblical religion.

Classes 3 hrs. a week. 1 semester.

323.1(.2) [423.1(.2)] The Islamic Religious Tradition

Islam is one of the most rapidly expanding religious traditions in the world. This course will examine the origins of Islam, its fundamental teachings in the Qu'ran and in the works of some of its major teachers. In addition, the course will survey the history of Islam and contemporary developments in selected areas.

324.0 (424.0) Religions of China

What did Confucius say? How does a Taoist and a Buddhist conceive of the world and his place in it? How have Chinese religious traditions shaped the character of Chinese culture? These questions will be examined through the reading in translation of selected Chinese classics such as: Confucius' Analects, Lao Tzu's Tao te Ching, The Buddhist Platform Scripture and selected writings of Chairman Mao.

Classes 3 hrs. a week. 2 semesters.

325.1(.2) [425.1(.2)] Myth and Story

The telling of stories and the recounting of myths in ritual settings are two major characteristics of religious traditions. The course will examine in translation a variety of stories and myths from the literature of major world traditions. Critical examination of the myths and stories will involve both locating the myth or story in the religious context of a particular faith and the comparative analysis of major themes. Literary sources will be drawn primarily from Hinduism, Buddhism, Islam and the biblical traditions.

Classes 3 hrs. a week. 1 semester.

326.1(.2) [426.1(.2)] The Hindu Religious Tradition

"Hinduism" is the name westerners give to the religious tradition of South Asia. The course will examine the historical development and literary monuments, such as the "Bhagavadgita", that express the religious life of South Asian peoples.

Classes 3 hrs. a week. 1 semester.

327.1(.2) [427.1(.2)] The Buddhist Religious Tradition

The Buddhist religious tradition was founded in South Asia, and moved to China, Japan and Southeast Asia. The founding of Buddhism will be examined through the teachings concerning the life of Siddhartha. Ch'an or Zen Buddhism will provide an insight into Chinese and Japanese Buddhism.

Classes 3 hrs. a week. 1 semester.

328.1(.2) [428.1(.2)] The Catholic Church Today

The Catholic Church has radically changed. What does it teach today about God, salvation, Jesus Christ, faith, Church, Sacraments, and human destiny? Students will be introduced to different interpretations given by some Christian Churches to these beliefs.

Classes 3 hrs. a week. 1 semester.

329.1(.2) [429.1(.2)] Catholicism and Contemporary Issues

What does the Catholic Church say to the world today about human dignity, atheism, community, work, labour, communism and capitalism, nuclear weapons, abortion, birth control, population? Students will be introduced to other views of these questions.

Classes 3 hrs. a week. 1 semester.

331.0 (431.0) Key Concepts of Christianity

Stressing biblical sources, this comprehensive overview traces the development of the dominant themes in Christianity and studies their relevance to present day moral questions. The course asks how a contemporary Christian conceives of God, of the origins of nature and man, and a human destiny here and hereafter.

Classes 3 hrs. a week. 2 semesters.

333.1(.2) [433.1(.2)] Grace and Freedom

A study of basic Christian beliefs about human freedom, the quest for salvation, God's grace in Christ, sin and Christian life. How does a contemporary Christian conceive of human evil, human community, redemption in Christ, and religious institutions?

Classes 3 hrs. a week. 1 semester.

334.1(.2) [434.1(.2)] Christian Spirituality Today

A study of the Christian religion as experienced and expressed today by outstanding writers of different traditions. It focuses on the universal themes contained in the spiritual writings of Christianity, including the Catholic, Protestant, and Greco-Russian traditions. Topics studied include: monasticism, prayer, charismatic renewal, community, building the world, justice and charity.

Classes 3 hrs. a week. 1 semester.

336.1(.2) [436.1(.2)] Creation and Evolution: The Religious Issues

The theory of evolution is a powerful tool for answering scientific questions about life in this world. The success of the scientific enterprise has led many people to seek answers to their religious questions in "evolutionary" ideas. On the other hand, the biblical account of creation is a fruitful source of insight into religious questions about why the world is as we find it. The central importance of biblical truth for Christians and Jews had led many of them to seek answers to scientific questions in the creation story. What are the relevant religious questions?

Classes 3 hrs. a week. 1 semester.

337.1(.2) [437.1(.2)] Hindu and Buddhist Religious Art

Art and architecture have given concrete expression to religious ideas and ideals in South Asia. The course will examine historically both Buddhist and Hindu art and architecture in association with the religious conceptions fundamental to these traditions.

Classes 3 hrs. a week. 1 semester.

338.1(.2) [438.1(.2)] Religion and Art: The West

In what ways may art be religious? Through a rapid thematic survey of the visual arts in Western civilization and an enquiry into the relationship between religious experience and the arts, the student is led to recognize various levels of religiousness in works of art.

Classes 3 hrs. a week. 1 semester.

339.1(.2) [439.1(.2)] Images or Idols?

Prerequisite: completion of a minimum of 5.0 courses at the University.

Telling sacred stories through pictures, sculpture and even architecture is historically both an essential and hotly debated aspect of western religious traditions. Judaism, Christianity and Islam selectively employ such arts. Each distinguishes between sacred and profane images and names unacceptable images "idols". Use of such a term symbolizes one of the most serious issues dividing western and eastern religious traditions. The purpose of this course is to examine the western religious debates about images and the arts with a view to understanding the significance of those debates for comparative religion and the encounter between religious traditions.

Classes and seminar 3 hrs. a week. 1 semester.

341.1(.2) [441.1(.2)] Political Theology: East and West

How women and men are to live well in society has been one of the most important subjects of religious thought, both in eastern and western traditions. The course will examine the political theology of such writers as Confucius, Augustine, Gandhi, and others with a view to understanding the relationship of political life and religious conviction.

Classes 3 hrs. a week. 1 semester.

342.1(.2) [442.1(.2)] Religion and War

Religious attitudes toward war have ranged from pacifism, through vigorous efforts to enforce limits on war's destructiveness, to outright support for specific wars. The course will examine comparatively the views of major religious traditions on war; the use of war and the warrior as religious symbols; the crisis of religious views on war in the nuclear age.

Classes 3 hrs. a week. 1 semester.

346.1(.2) [446.1(.2)] Religion and the Social Order

Employment opportunities frequently lead university graduates into business, into science and technology, or into careers associated with government — activities which society has traditionally linked to religion only in weak, external ways. In this course, the student is led to work out an understanding of the relationship between these specific activities and ultimate human well-being. Two issues are studied: In what ways does religion influence one's attitudes to work? And, how does religion, which preserves society, become for some the force which must overturn the social order?

Classes 3 hrs. a week. 1 semester.

347.1(.2) [447.1(.2)] Ecology and Religion

The course reviews the phenomenon of human ecology in order to advance to further questions: In man's relationship to nature, does nature have rights? To reduce pollution, may the rich deprive the poor of advanced technology? Is a low-consumption life-style desirable in itself? Should we leave development and progress to the experts? Such questions prepare the ground for a theology that finds religious meaning in the worldly realities of science, commerce, and government.

Classes 3 hrs. a week. 1 semester.

351.1(.2) [451.1(.2)] Love

Our culture has represented love, variously, as effecting self-fulfilment, the affirmation of another personality, union with deity, merit for a future life; or, as sex, a passing neurosis, an unreasoned self-annihilation, or a social contrivance. This course explores the assumptions and implications of these views, particularly as they involve ultimate human concerns, that is, religion. The course can be continued into Rel 352.2 where a coordinate theme is studied in a similar manner.

Classes 3 hrs. a week. 1 semester.

352.1(.2) [452.1(.2)] Death

The student considers such questions as what dying is really like, whether dying provides a valuable point of view of living, whether people continue in some form of existence after dying, how one is to understand the symbols in religious talk about death, and why mythologies deal so heavily in death.

Classes 3 hrs. a week. 1 semester.

413.1(.2) Cross-listed as Soc 415.1(.2)**416.1(.2) Cross-listed as Soc 416.1(.2)****460.0 Cross-listed as Psy 432.0****490.0-495.0, 496.1(.2)-497.1(.2) Directed Reading In Religious Studies**

Prerequisite: permission of department.

These courses are organized by individual faculty members in agreement with the department as a whole; they are designed to supplement or provide an alternative to regular courses in religious studies according to the special needs and interests of students. Course content can be proposed by the student.

590.0-595.0 Honors Seminars In Religious Studies

Prerequisite: fourth-year honors status and permission of department.

The three general areas in which the department offers courses are noted below, together with the courses which fall into each area:

1. Comparative Religion

202.0	327.1(.2) [427.1(.2)]
323.1(.2) [423.1(.2)]	337.1(.2) [437.1(.2)]
324.0 (424.0)	339.1(.2) [439.1(.2)]
325.1(.2) [425.1(.2)]	341.1(.2) [441.1(.2)]
326.1(.2) [426.1(.2)]	

2. Themes in Religious Studies

201.0	336.1(.2) [436.1(.2)]
301.1(.2) [401.1(.2)]	342.1(.2) [442.1(.2)]
302.1(.2) [402.1(.2)]	346.1(.2) [446.1(.2)]
308.1(.2) [408.1(.2)]	347.1(.2) [447.1(.2)]
310.1(.2) [410.1(.2)]	351.1(.2) [451.1(.2)]
316.0 (416.0)	352.1(.2) [452.1(.2)]
317.0 (417.0)	360.0 (460.0)
320.0 (420.0)	413.1(.2)
321.1(.2) [421.1(.2)]	414.1(.2)
322.1(.2) [422.1(.2)]	

3. The Christian Tradition

203.1(.2)	319.1(.2) [419.1(.2)]
204.1(.2)	328.1(.2) [428.1(.2)]
303.1(.2) [403.1(.2)]	329.1(.2) [429.1(.2)]
304.1(.2) [404.1(.2)]	331.0 (431.0)
309.0 (409.0)	333.1(.2) [433.1(.2)]
311.1(.2) [411.1(.2)]	334.1(.2) [434.1(.2)]
312.1(.2) [412.1(.2)]	338.1(.2) [438.1(.2)]



306.0 Sociology of Education (Edu 507.0)

Prerequisite: Soc 200 or enrolment in Education.

A study of major sociological approaches (both conceptual and methodological) to education in different societies, with special emphasis on Canadian society. The course will focus on topics such as relationship between family, education and society; education and inequality; the social organization of knowledge; education and social change; the politics of education.

308.0 Urban Sociology

Prerequisite: Soc 200.0.

An analysis of different ways in which sociologists approach the city; the historical and comparative approach, human ecology, urban and suburban interaction, informal urban social structures, community and power structure.

310.1(.2) Society and the Environment

Prerequisite: Soc 200.0.

This course will be an examination of selected Nova Scotia environmental issues; acid rain, forestry/wildlife, toxic wastes, and uranium exploration and mining, from an ecological perspective. The class will address the basic question: can environmental problems be resolved within our society? Students will be expected to analyze critically the perspectives of the provincial and federal governments, industry and environmental organizations.

311.1(.2) Population

Prerequisite: Soc 200.0.

An introductory course in demography and population studies designed to acquaint the student with the basic materials and techniques of demographic analysis, and to explore the interrelationships of demographic phenomena and various aspects of social structure. Topics include population size, composition, and distribution; and the dynamics of demographic change, i.e., fertility, mortality and migration. Particular attention is given to current population issues and problems in both developed (especially Canada) and developing nations.

313.0 Sociology of Kinship and Family

Prerequisite: Soc 200.0.

Cross-cultural analysis of family and changing family patterns, relationship between family and other institutions, male and female roles and patterns of interaction at each stage of family life-cycles.

315.0 Corrections

Prerequisite: Soc 200.0 or registration in the Criminology Certificate Program.

This course will focus on contemporary corrections through an examination of the systems, institutions, techniques, and methods that are used to prevent the development of criminal behavior patterns and to change those already developed. Emphasis will be placed on examining corrections in relation to the social forces and the value system of the society. Particular attention will be given to corrections within the criminal justice system within the Atlantic region.

317.0 Sociology of Religion

[Rel 317.0 (417.0)]

Prerequisite: Soc 200.0 or a course in religious studies.

In its study of the relationship between religion and society, this course examines the continuities between classical contributions of sociologists such as Durkheim, Marx and Weber, and contemporary theories and issues. Attention is focused on religious movements in Canada and other countries.

319.0 Reform and Revolution in Latin America

Prerequisite: Soc 200.0 or permission of instructor.

This course examines the conditions and social structure that underlie movements toward reform and revolution in Latin America. Major political and social trends on the continent will be explored in terms of various themes such as the role of the church, the military, United States intervention, aid and trade, land tenure and the multinational corporations. Special case studies will include revolutions in Mexico, Cuba and Nicaragua; and Chile under Allende and Pinochet.

320.0 Women in Canadian Society (WMS 320.0)

Prerequisite: Soc 200.0.

The analysis of the structural and cultural conditions which have determined the position of women at various stages in Canada's development, with particular emphasis on Atlantic Canada. The process of sex-related socialization will be considered as well as the consequences of sexual differentiation on the familial, education, occupations, legal and political status of women. This course may be taken in conjunction with the Atlantic Canada Studies Program; in conjunction with a concentration in sociology; as a social science elective.

321.0 Canadian Society

Prerequisite: Soc 200.0 or a course in economics.

A political economy perspective on the conditions created by the regional and class structure of Canadian society. Emphasis is placed on problems of regional development, the role of business, and the corporate structure of the Canadian economy. Among the major problems to be considered are the relationship between Atlantic Canada and Central Canada, the Quebec question, native peoples and northern development, corporate concentration and the impact of foreign investment.

322.0 Political Sociology

Prerequisite: Soc 200.0 or a course in political science.

Prevailing theories of radical or dissident behavior will be assessed critically and alternate emerging approaches suggested. Protest and radical movements in Europe, Latin America and elsewhere will be considered.

323.0 The Individual and Society

Prerequisite: Soc 200.0.

This is a general course which will explore a variety of issues that characterize sociological investigations of individual persons in their social settings. Attention will be given to the institutional contexts of individuality - families, work, leisure, and so on - to the public and private realms of social life and to the meanings which people construct with each other in their social worlds.

324.0 Social Stratification

Prerequisite: Soc 200.0.

An analysis of the main features of social inequality in modern industrial societies; distribution of power and wealth, existence of power elites or governing classes, comparative community power structures, institutionalization of class conflict, problems of social mobility, political expression of class and status groups.

325.1(.2) Bureaucracies

Prerequisite: Soc 200.0.

We shall examine the ways in which we can understand large corporate and government organizations as social tools. We shall emphasize their use to achieve the purposes of both those who run them and those who work in them.

326.1(.2) People in Bureaucracy

Prerequisite: Soc 200.0.

This course complements Soc 314.1(.2) by offering a sociological account of human relationships in bureaucratic contexts. Particular attention will be given to the possibilities for a limits on human action that organizational situations present.

327.0 Social Policy

Prerequisite: Soc 200.0.

This course analyzes the process by which public policies are formulated, the influence of particular social groups (politicians, bureaucrats, professionals, citizen interest groups) during the policy formulation process, the social implications of public policies and the nature and purpose of social policy research. The lectures focus on policy-making as it affects Atlantic Canada and each student specializes in a policy area of his or her choice (e.g., welfare, education, rural or northern development, energy, employment, health planning, defence, etc.).

328.1(2) Social Gerontology

Prerequisite: Soc 200.0 or permission of instructor.

An overview of the manner in which society and older people interact. The course examines such topics as social participation and adjustment, economic situations, problems of the elderly, policies and services designed to assist the elderly.

Note: Students who have received credit for Soc 312.0 may not enrol in this course.

329.1(2) The Family In Later Life

Prerequisite: Soc 200.0 or permission of instructor.

An examination of the relationships between the older person and the family. Topics studied include intergenerational relations, grandparent roles, marital status, sexual relationships, problems presented by dependent older people, and family support. Older women and widowhood will receive special attention. Cross-national and cross-cultural comparisons will be undertaken.

Note: Students who have received credit for Soc 312.0 may not enrol in this course.

330.1(2) Sociology of Retirement

Prerequisite: Soc 200.0 or permission of instructor.

The course examines various aspects of retirement from a sociological perspective. The topics covered include historical emergence of retirement, retirement policies and pension schemes, problems of individual adjustment to retirement. International comparisons will be presented.

Note: Students who have received credit for Soc 312.0 may not enrol in this course.

331.1(2) Modernization and Aging

Prerequisite: Soc 200.0 or permission of instructor.

An exploration of the relationships between patterns of aging and status of the elderly and societal development and modernization. Sociological perspectives and research dealing with changes in age roles, attitudes towards the elderly, family supports, services and programs for the elderly will be examined. Examples will be drawn from pre-industrial societies, as well as today's developed and developing nations.

Note: Students who have received credit for Soc 312.0 may not enrol in this course.

332.0 Sociology of Atlantic Canada

This course is designed to introduce students to the sociological study of Atlantic Canada, that is to the development and structure of its major institutions and social groups. The focus in the first term is on the dimensions of settlement, the development of class, industrialism, under-development and social movements. In the second term the course focuses on the contemporary structure of uneven development with particular emphasis on the organization of capital, labor, and the state in the resource sector - the fishery, agriculture, forestry and mining. Current issues and themes such as resettlement, multinational corporations, elites, marginality and unemployment, community dependence, intermediate technology, the state, and oil and gas are some subjects dealt with in this context.

333.0 Social Movements

Prerequisite: Soc 200.0.

Analysis of the origin and development of social movements and their role in social change. The political and sociological sources of social movements will be stressed, as well as their institutional and ideological transformations. The course will have a comparative focus, with attention to Canadian social movements in this century. Social gospel, agrarian socialism, trade unionism, social credit, cooperatives, and nationalism will be examined as diverse expressions of Canadian social life.

336.1(2) Work and Occupations in Contemporary Society

Prerequisite: Soc 200.0.

This course presents an overview of the work of sociologists on occupations. Occupations are studied as an important role in contemporary society. The professionalization of occupations is treated as are other changes in occupational structure and work conditions. The question of how people select or are selected for occupations is discussed. Other topics analyzed are occupations and culture, learning work roles, identification with occupations, career patterns, change in occupational structure, work setting, occupational ideologies, and influences of occupational roles on other aspects of life.

337.1(2) Leisure in Contemporary Society

Prerequisite: Soc 200.0.

In this course, leisure is seen as the converse of work in industrial society. Leisure is analyzed in relation to social structural features, such as social class and occupation. The course examines the social organization of such leisure activities as social interaction with family and friends; voluntary associations, varieties of play including sports, pastimes, hobbies, games and holiday travel; participation in expressive culture; use of mass media, the arts and entertainment.

338.1(2) Language Change and Social Change

Prerequisite: Soc 200.0 or permission of instructor.

This course consists of a systematic overview of historical linguistics in the context of social change. Specifically, the course covers the principles and processes of language change, and their relationship to aspects of social change, such as migration, language contact, technological change, and changing social structure. Students have the opportunity to discover elements of change in Indo-European and other languages by carrying out actual exercises.

339.1(2) The Sociology of Language

Prerequisite: Soc 200.0 or permission of instructor.

This course provides an introduction to the major areas of the sociology of language. Special attention is paid to language and social relations in Canada, particularly to the present-day situation. Standard topics in the sociology of language are treated, including language and social interaction; the use of language by social classes, men and women, ethnic groups and regions; dialects and social groups, bilingualism and multilingualism; language and nationalism; language maintenance and language shift; and language planning.

340.0 Ethnic and Minority Groups

Prerequisite: Soc 200.0 or a course in anthropology.

An analysis of racial, ethnic, and minority group structure and of inter-group processes in different societies, with special emphasis given to Canadian society.

342.1(2) Social Interaction

Prerequisite: Soc 200.0 or a course in anthropology or psychology.

An investigation of the social world through an examination of the nature and variety of human relationships. In personal terms, we shall struggle to understand our own places in the network of groups that make up society.

343.1(2) Society as Drama

Prerequisite: Soc 200.0 or a course in anthropology or psychology.

An effort to present a dramaturgical perspective on society is made. The scope and limits of this approach are explored and students introduced to its application through observational exercises. If "all the world's a stage", what's the play about?

344.0 Asylums, Prisons, and Other Total Institutions: The Inmates' View

Prerequisite: Soc 200.0.

The focus of this course is on institutional methods for the management and treatment of people classified as criminal or mentally ill and the consequences that these methods have for people who are institutionalized. It outlines the historical development of prisons and mental hospitals during the 19th century and before, and examines recent sociological studies of the inmate view of imprisonment and mental hospitalization. Attention will also be given to autobiographical accounts of ex-prisoners and mental patients and to the professor's own study of women's experiences in Canadian prisons. Finally, critiques of institutional methods for dealing with the criminal and the mentally ill will be discussed.

350.1(2)-351.1(2) Contemporary Issues in Sociology

Prerequisite: Soc 200.0.

The course will provide an opportunity for students to study contemporary substantive issues in considerable depth and detail.

352.1(2) The Mass Media

Prerequisite: Soc 200.0.

This course examines several of the major questions that have animated sociologists of the mass media and communication. In particular, it tackles the questions of "ideology" and political "bias" in the media's presentation of the world, and how to construct a fruitful theoretical approach to the modern media within the context of the development of capitalist society.

353.1(.2) Industry and Labor In Contemporary Society
Prerequisite: Soc 200.0.

This course will examine industry and labor in the context of changes in the economy since the early 1970s. Some of the themes addressed are: the internationalization of capital and the new international division of labor; technological change and its effect on patterns of work and levels of employment; and the role of the state in contemporary society. In the context of these broader themes, specific issues such as the relocation and restructuring of industry by the advanced industrial economies, changes in the labor process, unemployment and underemployment, part time work, the labor force participation of women, unemployment insurance, workers compensation, and the role of trade unions will be examined.

360.1(.2)/460.1(.2) Quantitative Methodology
Prerequisite: Soc 364.1(.2) and 365.1(.2).

Advanced level course in analysis of quantitative data in sociology. Topics covered include: the concept of association between variables, measures of association, multivariate analyses, regression techniques, inferential statistics and the research report.

Note: Students who have received credit for Soc 335.0 (435.0) may not enrol in this course.

361.1(.2)/461.1(.2) Survey Analysis
Prerequisite: Soc 364.1(.2) and 365.1(.2).

The course is designed to introduce students to the analysis of survey data and to the use of SPSS computer programs. Topics covered include editing and coding of survey data, univariate analysis including such procedures as graphic presentation of data, measures of central tendency and variability, normal distribution, bivariate table, and scale construction.

Note: Students who have received credit for Soc 335.0 (435.0) may not enrol in this course.

362.1(.2) Classical Sociological Theory
Prerequisite: Soc 200.0.

A critical examination of the major themes of social analysis in the 19th century, with particular emphasis on the classical tradition exemplified by the writings of Karl Marx, Emile Durkheim and Max Weber.

Note: The two half courses, Soc 362.1(.2) and 363.1(.2), replace the former course Soc 301.0. Students cannot receive a credit for both the full course and either/or both half courses.

363.1(.2) Contemporary Sociological Theory
Prerequisite: Soc 200.0.

A critical examination of the major themes of social analysis in the 20th century, with particular emphasis on current theoretical issues and differences in theoretical approaches to problems in sociological analysis.

Note: The two half courses, Soc 362.1(.2) and 363.1(.2), replace the former course Soc 301.0. Students cannot receive a credit for both the full course and either/or both half courses.

364.1(.2) Research Design
Prerequisite: Soc 200.0.

This course examines the place of research in sociology and the relationship of sociology to science. It examines concepts, measurement, research designs, and techniques of data collection. The course introduces students to a variety of approaches to research and data collection and emphasizes that methods of research are closely related to theory, the nature of research questions and design considerations.

Note: The two half courses, Soc 364.1(.2) and 365.1(.2) replace a former course, Soc 300.0. Students cannot receive a credit for both the full course and either/or both half courses.

365.1(.2) Data Analysis
Prerequisite: Soc 200.0 and 364.1(.2).

This course, which is a sequel to Soc 364.1(.2), covers the analysis of data and report writing. Analysis of a variety of types of data is considered, and statistics and quantitative methods are introduced. The course includes a number of exercises in analysis and report writing structured to introduce the student progressively to the means by which sociologists draw conclusions from observations.

Note: The two half courses, Soc 364.1(.2) and 365.1(.2) replace a former course, Soc 300.0. Students cannot receive a credit for both the full course and either/or both half courses.

371.1(.2) Evaluating Social Programs
Prerequisite: Soc 364.1(.2) and 365.1(.2) or permission of instructor.

This course is intended to provide an introduction to program evaluation for the social scientist. The material to be covered will include an examination of the evaluation process, data collection design and implementation, analytical techniques and report preparation - particularly useful for the student interested in the practical application of research methodologies.

372.1(.2) Social Impact Analysis
Prerequisite: Soc 364.1(.2) and 365.1(.2) or permission of instructor.

This course is designed to provide the student with an introduction to social impact analysis, in particular the effect of large scale development projects on society. As such it covers the design of analytical frameworks, the application of appropriate research methodologies and the development of social impact models.

380.0 Third World Urbanization
Prerequisite: Soc 200.0.

A survey of the major properties of urbanization in the developing nations. Topics to be covered include processes of urban growth, urbanization and underdevelopment, and urban migration, as well as urban life, poverty, housing settlements, and social policies, among other subjects.

385.1(.2) Problems of Development
[IDS 485.1(.2)]
Prerequisite: Soc 200.0 or a course in economics or political science.

This course will provide an introduction into concepts and theories of development and underdevelopment with particular reference to problems of Third World societies. The main emphasis will be on the various theories advanced in explanation of the historical development of less developed societies and their position in a growing global economy. The major lines of research associated with these theories will also be reviewed.

Classes 3 hrs. a week. 1 semester.

Note: Previous credit in Soc 305.0 precludes credit in this course.

386.1(.2) Sociology of Developing Societies
[IDS 386.1(.2)]
Prerequisite: Soc 200.0 or a course in economics or political science.

This course examines the conditions of economic and social development in the Third World. The role of colonial empires in the creation of these conditions and of the world system in maintaining them will be scrutinized. Problems discussed will include trade relations, foreign aid, land distribution, industrialization, class structures, the role of the estate, and the position of women. Illustrative case studies on these problems will range across different countries in the Third World (Africa, Latin America and Asia).

Seminar 3 hrs. a week. 1 semester.

Note: Previous credit in Soc 305.0 precludes credit in this course.

387.1(.2) Women and Development
[WMS 387.1(.2)]
Prerequisite: Soc 200.0 or IDS 300.0.

This course will examine the role of women in development. It will examine the changing structure of the division of labor by gender in different international, regional and community contexts, and the interaction between the economics and politics of class and gender in different societies at different levels of development. This course will also address issues such as: the incorporation of subsistence economies into modern market economies; the establishment of labor-intensive multinational industries, particularly those drawing on female labor; the relationship between the household and the formal and informal economies and patterns of female migration; and the role of women in the transition from rural to urban/industrial worlds.

391.0 Rural Sociology
[IDS 325.0]
Prerequisite: Soc 200.0.

This course is concerned with the comparative study of agrarian and maritime societies. The following issues will be examined in this context: class structures, models of development, agribusiness, the 'green' and 'blue' revolution in Third World agriculture and the fisheries, movements among rural workers and peasants.

400.1(2) Fisheries Development In the West

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course explores in detail issues related to fisheries development in Western countries. Three themes are explored in the course: artisanal or near shore fishing systems (territoriality fishing, communities and so on), and state management (theory and policy, regulation, and policing). Comparative material is drawn from countries around the North Atlantic Rim, the United States, Australia, New Zealand and Japan.

401.1(2) Fisheries Development In the Third World

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course explores in detail issues related to Third World fisheries development. Property rights, resource tenure and indigenous knowledge systems characteristic of traditional artisanal systems are discussed. A second theme explores modern efforts by developing states to manage and develop commercial fisheries, technological change, aquaculture and industrialisation. Comparative case material is drawn from Brazil, the Caribbean, Africa, India and South-East Asia.

403.0 Revolution and Change: A Case Study - Cuba

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

The seminar will study efforts at far-reaching and radical social, political, and economic change in 20th century societies, as exemplified by Cuba since 1960. Approaches, difficulties, and successes are examined and some cross-cultural comparisons will be made.

405.0 Sociology of Labor

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will analyze the changes in the occupations and industrial structure of Canadian society and the effects of these changes on the working population. Major themes of the course are the evolution of labor processes within occupations, the shifts of labor among occupations, the increasing labor force participation of women, the role of trade unions, the underemployment and unemployment of Canadian workers.

406.0 Directed Readings in Sociology

Prerequisite: honors standing.

This course provides an opportunity for honors students to read in depth in an area of sociology not normally covered by regular departmental course offerings. Students are expected to demonstrate initiative and independence.

This course does not constitute a 400 level seminar in fulfillment of requirement (c) for majors.

407.0-408.0 and 409.1(2)-410.1(2) Directed Reading in Sociology [WMS 407.0-408.0 and 409.1(2)-410.1(2)]

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

These courses provide an opportunity for students to read in depth in an area of sociology not normally covered by regular departmental course offerings. Students are expected to demonstrate some initiative and independence.

Note: These courses do not constitute a 400 level seminar in fulfillment of requirement (c) for majors.

412.0 Sociological Perspectives on Aging

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This seminar course is designed as an in-depth study of theoretical and methodological issues in sociological studies of aging. Major sociological perspectives and theories in aging are explored. Research applications of the theories in selected substantive subject areas are also presented.

413.0 Sociology of Identity

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This is an advanced course which will explore methodological, theoretical and substantive issues in a sociological approach to social

identities. In particular, we shall examine some of the ways in which the form and character of the link between persons and social institutions has been understood in order to enhance our own appreciation of this fundamental problem in the social sciences.

414.0 Sociology of Knowledge and Science

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This seminar will examine science as the preferred ideology of scientists. We shall seek to account for scientific knowledge as the subtle product of a community of intellectual authorities. We shall pay attention to various efforts among social scientists to understand the importance we all attach to scientific knowledge, without yielding to claims that this results from its particular insights into "reality". As social scientists we have a special obligation to bring this inquiry to bear on our own knowledge. To do this we shall examine how "theory" and "methods" in sociology are employed as persuasive reasons for creating an orderly body of scientific literature out of the chaotic human world in which research takes place.

415.1(2) New Religious Movements

[Rel 413.1(.2)]

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course explores theoretical and methodological approaches which explain and analyze the emergence, recruitment, success and failure of new religious movements in society. Case studies of specific movements will be examined.

416.1(2) Religion In Developing Societies

[Rel 416.1(.2)]

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course examines religious movements as both product and active agent of special processes in developing societies such as Latin America and India. There will be special focus on the relationship between religious movements and the position of women in developing societies.

420.0 Comparative Regional Development

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will examine sociological models and theories of economic development and apply them to a number of regional problems based on the social organization of economic production. Analysis will focus on various regional formations of the world capitalist system, with a case study approach to problems of Atlantic Canada. Such problems will include the sociology of rural decline and urban development, industrialization, single-industry dependence, industrial location, disparities of jobs and income, etc.

422.1(2) Gender and Development: Theory and Method

[IDS 422.1(2)/622.1(.2); WMS 422.1(.2)]

Prerequisite: Soc 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will examine the role of women and development in the Third World. It will discuss the interrelationship of various development and feminist theories; methodological approaches to the study of women and development will also be examined. This course will provide students with a conceptual overview and practical tools for understanding the problems faced by women in developing countries.

423.1(2) Gender and Development: Policy Issues

[IDS 423.1(2)/623.1(.2); WMS 423.1(.2)]

Prerequisite: Soc 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will examine case studies of the role of women in the development process in various Third World countries. It will provide an analysis of the gender dimensions of programs and policies that affect women in different international, regional and community contexts. Case studies will focus on a number of specific issues such as work, education, health and empowerment. These will vary from year to year.

425.0 Corporate Power and the World Economy

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will analyze the structure of economic and political power from a sociological perspective. Units of this analysis are the

corporations that dominate the world capitalist system and the Canadian economy. Both theoretical and methodological issues of corporate research will be explored in some depth.

430.0 The Sociology of Alcohol Use

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course is a seminar on the beverage use of alcohol in North America, the accompanying social problems, and society's efforts to solve these problems. Students investigate alcohol use from a variety of theoretical perspectives and are exposed to several major methods of research. Particular topics studied include taverns, the temperance movement, and drinking by youth, vagrants and ethnic groups. Students also do an original research paper on some topic related to alcohol use.

431.0 Law in Society

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

An in-depth study of the relationship between law and society. This course will examine law as a product of a social system and as an instrument of social change. Emphasis will also be placed on the social forces affecting judicial behavior and the determinants and purposes of legislation as the link between values and interests. Attention will also be directed to law as a profession, and jurisprudence as an evolving discipline with special emphasis on issues in the administration of justice.

432.1(.2) Gender and Law

[WMS 432.1(.2)]

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

By providing an examination of the gendered nature of conventional understandings of law, social control and deviance, this course will identify and challenge the ideology of sameness that has pervaded male-stream legal theory. It will also consider the implication of these gendered assumptions for the reproduction of inequality. Specific issues concerning the impact of law on women's lives will be explored in order to illustrate the relation between law, gender and power.

Seminar 3 hrs. a week. 1 semester.

440.0 Selected Studies in Sociological Analysis

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

A senior course which examines selected methods of analysis in sociology. The specific methods and the range of problems to which they are applied will vary with the instructor's areas of specialized interest and expertise.

447.1(.2) Work and the Empowerment of Women in India

[IDS 547.1(.2); WMS 447.1(.2)]

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

The objective of this course is to study women and work in rural and urban context of three regions of India: North India, Maharashtra and South India. The course adopts a dynamic approach to studying the processes involved in the subordination of Indian women and ways of empowering women in India.

448.0 Feminist Analysis: Field Research on Women and Men (WMS 448.0)

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This seminar focuses on problems of studying women, including sex bias in research. It also provides insights from feminist methodology.

450.0 Selected Topic

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

A seminar course which examines questions within an area of specialization and enables a student to study a particular sociological issue in detail.

453.0 Citizen Participation In Community Planning

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will focus on citizen participation in community planning. It will combine the reading and discussion of sociological works with an examination of case studies in citizen participation. These case studies will be supported by and based on first hand research in the Halifax/Dartmouth area and/or elsewhere in Atlantic Canada during the year. In these projects, seminar members will work independently and/or cooperatively on a series of agreed upon problems. Major topics involve historical and current perspectives on the issues in citizen participation.

455.0 Penology

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

A seminar which examines selected topics within an area of specialization and enables a student to study a particular sociological problem in detail. This course traces the history of penal methods and the development of contemporary corrections. The Canadian correctional apparatus is examined in relation to current issues and proposals. Correctional methods, problems, and efficacy are considered in some detail, in institutional programs, and in community programs. Correctional processes as these related to typologies of offenders, and special problems of female, youthful, and persistent offenders will be examined.

457.1(.2) Critical Criminology

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

A critical examination of traditional criminological theory and of conventional approaches to the problems of deviance, crime, and social control. Examination of the relationships between crime, law, class and power. Consideration of the relation of crime to surplus and marginal populations, social crime and the politicization of deviance, criminalization as a mode of control, and implications for a radical criminal policy.

458.1(.2) Comparative and Historical Criminology

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This course will examine the literature dealing with the nature of deviance and crime and with the master patterns of social control in past societies. In particular, it will focus on the criminal law, punishment, policing, institutionalization of deviance, new forms of social discipline, poverty, class and images of criminality, and sexuality, patriarchy and the family.

468.1(.2) Women's Organizations and Change

[WMS 468.1(.2)]

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2) and 365.1(.2); or a minimum of 3.0 courses in WMS; or permission of instructor.

This course describes women's organizations and social change, using a comparative perspective grounded in the local communities of Atlantic Canada and in the international arena. In working collectively for social justice and social change, how have women organized? What organizational forms have they used? How have they related to the larger society? What organizational strategies have been most successful in improving the position of women? These are some questions that will be discussed in analyzing the interrelationships between the actions of individuals, the activities of groups and the structures of communities, institutions, and nation-states.

Seminar 3 hrs. a week. 1 semester.

480.0 Ethnicity and the Canadian State

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2) and 365.1(.2); or permission of instructor.

This course will explore the interplay of power, politics and ethnicity within Canadian society, focusing on the impact of state practices and policies upon ethnic relations. The objective is twofold: first to understand the "social construction" of race and ethnicity through state practices, and second to comprehend the role of state practices, policies and structures in determining who will and will not exercise political power and influence, and how the exercise of power shapes ethnic consciousness and ethnic relations.

493.1(2)/593.1(2) Advanced Research Methods

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

This is a course in advanced qualitative research methods. From time to time, depending on student interest and faculty availability, this course will treat issues raised in historical, comparative, observational and other methods, as well as general questions in research design and analysis.

Note: These courses do not constitute a 400 level seminar in fulfilment of requirement (c) for majors.

495.1(2)-496.1(2) [595.1(2)-596.1(2)] Advanced Sociological Theory

Prerequisite: Soc 362.1(.2), 363.1(.2), 364.1(.2), and 365.1(.2); or permission of instructor.

Presentation of various topics of interest to advanced students. From time to time, depending on student interest and faculty availability, this course will consider particular theorists and such matters as constructing social theories, traditions of theoretical writing, and new directions and problems in the field.

509.1(2) Directed Reading: Advanced Studies in Sociology

Prerequisite: one of Soc 407.0 to 410.1(2) and permission of instructor.

This course allows students to pursue a sub-area of sociology in considerable depth. Students are expected to demonstrate considerable initiative and independence.

This course does not constitute a 400 level seminar in fulfilment of requirement (c) for majors.

530.0 Honors Seminar

Prerequisite: enrolment in honors program.

The purpose of this seminar is to help students prepare a major research paper on a topic agreeable to both the student and the department.

601.0 Social Justice and Social Change

Prerequisite: admission to M.A. in sociology and criminology program.

This seminar is designed to analyze major contemporary issues of social justice and social change within Canada. The seminar will also focus on the use of sociological research and analysis in the design and delivery of social programs as well as on issues facing students and faculty in designing and implementing sociological research.

602.1(2)-604.1(2) Research Methods

Prerequisite: Soc 364.1(.2) and 365.1(.2); and either Soc 460.1(.2) or 461.1(.2).

These courses will focus on specified sociological research methods of particular interest to students in criminology and social development.

608.1(2)-609.1(2) Directed Readings

Prerequisite: enrolment in the graduate program.

These courses allow students to pursue a sub-area of sociology at the graduate level. Students are expected to demonstrate considerable analytic sophistication and a capacity for independent thought.

610.0, 611.1(2)-612.1(2) Advanced Topics in Criminology

Prerequisite: undergraduate degree with a major or honors in sociology.

These seminar courses are designed to cover selected topics in criminology at an advanced level. Topics examined may include historical criminology, law and social control, women and crime, penology, victimology, media and crime, organized crime, crime and social policy.

613.1(2) Criminological Theory

Prerequisite: Soc 362.1(.2), 363.1(.2), and 303.0.

This seminar course examines contributions made by sociological theory in contemporary criminology. The course will emphasize major contemporary theoretical issues and debates. It is assumed that students have already acquired a basic background in the elements of criminological theory as part of their undergraduate degree training.

620.0, 621.1(2)-622.1(2) Advanced Topics in Social Development

Prerequisite: enrolment in the graduate program.

These seminar courses are designed to cover selected topics in social development at an advanced level. Topics examined may include social policy and change; gender, ethnicity, race and class in social development policies; issues such as housing, alcohol abuse, aging and violence.

623.1(2) Theories of Social Development

Prerequisite: Soc 362.1(.2) and 363.1(.2).

This seminar course will review the current state of sociological theory in the field and critically analyze and evaluate the major theoretical issues. It is assumed that students have already acquired the basic background in the elements of social policy and development theory as part of their undergraduate training.

630.0 Thesis Research

Prerequisite: enrolment in the graduate program.

In this course the students design and implement their M.A. thesis on a topic agreeable to both the student and the department. The thesis is expected to show both originality and the analytical/critical skills of research and interpretation.

Women's Studies (WMS)

Committee on Women's Studies

G. Thomas, Coordinator	English
S. Bell	Sociology
J. Cauville	Modern Languages and Classics
L. Christiansen-Ruffman	Sociology
P. Connelly	Sociology
S. Crooks	Philosophy
L. Falk	English
J.-A. Fiske	Sociology
P. Fitzgerald	Management
K. Flikeid	Modern Languages and Classics
M. Harry	English
W. Katz	English
G. Kellough	Sociology
U. Kelly	Education
S. Kindred	Philosophy
M. MacDonald	Economics
H. McGee	Anthropology
G. Pretty	Psychology
H. Ralston	Sociology
M. Royal	Political Science
G. Thomas	Modern Languages and Classics
S. Walter	Anthropology

During the last twenty years, courses and programs in the field of Women's Studies have begun to develop, both internationally and in Canada. In 1987 at a Women's Studies workshop sponsored by the Social Sciences Federation of Canada, Canadian Research Institute for the Advancement of Women, and Canadian Women's Studies Association, a resolution was passed unanimously that affirmed the necessity of Women's Studies being available at all universities and colleges in Canada. Women's Studies programs are now recognized as important in most Canadian universities.

Women's Studies programs at the university level are especially important. Given the commitment by all levels of government to the attainment of women's equality, and given the increasing recognition of the sexist biases in many existing disciplines, the study of women's status and experiences will make an important contribution to our knowledge, to the dissemination of knowledge, and to the eventual equality of women in society.

The Bachelor of Arts degree in Women's Studies is interdisciplinary and has been designed to facilitate cooperation with other universities in the Halifax metropolitan area.

Requirements for a Major

- Students must receive credit for 6.0 courses (or half course equivalents) in Women's Studies. Normally they will accomplish this by taking the following courses:
 - WMS 100.1(.2)
 - WMS 420.1(.2) and 421.1(.2)
 - the equivalent of 1.0 course with a clear focus on feminist theory, feminist methodology, and/or feminist analysis [e.g., such courses as WMS 448.0 (from Saint Mary's); WOM 210 A/B, 310 A/B, 311 A/B (from Mount Saint Vincent); or WOST 3500 A/B (from Dalhousie)].
 - 3.5 additional WMS courses (or equivalent) offered by Saint Mary's, Mount Saint Vincent, and Dalhousie Universities. Courses from the latter two institutions are subject to the established Saint Mary's regulations governing transfer credits and will be processed through the Letter of Permission system.
- All courses for the major must be approved by the Coordinator of the WMS Program at Saint Mary's.
- Students must satisfy all the requirements for a major in the Faculty of Arts as delineated in Section 3 of this Calendar.

Requirements for a Minor

Students must receive credit for the equivalent of four courses, including either WMS 420.1 and 421.2 or the equivalent of 1.0 course as described in regulation 1(c), for a major in WMS.

100.1(.2) Focus on Women

This course presents a variety of perspectives on the role, function, and expression of women. It focuses on women using a variety of disciplines in both the humanities (e.g., classics, English, history, linguistics, and religious studies) and the social sciences (e.g., anthropology, economics, political science, and sociology).

201.0 Cross-listed as Ant 201.0

252.1(.2) Cross-listed as Cla 352.1(.2)

305.1(.2) Cross-listed as Rel 305.1(.2) [405.1(.2)]

311.1(.2)-312.1(.2) and 313.0-315.0 Special Topics in Women's Studies

Prerequisite: at least 1.0 course in WMS.

These are combined lecture-seminar courses on a selected topic in women's studies. Course content will vary from year to year. These courses allow students to take advantage of offerings in other departments relevant to a women's studies degree.

317.0 Cross-listed as Egl 317.0

Prerequisite for WMS 317.0: at least 1.0 university course in English or permission of instructor.

318.0 Language and Gender

(Egl 325.0)

Prerequisite: Egl 200.0 or Egl 201.1(.2)/202.1(.2).

The course examines the role of language in the forming of popular perceptions about the position of women and men in society. The topics include a comparison between English and other languages in matters of grammar, vocabulary, and semantics; a comparison between modern English and earlier stages; and an inquiry into the origin of authoritarian notions of correctness. The historical role of women as users and teachers of language is also considered. Present-day attitudes, implementation of non-sexist language guidelines, and the struggle to establish non-discriminatory language practices are also included in the study.

320.0 Cross-listed as Soc 320.0

Prerequisite for WMS 320.0: Soc 200.0 or 1.0 WMS course or permission of instructor.

348.1(.2) Cross-listed as Psy 348.1(.2)

Prerequisite for WMS 348.1(.2): Psy 201.0 or permission of instructor.

349.1(.2) Cross-listed as Eco 349.1(.2)

350.1(.2) Cross-listed as Rel 305.1(.2) [405.1(.2)]

352.1(.2) Cross-listed as Cla 352.1(.2)

353.1(.2) Cross-listed as Cla 353.1(.2)

380.0 Cross-listed as Phi 380.0

Prerequisite for WMS 380.0: at least 1.0 university course in philosophy.

387.1(.2) Cross-listed as Soc 387.1(.2)

Prerequisite for WMS 387.1(.2): at least 1.0 university credit in WMS, political science, economics or sociology.

391.1(.2) Cross-listed as Mgt 391.1(.2)

Prerequisite for WMS 391.1(.2): completion of at least 10.0 university courses.

404.1(.2)-405.1(.2) and 406.0 Contemporary Issues of Feminism

Prerequisite: at least 2.0 credits in WMS or permission of instructor.

These courses provide an opportunity for students to study in considerable depth and detail selected contemporary issues of feminism both within and outside of academia. For example, a course might focus on inequality of women in the labor force, the role of unpaid work, violence and its use against women, the colonization of knowledge within academia, or on technology including the impact of new reproductive technologies and their control of women.

407.0-408.0 and 409.1(.2) Cross-listed as Soc 407.0-408.0 and 409.1(.2)

Prerequisite for WMS 407.0-408.0 and 409.1(.2): at least 4.0 credits in WMS and permission of instructor.

414.1(.2)-415.1(.2) and 416.0 Directed Readings in Women's Studies

Prerequisite: at least 4.0 credits in WMS courses.

These courses offer students an opportunity to pursue advanced readings and research in a particular area of women's studies. The students and professors will design the programs of study together.

420.1(.2) Seminar on Women's Studies

Prerequisite: at least 13.0 university credits or permission of instructor.

Students will review feminist theoretical perspectives, methodologies, and analytic approaches grounded in several disciplines in the humanities and social sciences. Each student will develop a research proposal that applies feminist perspectives to a selected contemporary issue within the women's movement (e.g., labor force inequality, new reproductive technologies, women's organizational structures, political empowerment, violence against women).

421.1(.2) Seminar on Women's Studies

Prerequisite: WMS 420.1(.2).

Students will continue to develop their analytic skills and apply feminist methodologies and analysis in carrying out their proposed research.

422.1(.2) Cross-listed as IDS 422.1(.2) [622.1(.2)] and Soc 422.1(.2)

Prerequisite for WMS 422.1(.2): theory and methods courses in WMS or sociology or permission of instructor.

423.1(.2) Cross-listed as IDS 423.1(.2) [623.1(.2)] and Soc 423.1(.2)

Prerequisite for WMS 423.1(.2): theory and methods courses in WMS or sociology or permission of instructor.

432.1(.2) Cross-listed as Soc 432.1(.2)**447.1(.2) Cross-listed as Soc 447.1(.2)****448.0 Cross-listed as Soc 448.0**

Prerequisite for WMS 448.0: previous or concurrent theory and methods courses in WMS or sociology or permission of instructor.

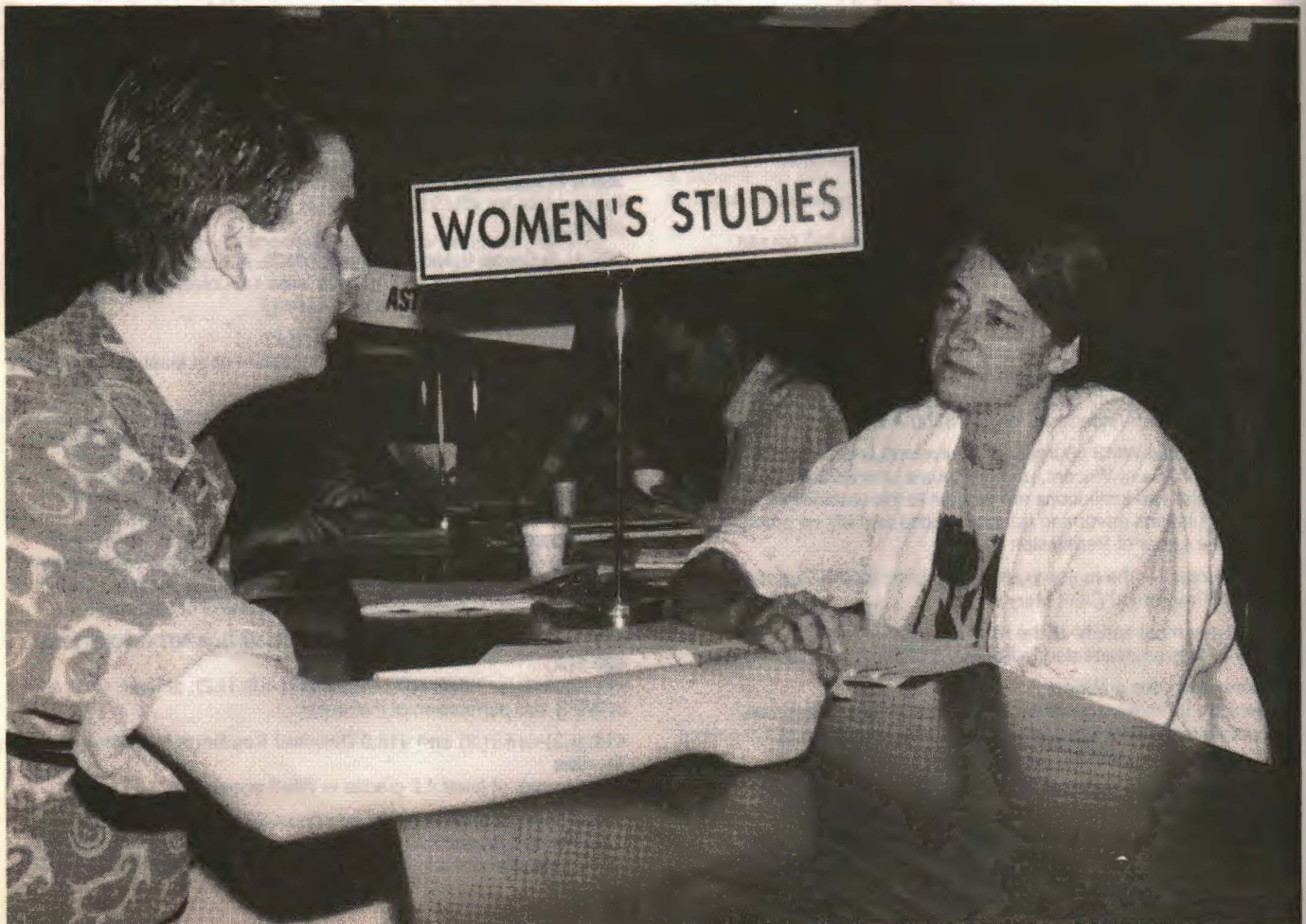
468.1(.2) Cross-listed as Soc 468.1(.2)**550.0 Cross-listed as Egl 550.0**

Prerequisite if taken as WMS 550.0: enrolment in the honors program in English, or special recommendation of the Department of English, or permission of instructor.

590.0 Cross-listed as Edu 590.0

Prerequisite for WMS 590.0: permission of instructor.

Note: Lists of courses in Women's Studies offered at Mount Saint Vincent and Dalhousie Universities are available in the academic calendars of those institutions or from the Saint Mary's WMS Coordinator.



Section 6

Financial Information

Financial Information

Financial information is a key component of a company's overall performance. It provides a clear picture of the company's financial health, including its assets, liabilities, and equity. This information is essential for investors, creditors, and other stakeholders to make informed decisions about the company's future prospects.

The financial statements of a company are typically divided into three main categories: the balance sheet, the income statement, and the cash flow statement. Each of these statements provides a different perspective on the company's financial performance. The balance sheet shows the company's assets and liabilities at a specific point in time, while the income statement shows the company's revenues and expenses over a period of time. The cash flow statement shows the company's cash inflows and outflows over a period of time.

Financial information is also used to evaluate a company's creditworthiness. Lenders and other financial institutions use this information to assess the company's ability to repay its debts. A company with strong financial information is more likely to be able to secure financing at a lower cost.

Financial information is also used to evaluate a company's profitability. Investors use this information to determine whether the company is a good investment opportunity. A company with high profitability is more likely to attract investors and increase its stock price.

Financial information is a complex and often confusing subject. However, it is a critical part of a company's overall performance and is essential for making informed decisions about the company's future. By understanding financial information, investors and other stakeholders can better evaluate a company's financial health and make more informed decisions about the company's future prospects.

Financial Information

It is the responsibility of all students to be familiar with university regulations pertaining to financial matters.

At the time of publication, fees for the 1992-93 academic year had not yet been determined. The fees listed below are those for 1991-92 and are subject to change prior to 1 September 1992. Students should be aware that the current fee structure for tuition is under review and any changes to it will be clearly delineated in the 1992 Registration Booklet. All fee calculations are made at registration without prejudice and are subject to confirmation and adjustment at a later date.

1. Academic Fees

(Fees listed below were those in effect for 1991-92)

a. Tuition Fees

Course Load	Per Semester	Per Academic Year
More than 3 courses	\$1,075.00	\$2,150.00
3 courses or less	\$ 215.00 per course	\$ 430.00 per course
Full Course		
Half Course	\$ 215.00 per course	N/A

Note: Students carrying more than the required program load (normally the equivalent of five full courses) will be assessed an additional \$430.00 for each full course overload and \$215.00 for each half course overload.

b. Students' Association Fee

This fee is compulsory for all students with the exception of those students registered exclusively in courses offered in extension centres.

Course Load	Per Semester	Per Academic Year
3 courses or more	\$44.25	\$88.50
Less than 3 courses	\$ 5.25	\$10.50

c. Medical Insurance Fees

Note: The medical insurance health plan for Canadian students is under review and may not be available in its present form in the 1992-93 academic year.

Canadian students registered in 3 or more courses and all non-Canadian students (regardless of course load) will be assessed a medical insurance fee at the time of registration. The fee is payable in full prior to 30 September for students who have completed August registration or at September registration for all other students.

	Single	Family
*Canadian Students		
- extended health care plan	\$114.00	\$260.00
**Non-Canadian Students		
- add equivalent to Nova Scotia's Medical Service Insurance (M.S.I.)	\$223.00	\$443.00
Total Non-Canadian:	\$337.00	\$703.00

Canadian students who wish to opt out of insurance coverage may do so if they have similar medical coverage. To do so they must complete a waiver form, available from Health Services, on or before 30 September.

**Exceptions will be considered before 30 September. Proof of coverage by a similar plan valid for the entire academic year must be presented to Health Services.

d. Differential Fees

Non-Canadian students must pay a differential fee. Students registering in August must pay the full fee by 30 September. Students registering in September must pay the full fee at the time of registration.

Course Load	Per Academic Year
3 courses or more	\$1,700.00
Less than 3 courses	
Full course	\$ 340.00 per course
Half course	\$ 170.00 per course

Note: A detailed description of differential fees is available from the Business Office.

Summary of Academic Fees for students carrying more than 3 courses (1991-92)

	Canadian	Non-Canadian
Tuition Fees	\$2,150.00	\$2,150.00
Student's Association Fee	88.50	88.50
Medical Insurance (single)	114.00	337.00
Differential Fee	N/A	1,700.00
Total	\$2,352.50	\$4,275.50

e. Audit Fees

Students auditing courses described in Academic Regulation 2 will be assessed one half (1/2) the regular tuition fee.

f. Thesis Supervision

Graduate students who have completed course requirements, but not their thesis or major research paper, must pay a registration fee of \$25.00. A supervisory fee of \$70.00 is also required for each academic session that a student is under a thesis supervisor.

g. Special Fees

Graduation: Degree or Diploma	\$20.00
Binding of Master's Thesis (3 copies)	33.00
Official Transcript	2.00
Special Examination	10.00
Late Registration	10.00

2. Residence Accommodation and Meal Plan Fees

	Per Semester	Per Academic Year
Single Room		
Meal Plan 1	\$1,945.00	\$3,890.00
Meal Plan 11	\$1,995.00	\$3,990.00
Meal Plan 111	\$2,037.50	\$4,075.00
Double Room		
Meal Plan 1	\$1,765.00	\$3,530.00
Meal Plan 11	\$1,815.00	\$3,630.00
Meal Plan 111	\$1,857.50	\$3,715.00
Apartments, Edmund Rice		
Residence (room only)	\$ 922.50	\$1,845.00

Descriptions of the various residence and meal plans available are specified in the Resources and Services section of this Calendar.

3. Payment of Fees

a. August Registration

A deposit must be paid at August registration. (At September registration full fees are due - see b. September registration.)

3 courses or more in the first semester	\$100.00
Less than 3 courses in the first semester	\$50.00

Outstanding first semester fees are due no later than 30 September and second semester fees are due no later than 15 January.

b. September Registration and Late Registration

First semester fees are due at the time of registration and second semester fees are due no later than 15 January. In special circumstances, the University reserves the right to require pre-payment in excess of the first semester instalment of tuition and residence fees.

Students planning to pay first semester fees from a Canada Student Loan, who have not received their loan at the time of September or late registration, will be permitted to register with payment of the appropriate deposit, listed below:

Tuition only (3 courses or more)	\$250.00
Single Room/M meal Plan	\$650.00
Double Room/M meal Plan	\$600.00
Apartment	\$300.00

The balance of the first semester fees is due no later than 30 September.

c. January Registration

Students who were not registered for the first semester and who register prior to the end of that semester for the second semester must pay a deposit of \$100.00 if registering in 3 or more courses, or \$50.00 if registering in less than 3 courses. The balance of fees is due no later than 15 January. Students who register for second semester courses in January must pay all fees at the time of registration.

d. Students who have not paid all fees in accordance with 3-a, 3-b or 3-c above, may have their registration cancelled at the discretion of the Registrar upon the recommendation of the Assistant Comptroller.

e. Students who have unpaid accounts with the University will not be permitted to register until the account has been paid in full. Such payments must be by cash, money order, certified cheque, Visa or Mastercard.

f. A student whose registration has been cancelled for non-payment of fees must pay all outstanding fees and an additional fee of \$50.00 prior to any consideration of reinstatement by the Registrar.

g. Cheques or money orders should be made payable in Canadian funds to Saint Mary's University. Visa and Mastercard are accepted.

4. Late Payment

a. Students who do not pay first semester fees by 30 September and/or second semester fees by 15 January are subject to late payment charges. The charges are \$5.00 for each business day the account is in arrears to a maximum of \$50.00 per semester or ten percent (10%) of the outstanding balance, whichever is less.

b. In addition to the late penalty outlined in Section 4-a, any account outstanding after 30 September in the first semester and 15 January in the second semester, will be subject to an interest charge of one percent (1%) per month.

Note: In light of the late penalty and interest charges outlined above, students planning to pay their fees with Canada Student Loan assistance are strongly encouraged to make application in sufficient time to ensure that the loan will be available prior to the last day for final payment of fees. Application processing time varies according to province; 6-8 weeks is average.

c. Students whose accounts are in arrears will be denied marks, transcripts and may be denied graduation.

5. Class Withdrawals and Refunds

Note: Non-attendance at classes does not constitute official withdrawal from a course or the University.

a. Students who officially withdraw (See academic regulation 16) prior to the first day of classes will receive a full refund of any fees paid, less a \$25.00 processing fee.

b. Students who officially withdraw once a semester has begun (See academic regulation 16) are eligible for an adjustment of tuition fees on a proportional basis, calculated in weekly units. (The number of units is based on the number of weeks in the period from the beginning of a semester to 15 November or 28 February, whichever is appropriate). No fee adjustment is granted after 15 November in the first semester or 28 February in the second. If the adjustment of fees will result in a refund, the student must apply for the refund directly to the Business Office.

c. Students who leave the University without officially withdrawing and who subsequently officially apply for and are granted a retroactive withdrawal, will be charged a \$50.00 processing fee in addition to the regular University fee assessment to the date established for official withdrawal.

6. Residence Withdrawal and Refunds

a. Students who officially withdraw, or are expelled from residence, are eligible for an adjustment of room and board fees on a proportional basis, calculated in weekly units. (The number of units is based on the number of weeks in the period from the beginning of a semester to 15 November or 28 February, whichever is appropriate.) **Note:** The minimum charge for Residence is \$250.00, regardless of the date of withdrawal. No fee adjustment is granted after 15 November in the first semester or 28 February in the second. If the adjustment of fees will result in a refund, the student must apply directly to the Business Office.

b. Students who withdraw, or are expelled from residence, will be charged a penalty of \$100.00 except if they are simultaneously withdrawing from all courses for the remainder of the academic year or an acceptable replacement is found who will assume the balance of residence fees for the academic year. Application for forgiveness of the penalty charge must be made to the Director of University Residences.

7. Scholarship, Bursaries, and Sponsorships

a. Only one-half of the value of any scholarship or bursary awarded by the University will be credited to the student's account during each of the two semesters. Unless the value of the scholarship or bursary is equal to or greater than the total fees for the year, payment is required by the student (section 3a & 3b). If the award exceeds the total semester's charges, refunds will be given by the Business Office, to those students requesting them, after 15 November for the first semester and after 28 February for the second semester.

b. Students whose fees are to be paid by government or some other sponsoring agency (excluding Student Loan Programs) are required to present a signed statement, certificate or other appropriate supporting document at registration.

8. Miscellaneous

a. Students will be charged for damage to University property.

b. Cheques returned by the bank are subject to a \$10.00 charge. Replacement of such cheques and future payments by the payee must be by cash, money order, certified cheque, Visa or Mastercard. N.S.F. cheques are considered a serious offence and may result in de-registration.

c. Income tax receipts will be automatically mailed to all students by the end of March. Duplicate receipts cost \$2.00 and must be ordered from the Business Office.

d. Students may be entitled to a tuition discount if they, their spouses, or parents are employees of the University. In order to receive a tuition discount, the University employee must apply to Personnel Services. Please note that tuition discount does not apply to the Executive Masters in Business Administration degree.

e. Students who are Canadian citizens or permanent residents and are 60 years of age or over on the first day of classes in September will be granted a full tuition waiver.

f. Fees cannot be deducted from salaries paid to students by the University.

g. Parking on Campus

Residence Parking	
Underground.....Tenants	\$21.00 per month
	\$200.00 per year
Non-Tenants	\$25.00 per month
	(+ G.S.T.)
	No Yearly Rate
Edmund Rice Residence Parking	\$75.00 for eight(8) months
Motorcycles	\$50.00 per year
Other parking	\$90.00 per year
	(G.S.T. included)

h. Fees and withdrawal scales as outlined in this section of the academic calendar do not apply to the Executive Masters in Business Administration degree. For information on the financial details related to this program, please contact the office of the E.M.B.A. Director.

Student Awards and Financial Aid Programs

The scholarships and bursaries administered by Saint Mary's University are divided into three categories: (a) Entrance Scholarships administered by the Admissions Office in cooperation with the Senate Scholarship Committee, (b) Achievement Scholarships; and (c) Named Scholarships and Bursaries administered by the Financial Aid Counsellor in cooperation with the Senate Scholarship Committee. Students may also wish to apply for external awards which are administered by the individual donor.

Definitions

Scholarship - An award granted on the basis of academic merit.

Entrance Scholarship - An award granted to students entering Saint Mary's University from high school.

Achievement Scholarship - An award granted on the basis of academic achievement attained during the preceding academic year (i.e., September to May) at Saint Mary's.

Bursary - A grant awarded on the basis of financial need.

Scholarship Eligibility - The formula used by the Senate Scholarship Committee to determine scholarship eligibility is arrived at annually from the academic performance of the top 10% of full-time students carrying five courses during the preceding year.

Awards Administered by Saint Mary's University

1. Presidential Scholarships

Conditions: A limited number of special entrance scholarships are available to students from Nova Scotia who live beyond commuting distance from the University. To be eligible students must be in Grade XII and must have maintained the highest accumulative scholastic average. Recipients of this award are ineligible for other awards administered through Saint Mary's University.

Value: The cost of tuition and fees as well as a single room with board. Equal in value to approximately \$6,000.00.

Duration: One year. Renewable for up to two further years (three for Commerce) providing the holders maintain high academic standing at Saint Mary's. Recipients are not required to reapply each year.

2. Metro Scholarship

Conditions: This scholarship has the same conditions as the Presidential except that it is awarded to a Grade XII student from the Halifax-Dartmouth Metropolitan area who resides off-campus.

Value: The cost of tuition and fees only.

Duration: The same terms as for the Presidential Scholarships

3. Other Entrance Scholarships

Condition: Candidate must be a permanent resident of Canada.

Value: \$200.00 to \$2,000.00.

Duration: One year.

4. Achievement Scholarships

Conditions: Candidates must qualify according to the Regulations for Scholarship Holders outlined below.

Value: \$200.00 to \$2,000.00.

Duration: One year. Application may be made each year the student progresses satisfactorily towards a first degree while attending Saint Mary's University.

Saint Mary's University Undergraduate Scholarship Regulations and Application Procedures

a. By 25 May candidates for scholarships must apply each year to the Financial Aid Counsellor.

b. Each award is granted for one academic year only. However, scholarships may be renewed each year on a competitive basis, providing the students reapply and qualify.

c. Students are responsible for notifying the Financial Aid Counsellor of late course completions and grade changes which were not recorded at the time when scholarship applications were filed. These must also reach the Financial Aid Counsellor by 25 May.

d. In order to be considered for an undergraduate scholarship students must have completed at least five full courses (or the equivalent in half courses) in the immediate preceding academic year (i.e., September to May). Courses taken at other institutions during the regular academic year and accepted as transfer credits at Saint Mary's University will be considered by the Senate Scholarship Committee provided that they appear on the student's record by 25 May or that the student notifies the Financial Aid Counsellor of any possible transfer credits by that date.

e. Students who receive scholarships from Saint Mary's must register in at least five full courses (or the equivalent in half courses) in order to be eligible for the scholarships for that academic year. An exception will be made for graduating students who require only three or more full courses (or the equivalent in half courses) to complete their degree program, as well as disabled students.

f. Students who are full time in one semester and part time in another or withdraw or complete their studies after one semester will receive only half of their scholarship.

g. Students who receive scholarships and fail to qualify for a renewal may reenter the competition for scholarships should they subsequently requalify.

h. Scholarships are taxable income. A T-4A form will automatically be prepared by the University.

i. At Registration, scholarship recipients are required to pay the balance of fees not covered by the award.

Named Undergraduate Awards

A growing number of University-administered scholarships, bursaries and trust funds are available to qualifying students at Saint Mary's University. Many of these awards have been established by generous Alumni, parents of Alumni, corporations and friends of the University. Such financial support from these benefactors provides significant assistance to both the University and the annual recipients of the awards. The entire University community is grateful for this generosity and support. Others are encouraged to support Saint Mary's in this manner. Should you wish to establish a scholarship or bursary at Saint Mary's please contact the Director of University Advancement at the University.

Detailed award values, criteria and application information for the named undergraduate scholarships and bursaries can be obtained from the Financial Aid Counsellor. A separate brochure, *Scholarships, Bursaries, and Government Loans*, provides descriptions of individual awards.

The scholarship application deadline for the 1992-93 academic year is 25 May 1992.

Bursary applications will be available between 1 October and 1 February. Award decisions will be made twice during the academic year. Provincial student aid assessment forms must be submitted with the bursary applications.

5. Scholarships for Part-Time Students

There are achievement scholarships available for students studying on a part-time basis. Interested students should consult with the Financial Aid Counsellor for information about terms of eligibility, as approved by the Senate.

6. Mature Students

Students accepted on the basis of mature admission who show potential for high academic achievement may be considered for an entrance award through the Continuing Education office.

7. Demonstrators and Teaching Assistantships

In some departments positions as laboratory demonstrators or research/teaching assistants are available for Saint Mary's University students. For more information please contact the appropriate department.

Awards Administered by the Donor (External Awards)

Canadian Federation of University Women Bursary
Canada Memorial Foundation Scholarships
CN Native Educational Awards
The Donald E. Curren Scholarship Fund
Department of Education - Scholarship for Black Students

Imperial Oil Higher Education Awards (Entrance and renewal)
 I.O.D.E. Provincial Chapter Bursaries
 McEwen Scholarship: Co-op Atlantic: Entrance Award
 The Nova Scotia Federation of Labour - The Joe Gannon Memorial Scholarship
 Petro Canada Education Awards for Native Students
 Queen Elizabeth Silver Jubilee Awards
 The Rotary Foundation Scholarships
 The Soroptimist Foundation Scholarship Programs for Women
 Terry Fox Humanitarian Award Program
 Tourism Scholarship of Prince Edward Island

For information concerning additional external awards application procedures and eligibility, please contact the Financial Aid Counsellor.

Financial Aid Programs Administered by the Government

Canada Scholarships Program for Science and Technology administered by the Association of Universities and Colleges of Canada for Industry, Science, and Technology Canada.

Canada Student Loans Plan

Students requiring financial assistance to help meet their educational expenses are encouraged to apply for Canada Student Loans. (Exception: Residents of Quebec apply for Quebec Student Loans.) Application is made to the Province in which the student is a resident. Canada Student Loan assistance is awarded on the basis of the financial information provided by the student, parents or spouse. The loans are interest-free while the student is registered full-time at University and are repayable six months after he/she ceases full-time study. Students are encouraged to apply before 30 June (30 May for Quebec) to avoid late payment of fee charges. Applications for most provinces, except Nova Scotia, are available at Student Services in April and May. Nova Scotia residents should pick up forms from the provincial Student Aid office.

Provincial Bursaries/Grants

Non-repayable bursaries or grants are provided by many provinces to students who demonstrate financial need and meet the bursary/grant eligibility requirements.

Notification of Award

Students found eligible for Canada Student Loans from Nova Scotia and New Brunswick will be sent their notification and documents in the mail. Bursary cheques from Nova Scotia and New Brunswick are sent directly to the institutions, as are Canada Student Loans and/or bursaries from most other provinces.

Students expecting Provincial Student Aid should check the Provincial Awards Board located in Student Services on the fourth floor of the O'Donnell-Hennessey Student Centre. Notices of any funds received are posted here as well as relative information or special instructions pertaining to each province. Funds will be held at the Business Office, McNally Main, until students sign for them.

Canada Student Loans Program: Part-Time Loans Plan

Guaranteed loans for part-time students attending post-secondary institutions are available under this program funded by the Federal Government. These interest-bearing loans are calculated on the basis of the student's financial situation and cover basic university expenses. Repayment of these loans begins thirty days from the date on which the loan was negotiated.

Canada Student Loans Program: Interest Relief Plan

The Canadian Government will pay the interest on full-time or part-time Canada Student Loans on behalf of the debtor if he/she is experiencing financial hardship due to unemployment or disability. Application for Interest-Relief forms are available in local banks.

Detailed information regarding financial aid eligibility, application procedures and appeals may be obtained by writing to the appropriate Provincial Student Aid Office as listed below. Assistance with more complicated appeals is available by contacting the University Financial Aid Officer.

Nova Scotia	Student Aid Office Department of Advanced Education and Job Training P.O. Box 2290 Suite 409 2021 Brunswick Street Halifax, Nova Scotia B3J 3C8 Telephone (902) 424-8420 General Inquiries Voice Response Unit (902) 424-7737 Toll free in Nova Scotia 1-800-565-8420 General Inquiries 1-800-565-7737 Voice Response Unit
New Brunswick	Student Financial and Support Services P.O. Box 6000 Fredericton, New Brunswick E3B 5H1 (506) 453-2577 (506) 453-2713
Newfoundland	Student Aid Division Department of Career Development and Advanced Studies Memorial University St. John's, Newfoundland A1C 5S7 (709) 576-2688 Recording (709) 576-4235 Information and Assistance 1-800-563-2000
Ontario	Student Awards Branch Ministry of Colleges and Universities Mowat Block, Queen's Park Toronto, Ontario M7A 2B4 (416) 965-6263 General Inquiries (416) 965-2798
Prince Edward Island	Student Aid Office Department of Education P.O. Box 2000 Charlottetown Prince Edward Island C1A 7N8 (902) 368-4640
Quebec	Director generale de l'aide financiere aux etudiants 1035, De la chevrotiere Quebec, Quebec G1R 5K9 (418) 643-3750

Note: Addresses for Student Aid Offices in other provinces are available on request from the Financial Aid Counsellor.

United States Stafford Loans Program (formerly GSL)

Citizens of the United States may be eligible for guaranteed student loans from their state to assist the funding of their post-secondary studies. Information and/or application forms may be obtained from the State Higher Education Authority, State banks or the Financial Aid Counsellor. Financial Aid Forms (FAF) must be submitted to the College Scholarship Service, Princeton, N.J., in order to complete state loan assessments.

Post Graduate Scholarship Assistance

Students whose university performance gives promise of successful graduate studies should seek advice on availability of fellowships and scholarships. Interested students should contact the Secretary to the Senate, Room MM216A, McNally Building, Saint Mary's University.

Father Burke-Gaffney Memorial Scholarship - Astronomy

Allstair and Josephine Cannon Memorial Scholarship - MBA

Central Guaranty Trust Award - MBA or senior Commerce student

John Despard de Blois Scholarship - Astronomy

The Dover Trust Co. Limited MBA Bursary

The Raymond W. Ferguson Bursary

One bursary of \$1,500 or two bursaries of \$750 each to be awarded by the University's Graduate Awards Committee based on the recommendation of the MBA Director and Dean of Commerce.

To be eligible for this award, a student must:

- a. have completed five (5) MBA credits at Saint Mary's University on a full-time basis;
- b. be enrolled in the MBA program on a full-time basis;
- c. be a Canadian citizen who has lived in Nova Scotia for at least ten (10) years;
- d. show evidence of financial need, academic ability, and possess those qualities of character and initiative which indicate potential leadership in the business world.

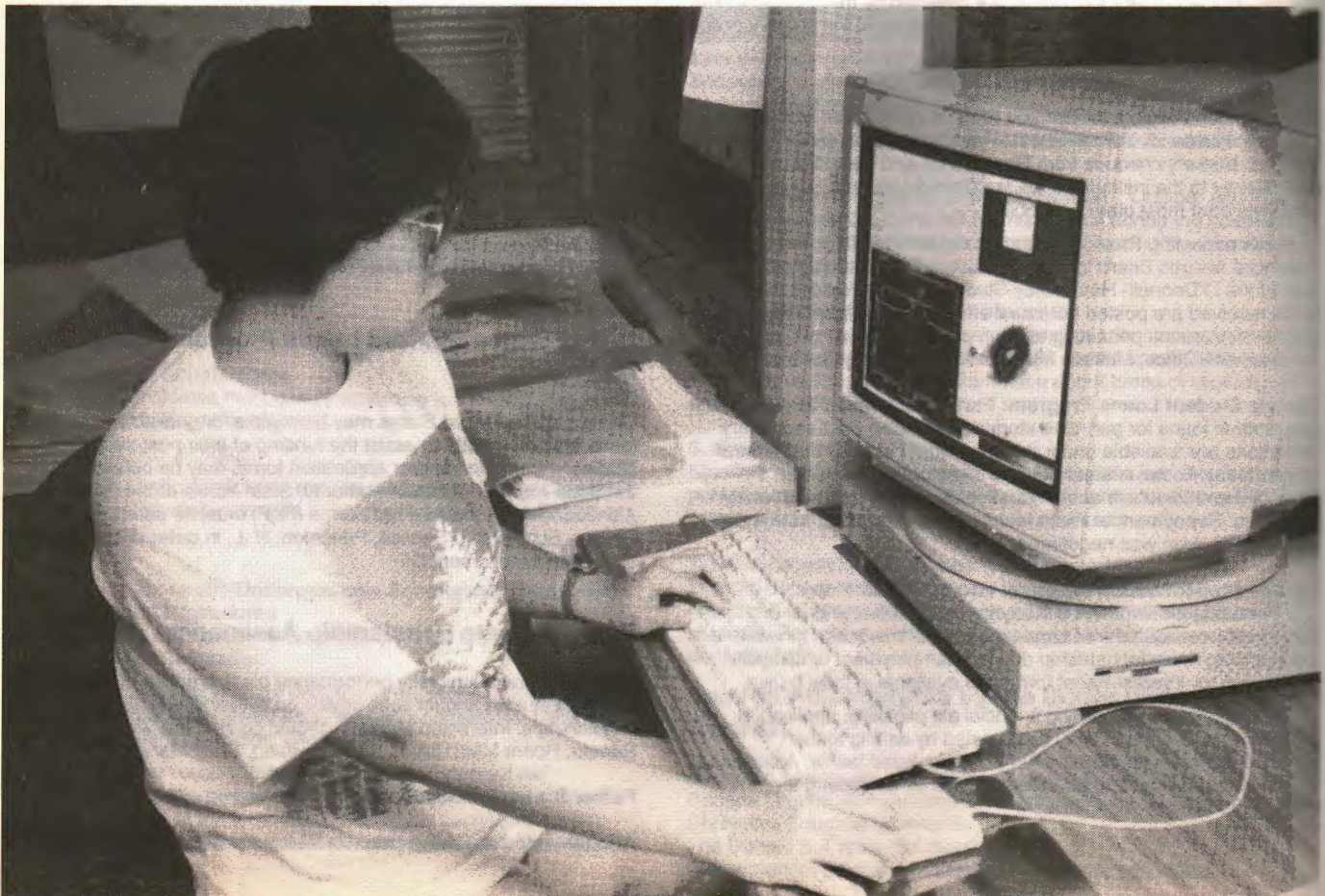
Mahon's Stationery Limited Scholarship

Awarded by the Graduate Awards Committee to a second year MBA student.

Pendse Awards - MBA

Royal LePage Scholarship - MBA

Saint Mary's University MBA Scholarship



Centres Institutes and Special Programs

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Centres, Institutes, and Special Programs

The Canada/China Language and Cultural Program

The Program: An Overview

The Canada/China Language and Cultural Program (CCLCP) was established in 1983 by the Canadian International Development Agency (CIDA), and is managed by Saint Mary's University. The Program provides English or French language training for CIDA-sponsored Chinese trainees while they are in China and cross-cultural training and ongoing support after they arrive in Canada. CCLCP language and cultural services play an instrumental role in CIDA's China related development activities which include the exchange of knowledge through academic, professional and technical exchanges.

In China

In China, the CCLCP has established the Canada/China Language Centre (CCLC) at Beijing Normal University (BNU) in Beijing. The CCLC is co-managed by Canadian and Chinese Directors who supervise a teaching and support staff of over 35 people. The Centre is responsible for English and French language training and testing at the main centre (CCLC) as well as at its Extension Centres established for particular development projects.

The CCLC offers English and French language classes on a semester basis with classes running from September to January and February to July. The Extension Centres typically follow this same teaching schedule, but the semester length can vary based on the language needs of the trainees and/or the needs of the specific CIDA project being served. Language testing, using a test (CanTEST) specifically developed for the program is offered regularly in January and July of each year. However, subject to numbers and project demand, special testing arrangements can be made that better serve the needs of other CIDA projects.

The CCLC curriculum is based on a communicative model that has been specifically tailored to the Chinese environment through the involvement of the Chinese teaching staff at BNU. As a result, it has a unique approach that includes the best of Canadian and Chinese educational traditions. Aside from the language aspects of the curriculum, there is a significant emphasis on the use of Canadian materials to promote an understanding of the culture in which the trainee will work and/or study.

In addition to its French and English language training and testing services, the CCLC serves the English language teaching community in China as a resource base and acts as an advisor for other Canadian projects having a French or English language component. Ongoing activities include the publication of a journal (*Monday Morning*), a visiting speakers series, and the organization of various activities and conferences, usually in conjunction with BNU. The CCLC has two modern language labs, a large library for student use, a teachers' resource centre, an extensive array of audio and visual material, and computer resources for administrative and teaching needs.

In Canada

In Canada, the CCLCP has established three regional centres (ROCs) and contracted support services in two other regions to provide cultural training and outreach programming in both English and French to Chinese trainees. The ROCs, hosted by academic institutions in Vancouver, Toronto, and Montreal, are staffed by professional trainers who sub-contract other personnel as needed, and utilize existing community resources to mount programs based on a national curriculum. The contracted support services exist in the Prairie and Atlantic regions to ensure ongoing support of trainees in those areas. The focus of all programs is cross-cultural communication and professional/academic skill training.

On arrival in Canada, trainees attend one of the cultural training programs for up to four weeks in order to prepare themselves culturally and linguistically for their professional placement training. Both standard and specialized cross-cultural training programs are available in English in Vancouver and Toronto and in English or French in Montreal. Following the on-arrival training, outreach support is offered to trainees, supervisors, and co-workers by the ROCs and the sub-contracted agencies for as long as the trainees are in Canada under CIDA sponsorship. This support reinforces the content of the training programs and includes aspects of professional, cross-cultural, and social life.

The ROCs use a newly revised cross-cultural training curriculum which allows great flexibility for instructors and trainees, depending on whether the trainees are in work or academic placements. Emphasis is given to the use of Canadian materials and resources and to interaction with Canadians so that trainees can come to an understanding of Canada, its people, and its customs.

Staff is also available to consult with agencies sponsoring Chinese trainees as to the best support for them. As well, the CCLCP encourages the use of its materials by all interested parties. Outreach programming is very interactive, with staff developing programs and resources as well as responding to the needs or requests of trainees and their supervisors.

Program Organization

CIDA has authorized Saint Mary's University to establish a China Program Office in Halifax, with a Program Director who is responsible for the overall management of the program. The Director works with Chinese and Canadian government officials as well as with university officials in Canada and China to plan and achieve the program objectives. Aside from having overall program responsibilities, the Program Director is the primary contact for CCLC matters that arise in Canada, while the Canadian and Chinese Directors are the points of contact for CCLC matters arising in China.

All in-Canada training activities are the responsibility of the National Coordinator, who works jointly with the regional centres and outreach personnel to provide cultural training programs and outreach services across Canada.

The Gorsebrook Research Institute for Atlantic Canada Studies

The Gorsebrook Research Institute for Atlantic Canada Studies was established at Saint Mary's University in 1982 to enhance and strengthen the research component of the University's well established Atlantic Canada Studies program. The Institute gives particular emphasis to the study of regional political economy, resource development, and the culture of the Atlantic Provinces. It also encourages research and activities in support of the International Development Studies program.

Objectives

The primary aim of the Institute is to encourage and facilitate research pertaining to Atlantic Canada, and to disseminate research findings to the regional, national, and international communities. The Institute emphasizes interdisciplinary, interuniversity and university/other-sector research cooperation.

Structure

The Gorsebrook Research Institute was established by the Senate/Board of Governors of Saint Mary's University and, in turn, operates under its own Board of Directors. Comprising the Institute's Board are the President of the University or his designate, the Coordinator of the Atlantic Canada Studies Committee, four members of the University community, six members external to the University, and the Executive Director of the Institute, ex officio. Ultimately, the Institute's Board of Directors is responsible to the Board of Governors and Senate of Saint Mary's University.

Resources

The Gorsebrook Research Institute utilizes and complements the resources of Saint Mary's Bachelor of Arts degree program in Atlantic Canada Studies, which was introduced in 1975, and corresponding Master of Arts program, which began in the fall semester, 1983. Both programs are interdisciplinary in nature, drawing on the expertise of 25 faculty members whose teaching and research is focused on the Atlantic Region. In addition, the Institute draws on faculty associated with the International Development Studies program, and on Research Fellows and Associates of the Institute. The Institute operates a survey research centre which provides services to researchers in the region.

Research

A number of projects have been undertaken as part of the Institute's research program. These include a cooperative investigation involving faculty at both Saint Mary's and Dalhousie Universities focused on Nova Scotia's fishing industry, a study examining the contribution of women's work to local single-industry communities, a project considering the relationship between the structure of manufacturing in Halifax and economic development and employment generation, compilation of a comprehensive bibliography of printed sources dealing with resource industries in the four Atlantic provinces, preparation of a comprehensive catalogue of Nova Scotian films, and a study of comparative aspects of forestry policy development in Sweden and Nova Scotia.

Activities and Programs

In order to improve regional research communication the Institute publishes the Atlantic Canada Research Letter twice a year. This publication reports on current research on Atlantic Canada in the social sciences and humanities, and aims to provide individuals with a ready source of reference for what is happening in their respective fields. Additional activities include faculty seminars, workshops, public forums, and conferences that have dealt with such regional concerns as the future of fisheries policy, assessment of the real potential of oil and gas development, and the impact of micro-chip technology on the workplace and employment. The Institute publishes a book series with Acadiensis Press entitled *Studies in the Political Economy of the Atlantic Region*. Two books have been published to date and three are in preparation. The Institute also publishes an occasional paper series.

The International Education Centre (IEC)

The International Education Centre carries out public education programs on international, cross-cultural, and race relations issues in the schools and community. It undertakes research and has a publication program in these areas. It also provides cross-cultural briefings and orientations for persons travelling abroad or arriving in Canada.

The Schools Program

The Centre extends its services to schools throughout Nova Scotia. It plans and arranges professional development workshops for teachers, focusing on topics and teaching strategies related to developing countries, cross-cultural, anti-racist, and global issues. It also provides programs for students to mark special days, such as World Food Day, Human Rights Day, Multicultural Heritage Day and Global Development Day. The Centre organizes an annual conference for school teachers and helps support a "Global Issues in Education" course provided by Saint Mary's Faculty of Education.

Speakers from Canadian minority groups and from other countries, foreign students, and others now resident in Nova Scotia, give presentations in schools interested in obtaining a better understanding of their countries, cultures, or development challenges.

The Community Program

The Centre organizes education programs in the community and promotes cooperation and interaction between the University and groups involved in anti-racist, cross-cultural, and international development work. It also makes its facilities available to ethnic organizations and non-governmental development organizations. It frequently hosts public meetings and conferences, publishes a monthly newsletter listing community international and multicultural events, and provides speakers from over 70 countries to make presentations for community groups.

The Resource Centre

The Centre has a significant collection of audio-visual and print resources on international development, race relations, and cross-cultural issues. These are available for consultation at the Centre and for loan by the public.

The International Briefing Centre

The IEC houses the International Briefing Centre which helps prepare people travelling and doing business abroad to operate effectively in other cultures. It also provides orientations for persons coming to Canada.

Research and Publications

Research interests of the Centre are both local and international. Local interests include the history of Nova Scotia ethnic groups and issues associated with ethnicity and race. Through such research, the Centre contributes to understanding Canadian society and culture. The Centre has published ten monographs on Ethnic Heritage in Nova Scotia, a bibliography of sources for ethnic studies, two volumes in a new series, "Issues in Ethnicity and Multiculturalism" and, most recently, a "Directory of Ethno-Cultural and Indigenous Organizations in Nova Scotia". International interests have resulted in two publications on the Caribbean. In collaboration with Dalhousie University, the Centre is surveying the understanding of Canadian students about international issues. Several publications from this study are now available.

Organization

A fifteen-member board oversees the activities of the Centre. The Board is drawn from members of the Saint Mary's academic community, the school system, ethnic groups, other universities, and from the community at large. The Centre's staff includes a Director; an Assistant Director responsible for the Community Program; two Schools Education Officers; the Briefing Centre Program Manager; a Speakers Bureau Coordinator; and a Secretary. Other grant-supported staff carry out research, conference organization, and special activities. The Centre welcomes the involvement of international students in its programs.

Facilities and Funding

Most of the International Education Centre's offices and its Resource Centre are on the main floor of the Burke Education Building. Beside the Centre are two theatres, which the University can make available for IEC activities. The Director's office is on the second floor of the Burke Education Building. The Briefing Centre and the research office are located at The Oaks.

The IEC's activities are supported through grants from CIDA's Public Participation Program, from Secretary of State, and through cost-sharing with various program partners. Briefing Centre programs are operated on a cost-recovery basis.

The Institute of Human Values

The supporters of the Institute believe that knowledge, morality, and freedom form an interdependent triad, and that the contemporary break-down of this relationship threatens all three aspects of human development. The Institute seeks to restore these vital links through discussion, teaching, research, and publication.

The contemporary crisis to which the Institute addresses itself is fourfold:

1. A three-fold crisis in the humanities, the social and the natural sciences, stemming from the failure to produce a theory of knowledge consonant with their characteristic functions and activities, and with their essential complementarity.
2. A moral crisis deriving from the fact that personal morality has been divorced from knowledge on the one hand, and from personal and social well-being on the other.
3. A crisis of leadership in all aspects of human activity, deriving from a widespread inability to make any meaningful connection between knowledge and judgement.
4. A crisis in the area of political freedom which derives, at least in part, from a loss of the sense of the historical relationship between moral values and the winning and defence of that freedom.

The Institute does not attempt to grapple with these problems as a self-sufficient entity, but acts rather as a catalyst through which the human and physical resources of Saint Mary's and other universities are brought to bear upon them.

Institute Activities

1. The coordination of the work of the members of the Institute in the various disciplines.
2. Research on all aspects of the relationship between knowledge, values and freedom, as well as upon urgent contemporary problems in which values are deeply involved.
3. The advising of students who wish to supplement their majors with problem and theme oriented core programs.
4. Planning and improving such programs.

5. The advising of students who wish to follow a program related specifically to human values.
6. The arranging of special lectures and symposia designed to explore all aspects of knowledge, values and freedom.
7. The editing of *The Vital Nexus*, a journal concerned with the relationships between conscience, justice, and freedom.
8. The production of video and sound tapes on values problems for distribution to the University community and to the public at large.
9. The organizing of interdisciplinary symposia at the annual meetings of the Canadian Learned Societies.
10. The establishment of a clearing house of information on questions related to knowledge, values and freedom, as a service to its members within the University and throughout the world.



Resources and Services

Alumni Association

The Alumni Association is an organization of graduates and former students of Saint Mary's. The Association seeks to promote the welfare of the University, and to foster continued association with the University and with one another. The activities of the Alumni Association are coordinated by the Alumni Office in conjunction with an elected executive which includes six members to the University's Board of Governors.

The Alumni Association sponsors the Student Alumni Association whose goal is to encourage students, alumni, faculty and staff of the University community to form life-long connections with Saint Mary's. These students are known as the SMU Ambassadors.

Annually, the Association awards the Father W. A. Stewart, S.J., Medal for Teaching; the Gold Medal for the outstanding undergraduate in Science; achievement awards for academic merit among resident students; and awards for graduating athletes.

The Association provides for substantial scholarship awards each year and supports many student activities and organizations.

The Alumni Office is located in Room SC310 on the third floor of the O'Donnell-Hennessey Student Centre.

Athletics and Recreation

The Department of Athletics and Recreation organizes and operates a variety of activities, providing an opportunity for all students at Saint Mary's University to participate on a number of different levels. The intramural and recreational programs are designed to promote fun, recreation, and sportsmanship by encouraging students to compete on a friendly basis. Emphasis is placed on participation. The club sports program provides an opportunity for all students to participate and/or compete in sports not included in the varsity program.

Saint Mary's is a member of the Atlantic Universities Athletic Association (AUAA) and the Canadian Interuniversity Athletic Union (CIAU). Our varsity teams compete in regularly scheduled league play with other universities in the Atlantic region and non-conference competitions with teams across Canada and in the United States.

Varsity (Men)

Soccer
Football
Ice hockey
Basketball
Track & field

Varsity (Women)

Field hockey
Basketball
Soccer
Track & field
Volleyball

Club (Men)

Rugby
Volleyball

Club (Men and Women)

Badminton
Fencing
Racquetball
Squash
Spirit team
Tennis
Karate

Club (Women)

Ice hockey

Intramural (League)

Softball
Football*
Soccer*
Volleyball*
Hockey
Basketball*
Indoor soccer
Coed softball
Coed soccer
Coed basketball
Coed volleyball
Ball hockey

Intramural

(Tournament)
Broomball
Tennis
Golf
Badminton
Table tennis
Racquetball/squash
Basketball
3/3 basketball
Women's ice hockey

*men and women

Recreation (Unstructured)

Swimming
Skating
Jogging
Basketball
Volleyball
Hockey
Badminton
Weight training
Table tennis
Tai Chi
Yoga
Racketball
Squash
Tennis

Recreation (Instructional)

Fitness classes
Fencing
Tennis
Aqua fitness
Weight training
Women's self-defence
Walking clinics
Running clinics
Squash
Racquetball
Jazz dance
Social dance
Tai Kwon Do
Tai Chi
Step training

On-Campus Facilities

The Tower
Alumni Arena
Huskies Stadium (artificial track and field)
Swimming Pool
Tennis Courts

Saint Mary's Athletics and Recreation Tower was opened in June 1987. This centre houses a triple-sized gymnasium with retractable seating, running track, racquetball and squash courts, weight training room, multi-use exercise room, sauna, whirlpool, steam room, offices, lounge, locker rooms, pro shop, sports medicine area, and equipment distribution area.

Bookstore

Situated on the second floor of the O'Donnell-Hennessey Student Centre, the bookstore utilizes 3,600 square feet of retail space to serve the University community.

The bookstore's prime role is to supply textbooks for current course offerings. In addition to textbooks, the bookstore carries an array of supplies, from pens to calculators, as well as an assortment of sundry items, including imprinted giftware, glassware, and crested clothing.

During the academic year, various services are available:

Used Book Buy-Back - At the end of both semesters, the bookstore conducts a buy-back of used books. Half price is paid for re-adopted textbooks, lesser amounts for books no longer used at Saint Mary's.

Ring Days - Rings can be ordered any time of the year, but during the special ring days, special discounts apply.

Special Orders - Personal copies of any book in print can be ordered through the bookstore. Customers pay list price plus postage.

Diploma/Degree Lamination - This method of preserving diplomas or degrees utilizes plastic sealing on a hardboard backing with attractive woodgrain finish.

The bookstore's regular hours: 9:00 a.m. to 4:30 p.m., Monday to Friday (7:30 p.m. on Wednesday). These are extended during rush periods.

Computer Services

The academic mainframe computer system at Saint Mary's University consists of two Digital Equipment Corporation VAXes running the VAX/VMS operating system; a VAX 3800 with 64 million bytes (mb) of main memory and a micro VAX 2000 with 6 mb of ram memory. These two systems can function as one large system, e.g., a local area VAX cluster. The cluster has over 4,200 million bytes of on-line high speed disk storage. Also included with the VAX cluster are dual density (800/1600 b.p.i.) magnetic tape drives, a 1.8 gigabyte backup storage unit, three line printers and an 8 pen drum plotter. Some of the languages and compilers supported include: BASIC, C, COBOL, FORTRAN, MACRO-11, PASCAL, MODULA-2 as well as the DEC EDT editor. There are also several statistical packages available including IMSL, Minitab, SPSS-X, SPSS-X Graphics, SAS. Several other applications include TSP (Time Series Processor), Shazam

Econometric, Oxford Concordance, Bulletin Board, Runoff, survey data bases. Kermit Communications Program and TeX Formatting Language are also available. The Department of Mathematics and Computing Science maintains a QMS 800 LaserGraphics printer as well as a multi-user UNIX based system.

Off-campus users may connect to the academic VAXes through several dial-up telephone lines. A Develcon Dataswitch Front End Communications Processor allows a terminal to be connected to one of several services including the academic VAXes, the UNIX system, various computer systems located at other universities within the Metro-Halifax area, the Metro-Halifax university on-line NOVANET library system, dial-out communications for DataPac, Envoy 100, etc. Terminal servers connect terminals to destinations on the campus backbone ethernet system.

There are about 100 computer terminals (video, hardcopy and graphics) and about 900 microcomputer systems available for faculty teaching, research and administrative purposes. There are 14 general access and departmental computer labs containing about 300 micros (PCs and MACs) and thirty-five terminals. Most of the PC XT's in the labs are equipped with 640 kb ram memory, dual floppy disks, Hercules compatible graphics, along with software for wordprocessing, spreadsheet and data base management applications. A large PC AT general usage lab contains forty PC ATs, each using a 20 mhz 286 cpu with 1 mb ram. Most of the MACs have at least 2 megabytes of ram memory, dual floppys, and wordprocessing, spreadsheet, and graphic software. Several labs contain software for statistics, graphics, charting and map drawing, CAD/CAM, financial applications.

There is a rich and varied assortment of microcomputers from several vendors including: IBM, Apple, Atari, Commodore, Tandy/Radio Shack, AT&T, Hewlett-Packard; as well as several types of PC XT, AT, 386 clones, SUN and NeXT workstations, etc. Assorted peripheral equipment includes: plotters, laser printers, microcomputer boards, CAD/CAM and OCR (Optical Character Recognition) microcomputer based systems, scanners, digitizing tablets, etc.

Several PC microcomputer labs are configured as Novell area networks (LANs) with network disk servers and printers. The Macintosh labs run under the Apple Share, MacJanet LAN software. The PCs in the general access Novell micro labs are directly connected to the campus backbone ethernet system and can access the VAXes as well as off-campus computer destinations. In addition, many labs and classrooms are equipped with micros and special computer overhead data projection units for teaching computer related courses. Most faculty offices are cabled to support computer communications.

The academic VAX is also a node on the Internet World-Wide electronic mail systems. Users can access information on the world-wide Internet TCP/IP based system using FTP and telnet. Authorized users can exchange information with users at several thousand sites around the world.

In addition to the day-to-day operation of the academic and administrative VAXes and computer labs, Computer Services also provides a variety of services for its users, including tours of the University computing facilities, assistance in using the VAXes and the public access microcomputer labs, programming advice. The latter is in addition to the liberal assistance available to students through their courses and labs. Computer Services also provides advice relating to the selection and purchase of computer hardware and software. Various computer manuals are produced by Computer Services and are available through the University Bookstore. Saint Mary's is also involved with several other universities in providing computer resources for academic and research purposes. Authorized faculty and students may make use of computer resources located at these universities.

Patrick Power Library

The library was officially opened on campus in June 1976 and is named in honour of the late Patrick Power, a generous benefactor of Saint Mary's in its early years as a college.

In 78,000 square feet of space, the three storey structure provides study space for students and accommodation for 300,000 volumes. The library's collections are selected to support the teaching and research programs of the University. As well as the general book and serial collections, the library maintains a number of separate collections including reference, rare books, microforms, annual

reports of major corporations, Canadian government documents, and the University archives.

In conjunction with other university libraries, the library uses the latest technological advances to facilitate acquisition and cataloguing of books. Novanet, the library's on-line catalogue, gives access to holdings in seven Nova Scotia universities' libraries.

The library subscribes to a number of information retrieval systems including CAN/OLE, DIALOG, IDRC, and INFOGLOBE, as well as several bibliographic data bases on compact disc (CD ROM). These systems provide access to a large number of computerized data bases covering a wide range of subject areas in science, language and literature, education, technology, the social sciences, business and economics.

The library offers a library instruction program to students through subject-specific library research sessions or through library workbook assignments.

A conference room and discussion rooms may be booked by groups of varying sizes. Photocopying and fax service are available.

The Ferguson Library for the Print Handicapped is located on the main floor of the library. The Ferguson Library provides a free service to the print-handicapped - individuals who are either medically certified blind or whose physical disability prevents them from reading printed material. This service is available to both post-secondary students and professionals.

Volunteer narrators read requested books and articles onto audio cassette tapes. Some requests are filled through borrowing tapes from other libraries. The holdings of the Ferguson Library consist of a permanent collection of complete titles on cassettes and also a substantial temporary collection, composed of short articles and selections from books. The Ferguson Library has a Kurzweil Reading machine which reads printed text by means of a scanner and a synthesized voice as well as a MagniLink to enlarge print up to fifty-four times.

The Media Centre is the headquarters of Media Services and is located on the third floor of the library. It provides playback facilities for audio and video cassettes, slides, films, filmstrips, film loops, and recorded plays, as well as a previewing service. Media Services provides closed circuit video viewing to 26 classrooms campus-wide.

The Language Laboratory, located on the second floor of the McNally Building, provides individual carrels where students and classes may listen to a variety of language tapes at a speed suitable to their requirements.

In addition to the services of the Patrick Power Library, students have access to the collections of other libraries in the area, and, through inter-library borrowing, to libraries all over the world. More detailed information on library collections, services, and hours of operation can be found in a series of printed guides available in the library.

Observatory

The Rev. Michael W. Burke-Gaffney Observatory at Saint Mary's University was opened in 1972.

The revolving aluminum dome measures five metres in diameter and rests upon an elevated pad atop the 23-storey academic-residence building. The Observatory's 0.4-metre reflecting telescope, the most powerful in Eastern Canada, is used primarily for student instruction.

The Observatory is open to the general public for regular viewing sessions every Saturday evening.

An enclosed corridor connects the Observatory to the night office and instrument room.

The Observatory is named for the late Professor Emeritus, Rev. Michael W. Burke-Gaffney, astronomer, engineer, and educator, who was at Saint Mary's University from 1940 until his death in 1979.

Student Services

At Saint Mary's University the Department of Student Services includes the Office of the Director, Chaplaincy, Counselling, Health Services, Cultural Activities (including the Art Gallery), Financial Counselling, Canada Employment Centre, Atlantic Centre of Support for Disabled Students, University Residences and Food Services, International Student Advising, and Student Discipline.

Chaplaincy

Because of its traditional commitment to Christian education, Saint Mary's University continues to emphasize personal and social values deriving from the experience of Christian civilization. Its students and teachers represent a diversity of cultural and religious backgrounds and the University encourages participation in activities related to all faiths.

The Roman Catholic chaplaincy is found in Room 145 of the Loyola Residence; weekday Mass is provided in the Rice Chapel. In addition, a special University Mass is held every Sunday in Canadian Martyrs' Church located on the edge of campus. Protestant and Jewish services are available in nearby churches and synagogues.

Pastoral guidance is available from the University Chaplain and from clergymen of all major denominations.

Counselling Services

Saint Mary's University Counselling Centre staff provide free, professional counselling services to full and part-time Saint Mary's University students. The Counselling Centre is located on the fourth floor of the O'Donnell-Hennessey Student Centre. Students may use the services by dropping into the Centre between 9:00 a.m. and 5:00 p.m., Monday to Friday, or by calling Pam Stonehouse, 420-5614; Beth Poulos, 420-5610; or Sarah Morris, 420-5601; and making an appointment. Evening appointments can be arranged. Students may use the service of the Centre on their own initiative, or they may be referred by a member of the academic or outside community.

A variety of services are offered through the Counselling Centre. While some students may have personal problems and can receive confidential assistance with these problems, many students use the service to improve their study skills, help define career goals, or simply increase their personal effectiveness.

The following describes the various services available at the Counselling Centre:

Individual Counselling

Personal Counselling - Students are counselled concerning a wide range of personal problems including learning problems, conflicts with professors, study skills, family problems, marriage and sexual problems, depression, anxiety, drug and alcohol abuse, eating disorders, and other issues.

Vocational Counselling - Students are interviewed in areas related to career choice (e.g., their abilities, interests, previous employment, etc.) Students may write an occupational interest inventory. The aim is to help the students define suitable career goals and enable them to select courses consistent with their career goals.

Group Programs

Study Skills - This program consists of six one-hour sessions which examine the topics of concentration and motivation, time-management, lecture-note taking, effective reading, writing papers, and exam preparation. These sessions are offered in both fall and winter terms.

Assertiveness Training - This program focuses on how to effectively communicate one's thoughts, feelings, and opinions. Assertive communication often leads to cooperation among people and having one's needs met. Communication skills are taught through lecture, role-playing, and practise in everyday situations.

Stress Management - This program helps students recognize and deal with sources of stress in their own lives. Techniques for coping with stress (e.g., relaxation exercises, problem-solving methods) are learned and applied. The above groups may involve 2 to 3 classes, lasting 1 to 1 1/2 hours each.

Sexual Harassment

To ensure and facilitate the pursuit of knowledge, Saint Mary's University is committed to the provision of an equitable environment for work and study for all university community members. Sexual harassment can seriously undermine the fulfilment of this primary goal by destroying the trust that is necessary for personal and educational freedom. In 1986, the Senate established procedures to discourage the presence of sexual harassment through education, and to investigate and resolve complaints of sexual harassment expeditiously and with fairness to all concerned.

Saint Mary's provides an advisory service to all members of the university community. The office of the Sexual Harassment Advisor is located in MN213, McNally Building. The Advisor is available between 9:00 a.m. and 5:00 p.m., Monday to Friday, or by calling 420-5446 for an appointment.

The Advisor is available to answer all inquiries concerning sexual harassment, and can provide educational programs for all campus groups. The Advisor is also available to consult with concerned individuals on a confidential basis, to suggest and explore a number of informal problem solving methods. She is also able to mediate formal disputes, and will advise complainants and respondents of correct procedures if involved in an investigation of sexual harassment. All inquiries are welcome, and will remain strictly confidential.

Peer Support Program

Peer Support Workers are trained student volunteers working in the Peer Office, located in Student Services. Volunteers provide information on financial aid, study skills, campus activities, career resources and student services programs. New students are encouraged to sign up to have a volunteer contact them to answer questions and offer support before classes begin, during mid-terms, exams, etc. Forms are available at the Peer Office.

Volunteers can be reached by calling 420-2170 or drop by the Peer Office Monday to Thursday, 9:00 to 4:00 p.m., and Friday, 9:00 a.m. to 12 noon.

Atlantic Centre of Support for Disabled Students

The Atlantic Centre of Research, Access, and Support for Disabled Students is one of three "Centres of Excellence" created under the Department of the Secretary of State's Centres of Specialization Fund. The purpose for creating these Centres was to mobilize a truly Canadian effort in making post-secondary education accessible to hearing-impaired Canadians.

The Atlantic Centre commenced operations in January of 1985. Since August 1987, the Atlantic Centre has been operating under a grant jointly funded by the Nova Scotia Department of Social Services and the federal Department of Health. Although the Centre has a mandate to provide support services to all disabled students, the major focus, until 1987, was to implement programs to assist hearing-impaired students in the post-secondary system.

The Centre, located on the third floor of the O'Donnell-Hennessey Building, is a demonstration centre which will assist in transforming the campus into an environment that is accessible to all students. The Centre has acquired a limited number of devices, such as a Personal FM system, for students to borrow for classroom use. These technical aids will ensure that the campus is well equipped to meet the needs of hearing-impaired students.

The Atlantic Centre, the Fitness and Recreation Centre, the Ferguson Tape Library for Print-handicapped Students, and other features such as accessible buildings, demonstrate the commitment of Saint Mary's to a totally accessible educational experience. Other universities within the Atlantic Region and throughout Canada will be able to experience first-hand how such an environment can assist a disabled student to complete a university education.

Ensuring that support services are available to hearing-impaired students attending Atlantic universities continues to be a vital role of the Atlantic Centre. The Visual Language Interpreting Program, a one-year course, is offered at Saint Mary's to develop entry-level interpreters capable of working in the university classroom.

A Tutor/Notetaker Program is being implemented in order to provide much-needed services. A Screening-in Program, which will evaluate admission requirements and examine criteria allowing for the screening-in (and not out) of hearing-impaired students, and computer-assisted instruction, are two other facets of the overall program providing hearing-impaired students with support services never before available in Canada.

The Atlantic Centre has on staff a deaf Educator/Counsellor who is qualified to provide counselling services to hearing-impaired students. The Educator/Counsellor is also available to faculty members for advice and intervention on behalf of faculty members or the hearing-impaired student.

Atlantic Centre - Innovations Project

Making the Employment Connection, funded in April 1988 for three years by Employment and Immigration Canada, Jobs Strategy Program, is demonstrating that capable, highly-motivated, and post-secondary educated persons with disabilities are successful candidates for career-track employment with large and small businesses in Nova Scotia.

Pre-Employment Support Services

The Project provides pre-employment interest and skills assessment counselling, job research and interviewing skills development, occupational therapy and computer technology consultations, and job placement for candidates and employers, designed to meet the specific needs of the person and the workplace.

Post-Employment Support Services

This aspect of the Project focuses on supplying the successful job candidate and their employer with the information and facilitation to make the transition into the workplace as smooth as possible. Services are tailored to meet the specific needs of each situation and might include workshops with co-workers to address fears and adjustments in the integration of the new employee, occupational therapy, computer, and vocational rehabilitation follow-up consultations.

Based on a consortium model, the Project is demonstrating that a partnership of large and small business, educational institutions, government agencies, and community resource groups that serve people with disabilities can produce an effective means of aiding Project candidates in finding meaningful work.

Research

In gathering and analyzing all previous research materials regarding employment issues for persons with disabilities, alternate employment opportunities, distance education, consortium models, and any other topics deemed of importance to the Project, Making the Employment Connection aims to accomplish its information and advocacy goal by reporting and publishing in this field of research. Original research reporting, out of the development and findings of the Project, is the goal of the third year.

The staff of the Atlantic Centre are confident that the use of specialized equipment, interpreters, tutor/notetakers, counselling, and a screening-in procedure will enhance the opportunities for hearing-impaired Canadians to pursue a post-secondary education with true equality in the country of their birth.

Financial Aid Office

Students are welcome to contact the Financial Aid Office for the following services.

Scholarships and Bursaries

Scholarship and Bursary brochures are available in the Financial Aid Office. These booklets provide detailed criteria and application procedures for all awards administered by the University.

Scholarships (merit-based)

If further information is required regarding University scholarships, students are welcome to contact the Financial Aid Office, (i.e., clarification of scholarship policy, study-abroad students).

All scholarship award letters are prepared by the Financial Aid Counsellor.

Bursaries (need-based)

Bursary criteria is available in the Scholarship and Bursary brochure.

Applications for bursaries are available after October 1 from the Financial Aid Office.

Students will be interviewed when applying for a bursary and are therefore asked to make appointments with the Financial Aid Counsellor.

Provincial Government Student Aid Programs (including U.S. loan applications) - Application Procedures/Information

Residency Questions, i.e., which province do I apply to?

Student Aid Appeals, i.e., what areas of the assessment may I appeal?

Disbursement of Student Aid Funds, i.e., where do I pick up the loans and cheques; timing and availability of funds; processing problems/delays.

Budget Counselling

Information on preparing a yearly budget is available. Students can also obtain help in:

- reviewing their yearly budget to determine whether they can meet the education expenses;

- exploring all sources of financial aid to meet the student's financial need;

- suggesting alternative sources of financial aid.

Foreign Students

Letters are provided for visa students regarding their expected education expenses for the academic year in question.

External Awards (awards administered through outside agencies)

Information concerning external scholarships and bursaries is available from the Financial Aid Office.

This information is also forwarded to the Dean's office for posting. Students are encouraged to drop by for updated information.

Student Health Services

The C. Henry Reardon Medical Centre is located on the 4th floor of the Student Centre and is named in honour of the late Dr. C. Henry Reardon who served as its initial Director from 1967 to 1980. It provides the students with the same service they would receive from their family doctor. Referrals to specialists may be made through the clinic.

Office hours are 9 a.m. to 12 noon and 1:00 to 5:00 p.m., Monday through Friday. A nurse and secretary are in the office during office hours. The Doctor's office hours are 1:30 to 4:30 in the afternoon only. It is preferable that students make an appointment (420-5611).

During the evening or night a physician may be reached at 453-3511. For emergency service call 428-2043/428-2948 or go directly to the Victoria General Hospital Emergency Department, 1278 Tower Road. Emergency services are also available at the Halifax Infirmary, 1335 Queen Street, telephone: 428-2784.

In response to the serious health problem created by AIDS (Acquired Immune Deficiency Syndrome), in the fall of 1989, Senate and the Board of Governors of the University developed a policy for all students, staff, and faculty. Details on this official policy are available on request.

Medical Insurance

Each year the Health Insurance Committee decides which insurance company will carry the health plan and they, along with the insurance company, are responsible for the administration of the plan. The following description applies to the 1990-91 academic year. Please note that the health plan for Canadian students is under review and may not be available in its present form in the 1991-92 academic year. A description of the benefits in any revised plan will be available on request from Health Services.

1. Full-Time Students (Canadian and Non-Canadian)

An extended health care plan arranged by the Students' Health Insurance Committee is compulsory for all full-time students. Students who are already covered by a similar plan may opt out. (See Financial Information section of this Calendar for details.) This plan includes such benefits as prescription drugs, ambulance service, accidental dental, physiotherapy, life insurance, etc. For information on premiums, please consult the Financial Information section of this Calendar.

Full-Time Canadian Students

All Canadian students, with the exception of those residing in the Yukon or Northwest Territories, are either covered or have access to basic hospital and medicare coverage in their province of domicile. It is the students' responsibility to see that they are in good standing with the Provincial Hospital Insurance Commission in the province of origin. If the province requires monthly payments, the students must make certain they are properly enrolled and maintain payments.

Full-Time Non-Canadian Students

Students not eligible for basic Canadian hospital and medicare coverage must be insured by the Blue Cross comprehensive health and hospital plan which has been arranged through the Students' Representative Council. For information on the premiums, please consult the Financial Information section of this Calendar.

Students who provide proof at the time of registration that they have the equivalent to Nova Scotia's Medical Services Insurance (M.S.I.) are exempt from the non-Canadian portion of the University's compulsory comprehensive coverage.

2. Part-Time Students

Part-time students are not eligible for either the extended or the comprehensive health plan.

The largest measure of responsibility for maintaining standards of conduct rests with the students themselves. The University reserves the right, however, to counsel, admonish, limit the activities of, impose penalties on, or dismiss any student or group of students whose conduct violates normally accepted standards of civilized behavior or is in conflict with the University's objectives, policies, rules and regulations.

b. Discipline System

The Senate-approved disciplinary system operates under the general responsibility and direction of the Director of Student Services. Several administrative officers of the University receive complaints, examine the evidence, and make decisions with respect to the disposition of cases. If there are appeals against these decisions, they are heard by the three-person Student Disciplinary Appeal Board. Decisions can involve monetary fines, suspensions, or expulsion from the University.

c. Campus Security Force

The maintenance of order and conduct at extracurricular functions is the responsibility of the Saint Mary's Campus Security Force. The Force is composed of full-time and part-time students and is headed by a chief, deputy chief, and six team captains. Students wishing to be members of this force must be of sound academic standing, of a general demeanour consistent with the normally accepted standards of conduct required of students at the University. The force is under the general supervision of the Director of Student Services of the University. Applications for Campus Security Force membership are to be directed to the Director's office.

The Campus Security Force provides students with an opportunity to obtain valuable experience in the field of crowd and citizen management and funds to augment their education costs.

Saint Mary's University Students Association

Incorporated in 1966, the Saint Mary's Students Association (SMUSA) is the official representative organization of the students of Saint Mary's University. Every student is automatically a member of the Association.

The goal of the Association is to promote and represent the interests of its membership. The Association seeks to foster understanding and fellowship among all sectors of the University community as a whole. It also coordinates artistic, literary, educational, social, and recreational activities for Saint Mary's students.

The Association is governed by a sixteen member Student's Representative Council. The Association organizes scores of activities for students as well as provides a service and representative base for its members.

The extracurricular organizations for students are recognized by the University. Students who represent the University in any public activity - dramatics, debating, oratorical contests, or athletic competition - or who hold office in any student organization, must be in good academic standing at the time of their election or appointment.

A detailed description of student societies is available in the Student Handbook which is distributed by the Students' Representative Council in September. Included in this list are the following:

Class A

Journal
Yearbook

Class B

Accounting
Anthropology
Arts
Asian Studies
Astronomy/Physics (SMUCAPS)
Atlantic Canada Studies
K. Thomas Biology
H. Beazley Commerce
Economics
Engineering
English
Education
French
Geographical
Geology
International Development
Management/Personnel and
Industrial Relations
Marketing
Math/Computing Science
MBA
Philosophy
Political Science
Psychology
Sociology

Class C

AIIEEC
Asian Students
Caribbean
Chinese
Citadels (Halifax)
Debating
Drama
Environmentally Concerned
Students (ECOSS)
First Year Students (SMUFYS)
Grad Class
Investment
Japanese
Kenyan
Mature
Off Campus
Residence
SMU Radio (CFSM)
Stock Exchange
Student Alumni

Class D

Christian Fellowship
Liberal Youth
NDP Youth
PC Youth



Section 9

Academic Officers and Faculty

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Academic Officers and Faculty

[The text in this column is extremely faint and largely illegible. It appears to be a list of names and titles, possibly including faculty members and administrative staff.]

Academic Officers and Faculty

Academic Officers

Vice-President (Academic and Research)

J. Colin Dodds, B.A. (Open University), B.Sc. (Hull), M.A., Ph.D. (Sheffield), Professor of Finance and Management Science

Faculty of Arts

Michael J. Larsen, B.A. (Saint Mary's), M.A. (Dalhousie), Ph.D. (Toronto), Dean and Professor of English

Donald J. Nauls, B.A. (Hons.), M.A. (Wilfrid Laurier), Ph.D. (York), Associate Dean and Assistant Professor of Political Science

Faculty of Commerce

Paul S. Dixon, B.A. (New Brunswick), M.Math., Ph.D. (Waterloo), Acting Dean and Associate Professor of Finance and Management Science

David H. Bateman, B.B.A. (New Brunswick), M.B.A. (Dalhousie), C.A., Associate Dean and Associate Professor of Accounting

Faculty of Education

Roger H. Barnsley, B.A. (Victoria), M.A., Ph.D. (McGill), Dean and Professor of Education

Faculty of Science

Clive M. Elson, B.Sc. (Toronto), Ph.D. (Queen's), Acting Dean and Professor of Chemistry

Faculty

Ahlikpor, James C. W., B.Sc., M.Sc. (Ghana), M.A. (British Columbia), Ph.D. (Toronto), Associate Professor of Economics

Akbari, Ather H., B.Sc., M.B.A. (Karachi), M.A., Ph.D. (Simon Fraser), Assistant Professor of Economics

Amlr-Khalkhall, Saleh S., B.A. (Shiraz), M.A., Ph.D. (Dalhousie), Associate Professor of Economics

Amlr-Khalkhall, M. Seyed A., B.Sc. (National University of Iran), M.A., Ph.D. (Dalhousie), Assistant Professor of Finance and Management Science

Ansell, Robert N., B.A. (Cambridge), Ph.D. (Glasgow), Assistant Professor of Philosophy

Ansong, Granville, B.A. (Hons.) (Ghana), M.A. (Queen's), M.Acc. (Waterloo), Ph.D. (Queen's), Assistant Professor of Accounting

Armstrong, Stanley A., A.B. (Brown), B.D. (Harvard), M.A., Ph.D. (Yale), Associate Professor of Religious Studies

Arseneau, D. Therese, B.A. (St. Francis Xavier), M.Phi. and Ph.D. (Oxford), Assistant Professor of Political Science

Arya, Pyare Lal, B.A., M.A., Ph.D. (Delhi), Professor of Economics

Azhar, Rauf A., B.A. (Punjab), M.A. (Economics), Ph.D. (McMaster), Associate Professor of Economics

Badawi, Jamal A., B.Comm. (Ain-Shams), M.B.A., Ph.D. (Indiana), Associate Professor of Management

Baker, Janet, B.A., M.A. (Queen's), Ph.D. (Dalhousie), Associate Professor of English

Barrett, L. Gene, B.A. (King's College), M.A. (Dalhousie), D.Phil. (Sussex), Associate Professor of Sociology

Bartlett, Brian, B.A. (New Brunswick), M.A. (Concordia), Ph.D. (Montreal), Assistant Professor of English

Bateman, David H., B.B.A. (New Brunswick), M.B.A. (Dalhousie), C.A., Associate Professor of Accounting

Bell, Sandra J., B.A., M.A. (Western Ontario), Ph.D. (Toronto), Assistant Professor of Sociology

Bernard, Paul R., B.A. (Providence College), M.A.T. (Assumption College), Ph.D. (Pennsylvania State), Associate Professor of French

Bistodeau, Linda, B.A., M.A. (Un. de Québec à Trois Rivières), Lecturer in French

Blair, June, B.A. (Hons.), M.A., Ph.D. (York), Assistant Professor of Philosophy

Boabang, Francis, B.A., M.Sc. (Ghana), M.A. (Saskatchewan), Ph.D. (Simon Fraser), Assistant Professor of Finance and Management Science

Bollini, Robert J., B.A. (Cornell), M.S. (Georgetown), Ph.D. (California, Berkeley), Associate Professor of History

Bowlby, Paul W. R., B.A., M.A., Ph.D. (McMaster), Associate Professor and Chairperson of the Department of Religious Studies

Bowles, Paul, B.Sc. (Southampton), M.A. (Sussex), Ph.D. (London School of Economics), Associate Professor of Economics

Boyle, W. Peter, B.Sc., Ph.D. (Queen's Belfast), Professor of Engineering

Bridgeo, William A., B.Sc. (St. Francis Xavier), Ph.D. (Ottawa), Professor of Chemistry

Bruce, Darryl, B.Comm. (McGill), M.Sc., Ph.D. (Pennsylvania State), C.A., Professor and Chairperson of the Department of Psychology

Byrne, Cyril J., B.A. (St. Dunstan's), M.A. (National University of Ireland), M.A. (Oxford), Ph.D. (Toronto), Professor of English and Coordinator of Irish Studies Program

Carrigan, D. Owen, B.A. (St. Francis Xavier), M.A. (Boston), Ph.D. (Maine), Professor of History

Catano, Victor M., B.S. (Drexel), M.S., Ph.D. (Lehigh), Professor of Psychology

Cauville, Joelle, M.A. (Paris), M.A., Ph.D. (U.B.C.), Assistant Professor of French

Chadwick-Jones, John K., B.A., M.A. (Oxford), Ph.D., D.Sc. (Wales), F.A.P.A., F.B.Ps.S., Professor of Psychology

Chamard, John C., B.A. (Saskatchewan), M.B.A. (Harvard), Professor of Management

Chan, Tsang Sing, B.B.A., M.B.A. (Wisconsin), D.B.A. (Indiana), Associate Professor of Marketing and Director of M.B.A. Program

Charles, Tony, B.Sc. (Hons.) (Carleton), Ph.D. (British Columbia), Associate Professor of Finance and Management Science

Chauvin, Guy, B.Comm. (McGill), M.A. (Dalhousie), Ph.D. (Trinity College, Dublin), Assistant Professor of Political Science

Chesley, G. Richard, B.Comm. (Mount Allison), M.A., Ph.D. (Ohio State), C.A., Professor and Chairperson of the Department of Accounting

Chew, Milton, B.S. (Juniata College), M.S., Ph.D. (Carnegie Institute of Technology), Associate Professor of Finance and Management Science

Chipuer, Heather M., B.A. (Saskatchewan), M.A. (O.I.S.E.), Ph.D. (Pennsylvania State), Assistant Professor of Psychology

Christiansen-Ruffman, Linda, B.A. (Smith College), Ph.D. (Columbia), Professor of Sociology

Cone, David K., B.Sc., M.Sc. (Guelph), Ph.D. (New Brunswick), Associate Professor of Biology

Connelly, Dennis E., B.Sc. (Alberta), M.Comm. (Toronto), Ph.D. (Illinois), Associate Professor and Chairperson of Finance and Management Science

Connelly, Patricia, B.A. (Saint Mary's), Dip.Ed., M.A. (Dalhousie), Ph.D. (Toronto), Professor and Chairperson of the Department of Sociology

Corns, Robert A., B.Sc., M.Sc., Ph.D. (Manitoba), Assistant Professor of Physics

Cosper, Ronald L., B.A. (Purdue), M.A. (Cornell), Ph.D. (Rutgers), Professor and Chairperson of the Department of Sociology

Courchene, Robert J., B.A. (Toronto), M.A. (Ottawa), Ph.D. (Montreal), Adjunct Professor of Education

Crooks, Shelagh, B.A. (Saint Mary's), M.A. (Dalhousie), Ph.D. (Edinburgh), Assistant Professor of Philosophy

Crowther, Roger H., B.A., M.A. (Cambridge), Professor of English

- Dar, Atul A.**, B.A. (Hons.), M.A. (Delhi), M.A., Ph.D. (McMaster), Associate Professor of Economics
- Darley, James A.**, B.A., M.Sc., Ph.D. (Western Ontario), Professor of Psychology
- Das, Hari**, B.Comm. (Madras), M.B.A. (Indian Institute of Management), M.Sc., Ph.D. (British Columbia), A.I.C.W.A., Professor of Management
- Davies, Donald H.**, B.Sc. (Carleton), Ph.D. (Bristol), Professor of Chemistry
- Davis, Bernard E.**, B.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Education
- Davis, Stephen A.**, B.A. (New Brunswick), M.A. (Memorial), D.Phil. (Oxford), Associate Professor of Anthropology
- Day, E. E. Douglas**, B.A., Dip.Ed. (Leicester), Ph.D. (Sheffield), Professor of Geography
- Dixon, Paul S.**, B.A. (New Brunswick), M.Math., Ph.D. (Waterloo), Dean of Commerce and Associate Professor of Finance and Management Science
- Doak, Ervin J.**, B.Comm. (Saint Mary's), M.A. (Dalhousie), Ph.D. (Toronto), Professor of Economics
- Dockrill, Frederick J.**, B.A., B.Ed., M.A. (Saint Mary's), Ph.D. (Dalhousie), Associate Professor of Education
- Dorp, Dieter**, B.P.E. (Toronto), M.B.A., Ph.D. (York), Assistant Professor of Finance and Management Science
- Dostal, Jaroslav**, Dip.Geol. (Prague), Ph.D. (McMaster), Professor of Geology
- Dougherty, Frank P.**, B.Comm. (Sir George Williams), M.Sc. (Clarkson College of Technology), Ph.D. (Pennsylvania State), C.A., Professor of Accounting
- Elson, Clive M.**, B.Sc. (Toronto), Ph.D. (Queen's), Professor of Chemistry
- Emerson, H. Bryan**, B.B.A. (Oklahoma), M.B.A. (Chicago), C.P.A., Associate Professor of Accounting
- Erickson, Paul A.**, B.A. (Michigan), M.A. (Indiana), M.A. (Wayne State), Ph.D. (Connecticut), Professor of Anthropology
- Falk, Lillian**, B.A., M.A. (Jerusalem), Ph.D. (Harvard), Associate Professor of English
- Farrell, Anthony J.**, B.A., M.A. (California), Ph.D. (Princeton), Professor of Spanish and Chairperson of the Department of Modern Languages and Classics
- Fillmore, Keith G.**, B.Sc. (Queen's), M.A. (Princeton), Ph.D. (British Columbia), Associate Professor of Physics
- Finbow, Arthur S.**, B.Sc., M.A. (Dalhousie), Ph.D. (Washington), Associate Professor of Mathematics and Computing Science
- Finden, Walter**, B.Sc., M.Sc., Ph.D. (Waterloo), Associate Professor and Chairperson of the Department of Mathematics and Computing Science
- Fiske, Jo-Anne**, B.Ed., M.A., Ph.D. (British Columbia), Assistant Professor of Sociology
- Fitzgerald, Patricia A.**, B.B.A. (St. Francis Xavier), M.A. (North Dakota), Ph.D. (Northern Colorado), Professor of Management
- Filkeld, Karin**, B.A., M.A. (Besancon), Ph.D. (Sherbrooke), Associate Professor of Modern Languages and Classics
- Flynn, T. Edward**, B.A. (Memorial), M.A. (Dalhousie), Ph.D. (London), Associate Professor of English
- Gatbonton, Elizabeth C.**, B.Sc. (St. Theresa's College), M.A. (Ateneo De Manila), Ph.D. (McGill), Adjunct Professor of Education
- Ginsburg, Jack L.**, B.A. (Temple), Ph.D. (Rutgers), Professor and Chairperson of the Department of Chemistry
- Gorman, Barry F.**, B.Comm. (Saint Mary's), M.B.A. (Dalhousie), C.A., Associate Professor of Accounting
- Gray, David F.**, B.Sc. (Toronto), M.A., Ph.D. (Dalhousie), Associate Professor of Finance and Management Science
- Greer, William T.**, B.A. (Toronto), M.B.A. (Boston), Assistant Professor of Management.
- Gregory, Janet**, B.A.Sc. (Waterloo), B.Ed., M.Sc., Ph.D. (Dalhousie), Associate Professor of Finance and Management Science
- Grennan, Wayne**, B.Eng. (Nova Scotia Technical College), B.A., M.A. (Dalhousie), D.Phil. (Oxford), Associate Professor of Philosophy
- Hadden, Richard**, B.A. (Toronto), M.A., Ph.D. (McMaster), Assistant Professor of Sociology
- Haigh, Elizabeth V.**, B.Sc., M.Sc. (Alberta), Ph.D. (Wisconsin), Professor of History
- Halebsky, Sandor**, B.A. (City College of New York), Ph.D. (Cornell), Professor of Sociology
- Hallett, George B.**, B.A., M.A. (Dalhousie), Professor of English
- Hanrahan, Bette L.**, B.A., B.Ed., M.A. (Saint Mary's), Assistant Professor of Education
- Harry, Margaret R.**, B.A. (Hons.) (London), M.A. (Manitoba), Ph.D. (Toronto), Associate Professor of English
- Hartnell, Bert L.**, B.Math., M.Math., Ph.D. (Waterloo), Professor of Mathematics and Computing Science
- Harvey, Andrew S.**, B.A. (Maine), M.A., Ph.D. (Clark), Professor of Economics
- Hayes, Charles J. A.**, B.A. (British Columbia), M.A. (Dalhousie), Ph.D. (London), Adjunct Professor of Psychology
- Haysom, John T.**, B.Sc. (London), Ph.D. (Cambridge), Professor of Education
- Herrick, Michael J.**, B.A., (College of Steubenville), M.A. (John Carroll), M.B.A. (Dalhousie), Ph.D. (Texas), Associate Professor of Education
- Heukaeufer, Margaretha**, Philosophicum (Friedrich Wilhelm), Erstes Staatsexamen (University Cologne), Zweites Staatsexamen (Aachen), Ph.D. (British Columbia), Assistant Professor of German
- Hill, Kenneth A.**, B.A. (California State College), M.A., Ph.D. (Alberta), Professor of Psychology
- Howell, Collin D.**, B.A., M.A. (Dalhousie), Ph.D. (Cincinnati), Professor of History
- Hughes, F. Lawrence K.**, B.Sc. (Ottawa), M.Sc., Ph.D. (Newcastle upon Tyne), Associate Professor of Mathematics and Computing Science
- Ireland, Alice M.**, B.A. (Chatham), M.Sc. (Carnegie-Mellon), M.B.A. (Dalhousie), C.A., Assistant Professor of Accounting
- Jaquith, James R.**, B.A. (Mexico City College), M.A., Ph.D. (Indiana), Professor of Anthropology
- Jones, Norman K.**, B.A. (McMaster), M.Sc. (Alberta), Ph.D. (Waterloo), Assistant Professor of Geography
- Jopling, Samuel H.**, B.Mech.Eng. (Georgia Institute of Technology), M.S., Ph.D. (Pennsylvania State), Professor of Accounting
- Kapoor, Brij M.**, B.Sc., M.Sc., Ph.D. (Delhi), Professor and Chairperson of the Department of Biology
- Katz, Wendy**, B.A. (Skidmore College, N.Y.), M.A., Ph.D. (Dalhousie), Professor of English
- Keeble, Edna**, B.A. (Hons.) (DePaul), M.A. (Dalhousie), Lecturer in Political Science
- Kellough, D. Gall**, B.A. (Hons.) (Winnipeg), M.A. (Manitoba), Ph.D. (Toronto), Assistant Professor of Sociology and Coordinator of the Criminology Certificate Program
- Kelly, Ursula**, B.A., B.Ed., M.Ed. (Memorial), Ph.D. (O.I.S.E.), Assistant Professor of Education
- Kepple, Duncan**, B.Sc., Ph.D. (Glasgow), Adjunct Professor of Geology
- Kiang, Mo-Tak**, B.Sc., M.A., Ph.D. (Dalhousie), Professor of Mathematics and Computing Science
- Kiesekamp, Burkhard**, B.A. (Carleton), M.A., Ph.D. (Toronto), Associate Professor and Chairperson of the Department of History
- Kling, Nathan D.**, B.B.A., M.B.A., Ph.D. (Texas), Associate Professor of Marketing (on leave)
- Konopasky, Robert J.**, M.A. (Western Ontario), B.A., Ph.D. (Windsor), Professor of Psychology

- Kruse, Robert L.**, B.A. (Pomona College), M.S., Ph.D. (California Institute of Technology), Professor of Mathematics and Computing Science
- Landes, Ronald G.**, B.Sc. (Oregon), M.A., Ph.D. (York), Professor and Chairperson of the Department of Political Science
- Lee, Eric**, B.A., M.A., Ph.D. (Victoria), Associate Professor of Finance and Management Science
- Lee, John**, B.A., M.A., Ph.D. (Toronto), Associate Professor of History
- Lenzer, Irmgard I.**, B.A. (California), Ph.D. (Indiana), Professor of Psychology
- Lonc, William**, S.J., B.Sc. (Sir George Williams), Ph.L., Ph.D. (St. Louis), Professor of Physics
- MacDonald, Martha**, B.A. (Dalhousie), M.A., Ph.D., (Boston College), Associate Professor of Economics and Executive Director of the Gorsebrook Research Institute for Atlantic Canada Studies
- MacDonald, Roger A.**, B.A. (St. Dunstan's), M.A. (Dalhousie), Ph.D. (New Brunswick), Professor of English
- MacKinnon, Kenneth A.**, B.Sc. (St. Dunstan's), M.A. (Dalhousie), Ph.D. (Toronto), Professor of English
- MacLeod, Kevin**, B.Sc. (St. Francis Xavier), M.Sc. (Technical University of Nova Scotia), Assistant Professor of Mathematics and Computing Science
- MacMillan, Michael R.**, B.A., B.Ed. (St. Francis Xavier), M.A. (Saint Mary's), Ph.D. (Alberta), Associate Professor of Education
- March, Peter**, B.A. (Dalhousie), Ph.D. (Bristol), Associate Professor of Philosophy
- Marshall, Rowland C.**, B.A., M.A. (Western Ontario), Ph.D. (Ottawa), Associate Professor of Philosophy
- Mate-Cole, Charles C.**, B.Sc. (Brunel), Ph.D. (Loioster), Adjunct Professor of Psychology.
- McBride, Edward J.**, B.S. (LeMoyné), M.A. (Catholic University of America), Professor of Political Science
- McCalla, Robert J.**, B.A. (Western Ontario), Ph.D. (Hull), Professor of Geography
- McCormick, Christopher**, B.A. (Hons.) (Acadia), M.A. (Queen's), Ph.D. (York), Assistant Professor of Sociology
- McGee, Harold F.**, B.A., M.A. (Florida State), Ph.D. (Southern Illinois), Professor and Chairperson of the Department of Anthropology
- McMullan, John**, B.A. (Hons.), M.A. (Sir George Williams), Ph.D. (London School of Economics and Political Science), Professor of Sociology
- Millar, Harvey R.**, B.Sc. (West Indies), M.A.Sc., Ph.D. (Technical University of Nova Scotia), Assistant Professor of Finance and Management Science
- Mills, Wallace G.**, B.A., M.A. (Queen's), Ph.D. (California, Los Angeles), Associate Professor of History
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