

A watercolor illustration of a city skyline. The central focus is a tall, multi-story building with a construction crane on top. The building is rendered in shades of orange and blue. To the right, a church steeple with a pointed top is visible. The foreground consists of various rectangular blocks in blue and orange, suggesting other buildings or structures. The overall style is artistic and hand-drawn.

SAINT MARY'S UNIVERSITY

HALIFAX-CANADA

1971-1972

ACADEMIC CALENDAR

-
1. Heavy Residence
2. Main Building
3. Library Reading-Room
4. Faculty Offices
5. Chemistry-Biology Building
6. Library
7. Students' Center
8. Winter Arena and Field House
9. Practice Sports Field
10. Stadium
11. High Rise Residence
12. Low Rise Residence
13. Dining Hall and Serving Booth
14. Auditorium/Recreation Building





Saint Mary's University

General Calendar
for the academic year
1971-72

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Academic Calendar Year 1971—1972

MAY

- | | | |
|----|-----------|--|
| 11 | Tuesday | Registration for first Summer Session. |
| 12 | Wednesday | First Summer Session begins. |

JUNE

- | | | |
|----|--------|------------------------------------|
| 25 | Friday | First Summer Session examinations. |
|----|--------|------------------------------------|

JULY

- | | | |
|----|----------|---|
| 5 | Monday | Registration for second Summer Session. |
| 6 | Tuesday | Second Summer Session begins. |
| 15 | Thursday | Last day for receiving applications for supplemental examinations for courses taken in regular academic year and in first Summer Session. |

AUGUST

- | | | |
|----|-----------|-------------------------------------|
| 18 | Wednesday | Second Summer Session examinations. |
|----|-----------|-------------------------------------|

SEPTEMBER

- | | | |
|------|----------------|---|
| 1 | Wednesday | Supplemental examinations for regular year and first Summer Session. |
| 7-10 | Tuesday-Friday | Registration for Evening Division students: 7:00 p.m. - 8:30 p.m. |
| 7 | Tuesday | Registration for all Fourth Year students: 9:00 a.m. - 12:00 noon, 1:00 p.m. - 5:00 p.m. |
| 8 | Wednesday | Registration for all Third Year students: 9:00 a.m. - 12:00 noon, 1:00 p.m. - 5:00 p.m. |
| 9 | Thursday | Registration for all returning Second Year students: 9:00 a.m. - 12:00 noon, 1:00 p.m. - 5:00 p.m. |
| 10 | Friday | Registration for all new students entering as Sophomores: 9:00 a.m. - 12:00 noon, 1:00 p.m. - 5:00 p.m. |

SEPTEMBER

11 Saturday

Registration for all new students entering as Freshmen: 9:00 a.m. - 12:00 noon, 1:00 p.m. - 5:00 p.m. Instruction begins for all classes. Late registration fee of \$25.00 with an additional fee of \$10.00 for each day after this date.

13 Monday

Final date for late registration and last day for change of registration.

17 Friday

OCTOBER

8 Friday

University Day and Installation of the President. No afternoon classes.

11 Monday

Thanksgiving Day. No classes.

15 Friday

Last date for application for degrees to be awarded in May, 1972.

NOVEMBER

11 Wednesday

Remembrance Day. No classes.

DECEMBER

8 Wednesday

Patronal Feast of the University. No classes.

15 Wednesday

Last day of classes.

16-22 Thursday-Wednesday

Examinations — first-term courses.

JANUARY 1972

3 Monday

Classes resume at 8:30 a.m.

4-11 Tuesday - Tuesday

Registration for all students for second semester.

FEBRUARY

4-6 Friday-Sunday

Senior Weekend. No classes.

25-26 Friday-Saturday

Supplementals for second Summer Session and first-term courses.

MARCH

8-26

Pre-registration of all students for next academic year.

16 Thursday

Charter Day. All extracurricular activities cease.

29 Wednesday

Easter recess begins after last class.

APRIL

3	Monday	Classes resume.
7	Friday	Last day of classes
10	Monday	Final examinations begin.
28	Friday	Survey Camp begins.

MAY

8	Monday	Spring Convocation
9	Tuesday	Registration for first Summer Session.
10	Wednesday	First Summer Session begins.

JUNE

23	Friday	First Summer Session examinations
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JULY

3	Monday	Registration for second Summer Session.
4	Tuesday	Second Summer Session begins.
14	Friday	Last day for receiving applications for supplemental examinations for courses taken in regular academic year and in first Summer Session.

AUGUST

18	Friday	Second Summer Session examinations.
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CALENDAR - - - 1971

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

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

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

CALENDAR - - - 1972

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

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

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

General Information

HISTORY

Saint Mary's University had its beginnings as a small college founded in Halifax in 1802 by Reverend, later Bishop, Edmund Burke. The site of the first building was just west of the present Saint Mary's Basilica on Spring Garden Road.

Official recognition came in 1841 when "An Act Incorporating the trustees of Saint Mary's College at Halifax" was enacted by the Nova Scotia House of Assembly. Eleven years later the privileges granted in the Act of 1841 were made permanent.

In 1903, the College was re-established on a new campus at Quinpool Road and Windsor Street in Halifax. Ten years later the Christian Brothers of Ireland assumed direction and added to the building.

In 1918, the Nova Scotia Legislature in the preamble to an Act to amend the law respecting Saint Mary's, declared that Saint Mary's, "originally incorporated by Chapter 39 of the Acts of 1841, shall continue to be deemed and taken to be a University, with all the necessary and usual powers . . . including the power of conferring Degrees in Arts and in all the other faculties."

The Jesuit Fathers assumed direction of Saint Mary's in 1940. In 1951, the University moved to a new 30 acre campus on the historic Collins estate and former Gorsebrook Golf Course in south Halifax. In 1968 Saint Mary's University became a co-educational university.

In July, 1970, Saint Mary's became a fully autonomous university, ending 168 years of ownership by the Roman Catholic Archdiocese of Halifax. The power and authority to govern the university, as stated in the Saint Mary's University Act, 1970, is now that of its board of governors.

Its independence will not, however, spell an end to the university's Christian tenor and traditions: Saint Mary's will continue under its charter to emphasize Christian and humanistic values and principles.

A full-fledged university with more than 5,500 students in attendance each year, Saint Mary's is today a high-rise university still characterized by a rapport among students, faculty and administration.

ASSOCIATIONS

Saint Mary's University is a member of the Association of Commonwealth Universities, of the Association of Universities and Colleges of

Canada, of the Association of Atlantic Universities, of the Jesuit Educational Association, International Association of Universities and an associate member of the Huntsman Marine Laboratory, St. Andrews-by-the-Sea, N.B.

Saint Mary's has been associated with the Nova Scotia Technical College since 1916 providing the first three years of courses leading to the Degree of Bachelor of Engineering in Civil, Electrical, Mechanical, Mining, Metallurgical, Chemical, Industrial and Geological Engineering. Since 1953, Saint Mary's has been one of the institutions sponsoring the Atlantic Summer School for Advanced Business Administration. In 1955, it entered upon an agreement of affiliation with the Maritime School of Social Work. And in 1957, it affiliated Ignatius College in Guelph, Ontario, and Regis College in Toronto, Ontario, for courses leading to degrees in Arts and Sacred Theology. Also in 1957, Saint Mary's became one of the six Maritime Universities co-operating with the Nova Scotia Department of Education in the professional training of teachers.

STATEMENT OF OBJECTIVES

This University believes that its objective is to induce, in the individual student, that kind of critical thinking that will build and refine his constructive, judgemental powers towards his own free formation of a system of Christian and humanistic values and principles that can face and answer the cultural and technological challenges of the present day. This University consequently believes that traditional humanism, confirmed by the teachings of Jesus Christ, and supplemented by the scientific and professional awareness required in our time, is the best educational instrument for the making of modern Canadians.

CHRISTIAN LIFE

The University encourages its members to pursue any activities which further its aims.

Saint Mary's University is a Christian University, and as such endeavours to create a specifically Christian atmosphere. This atmosphere is one in which concerned Christians are able to search for and spell out a concretization of their convictions.

One source of this desirable atmosphere stems from the opportunities offered Students, Faculty and Administration to participate in Liturgical functions and other religious programs, and this effort must be positive and to some extent aggressive if it is to go beyond the

opportunities offered on a strictly secular campus. The word aggressive is to be understood not as implying any indoctrination or interference with religious freedom but rather in the sense of leadership and example.

Chaplains: The office of chaplains on campus are located on the fourth floor of the Student Center.

Religious Services: The times and locations of religious services on campus are announced on the notice-boards and in the bulletins.

University Religious Events: The academic year is especially marked by inviting the University Community to participate in religious services, on dates to be announced, during:

September: as a part of the University Day celebrations.

November: to commemorate the deceased of the University.

December: to celebrate the traditional Patronal Feast of the University; the Feast of the Immaculate Conception, December 8.

May: Baccalaureate Service, as part of the Graduation Ceremonies.

STUDENT AFFAIRS

Student Affairs comprise student activities of a non-academic nature and student personnel services.

This sector of the University includes the Offices of the Dean of Students, Dean of Men, Dean of Women, Student Health Services, University Counselling Service, Chaplains' Office, Director of Athletics, Deans of Residences and Financial Aid Officer.

The Deans of Residences also cooperate with the Students Representative Council in compiling a list of off-campus housing which is made available to those students desiring accommodations of this nature.

The Dean of Students serves as liaison officer for the University to the Canada Manpower Centre.

The Dean of Men serves as liaison officer and University Representative to student government and student organizations.

The overall responsibility for student affairs is delegated by the President to the Dean of Students.

The Dean of Students main tasks are:

- a) to promote the educational role of the University in non-academic student activities;
- b) to further the physical, intellectual and moral well-being of the student body;
- c) to co-ordinate the activities of the various student personnel services and to supervise their development.

In the absence of the Dean of Students, the Dean of Men supervises Student Services.

The Dean of Men strives to promote the educational value of responsible student action in student self-discipline. He is available to all students for personal conferences and strives to assist students whenever possible.

STUDENT BEHAVIOUR

It is assumed that students come to the University for a serious purpose and will conform to duly established customs, policies, and rules. Students as adults must accept full responsibility for their actions. On the other hand the University cannot remain completely unconcerned about their actions. The University cannot be expected to prepare students for leadership without attempting to influence their spirit as well as their mind.

The University accepts the responsibility of creating on campus an atmosphere where students observe the elementary rules of good manners and show both self-respect and respect for others. It looks to them to display good taste in their dress, speech and general behaviour.

The University sees little need however to issue detailed regulations governing discipline since self-discipline should be the aim of each individual student. The University's few basic regulations are designed to create a favorable climate so that any individual may acquire personal self-control and build within himself a strong human spirit to guide his actions now and later as a member of society.

The University reserves the right to take appropriate action to prevent any individual or group from interfering with the learning process or to censure or penalize students who are guilty of breaches of school discipline. The registration of the student is considered an acceptance

of regulations. It should be understood that the University reserves the right, not only to suspend or dismiss students, but also to name conditions under which they may remain in the University.

MEDICAL AND HEALTH SERVICES

The Nova Scotia Medical Services Insurance Plan came into effect on April 1, 1969. The details of this plan may be obtained through the Department of Health, Province of Nova Scotia. The plan covers all residents of Nova Scotia.

Most other provinces have Medical Services Insurance plans similar to the one in effect in Nova Scotia and it is the responsibility of each student to insure himself in his home province.

All foreign students who are not eligible for coverage under the Nova Scotia Medical Services Insurance plan (e.g., those students who do not intend to remain in Nova Scotia for the duration of their university education) are covered by the University under a private Insurance Company.

The University has retained a medical doctor as Director of Medical Services. The doctor's office is located on campus, and his services will be available to all students.

The University accepts no responsibility for injuries or loss of time incurred by students while taking part in student activities.

All students are responsible for their own hospitalization expenses.

Notices

Bulletin-Board announcements intended for students must be in good taste. They must be placed on the bulletin boards provided. They must, in addition, be approved by the Students Representative Council.

Use of Grounds and Buildings

The use of University grounds and buildings by students is regulated by administration of the University upon the recommendation of the Dean of Students. Requests must be made through the office of the Dean of Men.

STUDENT ORGANIZATIONS

The extracurricular organizations listed below are officially recognized by the University. Students who represent the University in any public activity, dramatics, debating, oratorical contests, or athletic competition, or hold office in any student organization, must be in good standing at the time of their election or appointment.

Students' Council

It aims at promoting the best interests of the students by sharing with the Faculty the responsibilities of University government in all non-academic matters and in accordance with the powers conferred by the President.

Movement for Christian Action

Formerly the Sodality of the Blessed Virgin Mary; this organization is for those students who wish to express their Christianity through social action, and who believe that for this action to be effective it should be united with prayer and a life centered around the Eucharist.

S.M.U. Kamp

Operative since December, 1969, this organization operates solely for the benefit of underprivileged children of the metro area. During the months of July and August, a series of "campus" for children between 7 and 11 years of age are held.

Based from the High Rise residence, the extensive list of activities includes everything from swimming and creative art to field trips covering much of Nova Scotia's historical and vacation parks. The purpose is to give those children an exposure to many entertaining and educational activities, otherwise not open to them.

Alpha Sigma Nu

International Jesuit Honour Society. Membership is based on both high academic achievement and contribution to serious discussion on fundamental human questions.

Tau-Gamma-Sigma Society

Is restricted to students in the Faculty of Arts. Besides social and recreational activities the Society undertakes service projects for the welfare of the University and civic communities.

Sigma-Gamma-Phi Society

Is restricted to Science and Pre-medical students. Its functions are, in general, similar to those of the Tau-Gamma-Sigma Society.

Delta-Lambda-Kappa Society

Is open to students in the Faculty of Commerce. The aim of the Society is to formulate and implement a programme of an educational, social, and recreational nature for the benefit of the members.

The Engineering Society

Is restricted to Engineering students. Its activities correspond, in general, to those of the above societies of Arts, Science, and Commerce.

The Debating Society

Is open to all students. Its activities include Intercollegiate and Interfaculty Debates, Radio Debates and Forums, etc.

Band

Open to all full-time and part-time students and faculty. Both Marches and Popular music will be played.

Amateur Radio and Electronics Club

Open to all students and faculty.

Psychology Club

The aim of this club is to promote general interest and education in the field of psychology and to provide a liaison between the psychology department and the psychology students. Informal in structure, this club serves both an academic and social function. Membership is open to any full-time student.

Political Science Association

The organization has an elected executive, nonexecutive posts, and committees at large. It is our aim to promote a social consciousness among our members to enable them to utilize their full potential as students and as citizens.

The Chemical Institute of Canada

(CIC) Student Chapter is open to all Chemistry and Chemical Engineering Students. Through affiliation with the National organization, an educational and social programme is provided together with opportunities for closer contact with the faculty.

MILITARY SERVICE SCHOLARSHIPS

1. The high professional ability required of present-day military officers demands the best in education and training. The Department of National Defence therefore sponsors programs of university education and leadership training for selected young men who have the potential to become officers in the Canadian Armed Forces. The admission standards are high, but for those who qualify the way is open to a challenging and rewarding career.

2. The programs sponsored are the Regular Officers Training Plan, (ROTP), Medical Officer Training Plan (MOTP), Dental Officer Training Plan (DOTP) and Reserve Officer University Training Plan (ROUTP). Training given under these plans is divided into two parts; normal attendance at university throughout academic year and military training each summer.

3. **ROTP.** This plan combines university subsidization with career training as an officer in the Regular Component of the Canadian Forces. Successful applicants are enrolled in the rank of officer cadet. They are required to maintain a good standing both academically and militarily while in the plan. All tuition and other essential fees are paid by the Department of National Defence. In addition the Officer Cadet receives an annual grant of \$125.00 to purchase books and instruments, and is paid \$193.00 per month for personal and living expenses. Free medical and dental care is provided. Annual leave (30 days plus travelling time) with full pay and allowances may be granted each year, usually after the summer training period. On graduation the Officer Cadet is promoted to the commissioned rank of Lieutenant.

4. **MOTP.** Sponsorship is provided under the Medical Officer Training Plan during the 2nd, 3rd and 4th year medicine and internship year. It consists of paid tuition, \$125.00 annual book and instrument grant, complete medical and dental coverage, paid holidays and monthly pay of 2nd Lieutenant \$389.00 in academic years and \$689.00 in the internship year. Three years military service in Canadian Armed Forces starting with the rank of Captain is required upon obtaining your licence to practice medicine.

5. **DOTP.** Sponsorship is provided under the Dental Officer Training Plan during the 1st, 2nd, 3rd and 4th year dentistry. Subsidization consists of paid tuition, \$125.00 annual book and instrument grant, complete medical and dental coverage, paid holiday and monthly pay of \$193.00 in 1st year, \$389.00 in 2nd year, 3rd and 4th year. Five years military service in the Canadian Armed Forces starting with the

rank of Captain is required upon receiving your licence to practice dentistry.

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

7. **ADMISSION REQUIREMENTS.** An applicant must:

- a. be a Canadian citizen;
- b. be single and remain so until commissioned (ROTP only), MOTP, DOTP and ROUTP applicants may be married;
- c. be physically fit for enrolment in the Forces, and
- d. if ROTP, be between the ages of 16 and 21 on the first of January of the year he commences first year studies at University; if MOTP and DOTP, be between the ages of 17 and 38; ROUTP from 17 to 23.

8. **HOW TO APPLY.** Interested students are requested to contact one of the following:

Commanding Officer	or University Liaison Officer
Canadian Forces Recruiting Centre	Canadian Forces Base Halifax
Sir John Thompson Building	FMO
1256 Barrington Street	Halifax NS
Halifax NS	

for ROUTP – Commanding Officer of your local reserve unit.

The Department of Manpower and Immigration

Canada Manpower Division – in co-operation with Saint Mary's University, maintains a full-time Student Placement Office on the campus on a year-round basis. The purpose of this office is to assist graduates and undergraduates to obtain permanent, summer or part-time employment, and to assist local and national employers who wish to recruit at Saint Mary's University.



Financial Aid

Scholarships and Bursaries

Financial assistance is available to students at Saint Mary's University from three main sources: scholarships, bursaries, and Canada Student Loans. The scholarships and bursaries are administered directly by either the donor or the Director of Financial Aid at Saint Mary's University (Rooms 426 and 426A Student Center). Loans are administered by the student's provincial government in accordance with the Canada Student Loans Plan.

All financial aid is dependent on a student's satisfactory academic achievement when entering and while studying at the university. The award of scholarships, and in some instances of bursaries, as well as the renewal of such awards, is dependent on excellence in academic achievement.

FUNDS ADMINISTERED BY SAINT MARY'S UNIVERSITY

I. Scholarships

Scholarships are awarded annually to students of outstanding academic achievement when entering or while studying at the university.

Awards of up to \$1,000 are offered to students of excellent academic achievement when entering the university. Such students who wish to make application for scholarships must have an average of 80 per cent or over in their high school work. In addition, special awards are made annually to leading students in the graduating classes at Saint Patrick's High School, Halifax, Nova Scotia, Saint Malachy's High School, Saint John, New Brunswick, Gonzaga High School, St. John's, Newfoundland, and Brother Rice High School, St. John's, Newfoundland.

Students who have completed one or more years in a university are also eligible for scholarships even though they were not given an award at entry. All students who have an average of at least B in their university work are eligible to apply for these awards.

Each scholarship is awarded on merit for one year only. However, scholarships will be renewed each year provided academic achievement is maintained. Applications for awards or renewal of awards must be made by June 30th each year to the Director of Financial Aid.

Included in the scholarships administered by Saint Mary's University are the following endowed gifts:

Brother Stirling Scholarship (\$600):

Donated by Mr. John H. Dickey. Open annually to an entering student.

Ashwood Scholarship (\$200):

Open annually to all students.

Flinn Scholarships (Two awards of \$250):

Open annually to all students.

Mary C. Daley Scholarship (\$100):

Awarded in alternate years. Open to all students.

Eleanor M. Florian Scholarship (\$300):

Open annually to all students.

Duncan W. Lynch Memorial Scholarship (\$400):

Open annually to a Catholic student from Dartmouth.

John Glenister Memorial Scholarship (\$150):

Open annually to all students.

Nova Scotia Light and Power Company Scholarship (\$300):

Open annually to a Science or Engineering student.

James E. Donohue Memorial Scholarship (\$100):

Open to students in Engineering and awarded in alternate years.

Nova Scotia Teachers' College Scholarship (\$500):

Open annually to graduates of the Nova Scotia Teachers' College.

II. Bursaries

Students giving satisfaction in academic work, though not of scholarship standing, are given financial aid through bursaries and assistantships. In these cases the criterion for an award is financial need. As part of this program the University assists students at the Bishop Burke House in Halifax in the payment of their tuition fees and remits part of the charges to residence students from parishes in the Archdiocese of Halifax. In addition, a number of positions as course readers and laboratory demonstrators are open annually to Junior and Senior students; remuneration is based on hours of employment. All inquiries concerning bursaries and assistantships should be made to the Director of Financial Aid, (Student Center Rooms 426 and 426A).

Included in the bursaries administered by Saint Mary's University are the following endowed gifts:

Rebecca Cohn Memorial Bursary (\$100):

Open annually to all students.

Errol Davison Memorial Award (\$500)

A scholarship to be held by a student in Commerce in either the third or fourth year. High academic standing required although financial need will be considered. This scholarship is granted by the partners of H. R. Doane and Company in memory of Mr. Davison, a former partner of the firm and an alumnus and friend of Saint Mary's.

Bernard Zwicker Memorial Bursary (\$150):

Donated by Mr. and Mrs. Ivan Zwicker in memory of their son. Awarded in alternate years commencing 1969-70. Open to a student in the Commerce Faculty.

Lord Nelson Hotel Ltd. Bursary (\$250):

Preference will be given to applicants from the Atlantic Provinces. Open annually to students in either their Freshmen or Sophomore year.

The Institute of Chartered Accountants of Nova Scotia Centennial Bursary:

A bursary to be held by a student in any faculty, under the following conditions: the student must be a resident of Nova Scotia wishing to further his postgraduate education by entering the accounting profession with the intention of becoming a Chartered Accountant in Nova Scotia; the student must be in either of the last two years of his course; ability and financial need are taken into consideration in making the award.

The Birks Family Foundation Bursaries:

The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian universities. The bursaries are available to all full-time students recommended by the university. The numbers and amounts of such awards may vary annually, depending upon the funds available from the Foundation for the purpose.

FUNDS ADMINISTERED BY THE DONOR**I. Scholarships**

Scholarships are offered in varying amounts up to full coverage of tuition fees. They include:

School of Education Scholarships:

The province of Nova Scotia, through arrangement with the University, offers a number of scholarships to university graduates taking the degree of Bachelor of Education.

Application for these scholarships should be made in writing to the Dean of the School of Education, Saint Mary's University.

The Canadian Mathematical Congress Scholarships:

The Canadian Mathematical Congress offers a number of scholarships for students of Grade XII in the Nova Scotia schools on the basis of a competitive examination usually held early in May of each year. The amount of each award is determined by consideration of financial need based upon applications from the leading candidates. These are tenable at any university in Canada. Further information is available from the guidance departments of the various high schools.

Imperial Oil Ltd. Scholarships:

Imperial Oil Ltd. offers payment of tuition and other compulsory fees to all children or wards of employees and annuitants who proceed to higher education courses. The courses must be taken at any Canadian university or other approved institution of higher learning. Each award is tenable for a maximum of four years. To be eligible a student must attain an average mark of 70 per cent in the appropriate secondary school examinations in the subjects required for admittance to the approved institution. Further information and application forms may be obtained from the Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Avenue West, Toronto 7, Ontario.

General Foods Scholarships:

General Foods Limited has established two scholarships in the sums of \$2,000 (over a four year period). These awards were first presented in 1965 and 1966, and thus are again being made in 1969 and 1970. For further information contact the Director of Financial Assistance at Saint Mary's University.

Royal Canadian Engineer Memorial Trust Scholarship:

This scholarship is available to applicants throughout Canada to the sons and daughters of parents who have served with the R.C.E. or its equivalent organization. For further information and application forms see the Director of Financial Aid at the Student Centre.

Joe Gannon Memorial Scholarship:

Valued at \$500, and awarded to the son, daughter or legal ward of a trade unionist who is a member of a union affiliated to the Nova Scotia Federation of Labour. Applications should be addressed to Selection Committee, c/o Nova Scotia Federation of Labour, 530 Roy Building, Halifax, Nova Scotia.

Municipal School Board, Halifax County, Scholarships:

Four awards of \$100 are made annually to students who have been accepted by the Education Faculty of a Maritime university. Restricted to residents of Halifax County. Further information may be obtained from Municipal School Board, P.O. Box 90, Armdale, Nova Scotia.

Nova Scotia Power Commission Centennial Scholarship

Four valued at \$850.00 per year granted to Engineering students proceeding to Nova Scotia Technical College at the end of the present academic year. For further information see the Director of Financial Aid.

Hockey Canada Scholarships (2,000 annually):

Hockey Canada was established in 1969, as a result of the recommendations of the Task Force on Sports. This scholarship programme is intended to encourage young men in two equally important fronts – the pursuit of post-secondary education and the development of proficiency in the game of hockey. These scholarships are open to candidates with outstanding hockey ability who are Canadian citizens or who have held landed immigrant status for at least one year and who have graduated or are about to graduate from a secondary school with an average of at least 65% in the year of graduation, or who are presently enrolled or have been enrolled in a post-secondary institution. Tenable for four years. Further information and application forms may be obtained from the Director of Awards, AUCC, 151 Slater Street, Ottawa 4, Ontario.

Canadian University Students' Scholarships:

Annual awards by Canadian University Students enable specially selected students to take one year of their course at a university in a different part of Canada.

Many parishes and parish organizations offer scholarships to deserving students. Students interested in such scholarships should make inquiries from their parish or the parish organization concerned. These awards include:

Saint Agnes Parish Holy Name Society Scholarship (\$100).

Saint Joseph's Parish Scholarships:

Two awards, one of \$100 and one of \$150.

Saint Mary's Basilica Parish:

The Monsignor Carroll Memorial Scholarship (\$300).

Saint Peter's Parish Holy Name Society Scholarships:

These awards vary in number and value.

Saint Rose of Lima Parish Holy Name Society Scholarship (\$100).

Saint Stephen's Parish Scholarships:

Four awards of \$100.

Saint Stephen's Educational Association Scholarships:

Three awards of \$100.

The Home and School Association of various schools offer scholarships to deserving students. Students interested in such assistance should seek further information from their respective Home and School Association. These awards include:

Bedford Home and School Association Scholarship (\$100).

Oxford Home and School Association (\$50).

Saint Thomas Aquinas Home and School Association Scholarship (\$100).

In addition, many councils of the Knights of Columbus offer scholarships to deserving students. Students interested in such scholarships are advised to direct inquiries to the council in their area. These awards include:

Knights of Columbus Council 1097 (Halifax) Scholarships:

Seven awards of \$150.

Knights of Columbus Council 2181 (Yarmouth) Scholarship (\$200).

II. Bursaries

Assistance for students in financial need is available from various sources, including the following:

The Birks Foundation Bursaries:

Each year the Birks Family Foundation pays the tuition and fees of all children of its employees in attendance at Canadian universities. On or before September 30 of each year the Birks employee should file with the Foundation an Application of Intent to enroll his son or daughter in a university of his choice in the ensuing year. In the case of a student who wishes to continue his studies on a Birks grant, notification should be given to either the Foundation or the Director of Financial Aid at the end of each school year.

Royal Canadian Legion Bursaries, Nova Scotia Command:

Four bursaries, valued at \$350 and \$400, are offered annually. Established to assist dependents of veterans to further their education. Applications available from L.M. Rhodenizer, Education Committee, New Glasgow, Nova Scotia.

Children of War Dead (Education Assistance) Act:

This Act provides fees and monthly allowances for children of veterans whose death was attributable to military service. Inquiries should be directed to the nearest District Office of the Department of Veterans Affairs.

I.O.D.E. Second War Memorial Entrance Bursaries:

One for each Province, \$400 a year for four years. Awarded to children of deceased or permanently and seriously disabled Canadian men and women of the services who served in World War II. Further information is available from I.O.D.E. Educational Secretary, 301 Spring Garden Road, Halifax, Nova Scotia.

Provincial Chapter of Nova Scotia, I.O.D.E.:

A number of bursaries are awarded to university students in need of financial assistance. Preference is given to first-year students. Further information is available from Provincial Educational Secretary, I.O.D.E., 301 Spring Garden Road, Halifax, Nova Scotia.

The Post Discharge Rehabilitation Grants:

Ex-service personnel seeking educational grants should contact the Director of Financial Assistance at Saint Mary's University. If accepted to the University, they will be given a letter with which to support their application to the Department of Veterans' Affairs.

FUNDS ADMINISTERED BY THE PROVINCIAL GOVERNMENT

The University cooperates fully with both the Canada Student Loans Plan and the Nova Scotia Bursary - Canada Students Loans Programme.

Canada Students Loans Plan

The Canada Student Loans Plan was introduced by the Federal Government as a broad programme to assist students who in the absence of a loan, would be unable to pursue full-time post-secondary studies at a university or other educational institution. Canada Student Loans, available only on the basis of Certificates of Eligibility issued by the appropriate authority (Issuing Agency) for a Province, may be made by any branch of the chartered banks and by certain designated credit unions with the guarantee of the Federal Government.

Applications for Certificates of Eligibility must be made to provinces participating in the plan, and decisions on individual applications are made by the provincial appropriate authority (Issuing Agencies). Students applying for certificates who meet residence and other requirements must also demonstrate that the financial means available to them from all other sources are insufficient so that a guaranteed loan is needed. In no case will a loan for an academic year exceed a maximum of \$1,000, or total loans exceed \$5,000 during the student's academic career. Provincial authorities may issue Certificates of Eligibility under the plan up to the limits of provincial allocations in each loan year.

Borrowers under the plan are required to repay principal and pay interest, but no payments are required as long as they are full-time students at a specified post-secondary educational institution and for six months thereafter; interest during this period is paid by the Federal Government on behalf of the student. After a student's interest-free period has expired, he is required to make regular monthly payments which include re-payment of principal and interest on the outstanding balance at the rate that is in effect for student loans at the time that the student takes his loan out. The number of years over which a loan may be repaid depends on the loan amount and other considerations, but may not exceed ten years from graduation.

A student should apply for a loan under this plan only for the funds needed to enable him to continue his studies and in doing so he should give responsible consideration to the repayment obligations he is assuming; a student who actually borrowed the maximum of \$5,000 would, for instance, be obligating himself to pay, after the expiry of his

interest-free period, about \$58 each month until ten years after he leaves the university.

Any student needing a Loan should apply to the appropriate authority in the province in which he officially resides both for full information and application form. Enquiry should be directed to one of the following addresses:

Nova Scotia	Canada Student Loans Committee, Department of Education, Box 578, Halifax, Nova Scotia.
Alberta	Students Assistance Board, Department of Education, Administration Building, Edmonton, Alberta.
British Columbia	The British Columbia Student Aid Loan Committee, c/o Department of Education, Parliament Buildings, Victoria, British Columbia.
Manitoba	Department of Youth and Education, Student Aid Officer, 1181 Portage Avenue, Winnipeg 10, Manitoba.
New Brunswick	Department of Youth, Centennial Building, Fredericton, New Brunswick.
Newfoundland	Canada Student Loans Authority, Department of Education, Confederation Building, St. John's, Newfoundland.
Northwest Territories	Director of Education for the Northwest Territories, Department of Education, Yellowknife, Northwest Territories.
Ontario	Department of University Affairs Student Awards Officer, Suite 700, 481 University Avenue, Toronto 2, Ontario.

Prince Edward Island	Canada Student Loans Committee, Department of Education, Charlottetown, Prince Edward Island.
Quebec	Office of Student Aid Services, Department of Education, Parliament Buildings, Quebec 4, Quebec.
Saskatchewan	Department of Education, Avord Tower, Victoria Ave. & Hamilton Street, Regina, Saskatchewan.
Yukon Territory	The Students Financial Assistance Awards Committee, Superintendent of Education, Box 2703, Whitehorse, Yukon Territory.

Nova Scotia Government Bursary – Canada Student Loans Programme

This programme combines loan assistance, available through the Canada Student Loans Plan, and grant assistance, available from the Province of Nova Scotia. It is designed to supplement the resources of a student who, lacking such aid, would be unable to proceed to university studies. The ratio of grant to loan is determined in accordance with a formula fixed by the Province of Nova Scotia.

The Canada Student Loan portion of the award is guaranteed by the Federal Government. No interest or payments on principal are required during the period that the student is in full-time attendance at the university and for six months thereafter. The interest during this period is paid by the Federal Government.

The maximum amount available under the Canada Student Loans Plan is \$1,000, in any one year, and the total indebtedness permitted is \$5,000. With the addition of free grants from the Province of Nova Scotia, the maximum assistance a student receives in any year may exceed \$1,000, depending on the formula in effect in the year of application.

Assistance under the Nova Scotia Bursary – Canada Student Loans Programme is available to all residents of Nova Scotia. A student from another province must apply for assistance to the government of his own province. Application forms can be obtained from the Supervisor

of Student Aid, Department of Education, Box 578, Halifax, Nova Scotia.

Education Fund for Negroes

This fund was established in April, 1965, for the purpose of assisting promising Negro students to continue their education in high schools, vocational schools, technological institutes, nursing schools, and universities.

Negro students who register at a recognized university or college are eligible for assistance under the terms of the Fund. Inquiries should be directed to Mr. Harlan Cox, Chairman, Education Fund for Negroes, Box 578, Halifax, Nova Scotia. Mr. Cox's office will also advise Negro students of other sources offering assistance in meeting university expenses.

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 Office of Graduate Scholarships in the student center.

Financial Information

The schedule of fees for the 1971-1972 academic year, together with regulations respecting the payment of fees and withdrawal and refunds, is set out in the booklet entitled:

Saint Mary's University
Financial Information
1971-1972

This booklet is to be read in conjunction with, and is to be considered a part of, the 1971-1972 Academic Calendar.



Admission Information

Application, Admission Requirements, Admission To Advanced Standing. Registration.

For information on admission to Graduate Studies see page 61.

APPLICATION

All correspondence concerning admissions should be addressed to:
The Director of Admissions, Saint Mary's University, Halifax, Nova Scotia.

Application forms may be obtained by writing to the Director of Admissions. Applications should be forwarded to the Admission's office not later than August 31. The Application form must be accompanied by the following:

- a) Provincial or Accredited School Certificates showing all matriculation credits. Senior Matriculation certificates should be sent as soon as they are available.
- b) The completed Principal's Confidential Report Form must be mailed directly to the Director of Admissions by the Principal or Guidance Officer.
- c) Students who have attended any University or College must request that institution to send an official transcript directly to the Director of Admissions, Saint Mary's University. (See Admission of Transfer Students).
- d) A \$5.00 fee must accompany this application. Your application will not be processed until your fee is received.
- e) All overseas students whose mother tongue is not English are required to take the English Language Test administered by the

University of Michigan. The English Language Test is the responsibility of the student who must apply directly to the:

The English Language Institute
Testing and Certificates
The University of Michigan,
Ann Arbor, Michigan,
U.S.A.

A student wishing to apply for on-campus residence accommodation will receive, upon acceptance by the University, an "Application for Residence" form, from the Admissions office. The application with a \$50.00 deposit, serving as both a reservation and caution deposit, should be forwarded to the Dean of Residence, Saint Mary's University, and students are asked to note that no application for residence can be considered, unless accompanied by this deposit. The sum will be returned, either in full, or in part, one week after the end of the academic year, but will not in any event, be applied toward tuition or residence fees. In the case of accommodation not being available, or if the reservation is cancelled before August 1st, the deposit will be refunded in full. It is not refundable after this date.

ADMISSION REQUIREMENTS

For admission to Saint Mary's as an undergraduate, a candidate must have Junior Matriculation, which is Nova Scotia Grade 11 or its equivalent. The student must have an overall average of at least 60%, with no mark below 50% in these subjects:

English, Mathematics, and any three of Biology, Chemistry, Economics, Geology, Geography, History, Physics, or a language other than English.

Candidates for Science and Engineering should have Chemistry, Physics and/or Trigonometry, and marks in Science and Mathematics which are above average.

Although Saint Mary's does not require SACU test scores as one of its criteria for admission, students who have written SACU, CEEB or other standardized tests, should submit the results for evaluation.

Students applying for admissions as mature students must have a personal interview with the Director of Admissions. No application will be considered unless the student has completed a basic junior matriculation in an academic programme.

TRANSFER STUDENTS

Application for admission from students wishing to transfer from another University or College will be considered only for the year and session in which they are eligible to register in their former University.

Students who have been away from University studies for a number of years may be considered for admission.

A transfer student completing his first degree must complete at least ten courses at Saint Mary's to be eligible for a Saint Mary's degree.

Advanced standing for work done at other universities will be considered on the basis of individual courses.

Students who possess one undergraduate degree and who wish to take a further undergraduate degree shall be required to take at least five additional courses to fulfill the degree requirements for the second degree. Requirements for Commerce as a second degree, see page (36).

ACCEPTABLE CERTIFICATES

Satisfactory marks will be accepted towards the entrance requirements if such marks are granted by any one of these examining bodies:

- 1) A Nova Scotia Department of Education Grade 11 university preparatory program certificate;
- 2) A Nova Scotia Department of Education Grade 12 provincial examination in the university preparatory program;
- 3) A Nova Scotia Grade 12 high school certificate in the university preparatory program;
- 4) A combination of final high school and provincial examinations;
- 5) A provincial certificate from the provinces of New Brunswick, Newfoundland, or from a province that offers provincial examinations; or
- 6) Equivalent certificates issued by education departments of other provinces.

EQUIVALENT CERTIFICATES

United States:

High School graduation with 16 points, (4 in English, 2 in History, 2 in Algebra, 1 in Geometry and one each in 7 other academic subjects). The student must provide a High School Transcript and the test results of the C.E.E.B's or SCAT.

United Kingdom, West Indies and West Africa:

For admission at the Junior Matriculation level the G.C.E. with passes at the ordinary level in 5 subjects. English and Mathematics are required subjects. The grade of marks obtained must average less than four.

Hong Kong:

General Certificate of Education (as above) or University of Hong Kong Matriculation Certificate (on the same basis as the G.C.E.) The grade of marks obtained must average less than four.

ADMISSION TO ADVANCED STANDING

1. Arts.

A full year's credit (five courses) will be given to a student registering in arts who presents a senior matriculation certificate, Nova Scotia Grade 12 or equivalent, with an overall average of at least 60%, and no mark below 50% in these subjects:

English and four of ancient and modern languages, biology, chemistry, geology, geography, history, mathematics and physics.

This advanced standing makes graduation with a general degree possible in three years.

2. Science and Commerce

A full year's credit (five courses) will be given to a student registering in Commerce or Science who presents a Senior Matriculation Certificate, Nova Scotia Grade 12 or equivalent, with an overall average of at least 60%, and no mark below 50% in these subjects:

- i English
- ii Mathematics
- iii Three from: Biology, Chemistry, Geology, Geography, History, Physics, Ancient and Modern Languages.

This advanced standing makes graduation with a general degree possible in three years.

3. Engineering

A student registering in engineering who presents a Senior Matriculation Certificate, Nova Scotia Grade 12 or equivalent, with an overall average of 65% and no mark below 50% in the following subjects, will be able to complete the Engineering Diploma requirements in three years, and receive the Bachelor of Science degree:

- i English
- ii Chemistry
- iii Mathematics
- iv Three from: Biology, Chemistry, Geology, Geography, History, Physics, Ancient and Modern Languages.

The Diploma in Engineering admits the student without examination into any of the departments of the Nova Scotia Technical College for the final two years of a five-year program leading to the degree of Bachelor of Engineering.

4. New Brunswick Students:

A student who has a 75% average or above will be granted advanced standing, that is one year's credit (5 courses). If a student has enrolled in any enriched programs he must present a 65% average or above in these programmes.

5. Overseas Students:

United Kingdom, West Indies, West Africa and Hong Kong students may be granted advanced standing on the presentation of G.C.E. certificates in five subjects at the ordinary level of which two are English and Mathematics and in addition at least three subjects at the advanced level. The grade of marks obtained must average less than four.

6. Partial Credit (Fewer than five courses): All Faculties

Partial credit (fewer than five courses) may be granted on the basis of Senior Matriculation standing under the following conditions:

- a) These credits must be obtained before courses at the University are begun;
- b) The student must have a mark of 60% in each subject for which he is seeking advanced standing, except that a student in science wishing to take further courses in Mathematics or Science must have a mark of 75% in that subject in Nova Scotia provincial examinations or equivalent,
- c) Courses taken at other institutions or by Senior Matriculation after first registration at Saint Mary's will not be credited by the University unless the student has obtained prior, written approval of the Dean of Faculty.

Appeals

See page (41).

Requirements for Bachelor of Commerce as Second Undergraduate Degree:

A person holding an undergraduate degree recognized by the University and wishing to obtain a Bachelor of Commerce degree shall be required to satisfy the following requirements:

- 1) A maximum of TEN credits. Credits may be allowed for the under-noted courses, up to a maximum of four credits, if taken in the first undergraduate degree: Mathematics, Philosophy and two of: Introductory Accounting, Business Administration, Economics, Commercial Law, a second course in Accounting, Business Administration, Economics;

- 2) a MAJOR concentration in one of the areas of: Accounting, Business Administration, or Economics.

Programs for each of the MAJORS appear below. To determine the program to apply in a particular case, one should refer to the ten-credit program applicable to his major and reduce the number of credits therein by a maximum of FOUR as provided for in 1) above.

ACCOUNTING

First Year

Mathematics 113.0
Accounting 201.0
Business Administration 201.0
Economics 202.0
Accounting 203.1*-204.2*

Second Year

Accounting 301.1*
Accounting 331.1*
Accounting 333.2*
Commercial Law 201.0
Philosophy 120.0/129.0
One and one-half
Accounting courses at 300 level.

BUSINESS ADMINISTRATION

First Year

Mathematics 113.0
Accounting 201.0
Business Administration 201.0
Economics 202.0
Business Administration 203.1*-204.2*

Second Year

Business Administration 332.1*
Business Administration 333.2*
Commercial Law 201.0
Philosophy 120.0/129.0
The equivalent of two full
Business Administration courses at 300 level.

ECONOMICS

First Year

Mathematics 113.0
Accounting 201.0
Business Administration 201.0
Economics 202.0
Economics 203.1*-204.2*

Second Year

Economics 300.1*-301.2*
Commercial Law 201.0
Philosophy 120.0/129.0
The equivalent of two full
Economics courses at 300 level.

(Half-Course)

Registration

Registration will take place on the dates and times set forth in the Academic Calendar. Students should follow exactly the directions for Registration Procedure supplied by the Office of the Registrar. No credit will be allowed for a course for which the student is not regularly registered.

Should registration prove insufficient, the University reserves the right to cancel any listed course.

It is part of registration to meet initial obligations with the Office of the Bursar.

At the time of registration, all students not registered at Saint Mary's during the past academic year are required to present a certificate of medical fitness. Students participating in major sports may also be asked to produce a similar certificate.

Late Registration

Students registering on any other date than that designated in the Academic Calendar are required to pay a late registration fee.

Changes in Registration

Changes in registration are permitted only with departmental approval and only within the period indicated in the Academic Calendar.

No change of registration is permitted after the first week of instruction. This applies to full courses and half courses that begin in September and to half courses that begin in January.

Dropping of Courses

Students who drop a course without authorization of the Dean of Faculty will be given a grade of WF (withdrawal failure) on the university records. (see page 40 "Failures").

WITHDRAWAL

When a student withdraws from the University he must at once notify the Registrar, in which event this notification will be taken as the official date of withdrawal from the University.

Academic Information

Examinations and Grades Evening Division Adult Study Series The Atlantic Summer School For Advanced Business Administration

Examination and Grades

The university's policy in respect of the evaluation of a student's performance is designed to provide flexibility in the methods employed in evaluation, and as far as possible to provide for continuing evaluation of a student's progress throughout all stages of a course.

Accordingly, the method of evaluation in any course is determined by the member of faculty responsible for that course, subject to the approval of the appropriate department and faculty dean.

All professors must make known in writing to their students no later than *one week* after the beginning of any course the precise procedures for determining and measuring a student's progress in that course, including a statement of the number and form of examinations and assignments, and other criteria of evaluation.

The following letter-grade system is employed to evaluate progress in a course:

Quality Points

A – excellent, superior	4 points
B – very good, above average	3 points
C – good, average	2 points
D – fair, below average but passing	1 point
P – passed by supplemental examination	1 point
F – unsatisfactory progress, credit not given	0 points
Agrotat	Agrotat standing, credit given
W – permitted withdrawal	
WF – course withdrawal with evaluation of unsatisfactory progress.	

Attendance at all lectures, seminars, and laboratory periods of any course in which a student is registered is mandatory. A student whose attendance has been reported as unsatisfactory by the professor may be debarrred from tests and examinations, or required to withdraw from a course or degree programme by the appropriate Faculty Dean.

A candidate for a degree must be of good moral character and must have given general satisfaction throughout his course.

Supplemental and Special Examinations

1. A student is eligible to take a supplemental examination covering the same course materials as that contained in any given course on the written recommendation of the professor responsible for the course.
2. Such a recommendation must be submitted to the Registrar's office in conjunction with the final grade established at the end of a course; and supplemental examinations are taken at the time prescribed in the university calendar.
3. To be eligible to write any supplemental examination for which he is recommended, a student must have no more than two final course grades of unsatisfactory (F) during the academic year for which the supplemental examination is to be taken.
4. Supplemental examinations are graded either P (satisfactory) or F (unsatisfactory).
5. Only one supplemental examination is permissible in any course.
6. No more than three full courses passed by supplemental examinations will be credited towards any degree or diploma.
7. Applications for supplemental or entrance examinations must be made to the Registrar's office no later than the date set down in the Academic Calendar.

Special examinations are written outside the time assigned for regular and supplemental examinations, and are granted rarely and only for extraordinary reasons by the Committee on Academic Standing.

Failures:

A student who defaults any final process of evaluation — examination, assignment, etc. — is considered to have failed the course and receives a WF (withdrawal failure) notation on his record for that course. To receive credit in such course the student must repeat the course.

A student who obtains an evaluation in any course deemed by the professor offering the course to be so unsatisfactory as to preclude any reasonable prospect of achieving success in the course can with the approval of the departmental chairman and faculty dean be asked to withdraw from the course, and will receive a grade of WF.

No course may be taken more than twice.

A student who withdraws voluntarily from any course at a point in the course where his formal evaluation is unsatisfactory (F) will receive a

notation of WF on his record for that course. (See page 38 dropping of courses).

A student receiving a final evaluation of unsatisfactory (F) in a course which involves both lectures and laboratory work must repeat both parts of the course or an equivalent approved by the department concerned to receive a credit in the course.

A full-time student who, in his first year, fails to pass at least two courses, must withdraw from the University for one year. Such a student may be re-admitted on academic probation following this one-year suspension.

Any student who fails in two years of his work is automatically subject to dismissal.

Default of any formal process of evaluation in a course for medical reasons must be certified medically in written form with the Registrar's Office within one week of the default.

Aegrotat Standing

Aegrotat standing provides for a student receiving credit in a course in circumstances where the student has been unable, for medical reasons or compassionate grounds, to complete a final formal process of evaluation. A professor may award aegrotat standing after satisfactory evidence has been supplied to cover the absence. Such evidence must be submitted to the Registrar's office no later than one week after the absence.

Academic Probation

Any student who receives an evaluation of unsatisfactory (F) in more than two courses at either mid-year or year-end is placed on academic probation.

Any student whose academic record or progress is judged to be unsatisfactory because of poor attendance, assignments, or other reasons may be placed on academic probation. If the record continues to be unsatisfactory, the student may be dismissed from the University by the Dean of Faculty. A person who is on academic probation is subject to dismissal at any time at the discretion of the Dean of Faculty.

Appeals

Appeals pertaining to decisions taken on academic regulations may be instituted by writing to the Dean of the faculty concerned, with copies

going to the Chairman and professor concerned. The decision will be given later by the Dean after consultation with the faculty member involved. A student shall have the right to request the Senate to consider the decision by making formal application to the Committee on Academic Standing.

SPECIAL PROGRAMMES

EVENING DIVISION AND SUMMER SESSIONS

Credit courses in Arts, Science and Commerce, are offered at the University in Evening and Summer Sessions. Students enrolling in these courses must have fulfilled the usual requirements for University entrance (see Admission requirements for undergraduate and graduate students). Students must follow, as closely as possible, the normal sequence of courses as required for students in the Day Division. They must maintain the same standards in their studies, as students in the Day Division. Their programmes are subject to approval by the Department of the student's major concentration.

Evening Division courses begin in September, at the time the Day Division commences classes, and end with the April examinations. Two Summer Sessions of six weeks each are held, the First Session beginning in mid-May and the Second Session early in July. Brochures describing the courses offered in the Evening Division and Summer Sessions are available from the Director's Office, the former by August 1st and the latter by January 31st.

Students registered for degrees at Saint Mary's may take two courses each year in the Evening Division and one course per Summer Session. Students wishing to take courses at Saint Mary's for credit at another university must submit written permission from the appropriate authority at his or her university along with the application for a course or courses.

Students who expect to commence part-time studies in September or during the Summer Sessions should in the former case contact the Director not later than August 15th and in the latter case not later than April 1st. All inquiries should be addressed to the Director, Evening Division and Summer Sessions, Saint Mary's University, Halifax, Nova Scotia.

Adult Studies Series

In 1951, Saint Mary's University Adult Studies were instituted as a cultural service to the Halifax community. Lectures, academic in subject and treatment, are offered regularly to the general public on a

variety of topics. Their purpose is to extend familiarity with humanistic learning, awaken critical attitudes, and stimulate a deeper sense of values consistent with our western heritage.

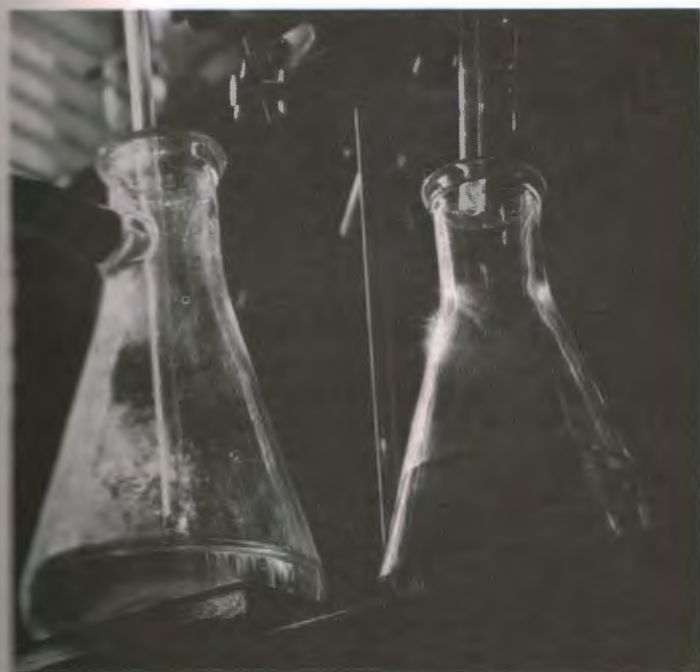
Usually lectures are given in series, ten lectures devoted in one semester to a particular topic.

Inquiries for information should be addressed to The Director, Adult Studies.

The Atlantic Summer School for Advanced Business Administration

This summer school, sponsored by the Association of Atlantic Universities, offers a five weeks' course for executives from mid-June to mid-July. The course is designed to benefit both university and non-university men. It is desirable, however, that students have from five to ten years of experience in the management of men or in the conduct of technical or staff functions at a fairly responsible level.

Information and application forms may be obtained from Dean H.E. Dysart, Director, Atlantic Summer School for Advanced Business Administration, University of King's College, Halifax, N.S.



Faculties and Courses

Arts Science Commerce Engineering Pre-Professional
Courses Honours Courses Education

Course Numbering System :

The course numbering system appearing in the calendar will be in effect commencing September 1971. (see page 66 for comparison of old and new numbers).

It is as follows:

1. A number of **four** (4) digits is used to designate each course. (A letter following the course number indicates a section of the same course, but this letter will be used at registration time and will **not** appear in the Calendar.)
2. The **first** digit indicates the **year** in which the course is normally taken:
 - 100 - 199 Freshman
 - 200 - 299 Sophomore
 - 300 - 399 Junior
 - 400 - 499 Senior
 - 500 - 599 Fifth year
 - 600 - 699 Graduate (sixth) year
3. The **second** and **third** digits indicate the departmental course number.
4. The **fourth** digit, which will follow a decimal point after the first three numbers, indicates a course of either one or two semesters:
 - .0 a full course of two semesters (e.g., English 101.0)
 - .1 a half course offered in the first semester (e.g. Accounting 311.1)
 - .2 a half course offered in the second semester (e.g. Engineering 112.2)

N.B.: Where a first semester course is repeated in the second semester, both numbers are listed after the course title. Thus, for example: GRAPHIC STATICS 203.1 or (203.2).

ARTS

Degree of Bachelor of Arts — The General Program

1. Subject to the regulations set forth in this calendar, the student must complete the equivalent of 20 full courses following junior matriculation, or 15 full courses following senior matriculation.

2. **During the regular academic year, the student will normally take five full courses. The department of the student's major concentration will normally govern his registration beyond the Freshman Year.**
3. **A. Major concentrations for the Arts degree may be taken in Anthropology, Classics, Economics, English, French, German, History, Latin, Mathematics, Philosophy, Political Science, Psychology, Sociology, Spanish, Theology.
B. Interdisciplinary Concentration – Asian Studies**
4. **Each candidate for the B.A. must receive credit for:**
 - (a) **one university course in English**
 - (b) **one course in History**
 - (c) **one course in Philosophy**
 - (d) **one course in a Social Science (Economics, Political Science, Psychology, Sociology)**
5. **A student who chooses a major concentration must complete no fewer than five courses in one subject. Courses numbered below 200 will not count. His program will be supervised and approved by his department.**
6. **A student who does not choose a major concentration must have his program supervised and approved by a member of Faculty. A copy of such a program must be filed in the office of the Dean at the beginning of each academic year and will be subject to his approval. At least 50% of a non-major student's elective work must be done at the 300 level or above.**

Additional Information:

See page (36) for requirements for Bachelor of Commerce – as **second undergraduate degree.**

SCIENCE

The requirements for the general degree of Bachelor of Science applicable to students who registered in September, 1966, or later, are as follows:

1. **Subject to the regulations set forth in this calendar, the student must complete a total of 20 full courses following junior matriculation, or 15 full courses following senior matriculation.**
2. **During the regular academic year, the student will normally take five full courses. The department of concentration will normally govern registration for the Sophomore and subsequent years.**

3. Concentrations for the science degree may be taken in Biology, Chemistry, Geology, Mathematics, Physics, Psychology.

4. **The Freshman Year:**

The student must complete five courses from those numbered 100-199 as follows:

- (a) Three required courses: one English, one Mathematics, and one History, or Economic History.
- (b) Two elective courses to be chosen from the courses open to Freshman in the following subjects: Biology, Chemistry, French, Geology, German, Latin, Physics, Spanish, Religious Studies.

5. **The Sophomore Year**

- (a) The student must choose his subject of concentration and seek registration advice from the department of that subject.
- (b) The student must complete:
 - (i) one course in Philosophy
 - (ii) one course each (at the 200 level and above) in two of the following: Biology, Chemistry, Geology, Mathematics, Physics, Psychology.
 - (iii) one course in Mathematics other than in (ii).
 - (iv) one elective from the Humanities, preferably English.

6. **The Junior and Senior Years:**

To satisfy requirement no. 1, the student must complete:

- (a) five or six courses beyond the sophomore level in two subjects from the following: Biology, Chemistry, Geology, Mathematics, Physics, Psychology or Engineering in the case of students following Schedule B under Engineering, see page 53. Students who wish to offer a subject begun only in the junior year may, by exception, offer the introductory course in that subject as one of the four courses required in (b).
- (b) Four or three courses in the Humanities or Social Sciences, contingent on choice in 6 (a). At least one of these courses must be a second course in the subject and beyond the sophomore level.

- (c) one course from the Social Sciences (Economics, Political Science, Psychology, Sociology, Anthropology).

Engineering and Science Course

Students who have obtained the Diploma of Engineering under Schedule "B" may proceed to the degree of Bachelor of Science on successful completion of a further year of study.

The program of this additional (fourth) year will include: a course in Mathematics, an elective from the Humanities,* and any three from Physics, Chemistry, or Mathematics, or three courses in Geology.

All programs must have the approval of the Dean of Science.

*This must be a course in Philosophy unless the student has already a credit in Philosophy.

BACHELOR OF SCIENCE WITH MAJOR

The requirements for the degree of Bachelor of Science with Major applicable to students who registered in September, 1970, or later, are as follows:

1. Subject to the regulations set forth in this calendar, the student must complete a total of 20 full courses following junior matriculation, or 15 full courses following senior matriculation.
2. During the regular academic year, the student will normally take five full courses. The department of concentration will normally govern registration for the Sophomore and subsequent years.
3. A major for the science degree may be taken in Biology, Chemistry, Geology, Mathematics, Physics, Psychology.
4. A student in the Major Program must obtain a grade of not less than "C" in every course in the major subject as described in item 7 (a). A student receiving a mark of less than "C" in any course in the area of his major will be permitted to continue in the major area only with the approval of the Dean of Science.

5. The Freshman Year:

The student must complete five courses from those numbered 100-199 as follows:

- (a) **Three required courses:** one English, one Mathematics, and one History, or Economic History.

- (b) Two elective courses to be chosen from the courses open to Freshmen in the following subjects: Biology, Chemistry, French, Geology, German, Latin, Physics, Spanish, Religious Studies.

6. The Sophomore Year

- (a) The student must choose his major subject and seek registration advice from the department of that subject.
- (b) The student must complete:
 - (i) one course in English
 - (ii) one course each, normally at the 200 level and above, in two of the following: Biology, Chemistry, Geology, Mathematics, Physics, Psychology.
 - (iii) one course in Mathematics other than in (ii)
 - * (iv) one elective from the Humanities or a Science course.

7. The Junior and Senior Years:

To satisfy requirement no. 1, the student must complete:

- (a) five or six courses beyond the sophomore level in the major subject from the following: Biology, Chemistry, Geology, Mathematics, Physics, Psychology.
- (b) one course beyond the sophomore level in related science other than the major subject.
- (c) two or one courses in subjects other than the major subject and from the following: Biology, Chemistry, Geology, Physics, Psychology contingent on choice in 7(a).
- (d) one course in Philosophy.
- * (e) one elective from the Humanities or a science course.

*Either 6b (iv) or 7(e) must be an elective from the Humanities excluding Mathematics.

COMMERCE

The program of study leading to the degree of Bachelor of Commerce is offered to students who desire the advantage of higher education and wish, at the same time, to prepare themselves for graduate study, a place in the business community, the public service, and professional life. The purpose of the program is to provide a broad background in the humanities and social sciences together with a development of the conceptual foundations of accounting, business administration and economics.

Degree of Bachelor of Commerce

The requirements for the degree of Bachelor of Commerce are as follows:

1. Subject to the regulations set forth in this calendar, the student must complete a total of 20 full courses following junior matriculation, or 15 full courses following senior matriculation.
2. During the regular academic year, the student will normally take 5 full courses. The five courses to be taken will be decided by the student in consultation with the department of his major. A major must be selected not later than the end of the sophomore year.

Up to the end of the sophomore year, the five courses in a student's program will be decided by the student in consultation with a member of the Commerce Faculty.

3. Major concentrations may be taken in Accounting, Business Administration and Economics.
4. **The Freshman Year:**

The student must complete 5 courses as follows:

- (a) Two required courses: English 101.0 and Mathematics 113.0
- (b) Three elective courses to be chosen from the following: Anthropology 100.0 level, Biology 111.1-112.2, Classics 100 level, Economics 102.0, French 102.0, History 100 level, Latin 102.0, Physics 111.0, Political Science 121.0, Psychology 201.0, Spanish 101.0, and a course in Religious Studies.

E. The Sophomore, Junior and Senior Years:

- (a) The student will take 15 courses normally at the 200 level and above
- (b) The student must complete 6 required courses as follows:
 - (1) English 200.0
 - (2) Philosophy 120.0/129.0
 - (3) Accounting 201.0
 - (4) Business Administration 201.0
 - (5) Commercial Law 201.0
 - (6) Economics 202.0

- (c) In addition to the courses listed under (b) above, the student must complete two approved courses to be chosen from the subject areas of the languages, humanities, social sciences (including Economics), natural sciences, accounting, and business administration.
- (d) The student must complete a major concentration in one of the following subjects as listed:
- (i) Accounting – five courses, to include: Accounting 201.0, 203.1 or 203.2 and 204.1 or 204.2, 301.1, 331.1, 333.2 and one and one-half Accounting courses at the 300 level.
 - (ii) Business Administration – five courses, to include: Business Administration 201.0, 203.1 or 203.2 and 204.1 or 204.2, 332.1, 333.2 and two Business Administration courses at the 300 level.
 - (iii) Economics – five courses, to include: Economics 202.0, 203.1 and 204.2, Economics 300.1*, Economics 301.2*, and two Economics courses at the 300.0 level.
- (e) The remaining courses required under section (a) will be chosen by the student in consultation with his department.

The programs shown represent what is normally taken and recommended for each concentration:

Accounting

First Year

English 101.0*
 Mathematics 113.0*
 Elective
 Elective
 Elective

Second Year

Accounting 201.0*
 Accounting 203.1* or 203.2* and 204.1*
 or 204.2*
 Business Administration 201.0*
 Economics 202.0*
 English 200.0*

Third Year

Accounting 331.1*–333.2*
 Accounting 301.1*–321.2
 Commercial Law 201.0*
 Philosophy 120.0/129.0*
 Elective

Fourth Year

Accounting 309.2–310.2
 Accounting 405.0
 Elective
 Elective
 Elective

*Required Course

Business Administration

First Year

English 101.0*

Mathematics 113.0*

Elective

Elective

Elective

Third Year

Business Administration
306.0

Business Administration
332.1* - 333.2*

Commercial Law 201.0*

Elective

Philosophy 120.0/129.0*

*Required Course

Second Year

Accounting 201.0*

Business Administration 201.0*

Business Administration 203.1* or 203.2*
and 204.1* or 204.2*

Economics 202.0*

English 200.0*

Fourth Year

Business Administration 410.2 - and an
additional half course

Elective

Elective

Elective

Elective

Economics

First Year

English 101.0*

Mathematics 113.0*

Economics 101.0 or 102.0

Elective

Elective

Third Year

Commercial Law 201.0*

Economics 300.1* - 301.2*

Economics elective **

Philosophy 120.0/129.0*

Elective

*Required Course

Second Year

Accounting 201.0*

Business Administration 201.0*

English 200.0*

Economics 202.0*

Economics 203.1* - 204.2*

Fourth Year

Economics Elective **

Elective

Elective

Elective

Elective

+ If the student intends to pursue graduate studies he is advised to take both Economics 302.0 and 303.0.

ENGINEERING

For the Diploma in Engineering, the syllabus of studies is that prescribed by Nova Scotia Technical College for the first three years of its five-year course. The first three years are given only at the associated universities, of which Saint Mary's is one, together with Acadia University, Dalhousie University, Memorial University, Mount Allison University, Saint Francis Xavier University, and the University of Prince Edward Island.

With a Diploma in Engineering a student may enter without examination any of the departments at the Nova Scotia Technical College, Laval University, or McGill University, and obtain the degree of Bachelor of Engineering (Civil, Electrical, Mechanical, Chemical, Metallurgical, Mining, Industrial, or Geological) on the successful completion of the last two years of a five-year course.

DIPLOMA IN ENGINEERING

Students entering with Senior Matriculation or equivalent, as defined below, will be required to follow the curriculum given below and designated as Schedule "A". On successful completion of this program the student will receive the Diploma in Engineering and a degree in Science.

Students entering with Junior Matriculation or equivalent, as defined in this calendar, will follow the curriculum given below and designated as Schedule "B". On successful completion of this program the students will be awarded the Diploma in Engineering.

SENIOR MATRICULATION REQUIREMENTS

The following entrance qualifications are necessary for those who, if they wish, plan to follow the program outlined in Schedule "A". A pass standing of 50% in each course is required with a general average of 65%.

- i English
- ii Mathematics
- iii Physics
- iv Chemistry
- v One from History, Geology, Geography, Ancient and Modern Languages.

Schedule "A"

First Year

Engineering 106.1
Engineering 107.2
Engineering 108.1 (or 113.1)
Mathematics 210.1
Mathematics 211.2
Physics 221.0
Chemistry 201.0
English 200.0

Second Year

Mathematics 311.0
Chemistry **Elective**
Physics 321.0
Engineering 314.2
Geology 111.0 or **Elective**
Engineering 203.1 (203.2)
Engineering 203.1 (203.2)
Engineering 204.1 (204.2)
Elective

Third Year

Engineering 304.1
Engineering 314.2
Engineering 303.1
Engineering 306.2
Engineering 308.0
Engineering 302.0
Elective (Humanities)
Mathematics **Elective**

Schedule "B"

First Year

Engineering 106.1
Engineering 107.2
Engineering 108.1 (or 113.1)
Mathematics 110.1
Mathematics 111.2
Physics 111.0
Chemistry 101.0
English 101.0
Mathematics 116.2

Second Year

Engineering 203.1 (203.2)
Engineering 204.1 (204.2)
Mathematics 210.1
Mathematics 211.2
Physics 221.0
Chemistry 201.0
Geology 111.0 or **Elective**
Elective

Third Year

Engineering 304.1
Engineering 314.2
Engineering 303.1
Engineering 306.2
Engineering 308.0
Mathematics 311.0
Engineering 302.0
Elective (Humanities)

Note:

1. Students who plan to enter Civil, Mining, Metallurgical or **Geological Engineering** at the Nova Scotia Technical College must substitute **Geology 111.0** for the second year elective.
2. **Engineering 112.2 (Engineering Measurements)** is required only of students proceeding to the Nova Scotia Technical College in **Civil, Mining, or Geological Engineering**.
3. The selection of courses from the Humanities, where not specifically designated, is subject to the approval of the registration advisor.

4. 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. This will be at the discretion of the Dean of Engineering.

ENGINEERING AND SCIENCE

Students who have obtained the Diploma of Engineering under Schedule "B" may proceed to the degree of Bachelor of Science if they fulfill the requirements noted under Engineering and Science Course.

PRE-PROFESSIONAL COURSES

Students who plan to enter the professions of theology, law, medicine, dentistry, etc., should see that their plan of studies includes courses prerequisite to entrance into the professional school of their choice. Calendars of professional schools may be consulted in the Office of the Registrar. If Saint Mary's University's program does not meet the entrance requirements to the school of his choice, the student is responsible to make it known to the appropriate Dean at registration. Appropriate adjustments will be made at that time.

The sequence of pre-professional courses may, if necessary, replace the concentration or major requirements for the Bachelor's degree. Though not strictly required by some professional schools, Saint Mary's recommends complete matriculation in Arts, Science, or Commerce, and does not guarantee that the timetable will allow the completion of minimum pre-professional requirements in less than the full time required for the Bachelor's degree. Prerequisite requirements for courses apply to pre-professional students.

Theology

Students who may wish to enter a theological seminary are advised to do major concentration work in Philosophy and/or Latin, supported by additional courses in languages and Social Sciences.

Law

Students planning to enter Law School should contact the Dean of their Faculty as soon as possible. In this way an appropriate program of study can be worked out and agreed upon by the student and the Dean of his faculty.

Medicine

Students who wish to apply for admission to medical schools in Canada or the United States are generally required to have complete matriculation in Arts or Science.

"College training in preparation for the study of medicine should provide the opportunity for a good general education including the attainment of competence in English. It should include theoretical and laboratory courses in Physics, Biology, and Inorganic and Organic Chemistry. At the present time the minimum requirement for admission to approved medical schools is three years of college training for the average student. For most students, four years is recommended in order to provide an opportunity to gain a broad educational experience." (Statement of the American Medical Association, December, 1951.)

Pre-medical students entering with Nova Scotia Grade XI or equivalent should complete fifteen university courses.

Credits should include Biology 111.1 & 112.2, Chemistry 101.0, 201.0, 301.0; Freshman English, Sophomore English, Mathematics 110.1 and 111.2, Philosophy and Physics 111.0. Of the six remaining credits, two or more advanced courses should be taken in a definite field of learning in the humanities, sciences, or social sciences.

Senior matriculation biology, general chemistry and physics will not ordinarily be accepted as equivalent to these required classes unless followed by second level university classes in the respective subjects.

Students wishing to complete the requirements for a Bachelor of Science or Bachelor of Arts Degree must take five additional courses to be determined by the department of concentration so as to fulfill the requirements on pages (45) and (44) respectively.

Dentistry

Students who wish to apply for admission to dental schools and who enter with Nova Scotia Grade XI or equivalent must complete minimum of fifteen university courses which should include Biology 111.1 & 112.2; Freshman English, Sophomore English; Mathematics 110.1 and 111.2, Physics 111.0. The remaining courses should include at least three courses chosen from the humanities and social sciences.

Students wishing to complete the requirements for a Bachelor of Science or Bachelor of Arts Degree must take 5 additional courses so as to fulfill the requirements on pages (45) and (44) respectively.

Architecture

Saint Mary's University, in association with the Nova Scotia Technical College, offers the first two years of a six-year course in Architecture leading to a Bachelor of Architecture degree. Students who complete two years of satisfactory University study, the courses studied being in any faculty, and who have been recommended by their appropriate Dean are admitted without further examination to the third year at the School of Architecture, Nova Scotia Technical College, Halifax, where they complete the four year professional phase of the curriculum.

Candidates should, preferably, complete at least one University course in Mathematics, alternatively, they may be required to take an entrance examination in this subject at Nova Scotia Technical College.

HONOURS DEGREES

ARTS AND SCIENCE

The general requirements for Honours Degrees are as follows:

1. Students of above-average ability are urged to make application to follow an Honours program before the end of their Sophomore year. Formal application for admission to an Honours program must be made on a form available in the Registrar's office. The form must be submitted by the student applicant to the Chairman of the Department concerned, and must receive the approval of the appropriate Dean of Faculty.
2. All Honours programs must consist of twenty full courses or equivalents beyond the Freshman year, and must satisfy the requirements for the General Bachelor's degree. A student must have the approval of the Committee on Academic Standing to transfer from an Honour's program to the General program.
3. A student must obtain a grade of not less than B in every Honours course as described in item 4(a) or 5(a) below. A student receiving a mark of less than B in any Honours course in item 4(a) or 5(a) will be permitted to continue in an Honours program only with the approval of the Committee on Academic Standing.
4. In an Honours program with a major, the fifteen full courses or equivalents taken beyond the sophomore level must include:
 - (a) nine full courses or equivalents beyond the sophomore level in a major subject;
 - (b) two full supporting courses or equivalents to be determined by the department of the major;
 - (c) four full courses or equivalents in the Humanities or Social Sciences.

3. In an Honours program with a combined major, the fifteen full courses or equivalents taken beyond the sophomore level must include:

- (a) eleven full courses or equivalents beyond the sophomore level in two allied subjects. Not more than seven full courses or equivalents being in either of them.
- (b) four full courses or equivalents in the Humanities or Social Sciences.

COMMERCE

Requirements for Honours Degree in Economics:

1. Admission Requirements:

- a. a 2.6 average in Economics.
- b. Junior year or higher standing.

2. Degree Requirements:

- a. ten full-year courses or equivalents in Economics
- b. no grade below C (2.0) in these ten courses (a student may receive a grade lower than C but it cannot be counted in the ten required courses).
- c. a minimum average of 2.6 in the ten Economics courses presented for Honours.
- d. the student must meet the requirements for a major in Economics.
- e. eight of the ten courses must be on or above the 300.0 level.
 - (i) a student may substitute a course from another department which is below or above the 300.0 level with the permission of the Department of Economics.
 - (ii) these substitutes will normally be in the Mathematics Department.
- f. the eight courses on or above the 300.0 level (or equivalent thereof) must contain at least one of the following:
 - (i) 302.0
 - (ii) 303.0
 - (iii) 440.1 -441.2
- g. the student will be expected to complete university requirements for graduation.
- h. twenty full courses, or equivalents, beyond the freshman year are required.

EDUCATION

Bachelor of Education Program

This program of studies, which is designed to form a professional preparation for university graduates intending to enter the teaching profession, is a full-time one of six courses lasting one academic year (September to May), dealing with preparation for teaching in Junior and Senior High Schools.

There are two goals aimed at in this program. The first is to provide students with a basic competence in the skills of teaching academic subjects. The second goal, is to encourage in students the development of those ideas which will allow them to perceive the process of Education as being one which while providing the facts and skills necessary for living, has, at the same time, the more significant aim of expanding and enriching the mind of the learner. In furtherance of these aims, students are required, in addition to class attendance, to undertake a considerable amount of reading and writing with the object of developing their own personal understanding and philosophy of education.

The six courses in the program are:

Philosophy of Education; Psychology of Education; History of Education; General Methods of Teaching; Special Methods of Teaching; Practice Teaching. In the case of Special Methods, students attend those two half classes dealing with the subjects they wish to teach in school. All students, unless previously trained as teachers and having a permanent licence, take the teaching practice.

This program meets the approval of the Department of Education of Nova Scotia and on successful completion of their studies, students may apply to the Department of Education of the Province of Nova Scotia for a teaching licence. Students are entirely responsible for any negotiations with the Department of Education respecting their licence status.

Candidates should note that the pass mark for the entire program is C average, while for individual subjects the pass mark is D. No supplemental examinations are provided. Failure in one subject constitutes failure of the program..

Admission Requirements

Candidates must hold a Bachelor's Degree of Saint Mary's University or of another recognized university of similar standing.

Candidates who have had professional teacher training at the Nova Scotia Teachers' Training College and who have since acquired a

Bachelor Degree, may obtain the Degree of Bachelor of Education by taking only the **classes** in Philosophy of Education, and Psychology of Education.

Candidates who **have** had professional teacher training of two or three years duration at a College of Education in the United Kingdom or Teacher Training College in the United States, who are licensed as teachers by the Province of Nova Scotia, and who have acquired a **Bachelor Degree**, may obtain the Degree of Bachelor of Education by undertaking a **program** of study as may be approved by Senate regulation.

Note: The Province of Nova Scotia will pay the **TUITION** fees of those candidates who **undertake** to teach within the Province for a period of two years. Applications for these **TUITION** grants may be made at the time of Registration.

In addition, the Province of Nova Scotia provides a certain number of **SCHOLARSHIPS AND BURSARIES** for those intending to take the Bachelor of Education Degree. Application for scholarship is made on a form obtainable from the School of Education which must be returned before **June 1st**. Note that all allocations of scholarships are made during June and only unusually are any funds available for this purpose after that month.

To Apply for Admission

1. Complete the form of application and make sure that all the documents **required** are complete and returned with the application.
2. Make sure that supporting documents – transcripts, references, and so on **will** be sent to the University by those concerned – The Director of Admission does **not** undertake to send for transcripts or references.
3. Applications should be made as soon as possible, but in any case, applications received after August 15th may not be processed in time for registration in September.
4. The admission of any candidates to the program is probationary and the status of all candidates is reviewed in December each year.



Graduate Studies

Degree of Master of Arts

GENERAL REQUIREMENTS FOR ADMISSION

1. Candidates for admission to the Master's program must:
 - a. Hold a **Bachelor's degree** from a University of recognized standing, and have completed an undergraduate program in the subject area chosen for his graduate study comparable to an Honours degree from Saint Mary's University in that subject area.

Note:

A Bachelor of Education degree comparable to that granted by Saint Mary's University with second class standing will be considered the equivalent of an Honours degree for candidates seeking admission to graduate study in Education.

- b. Candidates whose native tongue is other than English may be required to take a proficiency test in English under the auspices of

The English Language Institute
Testing and Certification
The University of Michigan
Ann Arbor, Michigan, U.S.A.

- c. Have the approval of the Committee on Graduate Studies, and of the department concerned.

2. Candidates who have not completed the requirements for admission may, on recommendation of the department concerned, be admitted by the Committee on Graduate Studies to a program of preliminary study.

3. Certain departments may have special requirements for admission in addition to the general requirements.

4. Application for admission must be made on a form obtainable from Director of Admissions. The application form calls for an official transcript of the student's academic record, and also for letters of recommendation from two persons in a position to judge the applicant's personal and intellectual capacities for graduate study. The form and all supporting documents must ordinarily be on hand by May 31st.

GENERAL REQUIREMENTS FOR THE MASTER'S DEGREE

1. Candidates normally must spend at least one academic year in residence. This period is additional to any time needed to meet the normal admission requirements.
2. Candidates must complete a program of 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 400 level or the 500 level, but, where advisable, courses at the 300 level may be included in a program, provided that the requirements applying to graduate students in such courses be of a graduate standard.
3. A Department may accept two advanced courses in the chosen subject area completed at other universities as part of the requirements, provided they have not been applied previously towards another degree.
4. A mark of B is required in all courses.
5. Two failures will require withdrawal from the program. There will be no supplemental examinations.
6. Candidates must complete all degree requirements within five calendar years of being accepted as Master's degree candidates.

FEES, FINANCIAL AID

The schedule of fees found on page (31) of this calendar applies to the graduate studies program.

- A number of fellowships up to a maximum of \$2,750 for the calendar year are available for full-time students. Further information on these may be obtained from the Director of Admissions. There is the possibility of supplementing fellowships through renumeration for departmental duties.

DEPARTMENTS OF INSTRUCTION

EDUCATION

The University's general requirements for admission to Graduate Studies and for the Master of Arts degree apply to the School of Education. The particular requirements of the School are as follows:

1. The candidate for admission is normally asked to appear for a personal interview with the Dean of Education and/or a faculty member designated by him. The interview usually occurs after the candidate's application form and supporting documents are on hand.
2. The candidate is encouraged to have completed at least one year of successful teaching before embarking on the M.A. (in Education) program.
3. Course offerings include courses in the following fields: Philosophy of education, psychology of education, comparative education, and educational administration/supervision. The complete directory of courses is found on page (109).
4. In conjunction with the writing of his thesis a candidate must enroll in Education 510.0 (Graduate Research Seminar). This course does not count as one of the four normally required for the degree.

HISTORY

The University's general requirements for admission to Graduate Studies and for the Master of Arts degree apply to the Department of History. The particular requirements of the Department are as follows:

1. The candidate will be required to demonstrate a reading knowledge of at least one foreign language by passing a test carried out in cooperation with the language department concerned. French is specified for candidates intending to write a thesis in the history of Canada.
2. A thesis can be written only in the following three fields: Canadian; Canadian-American Relations; and Tudor and Stuart England.
3. Before proceeding to the thesis, the student following the course-and-thesis approach must pass an oral examination in which he will be expected to demonstrate knowledge in (a) his fields of study and (b) the ideas of the leading historians. A similar examination will be required of candidates in the course programme.
4. Two months prior to the termination of his courses, the candidate will be invited to select from among the members of the History Department, the chairman and committee members of his examination board. While the Department will make every effort to meet his requests, it cannot guarantee that his selection of an examination board will be complied with fully.

PHILOSOPHY

The University's general requirements for admission to Graduate Studies for the Master of Arts degree apply to the Department of Philosophy. The particular requirements of the Department are as follows:

1. Admission

Candidates are normally required to have an honours degree in philosophy with at least second class standing, or its equivalent. Some acquaintance with modern logic and the various sections of the history of philosophy is desirable.

2. Duration of Study

The degree is normally taken in one year. Candidates with certain deficiencies in philosophical knowledge and education are asked to study for two years.

3 Courses

Candidates normally take four full courses in an academic year. Those enrolling in a two-year programme may be asked to attend certain medium-level undergraduate courses in their first year. The decision as to what courses a candidate should take varies from case to case depending on circumstances.

4. Thesis

Every candidate is required to write an M.A. thesis which shows critical acumen as well as philosophical originality. His work is closely supervised by one or two members of the Department. Areas from which the topic of the thesis can be chosen include: Ancient, Mediaeval and Modern Philosophy; Logic; Ethics; Epistemology; Metaphysics; Philosophy of Mind; Philosophy of History; Philosophy of Science; Phenomenology; and Existentialism.

Courses of Instruction

Accounting
Anthropology
Astronomy
Biology
Business Administration
Chemistry
Classics
Commercial Law
Economics
Education
Engineering
English

French
Geology
German
History
Latin
Mathematics
Philosophy
Physics
Political Science
Psychology
Religious Studies
Sociology
Spanish

Should registration prove insufficient, the University reserves the right to cancel any listed course.

Unless otherwise designated all courses listed are full courses.



Re-numbering of Courses

1971-72	70-71	1971-72	70-71	1971-72	70-71
ACCOUNTING		BIOLOGY (Con't)		CHEMISTRY	
201.0	201	211.2	206B	101.0	111
203.1	QM122	306.0	N.C.	201.0	121
204.1	QM201	311.1	311B	311.0	202
301.1	301	312.2	312B	341.0	203
308.1	308	313.1	313B	343.0	204
309.2	303	314.2	314A	411.0	306
310.2	303	315.2	315A	431.0	307
321.1	321	320.0	N.C.	441.0	304
322.2	322	325.1	325A	500.0	400
323.2	323			511.0	411
331.1	313	BUSINESS ADMIN.		513.0	412
333.2	312	201.0	201	531.0	407
ANTHROPOLOGY		203.1	QM122	541.0	404
110.0	151	204.1	QM201	CLASSICS	
207.0	152	302.2	202	120.0	120
208.0	153	305.2	N.C.	301.0	201
209.0	155	306.0	306	303.0	203
210.0	250	308.1	308	304.0	204
220.0	251	309.1	309	305.0	205
230.0	252	317.1	317	GREEK	
303.0	303	319.1	319	101.0	120
310.0	310	320.2	320	201.0	N.C.
340.0	340	321.1	321	COMMERCIAL	
345.0	345	322.2	322	LAW	
351.0	351	323.2	323	201.0	201
ASTRONOMY		325.1	325	ECONOMICS	
201.0	N.C.	326.2	326	101.1	N.C.
301.0	301	327.2	327	102.0	N.C.
BIOLOGY		328.1	328	202.0	N.C.
111.1	N.C.	329.1	329	203.1	QM122
112.2	N.C.	330.2	330	204.2	QM201
201.1	203A	331.1	313	300.1	300
202.2	203B	332.1	314	301.1	300
204.0	N.C.	333.2	312	302.0	302
205.0	N.C.	334.1	N.C.	N.C. - New Course	
207.1	207A	335.1	315		
209.2	N.C.	336.1	N.C.		
210.1	206A	410.2	310		
		416.2	316		
		417.2 *	N.C.		

1971-72	70-71	1971-72	70-71	1971-72	70-71
ECONOMICS (Con't)		ENGINEER. (Con't)		FRENCH	
	303	303.1	303	100.0	N.C.
	304	304.1	N.C.	102.0	102
	307	304.2	N.C.	200.0	120
	309	306.2	306	300.0	200
	310	307.0	307	301.0	201
	311			400.0	300
	312			401.0	301
	315	101.0	101	402.0	302
	316	200.0	120	407.0	307
	317	250.0	140	408.0	308
	319	300.0	202	409.0	309
	323	301.0	201	410.0	310
	N.C.	302.0	203	412.0	312
	N.C.	303.0	204	413.0	313
	N.C.	304.0	205	414.0	314
	N.C.	305.0	206	415.0	315
		306.0	207	416.0	316
		307.0	208		
	510	350.0	301	GEOLOGY	
	516	351.0	302	111.0	111
	519	352.0	303	121.0	N.C.
	526	353.0	304	201.0	201
	511	354.0	305	202.0	202
	N.C.	355.0	306	301.0	301
	532	356.0	307	302.0	302
	521	400.0	308	303.0	303
	542	401.0	309	401.0	401
	552	402.0	310	402.0	N.C.
	N.C.	403.0	311	404.0	404
	562	404.0	312	407.0	N.C.
		405.0	313		
		406.0	314		
		407.0	315	GERMAN	
	106	408.0	316	100.0	100
	107	409.0	317	200.0	200
	N.C.	410.0	318	250.0	250
	N.C.	411.0	319	300.0	300
	N.C.	450.0	320	301.0	301
	N.C.	451.0	321		
	N.C.	550.0	401		
	204	551.0	402		
	204	552.0	403		

N.C. — New course

1971-72	70-71	1971-72	70-71	1971-72	70-71
HISTORY		HISTORY (Con't)		MATHS (Con't)	
110.0	110	501.0	401	350.0	350
121.0	111	502.0	402	410.0	333
122.0	112	503.0	403	414.0	314
123.0	113	504.0	404	425.0	325
124.0	114	505.0	405	435.0	305
203.0	203	506.0	406	445.0	320
204.0	204	508.0	408	450.0	450
209.0	209	509.0	409	515.0	415
210.0	210	510.0	410	516.0	416
211.0	211	511.0	411	517.0	417
212.0	212	512.0	412	525.0	452
219.0	319	513.0	413	535.0	405
303.0	303	514.0	414	556.0	456
306.0	306			557.0	457
311.0	311	LATIN		PHILOSOPHY	
312.0	312	100.0	101	120.0	120
313.0	313	101.0	102	121.0	121
314.0	314	201.0	120	122.0	122
315.0	315	301.0	200	123.0	123
316.0	316	401.0	300	124.0	124
317.0	317	402.0	301	125.0	125
318.0	318	403.0	302	126.0	126
320.0	320	404.0	400	127.0	127
321.0	321			128.0	128
322.0	322	MATHEMATICS		129.0	129
323.0	323	110.1, 110.2	110A	150.0	150
324.0	324	111.1, 111.2	110B	200.0	200
325.0	325	112.0	112	209.0	209
326.0	326	113.0	113	211.0	211
327.0	327	116.0	N.C.	250.0	250
328.0	328	210.1, 210.2	120A	300.0	300
329.0	329	211.1, 211.2	120B	306.0	306
331.0	331	226.1	N.C.	308.0	308
332.0	332	227.1	225	350.0	350
333.0	333	250.0	250	351.0	351
334.0	334	310.0	222	352.0	352
335.0	N.C.	311.0	N.C.	353.0	353
336.0	N.C.	312.0	312	354.0	354
337.0	N.C.	313.0	313		
338.0	N.C.	314.0	212		
339.0	N.C.	327.0	N.C.		
500.0	500				

N.C. — New Course

1971-72	70-71	1971-72	70-71	1971-72	70-71
PHILOSOPHY (Con't)		POLITICAL SCIENCE		RELIGIOUS STUDIES	
455.0	454	121.0	121	100.0	121
462.0	402	201.0	200	201.0	N.C.
469.0	449	202.0	202	202.0	305
472.0	452	203.0	203	301.0	306
473.0	453	204.0	204	302.0	304
475.0	455	205.0	205	303.0	N.C.
476.0	456	206.0	206	304.0	N.C.
477.0	457	212.0	212	305.0	N.C.
		317.0	N.C.	306.0	334
PHYSICS		318.0	308	307.0	N.C.
111.0	111	319.0	309	308.0	309
121.0	121	330.0	350	309.0	N.C.
222.0	222	335.0	355	310.0	330
N.C.	N.C.	336.0	356	311.0	323
234.0	234	340.0	360	220.0	N.C.
333.0	333	341.0	361	321.0	324
336.0	336	345.0	370	322.0	N.C.
337.0	337	450.0	450	323.0	326
339.0	339	451.0	451	324.0	N.C.
350.0	350	452.0	452	325.0	N.C.
351.0	351	453.0	453	230.0	307
352.0	352	455.0	455	331.0	N.C.
353.0	353			332.0	302
450.0	450	PSYCHOLOGY		333.0	311
451.0	451	201.0	120	334.0	N.C.
452.0	452	301.0	203	335.0	321
453.0	453	302.0	204	336.0	N.C.
454.1	454	305.0	205	337.0	N.C.
455.2	455	306.0	212	338.0	N.C.
456.1	456	403.0	303	339.0	320
		404.0	304	340.0	316
ASTRONOMY		410.0	310	341.0	313
301.0	N.C.	411.0	311	342.0	N.C.
302.0	301	412.0	312	343.0	N.C.
		413.0	313	344.0	N.C.
		421.0	321	400.0	N.C.
		431.0	331		
		432.0	332		
		433.0	333		
		440.0	340		
		449.0	349		

N.C. — New Course

1971-72 70-71

SOCIOLOGY

200.0	121
300.0	200
301.0	207
302.0	302
303.0	303
304.0	304
305.0	N.C.
306.0	306
307.0	201
308.0	308
309.0	309
310.0	310
311.0	202
313.0	313
316.0	316
318.0	318
319.0	319
320.0	320
321.0	321
322.0	322
323.0	N.C.
324.0	324
325.0	N.C.
430.0	330
433.0	N.C.

SPANISH

101.0	100
201.0	200
301.0	302
302.0	306
303.0	303
304.0	304
305.0	305

N.C. — New Course



ACCOUNTING

G.P. Cormier	Associate Professor (Chairman)
C.A. Dixon	Lecturer
D.A. Hope	Assistant Professor
R.A. Isnor	Instructor
B.C. Knight	Assistant Professor
J.P. O'Neil	Assistant Professor
G.P. Rege	Assistant Professor
H.J. Schroeder	Assistant Professor
D.J. Sampson	Instructor
E.L. Sceles	Instructor

Recommended Courses leading to a B.Comm. with a Major in Accounting

First Year

English 101.0*

Mathematics 113.0*

Elective

Elective

Elective

Second Year

Accounting 201.0*

Accounting 203.1* or 203.2* and 204.1* or 204.2*

Business Administration 201.0*

Economics 202.0*

English 200.0*

Third Year

Accounting 331.1* – 333.2* Accounting 309.2 – 310.2

Accounting 301.1* – 321.2 Accounting 405.0

Commercial Law 201.0* Elective

Philosophy 120.0 – 129.0* Elective

Elective Elective

Fourth Year

*Required Course

A Commerce graduate who has followed the accounting concentration and obtained the required grades normally is in a position to sit for the final chartered accountancy examinations two years after receiving the commerce degree.

Commerce graduates may receive exemption from many of the courses and examinations conducted by the Institute of Chartered Accountants of Nova Scotia for students who intend to become Chartered Accountants. 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 Department of Accounting.

Arrangements also exist with the Institutes of other Provinces.

Exemptions are also granted by the Society of Industrial Accountants of Nova Scotia to Commerce graduates who register in the Industrial Accounting Course sponsored by the Society.

201.0: PRINCIPLES OF FINANCIAL AND MANAGERIAL ACCOUNTING

A study of basic accounting concepts, and their application to business transactions and financial statements. An introductory consideration of asset and liability accounts, and the managerial uses of accounting data.

Lectures: Four hours a week, two semesters.

203.1 AND 203.2: INTRODUCTORY QUANTITATIVE METHODS FOR COMMERCE

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

The purpose of this course is to provide an overview of calculus with an emphasis on application, an upgrading of algebraic techniques and an introduction to various other quantitative techniques for Commerce.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Business Administration 203.1 and 203.2 and Economics 203.1

204.1 and 204.2: INTRODUCTORY STATISTICS FOR COMMERCE

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

An introduction to probability and statistics with emphasis on business and economic applications.

Lectures: Three hours a week, one semester – half course.

Note. This is the same course as Business Administration 204.1 and 204.2 and Economics 204.2.

301.1: INTERMEDIATE FINANCIAL ACCOUNTING

Prerequisite: Accounting 201.0

A further study of the financial accounting aspects of Accounting 201.0 with special reference to balance sheet accounts.

Lectures: Three hours a week, one semester – half course.

308.1: TAXATION

Prerequisite: Accounting 301.1

An introductory study of the theory and procedures of taxation at all levels of government.

Lectures: Three hours a week, one semester – half course.

309.2: ADVANCED FINANCIAL ACCOUNTING I – CORPORATE ACCOUNTING

Prerequisite: Accounting 301.1

An advanced study of creditors' and shareholders' equities, consolidated financial statements and special problems in accounting for sales transactions.

Lectures: Three hours a week, one semester – half course.

310.2: ADVANCED FINANCIAL ACCOUNTING II – SPECIAL TOPICS

Prerequisite: Accounting 301.1

An advanced study of special topics including: partnerships, fiduciary accounting, governmental accounting, foreign operations, price level changes and receivership and liquidations.

Lectures: Three hours a week, one semester – half course.

321.1 and 321.2: INTRODUCTION TO COMPUTERS

Prerequisite: Accounting 201.0, Mathematics 113.0 or equivalent.

Introduction to information systems and data processing functions; systems analysis and flowcharting; computer characteristics; computer programming.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Business Administration 321.1 and 321.2.

322: COMPUTER APPLICATIONS AND MANAGEMENT

Prerequisite: Accounting 204.1 or 204.2 and 321.1 or 321.2

Further study of computer-based management information systems; models and simulation; basic concepts of probability; selected topics

from computer-dependent management techniques; problems of feasibility studies, controls, organization.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Business Administration 322.2.

323.2: INFORMATION SYSTEMS

Prerequisite: Accounting 321.1 and 321.2.

The study of computer-based data processing and information systems including the management problems of computers in business such as organization, control and feasibility.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Business Administration 323.2.

331.1: INTRODUCTORY COST ACCOUNTING

Prerequisite: Accounting 201.0.

This is a basic course in cost accounting principles, techniques and procedures: product costing, non-manufacturing costs with emphasis on managerial uses of cost accounting techniques.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Business Administration 331.1

333.2: MANAGERIAL FINANCE AND CONTROL

Prerequisite: Accounting 201.0 and 203.1 or 203.2.

Covers areas common to both finance and control: finance and control functions, profit planning, financial forecasting and budgets, performance

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Business Administration 333.2.

ANTHROPOLOGY

John Loewenstein
Alejandro Estrada
Peter Kassebaum
Brian Robinson

Professor, Chairman
Lecturer
Assistant Professor
Lecturer

Departmental Policy

- (1) To obtain a major concentration in Anthropology a student is required to have FIVE university course credits in Anthropology beyond the 120 level.
- (2) At least 50% of a student's elective work must be done at the 300 level or above. Suggested supporting courses for Anthropology majors include: Biology, Geology, History, Psychology, Religious Studies and Sociology.
- (3) The Honours Programme in Anthropology follows the regulations as stated in this calendar.
- (4) The programme for a major in Anthropology must be approved by the Chairman of the Department.

110.0: SOCIO-CULTURAL ANTHROPOLOGY

Prerequisite: None.

An introduction to the nature of culture, society, primitive economics, social organization, law and government, as well as cultural change. A cross-cultural study, contrasting primitive cultural systems with contemporary industrial society. Slides, video-tapes and films will supplement the lectures.

Lectures: Three hours a week, two semesters.

207.0: INTRODUCTION TO HUMAN AND PHYSICAL GEOGRAPHY

Prerequisite: None.

The course establishes the general physical characteristics of the world's natural environments and then goes on to examine simple human relationships with these environments.

Texts and selected references to be announced.

Lectures: Three hours a week, two semesters.

208.0: ETHNOLOGY I

Prerequisite: None.

A non-technical introduction to the science of peoples, their cultures and life histories as groups, with special reference to the New World.

Texts and selected references to be announced.

Lectures: Three hours a week, two semesters.

209.0: INTRODUCTION TO ARCHAEOLOGY

Prerequisite: None.

'Archaeology is a science that must be lived.

Dead Archaeology is the driest dust that blows'.

Sir Mortimer Wheeler

The scope of archaeology. Dating the past. The layout of an excavation. On digging town-sites. On digging burials.

Texts and selected references to be announced.

Lectures: Three hours a week, two semesters.

210.0: PALAEOANTHROPOLOGY II

Prerequisite: To be left to the discretion of the professor.

A technical and more intensive treatment of the subject-matter of course No. 140. This course is complementary to No. 202 Palaeontology (Géology), which is recommended to students of Anthropology.

Texts and selected references to be announced.

Lectures: Two hours a week, two semesters.

220.0: INTRODUCTION TO CULTURAL GEOGRAPHY

Prerequisite: Anthropology 120.0 or one other course in Anthropology.

A study of the cultural imprint of man on the world's landscapes. The course ranges from primitive societies to modern urban systems and includes brief introductions to mapping techniques, map interpretation (of Nova Scotia), and simple statistical procedures.

Text: A Geography of Mankind, J.O.M. Broek and J.W. Webb, McGraw Hill.

Lectures: Three hours a week, two semesters.

230.0: ETHNOLOGY II

Prerequisite: None

The Aborigines of North America.

Texts and selected references to be announced.

Lectures: Three hours a week, two semesters.

303.0: METHODOLOGY AND FIELDWORK IN SOCIAL ANTHROPOLOGY

~~Prerequisite:~~ Anthropology 110.0 with a grade of B or better.

This course is designed to apply basic concepts, already familiar to the student, to actual fieldwork within the Province of Nova Scotia, as far as circumstances permit. Museum visits, informant-interviewing, ~~computer~~ applications, research techniques, questionnaires plus audio-tapes, video-tapes and photography will be some of the topics covered. Students will learn by "doing".

Texts: To be announced.

Lectures: Two hours a week, two semesters.

Lab: 1-2 hours a week, two semesters.

304.0: COMPARATIVE AND PHYSIOLOGICAL PSYCHOLOGY

~~Cross-listed,~~ Psychology 404.0)

310.0 HISTORY OF ANTHROPOLOGY

~~Prerequisite:~~ Anthropology 110.0.

The course deals with the development of Anthropology from its early beginnings as a Natural Science to its present form as a synthesizing study of man. The subject will be divided into 2 major sections: Physical and Cultural Anthropology.

Texts and selected references to be announced.

Seminar course: Three hours a week.

325.0: RELIGIOUS CELEBRATION, HUMAN EXISTENCE, AND THE BOUNDARIES OF LIFE

~~Cross-listed,~~ Religious Studies 322.0)

326.0: RELIGIONS OF INDIA

~~Cross-listed,~~ Religious Studies 323.0)

340.0: CULTURAL GEOGRAPHY: REGIONAL STUDIES

~~Prerequisite:~~ Preference will be given to students who attended geography courses on lower levels.

The detailed cultural geography of one particular area: China.

Texts and selected references to be announced.

Lectures: Two hours a week, two semesters.

345.0: ETHNOLOGY III

Prerequisite: Background in Anthropology and/or Sociology.

Vanished and vanishing cultures from Africa, Oceania, North America, South America and Asia, viewed in relation to historical and environmental influences.

Texts and selected references to be announced.

Lectures: Two hours a week; two semesters.

351.0: THE BIRTH OF CIVILIZATION

Prerequisite: University History Work

A study of the earliest civilizations

The Mediterranean East — India — China — Mesoamerica and Peru.

Open to history students.

Texts and selected references to be announced.

Lectures (illustrated by lantern slides): Two hours a week: two semesters.

ASTRONOMY

201.0: THE ASTRONOMICAL UNIVERSE

Prerequisites: Sophomore standing or permission of the professor.

This course is designed in particular for the non-science student. The subject matter will include the solar system, the life-cycles of stars, the structure of our Galaxy, the nature of external galaxies, and the expanding universe. Recent discoveries and unsolved problems, such as quasars, pulsars, exploding galaxies, and "black holes" will be discussed to illustrate the open and evolving nature of scientific investigation.

Text: To be announced.

Lectures: Three hours per week, two semesters.

There will be evening observing sessions about twice a month by arrangement.

301.0: INTRODUCTION TO ASTRONOMY

(For details see Physics)

BIOLOGY

M. Wiles

E. Dobr-Tylingo

B. Kapoor

A. Rojo

E. Rojo

K.K. Thomas

Assistant Professor, Chairman

Assistant Professor

Assistant Professor

Associate Professor

Assistant Professor

Assistant Professor

Commencing September 1970, the Biology Department adopted courses which are either of one or two semesters duration and organized around a "core" program. Each single semester unit is worth one half credit and units are normally taken in pairs to provide whole numbers of credits. Courses of two semesters duration are also offered and are valued at one full credit. A student may not take a second unit in a particular subject area unless he has gained a mark of at least 35% in the first unit in that subject. This requirement will also apply to Biology 112.2 which follows Biology 111.1. Supplemental examinations for single semester units will be granted only in exceptional circumstances. Supplemental examinations for first semester courses will be taken in the first week of January, and those for second semester and two semester courses will be taken in the first week of September.

The Biology core program is normally included in the scheme followed by students doing either a **concentration** or a **major** in Biology. It is thus intended to provide all Biology students with a balanced and comprehensive knowledge in modern biological science. Such an approach is necessary because of the very wide spectrum of knowledge which is today included in biological science. Students completing the "core" program and going on to finish a **concentration** in biology should 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 understanding graduate level work in Biology after a further year of honors work or after a qualifying year in a graduate program.

It should also be emphasized that the Biology **concentration** at Saint Mary's is part of a General Science degree which aims as much at educating the whole man as providing specialized training in science. Moreover, a **concentration** in Biology is also useful as a first qualification for students intending to enter industry, or commercial organizations requiring technical representatives, supervisors or trainees. In the **major** program, on the other hand, more emphasis is placed on the scientific aspects of the students' education and training.

Following are the schemes devised and recommended by the Department for Biology students doing either the General Science degree or a B.Sc. with a major. The schemes fulfil the appropriate degree requirements, provide the core program in Biology, and follow a logical progression in development of knowledge of the subject areas covered.

Scheme A: General Science Degree with a Biology Concentration

Freshman Year

1. English 100.0
2. Math 110.1 & 111.2
3. History 100.0
4. Principles of General Biology (Science.) (111.1² & 112.2²)
5. Geology 111.0²
or Physics 111.0²

Sophomore Year

1. English 200.0
2. Math 200.1³ & 201.2³.
Chemistry 101.0² or 201.0²
4. Cytology (201.1¹) &
Cell Physiology and Biochemistry (202.2¹)
5. Botany (204.0¹)

Junior Year

1. Social Science Elective (200.0)
2. Humanity Elective (200.0)
or Social Science Elective (200.0)
3. Chemistry 343.0²
4. Cytology (201.1¹) &
Cell Physiology and Biochemistry (202.2¹)
or Zoology (205.0¹)
5. Principles of Ecology (207.1¹)
& Biostatistics (209.2¹)
or Genetics (210.0)
& Evolution (211.2)

Senior Year

1. Philosophy (120.0)
2. Humanity elective (300.0)
or Social Science Elective (300.0)
3. Social Science Elective (200.0
or 300.0)
4. Principles of Ecology (207.1¹)
& Biostatistics (209.2¹)
or Genetics (210.1¹) &
Evolution (211.2¹)
5. One elective from the following.
 - (a) Microbiology (306.0)
 - (b) Cytogenetics (311.1)
or Vertebrate Physiology (313.1)
& Human Genetics (312.2)
or Vertebrate Embryology (314.2)
 - (c) Comparative Chordate Anatomy (320.0)
 - (d) Biology of fishes (325.1)
& Morphology of Vascular Plants (315.2)

Scheme B: Science Degree with a major in Biology

Freshman Year

1. English 100.0
2. Math 110.1 & 111.2
3. History 100.0
4. Principles of General Biology (Science) (111.1² * 111.2²)
5. Chemistry 101.0² or 201.0²

Junior Year

1. Humanity Elective (200.0)
2. A related Science elective not in the major field (Junior or Senior Level)
3. Physics 111.02
or Geology 111.02
4. Cytology (201.1¹) & Cell Physiology and Biochemistry
or Botany (204.0¹)
5. Principles of Ecology (207.1¹) & Biostatistics (209.2¹)
or Genetics (210.1¹)
& Evolution (211.2¹)

Sophomore Year

1. English 200.0
2. Math 200.1³ & 201.2³
3. Chemistry 343.0²
4. Cytology (201.1¹) & Cell Physiology and Biochemistry (202.2¹)
or Botany (204.0¹)
5. Zoology (205.0¹)

Senior Year

1. Philosophy (120.0)
2. Psychology (200.0)
or Anthropology (200.0)
3. Principles of Ecology (207.1¹) (207.1¹)
& Biostatistics (209.2¹)
or Genetics (210.1¹) & Evolution (211.2¹)
4. Geology 200.0 or 301.0 or 302.0 etc.
or A Biology Elective from the following:
(a) Microbiology (306.0)
(b) Cytogenetics (311.1) or Vertebrate Physiology (313.1) & Human Genetics (312.2) or Vertebrate Embryology (314.2)
5. One elective from the following:
(a) Comparative Chordate Anatomy (320.0)
(b) Biology of Fishes 1 (325.1) & Morphology of Vascular Plants (315.2)

In schemes A and B.

1. course in core program
2. required supporting science course
3. required Math course.

Note: In any Biology course, the instructor may decide to substitute a one hour seminar or discussion period for one of the lectures.

The following courses will be offered in 1971-72.

BIOLOGY 111.1: PRINCIPLES OF GENERAL BIOLOGY 1 (SCIENCE)

K.K. Thomas

Prerequisites: None .

Outline: Class designed for Science students. A study of the physical, chemical and biological bases of the activities of living organisms. Emphasis will be on the modern approaches to biological sciences through a consideration of the following disciplines of biology: ecology, physiology, cytology, genetics, molecular biology, evolution and behaviour.

Text: To be announced.

Instruction: Lectures and/or seminars-discussion periods, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 112.2: PRINCIPLES OF GENERAL BIOLOGY 2 (SCIENCE)

B.M. Kapoor

Prerequisites: A mark of at least 35% in Biology 111.1

Outline: As for Biology 111.1. This unit is a continuation of studies undertaken in Biology 111.1.

Text: To be announced.

Instruction: As for Biology 111.1

For the following courses * indicates a course within the core program.

BIOLOGY 201.1*: CYTOLOGY

B.M. Kapoor

Prerequisites: Biology 111.1 and 112.2

Study of the gross structure of plant and animal cells and cell organelles in relation to heredity and development.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 202.2* : CELL PHYSIOLOGY AND BIOCHEMISTRY

K.K. Thomas

Prerequisites: Biology 111.1 and 112.2

Outline: An introduction to the essential aspects of biochemistry and cellular physiology and a discussion of how they underlie the basic processes carried on by organisms.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 204.0* : BOTANY

H. Bobr-Tylingo

Prerequisites: Biology 111.1 and 112.2

Outline: A study of different plant groups (Viruses, Bacteria, Fungi, Algae, Bryophytes, Ferns, Gymnosperms and Angiosperms). Introductions to physiological processes in plants, including photosynthesis, transpiration, absorption, nutrition, enzymes and hormonal action and growth.

Text: To be announced.

Instruction: Lectures, three hours per week, two semesters.

Laboratory: Three hours per week, two semesters.

BIOLOGY 205.0* : ZOOLOGY

E. Rojo

Prerequisites: Biology 111.1 and 112.2

Outline: A systematic survey of the Animal Kingdom with emphasis on gross morphology and its relation to function. Phylogenetic relationships, the influence of physiological adaptation through the mechanisms of heredity, and the involvement of the evolutionary processes in the phenomenon of the diversity of modern animal life.

Instruction: Lectures, three hours per week, two semesters.

Laboratory, three hours per week, two semesters.

BIOLOGY 207.1* : PRINCIPLES OF ECOLOGY

M. Wiles

Prerequisites: Biology 111.1 and 112.2; 201.1, 204.0 or 205.0 concurrently.

Outline: A study of the fundamental concepts and principles of modern ecology. Consideration of physiological ecology, population ecology and community ecology. A brief treatment of speciation, applied ecology, conservation and management. Renewable and non-renewable natural resources. The earth's biosphere as a dynamic, balanced system.

Text: Concepts of Ecology – E.J. Kormondy (Prentice-Hall)

Instruction: Lectures, three hours per week, one semester.

Laboratory: Three hours per week, one semester.

BIOLOGY 209.2*: BIostatISTICS

M. Wiles

Prerequisites: Biology 111.1 and 112.2; 202.2, 204.0 or 205.0 concurrently; Math 110.1 and 111.2.

Outline: Introduction to the principles and methods used for analyzing and using quantitative data in the biological sciences. The emphasis will be on practical applications of statistics in biology rather than statistical theory. Material covered includes graphical presentation of data, transformation of data, handling of data. Descriptive statistics, distributions, regressions, correlation, probability theory, comparisons of sets of data and sampling methods will be studied. Calculator usage and computer programming will be undertaken.

Instruction: Lectures, three hours per week, one semester.

Calculator or Computer time, three hours per week, one semester.

BIOLOGY 210.1*: GENETICS

E. Rojo

Prerequisites: Biology 111.1 and 112.2, 201.0 or 205.0, or concurrently; Chemistry 101.0 or 201.0

Outline: 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.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 211.2*: EVOLUTION

A. Rojo

Prerequisites: Biology 204.0, 205.0; 210.1 and 209.2 (or concurrently); Chemistry 101.0 or 201.0.

Outline: A study of the history, processes, mechanisms and factors of organic evolution. Main areas of study include the fossil record, genetics of populations and evolution of man.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 306.0: MICROBIOLOGY

E. Sobr-Tylingo

Prerequisites: Biology 201.1, 202.2; Chemistry 101.0 or 201.0

Outline: Morphology, biochemical activity and classification of microorganisms, (Viruses, Bacteria, Molds, Yeasts, and other microscopic life forms).

Text: To be announced.

Instruction: Lectures, three hours per week, two semesters.

Laboratory, three hours per week, two semesters.

BIOLOGY 311.1: CYTOGENETICS

B.M. Kapoor

Prerequisites: Biology 201.1.

Outline: This course deals mainly with chromosomes, biology, experimental studies on the mitotic apparatus, Karyotype evolution, sex chromosomes, control of the meiotic system, regulation of chromosome pairing and cytology in relation to taxonomy.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 312.2: HUMAN GENETICS

E. Rojo

Prerequisites: Biology 210.2, 209.2

Outline: The Chemical and physical nature of genes. The study of population genetics in both plants and animals using a statistical approach. Emphasis will be on human mutations through study of chromosomes and analysis of pedigrees.

Text: Human Genetics and its foundations – Whittinghill

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 313.1: VERTEBRATE PHYSIOLOGY

K.K. Thomas

Prerequisites: Biology 202.2

Outline: Analysis of the functions of major organs and organ systems in Vertebrates

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 314.2: VERTEBRATE EMBRYOLOGY

K.K. Thomas

Prerequisites: Biology 311.1 or 313.1

Outline: Early developmental processes involved in the transformation of the fertilized egg into a new individual.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 315.2: MORPHOLOGY OF VASCULAR PLANTS

B.M. Kapoor

Prerequisites: Completed core.

Outline: Structure, development and evolution of major taxa of vascular plants – Pteridophytes, gymnosperms and flowering plants, both extinct and extant.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BIOLOGY 320.0: COMPARATIVE CHORDATE ANATOMY

A. Rojo

Prerequisites: Completed core.

Outline: A comprehensive study of gross anatomy of the different systems of representatives of each major class, beginning with Amphioxus and culminating with the mammals.

Text: The Vertebrate body. A.J. Romer (4th edition) (W.B. Saunders)

Laboratory manual: Atlas and dissection guide for Comparative Anatomy, S. Wischnitzer (Freeman).

Instruction: Lectures, three hours per week, two semesters.

Laboratory, three hours per week, two semesters.

BIOLOGY 325.1: BIOLOGY OF FISHES

A. Rojo

Prerequisites: Completed core.

Outline: A study of the embryology, anatomy, physiology and classification of fishes. In classification and geographical distribution, emphasis will be placed on the marine Northwest Atlantic fishes and the freshwater fishes of Nova Scotia.

Text: To be announced.

Instruction: Lectures, three hours per week, one semester.

Laboratory, three hours per week, one semester.

BUSINESS ADMINISTRATION

O.P. Cormier	Associate Professor (Chairman)
G.A. Badawi	Assistant Professor
V. Baydar	Assistant Professor
D.J. Brean	Lecturer
R.D. Connell	Associate Professor
D.A. Hope	Assistant Professor
D.E. Innes	Lecturer
D. Landry	Lecturer
Z.H. Qureshi	Assistant Professor
V.V. Raghavan	Lecturer
U.P. Rege	Assistant Professor
H.J. Schroeder	Assistant Professor
S. Whitelaw	Assistant Professor

Recommended Courses leading to a B. Comm. with a Major in Business Administration.

First Year

English 101.0*
 Mathematics 113.0*
 Elective
 Elective
 Elective

Second Year

Accounting 201.0*
 Business Administration 201.0*
 Business Administration 203.1* or
 203.2* and 204.1* or 204.2*
 Economics 202.0*
 English 200.0*

Third Year

Business Administration
 306.0
 Business Administration
 332.1* – 333.2*
 Commercial Law 201.0*
 Philosophy 120.0*/129.0*
 Elective

Fourth Year

Business Administration 410.2 and an
 additional half course.
 Elective
 Elective
 Elective
 Elective

*Required Course

201.0: PRINCIPLES OF MANAGEMENT

A study of fundamental concepts of management; decision making; management planning, organizing, motivating and controlling. A prime objective of this course is to introduce the systems concept as a foundation for further study in the program.

Lectures: Three hours a week, two semesters.

203.1 and 203.2: INTRODUCTORY QUANTITATIVE METHODS FOR COMMERCE

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

The purpose of this course is to provide an overview of calculus with an emphasis on application, an upgrading of algebraic techniques and an introduction to various other quantitative techniques for Commerce.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Accounting 203.1 and 203.2 and Economics 203.1

204.1 and 204.2: INTRODUCTORY STATISTICS FOR COMMERCE

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

An introduction to probability and statistics with emphasis on business and economic applications.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Accounting 204.1 and 204.2 and Economics 204.2.

302.2: LINEAR PROGRAMMING

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

Programming models with business applications with emphasis on linear programming.

Lectures: Three hours a week, one semester – half course.

305.2: CALCULUS FOR BUSINESS

Prerequisite: Business Administration 203.1 or 203.2.

An introduction to the use of differential and integral calculus with emphasis on business and economic applications.

Lectures: Three hours a week, one semester – half course.

306.0: ORGANIZATIONAL BEHAVIOUR

Prerequisite: Business Administration 201.0.

An introductory study of human behaviour in formal organizations, with emphasis on patterns and theories of behaviour in industry. The course exposes the student to behavioural science concepts through

readings, a text, classroom sessions, and the application of course concepts to the analysis of cases.

Lectures: Three hours a week, two semesters.

308.1 and 308.2: PERSONNEL MANAGEMENT

Prerequisite: Business Administration 201.0.

Organization and management of personnel; manpower planning; improvement of performance; motivation; communication; supervision; the work group; remuneration.

Lectures: Three hours a week, one semester – half course.

309.1 and 309.2: INDUSTRIAL RELATIONS

Prerequisite: Business Administration 201.0

An introduction to the field of industrial relations, a study of union structure and operation, collective bargaining and allied material.

Lectures: Three hours a week, one semester – half course.

317.1: INTRODUCTION TO PRODUCTION MANAGEMENT

Prerequisite: Business Administration 201.0, Mathematics 113.0 or equivalent.

An introduction to the production function and process including coverage of the systems concept and the basic techniques for decision making in the areas of planning and control.

Lectures: Three hours a week, one semester – half course.

319.1: BUSINESS AND ITS ENVIRONMENT

Prerequisite: Business Administration 201.0; Economics 202.0.

Business and its economic and political environment; the social responsibilities of business.

Lectures: Three hours a week, one semester – half course.

320.2: TECHNIQUES OF PRODUCTION MANAGEMENT

Prerequisite: Business Administration 203.1 or 203.2, 317.1 and 321.1 or 321.2.

A more advanced course in the study of the production function,

Including control of inventory, costs using mathematical techniques and the computer.

Lectures: Three hours a week, one semester — half course.

321.1 and 321.2: INTRODUCTION TO COMPUTERS

Prerequisite: Accounting 201.0 and Mathematics 113.0 or equivalent.

Introduction to information systems and data processing functions; systems analysis and flowcharting; computer characteristics; computer programming.

Lectures: Three hours a week, one semester — half course.

Note: This is the same course as Accounting 321.1 and 321.2

322.2: COMPUTER APPLICATIONS AND MANAGEMENT

Prerequisite: Business Administration 204.1 or 204.2 and 321.1 or 321.2.

Further study of computer-based management information systems; models and simulation; basic concepts of probability; selected topics from computer-dependent management techniques; problems of feasibility studies, controls and organization.

Note: This is the same course as Accounting 322.2

323.2: INFORMATION SYSTEMS

Prerequisite: Business Administration 321.1 or 321.2

The study of computer-based data processing and information systems, including the management problems of computers in business such as organization, control and feasibility.

Lectures: Three hours a week, one semester — half course.

Note: This is the same course as Accounting 323.2

325.1 and 325.2: INTRODUCTION TO MARKETING

Prerequisite: Business Administration 201.0.

A study of principles and fundamental concepts of marketing and marketing management: pricing, promotion, merchandising, distribution structure and marketing research.

Lectures: Three hours a week, one semester — half course.

326.2: MARKETING MANAGEMENT

Prerequisite: Business Administration 325.1 or 325.2

Managerial in focus, this course is devoted to analysing marketing opportunities, a study of marketing activity and its organization, planning the marketing program and controlling the marketing effort.

Lectures: Three hours a week, one semester – half course.

327.2: MARKETING RESEARCH

Prerequisite: Business Administration 204.1 or 204.2, or equivalent, and 325.1 or 325.2

An introductory course in the nature, methods, procedures and application of marketing research.

Lectures: Three hours a week, one semester – half course.

328.1 and 328.2: MARKETING COMMUNICATION AND ADVERTISING

Prerequisite: Business Administration 325.1 or 325.2

An introduction to the study of advertising principles and practices, including advertising strategies, media presentation and evaluation of effectiveness.

Lectures: Three hours a week, one semester – half course.

329.1: INTERNATIONAL MARKETING

Prerequisite: Business Administration 325.1 or 325.2

An introduction to the nature and environment of international marketing including the study of the international consumer, product policy, distribution promotion, research and management.

Lectures: Three hours a week, one semester – half course.

330.2: SALES MANAGEMENT

Prerequisite: Business Administration 325.1 or 325.2

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 personal selling effort.

Lectures: Three hours a week, one semester – half course.

331.1: INTRODUCTORY COST ACCOUNTING

Prerequisite: Accounting 201.0

This is a basic course in cost accounting principles, techniques and procedures: product costing, non-manufacturing costs with emphasis on managerial uses of cost accounting techniques.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Accounting 331.1

332.1: INTRODUCTION TO FINANCE

Prerequisite: Accounting 201.0, and Business Administration 201.0, and 203.1 or 203.2 and 204.1 or 204.2

A basic course in finance introducing students to the various areas in finance: interest rate structures, financial markets, management of assets, instruments of financing, simulation approach.

Lectures: Three hours a week, one semester – half course.

333.2: MANAGERIAL FINANCE AND CONTROL

Prerequisite: Accounting 201.0 and Business Administration 203.1 or 203.2 and 204.1 or 204.2

Covers areas common to both finance and control: finance and control functions, profit planning, financial forecasting and budgets, performance measurement, management control systems, capital budgeting.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Accounting 333.2

334.1: FINANCIAL MANAGEMENT

Prerequisite: Business Administration 332.1

Managerial in emphasis, the course covers problems of capital structure and valuation of firm; the cost of capital in relation to financing problems; dividend policies and their relation to retained earnings; mergers and reorganizations.

Lectures: Three hours a week, one semester – half course.

335.1: INVESTMENTS

Prerequisite: Business Administration 332.1

The analysis of investment values; study of stock and bond markets; evaluation of investment techniques; investment analysis by industries; management of personal finance and portfolio.

Lectures: Three hours a week, one semester – half course.

336.1: STATISTICAL ANALYSIS FOR BUSINESS

Prerequisite: Business Administration 204.1 or 204.2

To expose the student to basic and advanced concepts of statistics as they apply to the solution of business problems. Sampling, correlation, index numbers, time series analysis, seasonal index forecasting, and Bayesian statistics will form the foundation of the course.

Lectures: Three hours a week, one semester – half course.

410.2: BUSINESS POLICY

Prerequisite: Business Administration 201.0 and the equivalent of two full additional 300 level Business Administration courses.

The perspective of top management; sizing up situations, formulating policies, discovering opportunities and planning programs of action; organizing administrative personnel and putting plans into action; control; follow up and appraisal; day to day administrative problems; the business leader and public responsibility.

Lectures: Three hours a week, one semester – half course.

416.2: CORPORATION FINANCE

Prerequisite: Business Administration 334.1

A study of current literature in corporation finance with emphasis on empirical findings and application of theory to practice with the help of case studies.

Lectures: Three hours a week, one semester – half course.

417.2: PORTFOLIO MANAGEMENT

Prerequisite: Business Administration 335.1

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; the selection of portfolios which appear most likely to satisfy stated investment objectives.

Lectures: Three hours a week, one semester – half course.

CHEMISTRY

E.R. Hayes	Associate Professor, Chairman
D.H. Davies	Assistant Professor
J. Elhanan	Associate Professor
I. Ginsburg	Assistant Professor
I.W. Murphy, S.J.	Associate Professor
G. Noel	Lecturer
A.T. Sabeau	Professor
K. Vaughan	Assistant Professor

The program of the Chemistry Department is designed to satisfy two functions:

- (1) to fulfill the requirements for the general degree of Bachelor of Science, the degree of Bachelor of Science with major and the Honours Bachelor of Science degree. 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.
- (2) to introduce students in other disciplines to the ideas of Chemistry and provide them with 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.

CHEMISTRY 101.0: AN INTRODUCTION TO CHEMISTRY

Prerequisite: None.

The fundamental laws and principles of Chemistry are explored and applied in the study of selected nonmetals, metals and their compounds.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 201.0: GENERAL CHEMISTRY

Prerequisites: Chemistry 101.0 or equivalent; Mathematics 210.1 and 211.1 to be taken concurrently.

A critical survey of the most important theories used to explain the behavior of gases, liquids, solids and solutions.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 311.0: INTRODUCTORY PHYSICAL CHEMISTRY

Prerequisites: Chemistry 201.0; Mathematics 210.1 and 211.1 (with special permission from the Chemistry Department this course may be taken concurrently).

Fundamental thermodynamics, electrochemistry, kinetic theory of matter, surface chemistry and catalysis.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 341.0: CHEMISTRY OF THE ELEMENTS

Prerequisites: Chemistry 201.0

An integrated course in inorganic and organic chemistry emphasizing structure and bonding. Fundamental concepts of organic chemistry are presented in the second semester.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 343.0: ELEMENTARY ORGANIC CHEMISTRY

Prerequisites: Chemistry 201.0 or Chemistry 101.0 with permission of the Chemistry Department.

A comprehensive treatment of organic chemistry for non-chemistry majors. The principal functional classes, reaction mechanisms, stereochemistry and physical methods are discussed in the lectures and illustrated in the laboratory.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 411.0: PHYSICAL CHEMISTRY

Prerequisites: Chemistry 311.0; Mathematics 210.1 and 211.1, 310.0 (with special permission from the Chemistry Department, Mathematics 310.0 may be taken concurrently.)

Basic quantum theory, statistical thermodynamics, chemical kinetics and reaction mechanisms.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 431.0: ANALYTICAL CHEMISTRY

Prerequisites: Chemistry 201.0 and one of Chemistry 311.0, 341.0 or 343.0.

Electrochemical and spectroscopic methods of instrumental analysis and an introduction to the techniques of separation chemistry.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 441.0: INTERMEDIATE ORGANIC CHEMISTRY

Prerequisites: Chemistry 341.0 (or Chemistry 343.0 with permission of the Chemistry Department.)

The study of aliphatic, aromatic and heterocyclic compounds with emphasis on modern methods and concepts in stereochemistry, reaction mechanisms and physical properties.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CHEMISTRY 500.0: RESEARCH THESIS

Prerequisites: Restricted to fourth year students in the Honour's program.

The student will carry out a research project under the direction of one of the members of the Department, will prepare a thesis on his work and will present it orally.

Laboratory: A minimum of six hours per week, two semesters.

CHEMISTRY 511.0: ADVANCED TOPICS IN PHYSICAL CHEMISTRY

Prerequisites: Chemistry 411.0

A course on special topics selected from advanced areas of physical chemistry.

Lectures: Three hours a week, two semesters.

Laboratory: None.

CHEMISTRY 513.0: QUANTUM CHEMISTRY

Prerequisites: Chemistry 411.0; Physics 210.1, 211.1 and Mathematics 310.0.

Lecture: Three hours a week, two semesters.

Laboratory: None.

CHEMISTRY 531.0: SELECTED CHAPTERS IN INSTRUMENTAL ANALYSIS

Prerequisites: Chemistry 431.0

A lecture-seminar-laboratory course designed to present topics in electronic circuits, radio-chemistry, spectroscopy and electrochemistry.

Lectures and Laboratory: Five hours per week, two semesters.

CHEMISTRY 541.0: ADVANCED ORGANIC CHEMISTRY

Prerequisites: Chemistry 441.0 and Chemistry 411.0 (the latter 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.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

CLASSICS

Mildred Harrington
Rev. M.J. O'Donnell, S.J.
Geraldine T. Thomas
Vincent McB. Tobin

Instructor
Associate Professor
Lecturer
Assistant Professor

LATIN

LATIN 100.0

A course in the essentials of Latin for students who have not completed Matriculation Latin.

Text: Latin Course for Schools, Part I and Part II, Ch. 1 – 27. – Wilding.

Lectures: Four hours a week, two semesters.

LATIN 101.0: FIRST YEAR COLLEGE LATIN

Prerequisite: Matriculation Latin.

A thorough study of Latin syntax with selections from various authors emphasizing the syntax explained in the given chapter.

Texts: Cicero's Pro Archia. Latin Course For Schools, Part II, Ch. 27 to end and Part III – Wilding.

Lectures: Three hours a week, two semesters.

LATIN 201.0: INTRODUCTION TO LATIN EPIC POETRY

Emphasis is placed on the exact rendering of the thought content into idiomatic English. Prose composition stresses the exact rendering of English into idiomatic Latin.

Texts: Outline of Latin Prose Composition – Vincent and Mountford; Aeneid II, IV – Vergil; Aeneid (complete, in translation).

Lectures: Three hours a week, two semesters.

LATIN 301.0: THE POETRY OF HORACE

A critical analysis and appreciation of Horace's art and ideals. Prose Composition.

Texts: Odes, Satires, Ars Poetica – Horace

LATIN 401.0:

A tutorial course on Tacitus, Livy and Juvenal. Roman history from Augustus to the beginning of the middle ages.

LATIN 402.0: CICERO'S RHETORIC

An intensive study of Cicero's Rhetoric.

Prose Composition.

Texts: Pro Lege Manilia, Pro Marcello, Pro Ligario

LATIN 403.0:

A tutorial course on Cicero (De Amicitia, De Senectute) and Lucretius (De Rerum Natura).

LATIN 404.0:

A tutorial course, the content of which may be varied according to the needs and interests of the student. Directed readings and research.

GREEK

GREEK 101.0: INTRODUCTORY GREEK

An introductory course covering the major grammatical points of the Greek language. This is a special programmed Greek course, placing emphasis on the oral aspects of language learning.

Lectures: Three hours per week, plus Language Laboratory.

This course will be followed in succeeding years by more advanced courses in the reading and interpretation of Classical authors.

GREEK 201.0 – SECOND YEAR GREEK

Prerequisite: Greek 101.0

An application of the major grammatical points of the Greek Language through the reading of the selected of classical authors:

- i. Homer (Iliad)
- ii. Xenophon (Anabasis)
- iii. the dramatists
- iv. lyric poetry

Lectures: Three hours a week, two semesters.

CLASSICAL HISTORY

CLASSICS 120.0: THE CLASSICAL CIVILIZATIONS OF GREECE AND ROME

A general survey of the civilizations of ancient Greece and Rome with particular regard to political organization and cultural contribution to modern western society.

Lectures: Three hours a week.

CLASSICS 250.0: GREEK PHILOSOPHY

See Philosophy 250.0.

CLASSICAL LITERATURE

CLASSICS 301.0: CLASSICS IN TRANSLATION

The **Classical Literature of Greece and Rome in Translation**. This course is especially recommended to all Arts students who are not taking Latin in their programme, and also to students of ancient history.

Texts: Various selections from the Classical writers of Greece and Rome.

Lectures: Three hours a week (or equivalent).

CLASSICS 303.0: HISTORY OF GREECE

A concentrated study of selected topics dealing with the main features of **Greek history**, stressing both the greatness and the weakness of ancient Greek society. This course is designed as a companion and parallel to Classics 304.0, which deals in the same manner with the history of Rome. This course may also be used as a history credit.

Lectures: Three hours a week (or equivalent).

CLASSICS 304.0: HISTORY OF ROME

A concentrated study of selected topics dealing with the main features of **Roman history**, stressing both the greatness and weakness of the Roman world. This course is designed as a companion and parallel to Classics 303.0 which deals in the same manner with the history of Greece. This course may also be used as a history credit.

Lectures: Three hours a week (or equivalent).

CLASSICS 305.0: HELLENISTIC HISTORY

Prerequisite: one course in Classics or history. Other students may be admitted at the discretion of the instructor.

This course considers the characteristics of the Hellenistic world from Alexander the Great until the arrival of Pompey in the east (334 B.C. to 63 B.C.). This is the period of the expansion of Greek culture over the eastern world (Hellenism), giving rise to a highly complex historical era, one containing many of the problems and features of 20th century life.

This course may also be used as a history credit.

Lectures: Three hours a week or equivalent.

COMMERCIAL LAW

201.0

Meaning of law; contracts; special types of contracts; real property; mortgages; partnerships; corporations; credit transactions; statutes affecting business taxation.

Lectures: Three hours a week, two semesters.

ECONOMICS

R.L. Ruth	Associate Professor, Chairman
R. Boelaert	Assistant Professor
P.R. Coelho	Assistant Professor
E.J. Doak	Assistant Professor
I.A. Mirza	Assistant Professor
L.B. Shaw	Lecturer
S. Swianiewicz	Professor
J.J. Vorstermans	Professor

Recommended courses leading to a B. Comm. with a major in Economics.

First Year

English 101.0*
Mathematics 113.0*
Economics 101.0 or 102.0
Elective
Elective

Second Year

Accounting 201.0*
Business Administration
201.0*
Economics 202.0*
Economics 203.1* – 204.2*
English 200.0*

Third Year

Commercial Law 201.0*
Economics Elective *+
Economics 300.1* – 301.2*
Philosophy 120.0/129.0*
Elective

Fourth Year

Economics Elective*+
Elective
Elective
Elective
Elective

*Required Course

+ Students intending to pursue graduate studies are advised to take both Economics 302.0 and Economics 303.0.

Recommended courses leading to a B.A. with a Major in Economics.

First Year

Economics 101.0 or 102.0

English 101.0

Mathematics 113.0

Elective

Elective

Second Year

Economics 202.0*

Economics 203.1* – 204.2*

English 200.0

History 111 (120) or 202

Philosophy

Third Year

Economics 300.1* – 301.2*

Economics Elective**

Elective

Elective

Elective

Fourth Year

Economics Elective**

Elective

Elective

Elective

Elective

*** Required Course**

Students intending to pursue graduate studies are advised to take both Economics 302.0 and Economics 303.0.

101.0: ECONOMIC HISTORY OF EUROPE

The economic history of Europe from the Aegean civilizations to the establishment of the Common Market. Stages of economic growth; birth of European civilization; medieval economic society; mercantilism; the first Industrial Revolution; laissez-faire and industrial capitalism; Europe since 1914.

Lectures: Three hours a week, two semesters.

102.0: ECONOMIC THEORY IN HISTORICAL PERSPECTIVE

A course in the development of modern economic society with particular emphasis on the Canadian and U.S. economies. The presentation of microeconomic and macroeconomic theory, problems and policies is designed for students not planning to major in economics.

Lectures: Three hours a week, two semesters.

202.0: PRINCIPLES OF ECONOMICS

An introduction to economic analysis covering macroeconomic theory; national income determination; national accounting; business fluctuations; money and banking; international economics; economic growth; economic policy; general price theory; theory of the firm; market

structures; production, cost, revenue and profit maximization; theory of distribution.

Lectures: Three hours a week, two semesters.

203.1: INTRODUCTORY QUANTITATIVE METHODS FOR COMMERCE

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

The purpose of this course is to provide an overview of calculus with an emphasis on application, an upgrading of algebraic techniques and an introduction to various other quantitative techniques for Commerce.

Lectures: Three hours a week, one semester – half course.

Note: This is the same course as Accounting 203.1 or 203.2 and Business Administration 203.1 or 203.2

204.2: INTRODUCTORY STATISTICS FOR COMMERCE

Prerequisite: Mathematics 113.0 or Grade XII Mathematics.

An introduction to probability and statistics with emphasis on business and economic applications.

Lectures: Three hours a week, one semester; laboratory one hour a week – half course.

Note: This is the same course as Accounting 204.1 or 204.2 and Business Administration 204.1 or 204.2

300.1 and 300.2: INTERMEDIATE MICROECONOMIC THEORY

Prerequisite: Economics 202.0 (also, 203.1 – 1972-73 Academic Year)

Theory of consumer behavior and demand; theory of production and cost; behavior of the firm under different market structures; theory of income distribution; general equilibrium; welfare economics.

Lectures: Three hours a week, one semester – half course.

301.1 and 301.2: INTERMEDIATE MACROECONOMIC THEORY

Prerequisite: Economics 202.0 (also, 203.1 – 1972-73 Academic Year)

National income accounting; models of aggregate demand and income determination; theory of prices, wages and employment; models of economic growth; international aspects.

Lectures: Three hours a week one semester – half course.

302.0: MATHEMATICAL ECONOMICS

Prerequisites: Mathematics 113.0, Economics 202.0 (Also, Economics 203.1 – 204.2, 1972-73 Academic Year).

An introduction to mathematical methods with emphasis on topics useful to economics: set theory, relations, functions, calculus, finite differences, matrix algebra. Applications of these methods are made to the solution of economic problems.

Lectures: Three hours a week, two semesters.

303.0: ECONOMIC STATISTICS

Prerequisite: Economics 202.0 (Also, Economics 203.1 – 204.2 1972-73 Academic Year)

Functions of statistical methods; collection; analysis and interpretation of statistical data; frequency distribution; measures of central tendency and dispersion; binomial, normal, and sampling distributions; testing hypotheses and estimations of parameters; index numbers; time series, regression and correlation analysis.

Lectures: Three hours a week, two semesters. One hour lab per week.

304.1: ECONOMIC HISTORY OF NORTH AMERICA

Prerequisite: Economics 202.0

This course acquaints students with the leading events and processes of economic history of North America in general, and of Canada in particular. Among the topics to be discussed are: the development of agriculture, industry and trade; the economic conditions which shaped banking developments; the colonial links and incentives; industrial and financial capitalism; twentieth century developments of industry, labour organizations, investments and trade patterns.

Lectures: Three hours a week, one semester – half course.

307.0: MONEY AND BANKING

Prerequisite: Economics 202.0

Money, its standards, supply and value; inflation and foreign exchange; Canadian Banking System and other banking systems and public finance; international monetary problems and their solutions; developments in international trade.

Lectures: Three hours a week, two semesters.

309.0: THE CANADIAN ECONOMY

Prerequisite: Economics 202.0 and the consent of the instructor.

The application of economic theory to the study of the structure and problems of the Canadian economy.

Lectures: Three hours a week, two semesters.

310.0: DEVELOPMENT ECONOMICS

Prerequisite: Economics 202.0

Alternative theories of growth and development; economic structures of developing and developed countries; economic and non-economic determinants of growth; development policy; role of government, monetary policy, foreign trade and foreign aid; some lessons of experience in growth and change.

Lectures: Three hours a week, two semesters.

311.0: DEVELOPMENT OF ECONOMIC IDEAS

Prerequisite: Economics 202.0

The course traces the development of economic ideas from the Middle Ages to the present. Students will be introduced to the theories of the main economic schools especially in the light of their contribution to contemporary economic thinking.

Lectures: Three hours a week, two semesters.

312.0: INTERNATIONAL ECONOMICS

Prerequisite: Economics 202.0

The course offers students an analysis of theory, institutions, and policy pertaining to economic relations between nations. Foreign exchange markets, balance of payments, adjustment mechanism and international capital flows are discussed. The technique of the I.M.F. will be explained, together with the deficiencies of this world body. Proposals for world monetary reform will be scrutinized.

Lectures: Three hours a week, two semesters.

315.0: COMPARATIVE ECONOMIC SYSTEMS

Prerequisite: Economics 202.0

Analysis of the differences in decision-making and in the institutional framework of the three basic types of contemporary economies: (1)

those produced by the North Atlantic civilization; (2) those built up in consequence of the imposition of the Communist doctrine; (3) those marked by the underdevelopment prevailing in Asia, the Middle East and the subtropical areas of the world.

Lectures: Three hours a week, two semesters.

316.0: INDUSTRIAL ORGANIZATION

Prerequisite: Economics 202.0 and 307.0 or permission of the instructor.

The concept of industry; institutional forms of economic units; market structure; policies for promotion of competition; the methods of governmental control of key industries; international aspects of industrial organization.

Lectures: Three hours a week, two semesters.

317.0: PUBLIC FINANCE

Prerequisite: Economics 202.0

The role of taxes and government expenditures in terms of economic analysis. Application to Canada including a study of Federal-Provincial relations.

Lectures: Three hours a week, two semesters.

319.0: LABOUR ECONOMICS

Prerequisite: Economics 202.0 or permission of the instructor.

Factors affecting wages, working conditions and employment in industrial societies; the role of market forces and collective bargaining in wage determination; the development of labour unions and collective bargaining in Canada, the United States and Europe; the effect of labour unions on the economy; our changing labour force and manpower policies for the future.

Lectures: Three hours a week, two semesters.

323.0: SOVIET-TYPE ECONOMIES

Prerequisite: Economics 202.0

This course will cover such topics as the following: Development of Soviet Economics – historical background, institutional framework, the rate of growth; the problems of saving, investment and central planning the origin of the Soviet Block – Communist international economics,

the problems of economic integration in Eastern and Western Europe, East-West trade, economic reforms in Eastern Europe; the Soviet-Type Economies in Asia.

Philosophy 209 Marxist Philosophy, is an appropriate supporting humanities elective for this course.

Lectures: Three hours a week, two semesters.

440.1: ADVANCED MICROECONOMICS

Prerequisite: Economics 300.1 or 300.2

Treatment of the major topics in microeconomic theory at an advanced level. Topics covered 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 the decision making models.

Lectures: Three hours a week, one semester — half course.

441.2: ADVANCED MACROECONOMIC THEORY

Prerequisite: Economics 301.1 or 301.2

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.

Lectures: Three hours a week, one semester — half course.

444.2: APPLICATIONS OF CONTEMPORARY ECONOMIC HISTORICAL ANALYSIS

Prerequisites: Economics 300.1 or 300.2 and 301.1 or 301.2 or permission.

Emphasis is given to those issues which relate to the economic growth of the economy of North America. Economic theory is applied in the investigation of these historical problems. The objective of this course is to introduce the student to the methodology and problems of modern economic history, and to develop the student's facility in applying economic theory to the resolution of these problems.

Lectures: Three hours a week, one semester — half course.

47.0: ADVANCED STUDY IN A SPECIAL SUBJECT: CAPITAL MARKETS AND STABILIZATION POLICY

Prerequisite: Economics 301.1 or 301.2 or permission.

This course is intended to provide members of the department, from time to time, the opportunity of presenting to the students the results of studies the professor has quite recently undertaken. For the 1971-72 academic year the topic is described as follows:

Capital market structure in theory and in Canada; financial intermediaries private and public, in theory and in Canadian experience; the theory, character and control of business cycles, especially of the North American variety, problems of economic stabilization; assessment of current economic conditions and current stabilization policy.

Lectures: Three hours a week, two semesters.

EDUCATION

M. MacMillan Acting Dean

Bernard E. Davis

B. Hanrahan

F. Phillips

L. Scobbie

D. Weeren

F. Dockrill

Assistant Professor

Assistant Professor

Assistant Professor

Assistant Professor

Associate Professor

Associate Professor

Assistant Professor

(B. ED. COURSES)

101.0: PHILOSOPHY OF EDUCATION

A fundamental study of the nature and aims of education culminating in the formulation of a truly humanistic Philosophy of Education for modern times.

Lectures: Three hours a week, two semesters.

402.0: PSYCHOLOGY OF EDUCATION

A study of the nature, equipment, growth, development, evaluation, and adjustment of the learner. Psychology 201.0 or equivalent is the normal prerequisite or concurrent requirement but may be waived for students who have completed readings prescribed by the School of Education.

Lectures: Three hours a week, two semesters.

403.0: GENERAL METHODS OF TEACHING

The application of the elementary principles of Philosophy and Psychology of Education to the organization and presentation of subject matter in the classroom.

Lectures: Three hours a week, two semesters.

404.0: HISTORY OF EDUCATION

A survey of our educational heritage aimed at assisting in the formation of sound educational principles and practices.

Lectures: Three hours a week, two semesters.

405.0: PRACTICE TEACHING

Practice teaching sessions will consist of observation and practical teaching in the public school system. The extent and dates of these sessions will be arranged by the Education staff.

406.0: CONTENTS AND METHODS OF SPECIFIC HIGH SCHOOL SUBJECTS

The seminars comprising this course discuss the concepts and competencies which the junior and senior high school teacher of a given subject should be concerned with developing in his students, and the methods most conducive to that development.

Sessions: Three hours a week, two semesters.

EDUCATION (M.A. COURSES)

EDUCATION 510.0: GRADUATE RESEARCH SEMINAR

A seminar in research techniques and statistical concepts culminating in the presentation and defence of theses.

EDUCATION 516.0: ANGLO-AMERICAN EDUCATION

A lecture and seminar course on education in the United Kingdom, the United States of America, English-speaking Canada, and selected countries with related educational patterns, aimed at the identification and analysis of common and distinguishing properties, practices and problems.

Sessions: Three hours a week, two semesters.

EDUCATION 519.0: EDUCATIONAL ADMINISTRATION

A seminar and lecture course analyzing the executive requirements for educational direction.

Sessions: Three hours a week, two semesters.

COMPARATIVE EDUCATION 526.0: CONTINENTAL EDUCATION

A lecture and seminar course on education in selected Continental European countries, including France, and selected societies with varied educational patterns, including French-speaking Canada, aimed at the identification and analysis of common and distinguishing properties, practices and problems.

Sessions: Three hours a week, two semesters.

PHILOSOPHY 530.0: PHILOSOPHICAL CRITIQUE OF MOTIVATION

A lecture and seminar course on the cultural significance of the psychology of motivation. As a study of social exigencies in the learning situation, this course is co-extensive with Philosophy 521.0 from the perspective of ultimate motivations.

PHILOSOPHY 531.0: DEVELOPMENTS IN THE SCIENCE AND PHILOSOPHY OF LANGUAGE: APPLICATIONS TO ENGLISH TEACHING.

An introduction to transformational grammar, logic, the study of logical structures in English, semantics, and some of the results of descriptive linguistics. An investigation of the implications of these for the teaching of English: grammar, composition, clear thinking, and effective communication.

Sessions: Three hours a week, two semesters.

PSYCHOLOGY 532.0: PERSONALITY DEVELOPMENT

Prerequisite: Ed. 402.0; Psych. 431.0, 432.0, or by permission of the Professor.

A lecture and seminar course dealing with the main theories of personality and of personality development. Emphasis will be laid on the Dynamic interpretation of development, with particular reference to the school situation at all ages.

PHILOSOPHY 533.0: THEORY OF KNOWLEDGE

A lecture and seminar course based on Lonergan's Insight and directed towards developing an epistemology inherent in the learning process.

Sessions: Three hours a week, two semesters.

PSYCHOLOGY 542.0: MOTIVATION AND LEARNING

Prerequisite: Education 402.0 (Psychology of Education) and Psychology 301.0 (Psychology of Learning and Motivation), (or the permission of the Professor)

A seminar course which discusses the tenets of modern theory as developed through the findings of experimental psychology. The following are examples of the type of topic dealt with: development of learning theory, conditioning, reinforcement, punishment, memory, concept learning. Application of learning theory to the classroom situation will be encouraged.

Sessions: Three hours a week, two semesters.

PSYCHOLOGY 552.0: PSYCHOPATHOLOGY OF EDUCATION

Prerequisite: Education 402.0 and Psych. 532.0 (or the permission of the Professor)

A lecture and seminar course devoted to the study of the causes and possible remedy of failure in educational performance and in emotional adjustment, these being considered separately and also in their effect on each other.

Sessions: Three hours a week, two semesters.

PSYCHOLOGY 560.0: MENTAL DEVELOPMENT AND THE CURRICULUM

Prerequisite: Minimally Educational Psychology, #402.0 or equivalent with, desirably previous undergraduate courses in psychology.

A lecture and seminar course for the purpose of developing in students a capacity for critical analysis of the basic assumptions of curriculum design and requirements as exemplified in pedagogy and textbooks, by means of a study of conceptualisations of all aspects of mental development.

Sessions: Three hours a week, two semesters.

PSYCHOLOGY 562.0: SOCIAL PSYCHOLOGY

Prerequisite: Education 402.0 (Psychology of Education) and Psychology 410.0 (Social Psychology), or the permission of the professor.

A seminar course which deals with the findings of experimental social psychology and the attempt to explain social behavior in terms of learning theory. The following are examples of the type of topic dealt with: theories of cognitive consistency, perception of persons, attitude development and change, prejudice, communication, game theory. The classroom is a social situation and application of the findings discussed will be encouraged.

ENGINEERING

Ryan, J.L.

Professor

Wanner, Donald B.

Assistant Professor

Giltham, D.A.

Assistant Professor

Reddy, V.R.

Assistant Professor

McIntrooney, D.L.

Assistant Professor

Bowes, H.G.

Instructor

113.2: SURVEYING FIELD COURSE

Prerequisite: Engineering 113.1

Practical surveying problems; the orderly compilation and recording of survey data. Transit and tape surveys, curve layouts, differential levelling. Profile plots and contour mapping. Astronomical observations.

Text: To be announced.

106.1: ENGINEERING DESIGN GRAPHICS

Engineering drawing and sketching with emphasis on sketching, analysis and synthesis of problems by using graphical methods as part of the design process, reading drawings, simple design projects.

Text: Engineering Design Graphics – James H. Earle, (Addison Wesley Publishing Company)

Engineering Graphics and Design Problems – Earle, Cleland, Stark, Mason, Bardell, Vogel, and Guerard (Addison Wesley Publishing Company)

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

107.2: DESIGN AND DESCRIPTIVE GEOMETRY PROBLEMS

Prerequisite: Engineering 106.1.

Basic Descriptive Geometry, plotting graphs and nomographs, graphical analysis and curve fitting, team design, projects with emphasis on creativity.

Text: Engineering Design Graphics as for Engineering 106.

Design and Descriptive Geometry Problems – Earle, Cleland, Stark, Mason, Bardell, Vogel, and Guerard (Addison Wesley).

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

108.1 PRINCIPLES OF ENGINEERING

Prerequisite: None.

A course for freshmen which discusses the philosophy of design and introduces the concepts of energy, economics and human factors and how these concepts are used by engineers in the solution of problems. Solution techniques indicated include an introduction to computer programming.

Lectures: Three hours a week. One semester.

Laboratory: Three hours a week.

112.2: ENGINEERING MEASUREMENTS

Prerequisite: Math 110.1, 111.2 concurrently.

This course presents the theory of measurements and applications of probability and statistics to measurements. Analysis of experimental data is included. The generalized measurement system is discussed and examples are presented. Lab work emphasizes ingenious use of measurement systems involving creativity, synthesis and analysis.

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

113.1: SURVEYING

Prerequisite: None

A course covering the theory and practices involved in Surveying for Engineering projects. The topics included are: Surveying instruments, measurement of distance, difference in elevation, direction angles, area

and earthwork calculations, circular curves, photogrammetry and mapping, applications of astronomy to engineering.

Lectures: Three hours a week, one semester.

203.1 (203.2): ENGINEERING MECHANICS (STATICS)

Prerequisites: Engineering 106.1, Engineering 107.2, Mathematics 121 (concurrently)

Equilibrium polygon and polygonal frames for all systems of loads; graphical representation of shear and moment for non-continuous beams; roof trusses, bents, including dead and live loads with fixed ends and ends on rollers; simple cantilevers.

Text: Mechanics for Engineers – Beer & Johnson.

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

204.1 (204.2): COMPUTER SCIENCE

Prerequisites: Math 110.1, 111.2.

An introduction to computer methods and the analysis of Engineering problems using the computer, including: introduction, history, philosophy, Number Systems, Computer logic, logic circuits, the physical computer components, machine language and finally Fortran IV Language.

Text: To be announced.

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

302.0: ENGINEERING MECHANICS (DYNAMICS)

Prerequisites: Mathematics 210.1 and 211.2, Mathematics 311.0 (concurrently).

Force, friction, determination of centroids and moments of inertia. Rectilinear, curvilinear and rotational motion of particles and solid bodies; work, energy and power, impulse and momentum.

Text: Mechanics For Engineers – Beer & Johnson.

Lectures: Three hours a week, two semesters.

303.1: FLUID MECHANICS

Prerequisite: Mathematics 210.1 and 211.2

A study of fundamentals of fluid mechanics based on an engineering science approach to compressible and incompressible fluids. Fluid properties and characteristics; fluid statics; conservation of mass and energy; Euler's equation of motion and Bernoulli's equation, impulse momentum in steady flow and introduction to the boundary layer concept.

Text: Principles of Fluid Mechanics—Kenyon (Ronald)

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

304.1: MECHANICS OF DEFORMABLE BODIES

Prerequisite: Engineering 203.1 or 203.2, Mathematics 210.1 and 211.2.

- Stress & Strain —Concepts & Definitions
- Fundamentals of Elasticity
- Torsional Loading
- Flexural Loading
- Statically Indeterminate Structures
- Columns
- Combined Stresses & Strains
- Connections

Text: "Mechanics of Materials" 2nd Edition — Higdon, Olsen, Stiles & Weese

Lectures: Three hours a week, one semester

Laboratory: Three hours a week, one semester.

306.2: ENGINEERING THERMODYNAMICS

Prerequisites: Physics 321.0, Mathematics 210.1 and 211.2.

The development of the general energy equation and the First Law; the Carnet Cycle and the development of the entropy concepts, steam power plants, refrigeration and gas engine applications.

Text: Thermodynamics — Van Wylen (Wiley)

Lectures: Three hours a week, one semester.

Laboratory: Three hours a week, one semester.

307.0: ENERGY CONVERSION

Prerequisites: Mathematics 210.1, 211.2, Physics 221.0, Engineering 306.2, Engineering 303.1 (may be taken concurrently).

Theoretical heat engine cycles, modification of theoretical cycles in **practice**. Principles of operation of steam engine; steam nozzles and **turbines**; gas turbines and elementary jet propulsion. Reciprocating **pumps**, centrifugal pumps; water turbines; impulse and reaction **turbines**.

Text: To be announced.

Lectures: Three hours a week, two semesters.

308.0: SYSTEM DYNAMICS

Prerequisites: Physics 111.0, 221.0, Mathematics 310.0 (concurrently).

A **unified** treatment of electrical and mechanical systems. Circuit **elements**: single energy-port and two energy-port elements. Generalized **continuity** and compatibility: Kirchoff's current and voltage laws, **conservation** of mass, momentum and energy. Formulation of **differential** equations; loop and node methods. Solution of equations; **classical** and Laplace transform methods and basic circuit measurement. **Transient** and frequency analysis of linear systems. Simulation and **analog** solution of a variety of engineering problems.

Text: Introduction to System Dynamics – Shearer, Murphy and Richardson (Addison Wesley, 1967).

Lectures: Three hours a week, two semesters.

Supervised Problem Sessions: Three hours a week, two semesters.

314.2: ENGINEERING MATERIALS

Prerequisite: Chemistry 201.0, Physics 221.0, Mathematics 210.1 & 211.2.

- Introductory Principles
- Structure of Solid Phases
- Atomic Processes in Solids
- Electrical Processes in Solids
- Multiphase Materials
- Materials utilization

Text: "Materials Science for Engineers" – L.W. Van Vlack

Lectures: Three hours a week, one semester

Laboratory: Three hours a week, one semester.

ENGLISH

Full Time Faculty

Roger H. Crowther	Associate Professor (Chairman)
Janet Baker	Assistant Professor
Cyril J. Byrne	Lecturer
Lilian Falk	Assistant Professor
Thomas Edward Flynn	Associate Professor
John Geoffrey Harrison	Associate Professor
Denis P. Healy	Assistant Professor
Roger A. MacDonald	Assistant Professor
Kenneth MacKinnon	Assistant Professor
David H. Parkin	Assistant Professor
Richard Perkyns	Assistant Professor
David Pigot	Assistant Professor
John Power, S.J.	Assistant Professor
Andrew T. Seaman	Assistant Professor
John K. Snyder	Assistant Professor
Christopher J. Terry	Assistant Professor
Kathleen R. Tudor	Assistant Professor
Terrance A. Whalen	Assistant Professor

NOTE:

English 101.0 must be taken by all students entering the university without a Senior Matriculation credit in English.

English 200.0 normally will be prerequisite to all higher English courses.

Only one course at the level 300.0 to 310.0 may be included in a student's minimum requirement for a major.

Students planning to register for higher English courses are requested to enquire at the department office for advance reading lists.

101.0: CRITICAL READING AND WRITING

Prerequisite: Junior Matriculation English or equivalent.

A course designed to help the student read with discrimination and order his insights in expressive prose.

Text: To be announced.

Lectures: Three hours a week; two semesters.

200.0: INTRODUCTION TO LITERARY FORMS

Prerequisite: English 101.0 or equivalent.

A critical introduction to the craft of the novel, poetry, and drama. Emphasis will be placed on major works from various periods of literary study. This course is a prerequisite for all 300.0 level courses.

Text: To be announced.

Lectures: Three hours a week; two semesters.

250.0: LITERATURE SEMINAR FOR MAJORS

Prerequisite: A (B) grade average in English 101.0 or equivalent. This course also requires that: a) the student intend to major in English and b) that he has completed or is concurrently enrolled in English 200.0.

This course is organized in substance as a practical criticism course. The course will include at least four novels, four plays, and an anthology of poetry. All members of the department are involved in the teaching. As a result, students majoring in English will be exposed to the various points of view in the department before doing advanced work.

Text: To be announced.

Lectures: Two hours a week; two semesters.

300.0: COMPARATIVE LITERATURE: EUROPE

Prerequisite: English 200.0.

A seminar course examining some of the characteristics of West European Literature and a consideration of whether or not it is worth reading. Details of texts will be posted.

Text: To be announced.

Lectures: Three hours a week; two semesters.

301.0: THE MODERN NOUVELLE

Prerequisite: English 200.0.

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 characterise the modern imaginative and cultural consciousness of the West.

To examine, within this broader cultural context, the manner in which those literary conventions, elements and emphases characteristic of the

novel in general and of the nouvelle in particular lend themselves with peculiar appropriateness to the imaginative illumination of certain important areas of contemporary emotional, moral and social experience.

Text: To be announced.

Lectures: Three hours a week; two semesters.

302.0: CANADIAN LITERATURE

Prerequisite: English 200.0 or its equivalent.

Actual selections of texts and emphasis will be left to the lecturer; the whole value of the course would be in creating and maintaining an exploratory and experimental atmosphere.

Text: To be announced.

Lectures: Three hours a week; two semesters.

303.0: SHAKESPEARE

Prerequisite: English 200.0 or equivalent.

Provisionally, intensive study will be required of the following texts: Love's Labour's Lost; The Merchant of Venice; Twelfth Night, As You Like It; Hamlet; Othello; Anthony and Cleopatra; The Winter's Tale. Reference will be made to other Shakespearian plays, and to such literary background material of the Elizabethan period as will enrich the study of the major texts.

Text: To be announced.

Lectures: Three hours a week; two semesters.

304.0: THE DEVELOPMENT OF DRAMA IN THE THEATRE

Prerequisite: English 200.0.

This course will trace in outline the history of drama in relation to the living theatre from its inception to contemporary styles, with particular reference to the Greek and Roman classical theatre; the religious origins and secularization of English drama; the Elizabethan Playhouse; the development of the private theatre and Proscenium stage; the clash of Puritanism with the Restoration and 18th century theatre; pioneers of the new stage craft in the later 19th and 20 centuries.

Text: To be announced.

Lectures: Three hours a week; two semesters.

305.0: INTRODUCTION TO LINGUISTICS

Prerequisite: English 200.0.

The course surveys past and present approaches to linguistic science with reference to phonetics, phonemics, morphology, syntax, semantics, and classification of languages.

Text: To be announced.

Lectures: Three hours a week; two semesters.

306.0: RELIGION AND DRAMA (See Religious Studies 305.0)

Prerequisite: English 200.0.

307.0: RELIGION IN 20th CENTURY POETRY (See Religious Studies 336.0)

Prerequisite: English 200.0.

350.0: HISTORY OF THE ENGLISH LANGUAGE

Prerequisite: English 200.0.

A course designed to acquaint the student with the nature of language and its growth. The student will be instructed in the basic techniques of linguistic analysis.

Text: To be announced.

Lectures: Three hours a week; two semesters.

351.0: MIDDLE ENGLISH 1100 to 1400

Prerequisite: English 200.0.

A course intending to give students the groundwork of Medieval, both English and European, literary conventions, (Courtly Love, for instance) through a study of texts such as Sir Gawain and the Green Knight, Malory's Morte d'Arthur and to look at the social, political, and religious temper of the period through a study of the text of Langland's Piers Plowman, the Miracle and Morality plays, and the religious and secular lyrics of the period. Students should consult with the professor before registering about a possible co-requisite.

Text: To be announced.

Lectures: Three hours a week; two semesters.

352.0: CHAUCER AND HIS CONTEMPORARIES

Prerequisite: English 200.0.

The course studies the poetry of Chaucer in depth, refers to contemporaries of Chaucer such as Wm. Langland, and may extend to consideration of the 'Scottish Chaucerians'.

Text: To be announced.

Lectures: Three hours a week; two semesters.

353.0: TUDOR POETRY AND PROSE

Prerequisite: English 200.0.

A study of the poetry and prose mainly of the Tudor era. Major emphasis will be given to the works of Wyatt, Surrey, Sidney, and Spenser.

Text: To be announced.

Lectures: Three hours a week; two semesters.

354.0: SHAKESPEARE: POEMS AND PLAYS

Prerequisite: English 200.0.

An extensive study of Shakespeare's comedies, romances, tragedies and sonnets. This course also involves attention to the background of Elizabethan society and theatre.

Text: To be announced.

Lectures: Three hours a week; two semesters.

355.0: ELIZABETHAN AND JACOBEAN DRAMA

Prerequisite: English 200.0.

This course excludes attention to Shakespeare and concentrates mainly on the dramatic works of Marlowe, Jonson, Beaumont, Fletcher, and Webster.

Text: To be announced.

Lectures: Three hours a week; two semesters.

399.0: 17th CENTURY POETRY AND PROSE: 1600-1660

Prerequisite: English 200.0.

The basic text will be 17th Century Poetry and Prose. An inquiry into the change of civilization in the English seventeenth century with comparative reference to some contemporary French writers. The inquiry will include the questions, is the poetry of this period worth reading, what is worth reading in it, and why (or why not) it worth reading?

Text: 17th Century Poetry & Prose, (Witherspoon & Warnke)

Lectures: Three hours a week; two semesters.

400.0: RESTORATION AND EIGHTEENTH-CENTURY POETRY AND PROSE 1666-1780

Prerequisite: English 200.0.

A study of the central works in the Neo-Classic era. Major attention is given to Butler, Dryden, Swift, Pope, and Johnson.

Text: To be announced.

Lectures: Three hours a week; two semesters.

401.0: THE NOVEL: DEFOE TO AUSTEN

Prerequisite: English 200.0.

The origin and development of the English novel. Special emphasis is placed on the works of Defoe, Richardson, and Fielding. The study may also include representative works of Sterne, Smollett, Goldsmith, Mary Shelley, Godwin, several Gothic novelists, and Jane Austen.

Text: To be announced.

Lectures: Three hours a week; two semesters.

402.0: THE NINETEENTH CENTURY NOVEL

Prerequisite: English 200.0.

Authors may include Jane Austen, Dickens, Thackeray, The Brontes, George Eliot, Hardy, Meredith, James.

Text: To be announced.

Lectures: Three hours a week; two semesters.

352.0: CHAUCER AND HIS CONTEMPORARIES

Prerequisite: English 200.0.

The course studies the poetry of Chaucer in depth, refers to contemporaries of Chaucer such as Wm. Langland, and may extend to consideration of the 'Scottish Chaucerians'.

Text: To be announced.

Lectures: Three hours a week; two semesters.

353.0: TUDOR POETRY AND PROSE

Prerequisite: English 200.0.

A study of the poetry and prose mainly of the Tudor era. Major emphasis will be given to the works of Wyatt, Surrey, Sidney, and Spenser.

Text: To be announced.

Lectures: Three hours a week; two semesters.

354.0: SHAKESPEARE: POEMS AND PLAYS

Prerequisite: English 200.0.

An extensive study of Shakespeare's comedies, romances, tragedies and sonnets. This course also involves attention to the background of Elizabethan society and theatre.

Text: To be announced.

Lectures: Three hours a week; two semesters.

355.0: ELIZABETHAN AND JACOBEAN DRAMA

Prerequisite: English 200.0.

This course excludes attention to Shakespeare and concentrates mainly on the dramatic works of Marlowe, Jonson, Beaumont, Fletcher, and Webster.

Text: To be announced.

Lectures: Three hours a week; two semesters.

356.0: 17th CENTURY POETRY AND PROSE: 1600-1660

Prerequisite: English 200.0.

The basic text will be 17th Century Poetry and Prose. An inquiry into the change of civilization in the English seventeenth century with comparative reference to some contemporary French writers. The inquiry will include the questions, is the poetry of this period worth reading, what is worth reading in it, and why (or why not) it worth reading?

Text: 17th Century Poetry & Prose, (Witherspoon & Warnke)

Lectures: Three hours a week; two semesters.

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Text: To be announced.

Lectures: Three hours a week; two semesters.

402.0: THE NINETEENTH CENTURY NOVEL

Prerequisite: English 200.0.

Authors may include Jane Austen, Dickens, Thackeray, The Brontes, George Eliot, Hardy, Meredith, James.

Text: To be announced.

Lectures: Three hours a week; two semesters.

403.0: ROMANTIC POETRY

Prerequisite: English 200.0.

A study of 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.

Text: To be announced.

Lectures: Three hours a week; two semesters.

404.0: VICTORIAN POETRY AND PROSE

Prerequisite: English 200.0.

The course is designed to acquaint students with the attitudes and ideas of the writers in the Victorian period. Arnold, Browning, and Tennyson are studied in depth.

Text: To be announced.

Lectures: Three hours a week; two semesters.

405.0: NINETEENTH-CENTURY NORTH AMERICAN LITERATURE

Prerequisite: English 200.0.

Major writers of the 19th century. Critical readings of works by Cooper, Hawthorne, Melville, Emerson, Thoreau, Whitman, Emily Dickinson, James.

Text: To be announced.

Lectures: Three hours a week; two semesters.

406.0: TWENTIETH-CENTURY NORTH AMERICAN LITERATURE

Prerequisite: English 200.0.

Representative figures in the modernist tradition. A consideration of the work and place of such writers as Dreiser, Hemingway, Faulkner, Fitzgerald, Mailer, Pynchon; in poetry that of T.S. Eliot, Robert Frost, Hart Crane, and others.

Text: To be announced.

Lectures: Three hours a week; two semesters.

402.0: MODERN ENGLISH POETRY

Prerequisite: English 200.0.

A study of the major poets of the modern era. Authors will include Hardy, Hopkins, Eliot, Pound, Yeats, and Auden. The course will also include reference to English poetry of the fifties and sixties.

Text: To be announced.

Lectures: Three hours a week; two semesters.

408.0: TWENTIETH CENTURY DRAMA

Prerequisite: English 200.0.

A study of the major dramatists from the late 19th century to the contemporary movements. Dramatists studied include Ibsen, Chekhov, Strindberg, Shaw, Synge, O'Casey, O'Neill, Pirandello, Brecht, Wilder, Williams, Miller, Beckett, Ionesco, Pinter, Osborne, and Albee.

Text: To be announced.

Lectures: Three hours a week; two semesters.

409.0: LITERATURE, THOUGHT, AND ART — 1880-1930

Prerequisite: English 200.0.

This is not a course in the history of ideas. It is an exploration of the relationship between the cultural background of the period and its effect on imaginative works.

Text: To be announced.

Lectures: Three hours a week; two semesters.

410.0: THE MODERN NOVEL

Prerequisite: English 200.0.

Authors may include James, Conrad, Lawrence, Joyce, Forster, Virginia Woolf.

Text: To be announced.

Lectures: Three hours a week; two semesters.

411.0: THEORY AND PRACTICE OF CRITICISM

Prerequisite: English 200.0 and two 300.0 level courses.

A course offering practice in individual judgment of various literary forms, with introduction to the principles of criticism.

Prospective Honours students are recommended to take this course after (at least) two courses at the 300 level. Students may select this course only if they have the approval of the Department.

Text: To be announced.

Lectures: Three hours a week; two semesters.

450.0: SPECIAL AUTHOR

Prerequisite: English 200.0 and at least three 300.0 level courses.

A tutorial course open to students who prove themselves worthy of studying a given author in depth.

Text: To be announced.

Tutorials: By arrangement with supervisor.

451.0: SPECIAL SUBJECT

Prerequisite: English 200.0 and at least three 300.0 level courses.

A tutorial course open to students who prove themselves worthy of studying a special theme or movement in depth.

Text: To be announced.

Tutorials: By arrangement with supervisor.

550.0: SPECIAL AUTHOR

Prerequisite: Enrollment in the English Honours Programme, or special recommendation of the department.

This course will provide the opportunity to study a particular author in considerable depth and detail, and will require some measure of independence and initiative in the student.

Tutorials: By arrangement with supervisor, two semesters.

551.0: SPECIAL SUBJECT

Prerequisite: Enrollment in the English Honours Programme, or special recommendation of the department.

This course will provide 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, two semesters.

552.0: LITERATURE AND CRITICISM SEMINAR

Prerequisite: Enrollment in the English Honours Programme, or special recommendation of the department.

A seminar course aimed towards an understanding of the general foundations of literature and criticism, and an appreciation of the links between Literature and other disciplines. The course will use material from a wide variety of periods and sources.

Seminars: Two hours per week, two semesters.

FRENCH

Guy LePierres

Associate Professor, Chairman
Professor

F.J. Devine, S.J.

Assistant Professor

Maryvonne Herivault

Assistant Professor

John Mackriss

Assistant Professor

Arthur Murphy

Associate Professor

Esther Fernande Pepin

Assistant Professor

Rose Marie Poulet

N.B. Courses beyond the 102.0 level are taught in French.

100.0: INTRODUCTION TO THE FRENCH LANGUAGE.

Prerequisite: None.

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 the oral aspect.

Text: Assimil (Garneau)

Lectures: Three hours a week, two semesters.

Language Laboratory: Three half-hours a week, two semesters.

FRENCH 102.0: ORAL AND WRITTEN FRENCH

Prerequisite: Junior Matriculation French.

An audio-lingual course based on modern principles of linguistics whose main objective is the development of the ability to speak French. It is supplemented by a Workbook for written composition and by oral practice in the language laboratory.

Texts: Perspectives de France – Bieler, Haac, Léon, Lessons 1-15.
(Prentice Hall) Workbook for Perspectives de France.

Lectures: Three hours a week, two semesters.

Language Laboratory: Three half hours a week, two semesters.

FRENCH 200.0: INTERMEDIATE ORAL AND WRITTEN FRENCH

Prerequisite: Senior Matriculation French or French 102.0.

A continuation of the method adopted in French 102.0 to develop proficiency in the use of the spoken language. The course also includes the writing of free compositions in French on topics of current interest.

Texts: Perspectives de France – Bieler, Haac, Léon, Lessons 16-32.
(Prentice Hall) Workbook for Perspectives de France.

Lectures: Three hours a week, two semesters.

Language Laboratory: Three half hours a week, two semesters.

FRENCH 300.0: INTRODUCTION TO FRENCH LITERATURE

Prerequisite: French 200.0.

A study of the main trends in French Literature through the works of representative writers. Literary analysis of selected texts in prose and verse. This course is **OBLIGATORY** for all students whose major concentration is French.

Text: Lectures classiques et Modernes. Hall et Michaud (Odyssey)
Harrap's French – English Dictionary.

Lectures: Three hours a week, two semesters.

FRENCH 301.0: ADVANCED CONVERSATION AND CULTURAL STUDIES

A thoroughly practical course intended to further develop the student's ability to speak French. Various aspects of French cultural life will be discussed in class. Texts by French contemporary writers will help the student acquire a general idea of French civilization. Oral practice in the Language Laboratory.

Text: France de nos jours, Carlut et Brée (MacMillan).

Lectures: Three hours a week, two semesters.

Laboratory: Two half-hours a week, two semesters.

FRENCH 400.0: XVI CENTURY FRENCH LITERATURE

Texts: XVI Siècle, Lagarde et Michard (Bordas)
Robbais, Oeuvres (extraits) 2 volumes (Classiques Larousse)
Montaigne, Essais, 3 volumes (Nouveaux Classiques Larousse).

Lectures: Three hours a week, two semesters.

FRENCH 401.0: XVII CENTURY FRENCH LITERATURE

Texts: XVIIe Siècle – Lagarde et Michard (Bordas); Cinna – Corneille;
Le Médecin malgré lui – Racine; Les Précieuses Ridicules – Molière.

Lectures: Three hours a week, two semesters.

FRENCH 402.0: XVIII CENTURY LITERATURE

Texts: XVIIIe Siècle – Lagarde et Michard (Bordas); Candide –
Voltaire; Discours sur l'origine et les fondements de l'inégalité parmi les
hommes – Rousseau; Le Mariage de Figaro – Beaumarchais.

Lectures: Three hours a week, two semesters.

FRENCH 407.0: XIX CENTURY ROMANTICISM

Texts: XIXe Siècle – Lagarde et Michard (Bordas); Atala – Chateau-
brant; Ruy Blas – Hugo; Poésies Choiesies – Musset.

Lectures: Three hours a week, two semesters.

FRENCH 408.0: XIX CENTURY REALISM

Texts: Le Rouge et le Noir, La Chartreuse de Parme – Stendhal;
Madame Bovary, L'Education Sentimentale – Flaubert.

Lectures: Three hours a week, two semesters.

FRENCH 409.0: XX CENTURY LITERATURE FROM 1900 to 1950.

Texts: Vol de Nuit – Saint-Exupéry; Thérèse Desqueyroux – Mauriac;
Antigone – Anouilh; La Peste – Camus; La guerre de Troie n'aura pas
lieu – Giraudoux; la Reine morte-Montherlant.

Lectures: Three hours a week, two semesters.

FRENCH 410.0: CONTEMPORARY FRENCH LITERATURE.

Text: Anthologie vivante de la littérature d'aujourd'hui – Pierre de
Boisdeffre. (Librairie Académique Perrin).

Lectures: Three hours a week, two semesters.

Texts: Perspectives de France — Bieler, Haac, Léon, Lessons 1-15.
(Prentice Hall) Workbook for Perspectives de France.

Lectures: Three hours a week, two semesters.

Language Laboratory: Three half hours a week, two semesters.

FRENCH 200.0: INTERMEDIATE ORAL AND WRITTEN FRENCH

Prerequisite: Senior Matriculation French or French 102.0.

A continuation of the method adopted in French 102.0 to develop proficiency in the use of the spoken language. The course also includes the writing of free compositions in French on topics of current interest.

Texts: Perspectives de France — Bieler, Haac, Léon, Lessons 16-32,
(Prentice Hall) Workbook for Perspectives de France.

Lectures: Three hours a week, two semesters.

Language Laboratory: Three half hours a week, two semesters.

FRENCH 300.0: INTRODUCTION TO FRENCH LITERATURE

Prerequisite: French 200.0.

A study of the main trends in French Literature through the works of representative writers. Literary analysis of selected texts in prose and verse. This course is **OBLIGATORY** for all students whose major concentration is French.

Text: Lectures classiques et Modernes. Hall et Michaud (Odyssey)
Harrap's French — English Dictionary.

Lectures: Three hours a week, two semesters.

FRENCH 301.0: ADVANCED CONVERSATION AND CULTURAL STUDIES

A thoroughly practical course intended to further develop the student's ability to speak French. Various aspects of French cultural life will be discussed in class. Texts by French contemporary writers will help the student acquire a general idea of French civilization. Oral practice in the Language Laboratory.

Text: France de nos jours, Carlut et Brée (MacMillan).

Lectures: Three hours a week, two semesters.

Laboratory: Two half-hours a week, two semesters.

FRENCH 400.0: XVI CENTURY FRENCH LITERATURE

Texts: XVI Siècle, Lagarde et Michard (Bordas)
Mabius, Oeuvres (extraits) 2 volumes (Classiques Larousse)
Montaigne, Essais, 3 volumes (Nouveaux Classiques Larousse).

Lectures: Three hours a week, two semesters.

FRENCH 401.0: XVII CENTURY FRENCH LITERATURE

Texts: XVIIe Siècle—Lagarde et Michard (Bordas); Cinna—Corneille;
Phèdre—Racine; Les Précieuses Ridicules — Molière.

Lectures: Three hours a week, two semesters.

FRENCH 402.0: XVIII CENTURY LITERATURE

Texts: XVIIIe Siècle — Lagarde et Michard (Bordas); Candide —
Voltaire; Discours sur l'origine et les fondements de l'inégalité parmi les
hommes — Rousseau; Le Mariage de Figaro — Beaumarchais.

Lectures: Three hours a week, two semesters.

FRENCH 407.0: XIX CENTURY ROMANTICISM

Texts: XIXe Siècle — Lagarde et Michard (Bordas); Atala — Chateau-
briant; Ruy Blas — Hugo; Poésies Choisies — Musset.

Lectures: Three hours a week, two semesters.

FRENCH 408.0: XIX CENTURY REALISM

Texts: Le Rouge et le Noir, La Chartreuse de Parme — Stendhal;
Madame Bovary, L'Education Sentimentale — Flaubert.

Lectures: Three hours a week, two semesters.

FRENCH 409.0: XX CENTURY LITERATURE FROM 1900 to 1950.

Texts: Vol de Nuit — Saint-Exupéry; Thérèse Desqueyroux — Mauriac;
Antigone — Anouilh; La Peste — Camus; La guerre de Troie n'aura pas
lieu — Giraudoux; la Reine morte-Montherlant.

Lectures: Three hours a week, two semesters.

FRENCH 410.0: CONTEMPORARY FRENCH LITERATURE.

Text: Anthologie vivante de la littérature d'aujourd'hui — Pierre de
Boisdeffre. (Librairie Académique Perrin).

Lectures: Three hours a week, two semesters.

FRENCH 412.0: FRENCH CANADIAN LITERATURE

A general survey of French Canadian Literature with special emphasis on the novel from 1930 to the present day.

Text: La dalle des Morts et la Folle – Savard (Ne'nuphar) – Le Survenant – Guèvremont (Fides) « Doux-amer-Martin (Cercle du Livre de France); Poèmes choisis – Nelligan (Fides); L'Oeuvre de pierre – Paradis (Conseil des Arts),

Lectures: Three hours a week, two semesters.

FRENCH 413.0: FRENCH CIVILIZATION

An in-depth study of France and of fundamental aspects of French life and culture: history; geography; contemporary political institutions; educational system; social and artistic life; through lectures, readings, discussions and exposés. The topics will often be illustrated with slides.

Text: La civilisation française, Victor Duloup (Longmans).

Lectures: Three hours a week, two semesters.

FRENCH 414.0: EVOLUTION OF THE FRENCH NOVEL

Course description: An examination of the principal stages in the development of the French Novel.

Texts: La Princesse de Clèves – La Fayette; Manon Lescaut - l'abbé Prévost; Eugénie Grandet – Balzac; Le Rouge et le Noir – Stendhal; Madame Bovary – Flaubert; Du côté de chez Swann – Proust.

Summer reading is strongly advised.

Lectures: Three hours a week, two semesters.

FRENCH 415.0: THE FRENCH THEATRE

Course description: A study of some of the major works of French dramatic literature.

Texts: Le Cid – Corneille; Tartuffe – Molière; Phèdre-Racine; Bérénice – Racine; Le jeu de l'amour et du hasard – Marivaux; Le Mariage de Figaro – Beaumarchais; On ne badine pas avec l'amour – Musset.

Lectures: Three hours a week, two semesters.

FRENCH 416.0: POETRY IN FRANCE

A study of the evolution of French poetry from the Renaissance to the present day with special emphasis on its relation to the visual arts.

Text: *Le Livre d'Or de la Poésie française* — Pierre Seghers. (Marabout)

Lectures: Three hours a week, two semesters.

GEOLOGY

C.A.R. de Albuquerque

D. Hope-Simpson

Q.A. Siddiqui

Assistant Professor

Associate Professor

Assistant Professor

111.0: INTRODUCTION TO GEOLOGY

The Earth as a planet; minerals and rocks; surface and deep-seated processes. Structural evolution of North America with special reference to the Maritime area. Historical Geology. Economic Geology.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

Field work as specified.

121.0: PRINCIPLES OF GEOLOGY

Credit will be granted for either Geo. 111.0 or 121.0, not both.

Prerequisites: Physics 111.0 and or Chemistry 101.0 or equivalent.

Earth as a planet. Earth materials. Geological cycles. Geologic time.

External processes: geomorphology, sedimentation, etc. Internal

processes: deformation, the earth's interior, volcanoes, plutonism,

metamorphism, and mountain building. Evolution of the lithosphere.

Geology in industry.

Field work; maps and mapping; geology of the Maritime area.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

201.0: CRYSTALLOGRAPHY AND MINERALOGY

Morphological classification and atomic structure of crystals; chemical mineralogy and determinative mineralogy.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

202.0: PALEONTOLOGY

Fossils, their nature and mode of preservation. The morphology, classification and stratigraphic ranges of the main groups of invertebrate fossils. Elementary vertebrate paleontology.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

301.0: PETROLOGY

Prerequisite: Geology 201.0.

Prerequisite or concurrent: Physics 111.0, Chemistry 201.0.

The optical properties of minerals. The description and interpretation of igneous, sedimentary and metamorphic rocks.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

302.0: STRATIGRAPHY AND HISTORICAL GEOLOGY

Prerequisites: Geology 111.0. Geology 202.0 strongly recommended.

Principles of stratigraphy. Historical geology and tectonic evolution of North America. Principles of stratigraphic paleontology; paleoecology; facies; faunal and floral assemblages.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

303.0: STRUCTURAL AND FIELD GEOLOGY

Prerequisite: Geology 111.0

Primary and secondary structures of rocks. Field mapping. Map interpretation. The graphical analysis of structural field observations. **Tectonics.**

Students are strongly recommended to attend the Maritime Universities **Geological Field School** early in May preceding or following this course.

401.0: ECONOMIC GEOLOGY

Prerequisite: Geology 301.0

Prerequisite or concurrent: Geology 303.0.

The occurrence and classification of ore-deposits. Theories of origin. Field and laboratory investigations. Surface and underground mapping **problems.**

Text: To be announced. Reference to Journals.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

402.0: GEOCHEMISTRY (NOT OFFERED 1971-72)

Prerequisite: Geology 301, Chemistry 121.

Principles of distribution of elements. Geochemical features of geological processes. Chemistry of igneous rocks, lunar rocks and meteorites.

Text: To be announced.

Lectures: Three hours per week, two semesters.

Laboratory: Three hours per week, two semesters.

404.0: MICROPALAEONTOLOGY

Consent of the Department required.

Principles of Micropaleontology: major groups of micro-fossils and their use in the petroleum industry. Paleocology and correlation. Techniques of collection, preparation and identification.

Text: To be announced.

Lectures: Two hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

Field work as required.

407.0: IGNEOUS AND METAMORPHIC PETROLOGY

Prerequisite: Geology 301, Chemistry 121.

Modern concepts and theories of petrogenesis. Study of selected suites of igneous rocks and metamorphic complexes. Igneous rocks, lunar rocks and meteorites.

Text: To be announced.

Lectures: Three hours per week, two semesters.

Laboratory: Three hours per week, two semesters.

GERMAN

Roman Nahrebecky

Assistant Professor

100.0:

An introductory language course for those beginning the study of German. Basic linguistic structures will be studied with particular emphasis on the oral aspect.

Text: To be announced.

200.0:

Prerequisite: German 100.0

This course presents an intensified study of grammar and syntax and the reading of German texts.

Text: A Practical German Review Grammar—Emory E. Cochran.

250.0: GERMAN LITERARY PROSE

The aim of this course is to familiarize the student with the artistic qualities of German literary prose. Summaries, compositions and short essays will be written.

Text: To be announced.

300.0: MODERN GERMAN LITERATURE

A study of trends in modern German literature (Naturalism, Impressionism, Expressionism).

301.0: THE ROMANTIC AGE

Prerequisite: German 250.0 or equivalent.

The purpose of this course is to provide the student with an understanding of the characteristic traits of German poetry and prose in the Romantic Age.

Poems, tales and historic tales by L. Tieck, Novalis, H. von Kleist, C. Brentano, A. von Arnim, A. von Chamisso, E.T.A. Hoffmann, L. Uhland, J. von Eichendorff and H. Heine will be read and discussed.

Two hours per week; two semesters.

HISTORY

Elizabeth Chard	Assistant Professor, Chairman
Stanislaw Bobr-Tylingo	Associate Professor
Robert Bollini	Assistant Professor
R.H. Cameron	Assistant Professor
Elizabeth Haigh	Lecturer
Colin Howell	Lecturer
Burkhard Kieseckamp	Assistant Professor
John R. MacCormack	Professor
Wallace Mills	Assistant Professor
Mary Sun	Assistant Professor
George F.W. Young	Assistant Professor

DEPARTMENTAL POLICY

- (1) To obtain a major concentration in History a student is required to have FIVE university credits in History beyond the 120.0 level. A History credit from high school will satisfy the Bachelor of Arts requirement of a compulsory History credit but will NOT count towards the History concentration. A History major therefore will have six university History credits in his/her B.A. degree programme.
- (2) The History Department strongly advises that students without university experience begin their studies in the History Department with the 120.0 level courses. PLEASE NOTE: Students

with junior matriculation **MUST** begin their studies in the Department on the 120.0 level.

- (3) At least 50% of a student's elective work should be done at the 300.0 level or above. Suggested supporting courses for History majors include: Political Science, Economics, Anthropology, and Sociology.
- (4) The Honours Programme in History follows the regulations as stated in this calendar.
- (5) All students majoring in History must have two university credits in one foreign language. In the case of students majoring in Canadian History, French is specified as the language required.
- (6) The programme for a major in History must be approved by the Department.

COURSE DESCRIPTIONS (GENERAL)

- (a) All History courses are full credits and are year-length courses.
- (b) History 121.0, 122.0, 123.0, & 124.0 are survey courses which fulfill the University requirement of one History credit for the B.A. degree. These courses normally combine lectures with small tutorial group meetings. Three hours per week is the time allotment.
- (c) History courses on the 200.0 level and 300.0 level are frequently structured to consist of both lectures and seminars. Two hundred level courses normally meet for 3 hours per week; three hundred level courses for 2 hours per week.
- (d) History courses on the 500.0 level are seminar courses designed for advanced work by History majors and honours students in their junior and senior years and Master's candidates. These classes meet 2 hours per week.

COURSE OFFERINGS FOR THE 1971-1972 ACADEMIC TERM

The courses below marked with an asterisk (*) will probably be offered by the Department of History during the 1971-72 academic term. Students are urged to check with the Department prior to registration to confirm the Department's offerings.

110.0

Students eligible for advanced standing in History will be given this number for a credit.

*121.0: CIVILIZATION IN THE WEST

A course designed to explore the origins and development of the characteristic political, legal, and cultural institutions of western civilizations and their impact on other cultures.

* 122.0 HISTORY OF CANADA

A survey course from the earliest times to the present with emphasis on the French regime, the rivalry with Great Britain for control of the continent, British colonial rule, Confederation, and the development of Dominion status.

*123.0: SURVEY OF THE HISTORY OF THE UNITED STATES

A survey of U.S. history from its colonial beginnings to the present. Attention will be given to the central themes of U.S. history from the Revolution to World War II.

*124.0: A HISTORY OF BRITAIN – 1066 TO THE PRESENT

The course is a general survey of British civilization from the Anglo-Saxon period to the present. The emphasis falls on significant themes rather than narrative history.

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 an industrial society.

*204.0: EUROPE: 1815-1945

An introduction to nineteenth and twentieth century Europe with particular emphasis on the diplomatic background of the First and Second World Wars.

*209.0: MODERN EAST ASIA

China and Japan in the 19th and 20th centuries as they confront the modern West with special emphasis on the contrast between China's response and that of Japan.

***210.0: 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.

***211.0: THE HISTORY OF SCIENCE**

The course will cover the major innovations and developments in science and its theory from Babylonian and Egyptian civilizations to the present century. Emphasis will be placed on the interaction between any society and the science and technology it develops.

***212.0: THE HISTORY OF RUSSIA and the SOVIET UNION, 882 TO THE PRESENT**

An introductory survey beginning with the establishment of the Rurik dynasty. There will be emphasis on Russia's social situation and the way it shaped political developments.

***219.0: CANADIAN-AMERICAN RELATIONS**

This course will examine the basic developments in Canadian-American Relations. Emphasis will be on the events of the geographical region of New England and the Maritime Provinces. 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.

303.0: TUDOR AND STUART ENGLAND

Prerequisite: one University History course or the consent of the instructor.

The history of England with special emphasis on the development of the English parliament.

***306.0: MONARCHY, REVOLUTION AND EMPIRE**

Prerequisite: One University History course or the consent of the instructor.

The attempts of European societies to create a valid polity after the shocks of the Renaissance and Reformation. The course examines the political, economic, social and intellectual history of Europe from the end of the Thirty Years' War to Waterloo (1648-1815).

***311.0: MEDIEVAL ENGLAND**

Prerequisite: One University History credit or the consent of the instructor.

The course attempts to trace the evolution and continuity of ideas and institutions. All aspects of the period are considered, but the emphasis falls on constitutional and administrative developments.

312.0: MEDIEVAL EUROPE

The main currents of medieval European history with special emphasis on the intellectual and cultural aspects.

***313.0: EUROPE, 1815-1870**

In this course particular emphasis will be placed on the history of France, on the revolutions of 1848-1849, and on the unification of Germany and Italy.

314.0: EUROPE, 1870-1945

Emphasis will be placed upon the backgrounds of World Wars I and II and the problems of modern industrial society.

***315.0: NINETEENTH-CENTURY BRITAIN**

Prerequisite: One University History credit or the consent of the instructor.

A study of politics, economics, society and values in the leading world power of the age.

316.0: FOUNDATIONS OF AMERICAN HISTORY: Colonial Period to 1789

Prerequisite: One University History course or the consent of the instructor.

A course which is concerned with the foundations of the American nation. Attention will be given to colonization, the growth of the Thirteen Colonies, their relationship with Great Britain culminating in the Revolution, and the establishment of the United States of America.

***317.0: AMERICA IN THE NINETEENTH CENTURY**

Prerequisite: One University History course or the consent of the instructor.

A course which discusses the growth of the United States from an agrarian importing nation to an industrial exporting nation. Emphasis will be on the internal problems of developing the country, expanding into the West, waging a Civil War, and the triumph of the industrialists.

***318.0: AMERICA IN THE TWENTIETH CENTURY**

Prerequisite: One University History course or the consent of the instructor.

A course concerned with the rise of financial capitalism and the United States as a world power.

320.0: BRITISH EMPIRE-COMMONWEALTH

A study of trends in 18th and 19th century Britain with special emphasis on the practice and theory of imperialism.

321.0: AFRICA IN THE 19th AND 20th CENTURIES

A look at some African societies and their values, with some examination of the phenomena of European intrusions, conquests and colonialism, and their impact on African societies.

322.0: SOUTH AFRICA

A study of the complex inter-relationships and conflicts arising from different cultures, religions and skin colours from the 17th century to the "apartheid" state of the mid-twentieth century.

323.0: THE HISTORY OF CHINA, 618-1911

Prerequisite: Two History credits or the consent of the instructor.

A study of society, government and intellectual development in China during the T'ang, Sung, Ming and Ch'ing dynasties, with special attention to factors affecting the rise and decline of dynasties.

***324.0: THE HISTORY OF JAPAN, 710-1868**

Prerequisite: Two History credits or the consent of the instructor.

A study of the evolution of Japanese society and culture from the Nara period to the Tokugawa shogunate in the 19th century. Special emphasis will be placed on the transition from the period of imitation of the Chinese model to the emergence of a characteristically Japanese culture.

325.0: THE IBERIAN EMPIRES IN THE NEW WORLD, 1492-1810

Prerequisite: One History credit or the consent of the instructor.

The History of colonial Latin America with special emphasis on the Iberian maritime expansion, conquest, and colonization of the New World; the survival and continuing influence of the American peoples in the Colonial World; the impact of the African negro on Colonial society; and the administration, economy and final collapse of the empire.

326.0: THE IBERIAN PENINSULA FROM ROMAN TIMES TO THE PRESENT

Prerequisite: One History credit or the consent of the instructor.

A study of the History of Spain and Portugal from their Roman foundations to the present, with special emphasis on the period since the reigns of Ferdinand and Isabella.

327.0: A HISTORY OF NEW FRANCE TO 1791

Prerequisite: One University History course or the consent of the instructor.

This course will involve a study of the cultural, social, political, and economic development of the French regime in America. In addition, it will attempt to deal with the immediate consequences of the Conquest insofar as they were reflected in this development.

328.0: A HISTORY OF BRITISH NORTH AMERICA, 1763-1867

Prerequisite: One University course in History or the consent of the instructor.

This course will examine the major political, social, economic, religious, and intellectual trends evident in British North America in the period following the Treaty of Paris, 1763. Special attention will be given to the historiography of this period.

329.0: HISTORY OF CANADA, 1849-1920

Prerequisite: One University course in History or the consent of the instructor.

This course deals with the problems arising from the attempt to build a British North American nation in the age of Macdonald and Laurier.

331.0: MODERN FRANCE, 1815-1940

Prerequisite: One University History course or the consent of the instructor.

The struggle of Frenchmen to reconcile the ambiguities of their revolutionary past with the exigencies of nationalism and state security is the theme of this course. Students will find a modest reading knowledge of French useful, if not essential.

332.0: THE SCIENTIFIC REVOLUTION

The aim of the course is the study of the intellectual revolt which we know as the Scientific Revolution of Western Europe. The point is to examine man's reinterpretation of the natural universe in the context of the philosophical, cultural and social milieu of the 16th, 17th, and 18th centuries.

333.0: A HISTORY OF CANADA IN THE 20TH CENTURY

Prerequisite: One University History course or the consent of the instructor.

A course designed to examine the emergence of Canada's social, political, and economic structure 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: MYTH AND HISTORY: THE PROBLEM OF INTERPRETING HUMAN EXISTENCE.**

Prerequisite: One University History course or the consent of the instructor.

Man's search for meaning. The life of man in relation to his past and that of his communities: the question put to Marc Bloch; "Papa, what good is history?" Students in this course coregister in Religious Studies 334.0.

335.0: RESTORATION AND EIGHTEENTH-CENTURY ENGLAND

Prerequisite: One University History course or the consent of the instructor.

The emphasis will fall on the continuity and development of institutions, procedures, and ideas. Politics and the constitution receive special attention.

336.0: ENVIRONMENT, INSTITUTIONS, AND VALUES IN CANADA AND THE UNITED STATES DURING THE 19TH and 20TH CENTURIES. (SEE HISTORY 339.0)

Prerequisite: Two University History courses, one of which must be in either Canadian or American History, or consent of instructor.

This course will examine the development of institutions and attitudes in Canada and the United States during the 19th and 20th Century. Unlike traditional courses in Canadian-American relations it will deal with the development of a peculiar North-American life-style. Particular emphasis will be put on the role of the frontier and of religion and ideology in the development of national institutions, national myths, and national consensus.

Students will be expected to utilize primary as well as secondary materials, including various literary, philosophical, and religious writings.

***337.0: RUSSIA IN REVOLUTION**

It is planned that the course will cover the revolutionary period in Russia beginning with the Decembrist revolt of 1825 and ending in 1925 at which time Stalin was becoming entrenched as Lenin's sole successor. It will deal with the development of the various political ideologies which proliferated in the 19th century in response to the social, political and intellectual dissent. The Slavophile-Westernizer debate will provide a background to the populist movement, the terrorist groups, and to the Socialist Revolutionary party; the beginnings of Russian marxism and the split of the Marxist party into the Bolshevik and Menshevik branches will be examined. The students will be asked to keep always in mind the question of whether revolution was inevitable or whether the autocracy could have reformed itself sufficiently to prevent the upheavals of 1905 and of 1917. 1925 is a reasonable cut-off point in view of the fact that the new government had, by then, secured its position sufficiently to be no longer subject to the threat of over-throw by internal or external opponents.

Some primary sources, including a few relevant novels, will be read in addition to secondary materials.

***338.0: HISTORY AND HUMAN VALUES**

Prerequisite: One University History course or the consent of the instructor.

The course will be comparative in structure rather than chronological. The main topics will be the effect of natural-law ideas and church-state

conflict on the political and legal institutions of Western Europe in the Middle Ages; the impact of Protestant values on the revolutions of the 17th and 18th centuries; the erosion of natural law by Cartesianism and man's attempt to find the new value-structures in the 19th and 20th centuries. There will be guest lectures on the political significance of Confucianism, Indian value system, and Medieval philosophy.

339.0: Students registering in History 336.0 must also coregister for this course.

***500.0: READING COURSES IN HISTORY**

Prerequisite: The consent of the instructor.

Each Reading Course will be organised by the instructor(s) involved. In general, each course will be centered 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.

***501.0: THE PURITAN REVOLUTION AND THE CROMWELLIAN PROTECTORATE**

Prerequisite: History 303.0 or consent of the instructor.

A pro-seminar with particular emphasis on political and economic changes during the Puritan Revolution.

502.0: THE ERA OF THE FRENCH REVOLUTION

The background, course and impact of the French Revolution.

***503.0: GERMAN FOREIGN POLICY, 1890-1945**

The history of Germany with special emphasis on German foreign policy.

***504.0: BRITISH FOREIGN POLICY, 1890-1945**

Prerequisite: History 203.0, History 314.0, History 315.0, or consent of the instructor.

Particular emphasis will be placed on Anglo-American relations; the Anglo-French Entente before 1914, and Anglo-German relations 1930-1945. Students will be expected to do considerable research in the diplomatic documents of the period.

505.0: UNITED STATES FOREIGN POLICY 1890-1945

Prerequisite: At least one University course in U.S. History or consent of the instructor.

Emphasis will be placed on the emergence of the United States as a world power prior to World War I; the retreat into isolation after 1918 and American-Japanese relations to 1941.

506.0: THE POLITICS OF THE PEACE SETTLEMENT 1919-1921

A seminar in which students will be expected to work closely in the documentary sources.

508.0: CHURCH AND STATE THROUGH THE AGES (CROSS-LISTED IN 3 OTHER DEPTS.)

Prerequisite: History 338.0 or consent of the instructor.

An inter-departmental seminar made possible by the cooperation of the following departments: History, Philosophy, Political Science, and Religious Studies.

509.0: THE ERA OF THE AMERICAN CIVIL WAR

A course concerned with the causes and impact of the American Civil War.

510.0: A PERIOD IN THE HISTORY OF NOVA SCOTIA

Prerequisite: At least one University course in Canadian History or the consent of the instructor.

A course designed especially for Honours History students who will be afforded an opportunity to use the original material as found in the Public Archives of Nova Scotia. The course will be conducted as a seminar with the presentation of papers on given topics as well as discussion of these papers and related topics.

***511.0: MODERN EAST ASIA, SELECTED PROBLEMS**

Prerequisite: History 209.0 or consent of the instructor.

Theme: The influence of the West on the modernization efforts of China and Japan during the 19th and 20th Centuries.

***512.0: SPECIAL TOPICS IN PRE-CONFEDERATION CANADIAN HISTORY**

Prerequisite: At least one University course in Canadian History or the consent of the instructor.

This course will enable students to explore certain historiographical problems in Canadian History and to use primary source material more extensively than is possible in lecture courses.

513.0: SELECTED PROBLEMS IN POST-CONFEDERATION CANADIAN HISTORY

Prerequisite: At least one University course in Canadian History or the consent of the instructor.

The course is designed to introduce the student in a detailed way to some of the major problems of the Canadian national experience. Particular emphasis will be placed on one or more of the following: the political, economic, social, intellectual, and/or religious dimension of this experience. Students will be introduced to some of the primary documents of the period.

514.0: PRO-SEMINAR IN LATIN AMERICAN HISTORY

Prerequisite: History 210.0 or the consent of the instructor.

A reading seminar involving an in-depth study and an historiographical research and interpretive paper on a selected period and/or problem in the history of Latin America. The aim of this course is to give students interested in the area a working knowledge of the historiography and an introduction into the problems of original research of the said period and/or problem under consideration. While not absolutely required, a reading knowledge of Spanish or Portuguese is strongly desirable.

Cross-Listed Courses.

Courses offered in other Departments which are cross-listed in History are:

205.0 – Classics 205.0	– Hellenistic History
223.0 – Classics 203.0	– History of Greece
224.0 – Classics 204.0	– History of Rome
300.0 – Anthropology 351.0	– Pre-Classical Ancient History
309.0 – Religious Studies 308.0	– Towards the Reformation
330.0 – Religious Studies 310.0	– Studies in Eighteenth Century Social and Religious Thought

The Department is prepared to allow some courses, other than those listed above, to be counted in a student's History concentration. Students must seek the Department's permission in such cases.

LATIN (See Classics)

MATHEMATICS

K. Singh	Associate Professor, Chairman
Faith Chao	Lecturer
H.D. Cochran	Assistant Professor
F. Jackson	Associate Professor
D. Kabe	Associate Professor
P. Scobey	Lecturer
Y.P. Singh	Assistant Professor
B. White	Lecturer

110.1(110.2): ALGEBRA AND TRIGONOMETRY I

Prerequisite: Grade XI Mathematics

Introduction to Algebra and Trigonometry.

Sets and Operations; Real Numbers; Functions; Relations; Graphs of Elementary Functions; Elementary Trigonometry; Exponential Function; Linear and Quadratic Inequalities, Logarithm.

Text: To be announced

Lectures: Three hours a week, one semester

Tutorials one hour a week, one semester - half course.

111.1 (111.2): ALGEBRA AND TRIGONOMETRY II

Prerequisite: Mathematics 110.1 (110.2)

Logarithms; Solution of Triangles; More Advanced Trigonometry; Polynomials; Remainder Theorem; Matrices and Determinants; Sequences; Mathematics Induction; Analytical Geometry, Algebra of Complex numbers.

Lectures: Three hours a week; one semester.

Tutorials one hour week; one semester - half course.

112.0 MATHEMATICS FOR LIBERAL ARTS STUDENTS

Prerequisite: Grade XI Mathematics.

A course intended to illustrate various aspects of modern mathematics. The material may differ from year to year. Problems and written assignments will form an integral part of the course. This course does not contain any formal material prerequisite for more advanced courses.

113.0. MATHEMATICS FOR COMMERCE STUDENTS.

Prerequisite: Grade XI Mathematics.

Sets and subsets, real numbers, first degree equations, relations and functions, graphs, exponential, logarithms, inequalities, linear programming, permutations, combinations, probability, measure, systems of linear algebraic equations, matrices and solution of linear systems.

Text: To be announced

Lectures: Three hours a week; two semesters

Tutorials, one hour a week; two semesters.

116.2 INTRODUCTION TO DIFFERENTIAL AND INTEGRAL CALCULUS TECHNIQUES

Prerequisite: Math 110.1 (110.2)

This course introduces the Engineering student to the basic concepts of differential and integral calculus. In particular the geometric significance of these concepts along with the techniques of differentiation and integration of elementary functions are presented.

Lectures: three hours a week, one semester.

210.1 (210.2): DIFFERENTIAL CALCULUS

Prerequisite: Grade XII Mathematics or Mathematics 111.1 (111.2).

Inequalities, absolute values, functions and their graphs, limits and continuity, derivative, implicit differentiations, application of derivatives to geometrical problems, mechanics and maxima, minima, second derivatives, curvatures, Rolle's Theorem, mean value theorem, differential and approximations.

Text: to be announced.

Lectures: Three hours a week for one semester half course.

Tutorials one hour a week for one semester.

211.1 (211.2): INTEGRAL CALCULUS

Prerequisite: Mathematics 210.1 (210.2)

Antiderivative, the definite integral, fundamental theorem of integral calculus, applications of definite integral, techniques of integration, parametric and polar coordinates.

Text: To be announced.

Lectures: Three hours a week; one semester.

Tutorial one hour a week, one semester half course.

226.1 (226.2): COMPUTER PROGRAMMING WITH APPLICATIONS.

Prerequisite: Mathematics 210.0 (210.2), 211.1 (211.2) or concurrently.

A study of Fortran languages with special emphasis on version IV. Applications to numerical solutions to certain non-linear equations, numerical integration and differentiation and evaluation of certain functions.

Lectures: Three hours a week, one semester.

Laboratory: one hour per week.

227.1 (227.2): INTRODUCTORY NUMERICAL ANALYSIS

Prerequisite: Mathematics 226.1 (226.2).

Matrices and solutions to non-linear equations. Finite differences. Iterative techniques. Interpolation. Numerical differentiation and integration. Difference and differential equations.

Text: To be announced.

Lectures: Three hours a week, plus laboratory periods; one semester.

250.0: ANALYSIS I

Prerequisite: Mathematics 210.1 (210.2) – 211.1 (211.2) or concurrently.

Set Theory. Countability Sequences.

Analysis on the real line. Convergence. Continuity. Uniform Continuity. Applications to Calculus. Elementary Theory of Metric Spaces. Application to Differential and Integral Equations.

310.0: CALCULUS II

Prerequisite: Mathematics 211.1 (211.2).

Argand plane. Vectors, matrices and determinants. Vector algebra. Infinite sequences and series. Convergence. Taylor's series. Partial differentiation. Ordinary differential equations. Arc lengths. Multiple integrals. Applications to simple numerical analysis.

Text: To be announced.

Lectures: Two hours a week; two semesters.

Tutorial: Two hours a week; two semesters.

311.0: ENGINEERING MATHEMATICS

Prerequisite: Mathematics 211.1 (211.2)

Matrices and determinants, vector algebra, infinite sequence series, partial derivations, double integrals, line integrals, algebra of complex numbers, first order differential equations, linear differential equations with constant coefficient. Various engineering applications will be discussed.

Lectures: Three hours a week, two semesters.

Tutorials: One hour a week, two semesters.

312.0: LINEAR ALGEBRA

Prerequisite: Mathematics 310.0 or concurrently.

Abstract systems. Fundamental properties of vector spaces. Linear transformations and matrices. Linear equations and determinants. The Hamilton-Cayley theorem. Canonical forms. Metric concepts. Functions of matrices.

Text: To be announced.

Lectures: Three hours a week; two semesters.

Tutorial: One hour a week; two semesters.

313.0: MODERN ALGEBRA

Prerequisite: Mathematics 310.0 or concurrently.

A study of formal algebraic systems and integral domains, groups, rings, fields and vector spaces and the deduction of their more important properties.

Text: To be announced.

Lectures: Lectures three hours a week, two semesters.

314.0: APPLIED STATISTICS

Prerequisite: Mathematics 211.1 (211.1).

Elements of set theory, probability, conditional probability, Bayes' Laplace rule, binomial, hypergeometric, poisson, multinomial, uni-

form, exponential, gamma, beta, and normal distributions. Mathematical expectation, moments; moment generating functions. Chebyshev's theorem. Sums of random variables. Sampling distributions, chi-square, F and T distribution. Point and interval estimation. Tests of hypotheses. Linear regression and correlation. Bivariate normal distribution. The method of least squares.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

327.0: NUMERICAL ANALYSIS

Prerequisite: Mathematics 227.1 (227.2).

Further studies in interpolation, numerical integration and differentiation, matrix inversion and solutions of systems of linear equations and numerical solutions of ordinary and partial differential equations.

Lectures: three hours a week, two semesters.

Laboratory: one period a week.

350.0: ANALYSIS II

Prerequisites: Mathematics 250.0 and 310.0 with 312.0 concurrently.

Elementary Topology. Metric Spaces. The Stone-Weierstrass Theorem. The Baire Category Theorem and applications. Equicontinuity and the Ascoli-Arzelà Theorem. Named linear spaces. The Hahn-Banach Theorem. Introduction to Hilbert Space. Stieltjes integral. Lebesgue integration Fourier Series.

Text: To be announced.

Lectures: Three hours a week, two semesters.

410.0: CALCULUS III

Prerequisite: Mathematics 310.0.

Uniform convergence. Series and limits. Fourier series. Vector algebra and matrices. Ordinary and partial differential equations. Laplace transform. Multivariable calculus. Jacobians.

Text: To be announced.

Lectures: Three hours a week; two semesters.

Tutorial: Two hours a week; two semesters.

414.0 STATISTICS II

Prerequisite: Mathematics 310.0.

Non-parametric methods; simple tests and estimation of hypotheses. Elements of sampling theory. Analysis of variance and related design of experiments.

Text: To be announced.

Lectures: Three hours a week; two semesters.

Laboratory: Three hours a week; two semesters.

425.0: ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

Prerequisite: Calculus 310.0.

Classical techniques of solving first and second order equations. Systems of equations. Series solutions. Transform methods. Introduction to partial differential equations and discussion of simple types.

Texts: To be announced.

Lectures: Three hours a week; two semesters.

435.0: THEORY OF A COMPLEX VARIABLE

Prerequisite: Mathematics 310.0

The complex plane. Elementary transformations and mappings. Analytic functions. Branch points and cuts. Infinite series and uniform convergence. Conformal mapping. Complex integration. Cauchy's theorem. Residues. Liouville's theorem and the fundamental theorem of algebra.

Text: To be announced.

Lectures: Three hours a week, two semesters.

445.0: INTRODUCTORY OPERATIONS RESEARCH

Prerequisite: Mathematics 310.0.

Linear programming, Dynamic Programming, quadratic and geometric programming, optimization techniques.

Text: To be announced.

Lectures: Three hours a week; two semesters.

50.0: ANALYSIS III

Prerequisites: Mathematics 250 or permission of the instructor.

Measure Theory, Lebesgue integration, dominated convergence, Egoroff's theorem, Hilbert spaces.

Text: To be announced.

Lectures: Three hours a week; two semesters.

515.0: THEORY OF STATISTICS

Prerequisites: Mathematics 310.0.

Fundamental concepts and theorems of probability; Distribution functions as probability models for the discrete and continuous cases; Moment generating functions; sampling distributions; Point and interval estimation; Statistical inference and hypotheses testing; Correlation and regression analysis.

Text: To be announced.

Lectures: Three hours a week, two semesters.

516.0: STOCHASTIC PROCESSES

Prerequisites: Mathematics 414.0.

Probability models for physical situations; Branching processes; Random walk; Markov chains; The Poisson Processes; The pure birth and death process; Waiting line and serving problems.

Text: To be announced.

Lectures: Three hours a week, two semesters.

517.0: INTRODUCTION TO STATISTICAL DECISION THEORY

Prerequisites: Mathematics 310.0, and 312.0 (Mathematics 213 is desirable but not essential).

Statistical decision problems; Bayes decision rule; Linear programming and its applications to statistical decision problems; Minimax Wald sequential rule; Conventional statistical theory and decision theory.

Text: To be announced.

Lectures: Three hours a week, two semesters.

525.0: PARTIAL DIFFERENTIAL EQUATIONS

Prerequisites: Mathematics 425.0.

Derivation of standard second order equations. Method of characteristics. Greens functions. Separation of variables, Poisson's integral. Integral transforms with emphasis on Laplace methods. Special functions.

Text: To be announced.

Lectures: Three hours a week; two semesters.

535.0: COMPLEX ANALYSIS

Prerequisite: Mathematics 435.0.

Analytic functions, residues, Laurent's series, Analytic continuation, Conformal mapping, Riemann surfaces, Integral transforms, special functions, Asymptotic expansions and applications.

Text: To be announced.

Lectures: Three hours a week, two semesters.

556.0: INTRODUCTION TO APPLIED MATHS

Prerequisites: Mathematics 435.0 and 425.0.

The course will deal with topics such as those given below:

Linear analysis and group theory, vector and tensor analysis, Interpolation, curve fitting and numerical analysis, conservation principles, General discussion of ordinary and partial differential equations occurring in physical problems leading to different types of boundary value problems.

Text: To be announced.

Lectures: Three hours a week; two semesters.

557.0: FLUID MECHANICS I

Prerequisites: Mathematics 435.0, with 525.0 concurrently.

Elementary theory of perfect fluids. Internal forces, conservation laws, Eulerian and Langrangian approaches. Complex potentials, sources and sinks. Blasius' theorem, Flows past plates and cylinders.

Text: To be announced.

Lectures: Three hours a week, two semesters.

PHILOSOPHY

Rolf Gruner	Associate Professor, Chairman
Robert N. Ansell	Assistant Professor
Richard H. Beis	Associate Professor
Lawrence Dewan	Associate Professor
Henry Lackner	Assistant Professor
Rowland C. Marshall	Associate Professor
Arthur P. Monahan	Professor
William A. Stewart S.J.	Professor

Preliminary Remarks

1. The courses from No. 120.0 to No. 129.0 inclusive are introductory and **alternative**. Normally, a student selects one of them according to his preference. A course above No. 129.0 may be counted as satisfying the requirement in Philosophy.
2. With permission of the Department courses numbered as honours courses may also be taken in the general degree programme.
3. A student may register for a major concentration in Philosophy concurrently with a major concentration in another subject approved by the Department. Examples of such subjects are Classics, Economics, English, History and Political Science.

120.0: INTRODUCTION TO PHILOSOPHY

An introductory examination of Philosophy as an intellectual discipline and type of knowledge and of its method of treating such problems as the nature of reality, human knowledge and human values.

Text: To be announced.

Lectures: Two hours a week; two semesters.

Seminar: One hour every second week.

121.0: INTRODUCTION TO PHILOSOPHY

W.A. Stewart

This course deals with five major philosophical problems: The problems of philosophy itself, of knowledge, of material being, of living material being, of man. The student is encouraged to seek intellectually satisfying answers for himself, and at the same time to examine critically some of the major historical and contemporary viewpoints. The course's primary aim is the development of method in philosophy and of the student's own critical intelligence and reflection.

Text: Classroom Notes.

Lectures: Two hours a week; two semesters.

Seminar: One hour every second week.

122.0: INTRODUCTION TO PHILOSOPHY

A.P. Monahan

The student will be introduced to philosophy through an examination of how representative philosophers deal with the basic philosophical questions of the nature of reality and man, knowledge, freedom and ethical values. Readings from the history of philosophy as a background for contemporary philosophy.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

123.0: INTRODUCTION TO PHILOSOPHY: LOGIC, MAN AND SCIENCE

R.C. Marshall

First term: An introductory study of logic, including uses of language, informal fallacies, definition, forms of deductive and inductive argument.

Second term: An examination of philosophical problems which emerge from a consideration of human capacities and behaviour and physical phenomena. Perception and the reality of material things, reasons and causes, free choice and necessity, minds and machines.

Texts: Introduction to Logic – I.M. Copi; text for second term to be announced.

Lectures: Two hours a week, two semesters.

Seminar: One hour every second week.

124.0: INTRODUCTION TO PHILOSOPHY: CRITICAL REASONING R. Gruner

A description and analysis of the most important tools of formal and informal reasoning with discussion of the following topics: Basic logical concepts; formal relations and arguments; language and meaning; informal inferences and procedures.

Text: Critical Thinking – M. Black.

Lectures: Two hours a week, two semesters.

Seminar: One hour every second week.

125.0: INTRODUCTION TO PHILOSOPHY: SEMANTICS, LOGIC AND GENERAL PHILOSOPHICAL ISSUES

(Evening Course)

R.N. Ansell

The first term will be devoted to the development of precision, rigour and clarity in the student's thinking. Lectures will be supplemented by seminars in which small groups will work through exercises in logic and semantics, of an elementary character.

During the second term general philosophical issues will be discussed in lectures and seminars. Fundamental problems in ethics, philosophy of religion, philosophy of perception and theory of knowledge will be raised.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

126.0: INTRODUCTION TO PHILOSOPHY

L. Dewan

What is meant by "philosophy"? Could it exist? Has it ever existed?—Peace and war, freedom, education, propaganda, drugs, pornography: Has "the philosopher" anything worth hearing regarding these issues? Or regarding technology and the sciences? Does the human intelligence stand in need of liberation? Is a God a principle of enslavement or of liberation?—This course discusses these questions.

Reading list: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

127.0: INTRODUCTION TO PHILOSOPHY: THE BIG QUESTIONS

H. Lackner

This course introduces students to philosophy by looking into questions which are of particular relevance in our time of upheaval, questions such as 'What can I believe?', 'Is there a God and an after-life?', 'How ought I to live my life?', 'How does man differ from inanimate objects (such as stones), from animals and from computers?'. Instead of being provided with definite answers, students will be given the tools to enable them to search for themselves.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

128.0: INTRODUCTION TO PHILOSOPHY

(Saturday Course)

J. Lowrie

An introduction to philosophy through the writings of the Greek thinkers (Presocratics, Plato, Aristotle).

Texts: Ancilla to the Presocratic Philosophers – K. Freeman (ed.); Collected Dialogues – Plato; Introduction to Aristototle – R. McKeon (ed.).

Lectures and Seminars: Three hours (Saturdays, 9 a.m. to 12 noon), two semesters.

129.0: INTRODUCTION TO PHILOSOPHY

R. Beis

This course will introduce the student to philosophy through the examination of problems arising within four areas of philosophy: Ethics, Philosophy of Mind, Philosophy of Science, and Philosophy of Language. Ethics will consider such problems as the nature of morality and freedom, and the relation of metaethical approaches to these problems. In the Philosophy of Mind the Mind-Body Problem and the nature of consciousness and mental phenomena will be examined. The Philosophy of Science will inquire into the nature of scientific explanation, laws, and theories. In the Philosophy of Language theories of meaning, theories of signs, and language about God will be investigated.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Personal Tutorials and Course Consultations:
To be arranged for each student individually.

150.0: INTRODUCTION TO SYMBOLIC LOGIC

Prerequisites: Normally, Philosophy 123.0, 124.0, or 125.0, or courses in pure Mathematics or Computer Science (any of the above concurrently with this course, if desired).

A thorough grounding in the propositional and predicate calculi; with emphasis on the development of facility in natural deductive and axiomatic methods; and with some attention to metalogic, applications and set theory.

Texts: Beginning Logic — E.J. Lemmon; Introduction to Symbolic Logic and Its Applications — R. Carnap.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Engineering 204; any course in pure Mathematics.

200.0: PHILOSOPHY OF BEING

Prerequisites: None.

This course is a philosophical investigation into the foundations of metaphysics in cognitional theory, of the principles of proportionate being, of the problem of a transcendent being or God. It also investigates related problems such as the problems of human freedom and of evil and the position of atheism, agnosticism and pantheism.

Text: Insight — B. Lonergan.

Lectures: Two hours a week, two semesters.

Seminar: One hour every second week.

205.0: MEDIAEVAL PHILOSOPHY AND POLITICS

Prerequisites: None.

An examination of the mediaeval conception of society, with particular emphasis on the problem of the relation between political society and the society of the Church.

Texts: Readings in Augustine, John of Salisbury, The Canonists, Thomas Aquinas, Dante, John of Paris, William of Ockham, Marsilius of Padua.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: History 338, 408; Political Science 355, 450.

208.0: HEGEL'S POLITICAL PHILOSOPHY

Prerequisites: None (courses in any of the social sciences and/or Philosophy would be helpful).

A lecture and seminar course to examine Hegel's political writings in general and his **Philosophy of Right** in greater detail. The evolution of his political thought will be traced from his earliest writings to his mature works within the context of his philosophical system. An endeavour will be made to relate the more relevant aspects of his political philosophy to current concepts and problems.

Text: Philosophy of Right – G.W.F. Hegel.

Reference: Hegel's other political writings.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Political Science 356, 450; Religious Studies 310.

209.0: MARXIST PHILOSOPHY

Prerequisites: None (courses in Philosophy, Sociology and/or Economics would be helpful).

Marxist philosophy – which at present has more followers in the world than any other – will be critically described and evaluated. The emphasis will be on the scientific naturalism of the later Marx and contemporary Marxists, but the early, 'humanistic' Marx will also be discussed if the class so desires. –Marx's theory of knowledge (which claims to replace ideology by science and which supplements synchronic with diachronic analysis) will be discussed in detail. But most of the year's work will be devoted to Marxist social philosophy. Hence Historical Materialism will be examined, as a scientific theory and as an alternative to various other social and political theories. Such misunderstood Marxian concepts as 'dialectic', 'necessity' and 'contradiction' will be shown to refer to underlying, basic economic laws. These laws will be examined in turn and their fundamental role in Historical Materialism demonstrated. Evidence for and against will be investigated.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Economics 311; Political Science 356; Religious Studies 302, 310; Sociology 207.

211.0: PHILOSOPHY OF MIND

Prerequisites: None (an introductory course in Philosophy and/or Psychology would be helpful).

This course will examine what, if anything, is unique about man. It is

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 by special emphasis will be given to those of S. Freud and K. Dabrowski.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Psychology 321, 333.

230.0: PHILOSOPHICAL FOUNDATIONS AND METHODOLOGY

Prerequisites: One course in Philosophy.

Instruction in the use of methods for evaluating philosophical writings and solving philosophical problems. Basic papers and problems are selected for their value as exercises in the application of standard logical and semantical techniques, but also because familiarity with them is necessary in later courses. Controversial techniques are evaluated with the aid of uncontroversial ones. —This course is useful for any other course in philosophy.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

250.0: GREEK PHILOSOPHY

Prerequisites: None.

A history of Greek philosophy with particular emphasis on its major figures, Plato and Aristotle.

Text: A History of Ancient Western Philosophy — J. Owens.

Lectures: Three hours a week, two semesters.

Relevant Courses in Other Areas: Classics 120; Greek 120; History 211; Religious Studies 306.

300.0: INTRODUCTION TO ETHICS

Prerequisites: One course in Philosophy or permission of the professor.

An introduction to moral philosophy designed to acquaint students with historical expressions of basic ethical problems and with contemporary analytic approaches to ethics.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in other Areas: Religious Studies 316, 319.

306.0: EPISTEMOLOGY

Prerequisites: None (an introductory course in Philosophy would be helpful).

An investigation of the problem of knowledge through a study of the epistemological thought of Bernard Lonergan.

Text: Insight – B. Lonergan.

Lectures: Two hours a week, two semesters.

Seminar: One hour every second week.

308.0: PHILOSOPHICAL LOGIC

Prerequisites: Normally, Philosophy 150.0 or 230.0 (concurrently with this course, if desired).

The course tackles philosophical problems surrounding, and arising out of logic: the nature of logic and mathematics, analyticity, modal properties, the *a priori*, logical truth, mathematical truth. (The relevance of these topics to the gauging of past, present and future philosophical techniques will be brought to the fore.) Subsidiary topics: identity, proper names, the verb 'to exist' and the ontological argument, Russell's theory of descriptions, conditional statements, entailment, Platonism, Nominalism, logical paradoxes.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Any course in pure Mathematics.

350.0: MEDIAEVAL PHILOSOPHY

Prerequisites: One course in Philosophy or permission of the professor.

A history of the major philosophical doctrines and currents in western Europe from the period of Augustine to the fifteenth century.

Text: History of Christian Philosophy in the Middle Ages – E. Gilson.

Lectures: Three hours a week, two semesters.

Relevant Courses in Other Areas: History 312, 408; Religious Studies 136.

351.0: PHILOSOPHY OF SCIENCE

Prerequisites: None.

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.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Relevant Courses in Other Areas: History 211, 332.

352.0: BRITISH EMPIRICISM

Prerequisites: Normally, Philosophy 230 (concurrently, if desired).

A critical examination of some works by Locke, Berkeley, Hume, Russell and Ayer, with attention focused mainly on their theories of knowledge, meaning and perception.

Texts: Readings in Locke, Berkeley, Hume, Russell and Ayer.

Lectures and Seminars: Three hours a week, two semesters.

353.0: CONTINENTAL IDEALISM, DESCARTES TO HEGEL

Prerequisites: One course in Philosophy or permission of the professor.

A lecture and seminar course to examine the development of rationalist and idealist thought from Descartes to Hegel.

Texts: Readings in Descartes, Malebranche, Spinoza, Leibniz, Kant, Fichte, Schelling and Hegel.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: French 301; History 306; Religious Studies 330.

354.0: METAPHYSICS AS A KNOWLEDGE OF GOD

Prerequisites: One course in Philosophy or permission of the professor.

What is the idea of metaphysics? Is it possible? Does it exist? This course studies these problems while introducing the student to three classical works, the *Metaphysics* of Aristotle, the *Summa Theologiae (prima pars)* of St. Thomas Aquinas, and the *Critique of Pure Reason* of Immanuel Kant.

Text: To be announced.

Lectures: Three hours a week, two semesters.

Relevant Courses in Other Areas: History 211; Religious Studies 136, 312.

355.0: THE EXISTENTIALIST VIEW OF MAN

Prerequisites: One course in Philosophy or permission of the professor.

A lecture and seminar course to examine the origins, expressions and significance of the existentialist movement in contemporary Philosophy.

Texts: Readings in Kierkegaard, Nietzsche, Jaspers, Marcel, Sartre and Camus.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: French 309; Religious Studies 137, 307.

402.0: PHILOSOPHY OF THE SOCIAL STUDIES

Prerequisites: One course in Philosophy or permission of the professor.

A philosophical examination of the purpose and character of the social studies and of the major conceptual, logical and methodological problems which arise in them.

Text: To be announced.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Psychology 321; Sociology 207.

449.0: THE PHILOSOPHY OF WITTGENSTEIN

Prerequisites: Normally, Philosophy 230.0 (concurrently, if desired).

A critical examination of Wittgenstein's philosophy, chiefly that of the late period.

Text: Remarks on the Foundations of Mathematics, The Blue and Brown Books, Philosophical Investigations—L. Wittgenstein.

Lectures, Seminars and Tutorials: Approximately three hours per week, two semesters.

452.0: PHENOMENOLOGY

Prerequisites: One course in Philosophy or permission of the professor.

The origins, developments, concepts, method and influence of the phenomenological movement in contemporary Philosophy.

Texts: Selections from Husserl, Heidegger, Sartre, Merleau-Ponty.

Reference: The Phenomenological Movement—H. Spiegelberg.

Relevant Courses in Other Areas: Religious Studies 137, 302, 310.

453.0: PHILOSOPHY OF HISTORY

Prerequisites: One course in Philosophy or permission of the professor.

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.

Text: Philosophy of History — W.H. Walsh.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: History 338; Religious Studies 330, 334.

455.0: CONTEMPORARY ANALYTIC PHILOSOPHY

Prerequisites: One course in Philosophy or permission of the professor.

A lecture and seminar course to examine the origins, expressions and significance of the contemporary analytic movement in Philosophy.

Texts: Readings from representative members of the Analytic School.

Lectures and Seminars: Three hours a week, two semesters.

456.0: ADVANCED ETHICAL THEORY

Prerequisites: One course in Philosophy or permission of the professor.

A lecture and seminar course to examine certain fundamental problems of contemporary ethics. Attention will be concentrated on metaethical problems which arise from and are discussed in the writings of Moore, Stevenson, Hare, Nowell-Smith, Frankena, Hampshire, and Brandt.

Texts: Selected readings in the above-mentioned authors.

Lectures and Seminars: Three hours a week, two semesters.

457.0: AUGUSTINE AND AQUINAS ON PHILOSOPHY

Prerequisites: One course in Philosophy or permission of the professor.

A lecture and seminar course to explore the meaning of Philosophy and its relation to Theology in the writings of Augustine and Aquinas.

Texts: Selected Readings in Augustine and Aquinas.

Lectures and Seminars: Three hours a week, two semesters.

Relevant Courses in Other Areas: Religious Studies 136, 308.

Some courses in other areas of study are of a partly philosophical content, and in certain cases the Department of Philosophy is prepared to give credits for them provided prior permission has been obtained. None of them, however, will be counted as satisfying the **requirement** in philosophy. The courses in question are the following.

EDUCATION 401.0: PHILOSOPHY OF EDUCATION

HISTORY 211.0: THE HISTORY OF SCIENCE

HISTORY 338.0: HISTORY AND HUMAN VALUES

HISTORY 408.0: CHURCH AND STATE THROUGH THE AGES

POLITICAL SCIENCE 335.0: POLITICAL THOUGHT TO THE FRENCH REVOLUTION

POLITICAL SCIENCE 356.0: MODERN POLITICAL THOUGHT

POLITICAL SCIENCE 450.0: SEMINAR IN THE HISTORY OF POLITICAL THOUGHT

RELIGIOUS STUDIES 201.0: BELIEF AND UNBELIEF

RELIGIOUS STUDIES 230.0: THE MEASURE OF MAN

RELIGIOUS STUDIES 306.0: MYTH AND HISTORY

RELIGIOUS STUDIES 307.0: SAINT AUGUSTINE

RELIGIOUS STUDIES 310.0: STUDIES IN 18th CENTURY SOCIAL AND RELIGIOUS THOUGHT

RELIGIOUS STUDIES 332.0: ATHEISTIC HUMANISM

RELIGIOUS STUDIES 340.0: SOCIAL ETHICS

RELIGIOUS STUDIES 344.0: PROBLEMS IN SOCIAL ETHICS

PHYSICS

D. Murty
K. Fillmore
W. Lonc S.J.
U. Merdsoy
G.F. Mitchell
F. Tomscha

Professor Chairman
Lecturer
Assistant Professor
Associate Professor
Assistant Professor
Associate Professor

NOTE: Students failing to complete a laboratory course prior to the date of examination will not be eligible to write the examination. Marks will be awarded for the practical work and combined with the examination results for the final mark.

111.0: GENERAL PHYSICS

Introduction to mechanics, sound, light, heat and electricity.

Text: Physics, Foundations and Frontiers — G. Gamow and J.M. Cleveland

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

221.0: UNIVERSITY PHYSICS

Tutorial (Compulsory) one hour a week.

Prerequisite: Physics 111.0 or a knowledge of Grade 12 Physics is necessary and it will be essential for students to be taking an Introductory Calculus course concurrently.

Topics will include: Mechanics, heat, sound, light and electricity.

Text: University Physics—Sears and Zemansky.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

PHYSICS 321.1: OPTICS

Prerequisites: Physics 221.0 and Math 310.0 (concurrently).

Optical Instruments, physical optics, including wave theory, polarization.

Text: Optics by Sears, Addison-Wesley.

Lectures: Three hours/week, one semester.

Laboratory: Three hours/week, one semester.

PHYSICS 322.2: ELECTRICITY AND MAGNETISM

Prerequisites: Physics 221.0 and Math 310.0 (concurrently).

Electricity and Magnetism; fundamental theory and concepts. Basic electric and magnetic properties of materials.

Text: Electricity and Magnetism, Duckworth, Holt-Rinehart-Winston.

Lectures: Three hours/week, one semester.

Laboratory: Three hours/week, one semester.

334.0: THEORETICAL MECHANICS

Prerequisites: Physics 321.1 and Math 310.0 (concurrently).

Introduction to Vector Analysis, work and potential energy, principle of virtual work the damped harmonic oscillator, the forced harmonic oscillator, 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 and Kepler's 3rd Law. Motion of a system of particles, motion of rigid bodies in three dimensions, generalized coordinates, holonomic and non-holonomic constraints, degrees of freedom, Lagrange's Equations, Hamilton's Principle, the Hamiltonian Function, Hamilton's Canonical Equations, wave motion, the wave equation, DeBroglie's Wave Mechanics, Operator Method in Quantum Mechanics, brief Introduction to Linear Operators, the Schrodinger Equation.

Text: Introduction to Theoretical Mechanics – R.A. Becker.

Lectures: Three hours per week, two semesters.

433.0: ELECTROMAGNETIC THEORY

Prerequisite: Physics 321.1 and 322.2, Mathematics 311.0, Mathematics 411.0 (may be taken concurrently).

Alternating currents, development of the theory of electric and magnetic fields, solutions of Maxwell's equations, theory of light, potential, images, skin effect, multipoles.

Text: Electromagnetic Theory—Reitz and Milford (Wiley & Sons)

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

436.0: ELECTRIC CIRCUITS (ENGINEERING 305.0)

Prerequisite: Mathematics 310.0, Physics 221.0, Engineering 305.

Circuit elements, equilibrium equations (mesh and node), the principle of duality, Laplace transforms, network theorems, energy and power, complex impedance and the use of phasors, steady state analysis of circuits, two-terminal networks two-terminal-pair networks and basic measurements.

Text: Electrical Engineering Circuits—Skilling (Wiley)

Reference: Networks, Lines and Fields—Ryder (Prentice-Hall)

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

437.0: ATOMIC AND NUCLEAR PHYSICS

Prerequisites: Physics 321.1, 322.2 and Maths 310.0.

Atoms, electrons, radiations, the nuclear atom, X-rays, and atomic structure, quantum theory of radiation, special theory of relativity, group velocity and wave velocity, atomic spectra and atomic structure, the nucleus, isotopes, 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 source, particle accelerators.

Text: Nuclear Physics—Irvin Kaplan (Addison-Wesley).

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

439.0: PHYSICAL OPTICS AND OPTICAL INSTRUMENTS

Prerequisites: Physics 321.1, 322.2, Mathematics 410.0.

Geometrical optics, optical design and instruments, Radiation laws, wave behaviour of light and formulation of theories, Stimulated radiation and coherence theory, Lasers and Q-switching.

Text: Principles of Optics—Max Born and Emily Wolf.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

450.0: ELECTRICAL MEASUREMENTS AND MEASURING INSTRUMENTS

Prerequisites: Mathematics 310.0, Physics 433.0 (may be taken concurrently).

Measurements of inductance, capacitance, and resistance, potentiometers, magnetic measurements, illumination, high-voltage measurements and testing, electrical methods of measuring temperature, eddy currents, measuring instruments, measurement of power, energy, measurement of speed, frequency and phase difference.

Text: Electrical Measurements and Measuring Instruments—Golding (Sir Isaac Pitman and Sons).

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

451.0: ELECTRONICS

Prerequisites: Mathematics 310.0, Physics 433.0 (may be taken concurrently).

Electrical measurements, power supplies, application by vacuum tubes and transistors amplifier circuits, oscillators, comparison measurements, servo systems, operational amplifiers for measurement and control, electronic switching and timing and digital counting systems, an integrated system of instruments, test equipment and rapid-connect parts, electrical signals and reactive circuits.

Text: To be announced

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

452.1: ADVANCED MECHANICS

Prerequisites: Physics 334.0 and Maths 310.0.

A study of generalized mechanics with particular emphasis on those formulations required for quantum mechanics and statistical physics.

Topics will include: Lagrange's equations, Hamilton's canonical equations, variational principles transformation theory, the Hamilton-Jacobi method, continuous systems, fields.

Text: Classical Mechanics—J.W. Leech (Methuen)

Reference: Classical Mechanics—H. Goldstein (Addison-Wesley)

Lectures: Three hours a week, one semester-half course.

453.2: CLASSICAL THERMODYNAMICS

Prerequisites: Physics 334.0 and Math 310.0.

Thermal phenomena from a macroscopic viewpoint: Temperature, work, heat, internal energy, entropy, the laws of thermodynamics, other state functions, Maxwell's relations, applications to simple systems, criteria for equilibrium.

Text: Thermodynamics — Vanderslice, Schamp, and Mason (Prentice-Hall)

Lectures: Three hours a week, one semester - half course.

550.0: TOPICS IN THEORETICAL PHYSICS

Prerequisites: Physics 334.0, Math 410.0.

Fluid dynamics, elasticity, tensor calculus, the theory of relativity.

The areas of greatest concentration will be decided upon in consultation with the students.

Texts: Fluid Dynamics —G.H.A. Cole (Methuen).

Tensor Calculus—B. Spain (Oliver and Boyd).

Lectures: Three hours a week, two semesters.

551.0: THERMODYNAMICS AND STATISTICAL MECHANICS

Prerequisites: Physics 433.0, Mathematics 410.0.

First and second law of thermodynamics and their application to simple thermodynamic systems and to chemical reactions. Kinetic theory and transport phenomena—in statistical mechanics the macro canonical and grand canonical ensembles, and Bose-Einstein and Fermi-Dirac statistics are discussed and applied to gases, electrons in metals, and low temperature physics.

Text: Thermodynamics and Statistical Mechanics—Zemansky.

Lectures: Three hours a week two semesters.

552.0: QUANTUM MECHANICS

Prerequisites: Physics 433.0, Mathematics 410.0.

Wave mechanical concepts—wave equation of Schrodinger—energy eigen function—examples of energy eigen functions—general principles of quantum mechanics—interpretative postulates of quantum mechanics—operators with continuous spectra—uncertainty principle—matrix mechanics—the equation of motion of operator—the Dirac notation for wave functions and operators—spin—Pauli's principle—time independent perturbation theory—collision processes—elastic scattering by fixed center of force—Born approximation—inelastic scattering processes—Dirac equation for a free particle.

Text: Quantum Mechanics—Mandl (Butterworth Publication, London).

Lectures: Three hours a week, two semesters.

553.0: UPPER ATMOSPHERE

Prerequisites: Physics 433.0, Mathematics 410.0.

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, the transport properties in the upper atmosphere.

Text: *The Upper Atmosphere*—Craig (Academic Press, New York).

Reference: *Physics of the Upper Atmosphere*—Ratcliffe (Academic Press, New York).

Lectures: Three hours a week, two semesters.

554.1: INTRODUCTION TO SOLID STATE PHYSICS

Prerequisites: Physics 433.0.

Crystal Structure; Lattice vibrations; Free electron Fermi gas; Band structure; Properties of simple metals; semiconductors and insulators; Superconductivity.

Text: *Introduction to Solid State Physics*—C. Kittel (Wiley and Sons)

Lectures: Three hours a week; one semester - half course

Laboratory: Three hours a week, one semester.

555.2: TOPICS IN ADVANCED NUCLEAR PHYSICS:

Prerequisites: Physics 437.0, Maths 410.0.

Some selected topics in Nuclear Physics will be discussed. Topics will be oriented towards research problems.

Reference: *Alpha-Beta-Gamma Ray Spectroscopy*. Vol. 1 and 2. K. Siegbahn. (North-Holland).

Lectures: Three hours a week—one semester—one half-course

556.1: ASTROPHYSICS

Prerequisites: Physics 433.0, Maths 410.0.

An investigation of the physics of stellar structure with applications to the evolution of stars, nucleosynthesis, supernovae, and neutron stars.

The relations of stellar physics to galaxy evolution and to the cosmological problem will be examined.

Text: To be announced.

Reference: Principles of Stellar Structure—Cox Giuli (Gordon and Breach)

Lectures: Three hours a week, one semester – half course.

ASTRONOMY 201.0: THE ASTRONOMICAL UNIVERSE

Prerequisites: Sophomore standing or permission of the professor.

This course is designed in particular for the non-science student. The subject matter will include the solar system, the life-cycles of stars, the structure of our Galaxy, the nature of external galaxies, and the expanding universe. Recent discoveries and unsolved problems, such as quasars, pulsars, exploding galaxies, and “black holes” will be discussed to illustrate the open and evolving nature of scientific investigation.

Text: To be announced.

Lectures: Three hours per week, two semesters.

There will be evening observing sessions about twice a month by arrangement.

Length: Three hours per week, two semesters.

ASTRONOMY 301.0: INTRODUCTION TO ASTRONOMY

Prerequisites: Physics 221.0, Mathematics 210.1 and 211.2.

An introductory survey of astronomy with emphasis on physical principles. The Solar System: The structure and motions of the earth, the moon, planetary orbits, properties of the planets, comets, meteors, the sun. Properties of Stars: Radiation theory, stellar spectra, stellar atmospheres, stellar interiors, the evolution of stars, variable stars, supernovae. Stellar Systems: Binary stars, star clusters, the structure of our galaxy, galaxies and the universe.

Text: Essentials of Astronomy – L. Motz and A. Duveen (Wadsworth)

Lectures: Three hours a week, two semesters.

There will be occasional evening observing sessions by arrangement.

POLITICAL SCIENCE

Theodore B. Ciuciura	Professor, Chairman
Robert G. Boyd	Associate Professor
Richard A. Butler	Lecturer
Guy Chauvin	Assistant Professor
Peter A.B. Dale	Lecturer
William J. Dalton	Professor
Edward J. McBride	Assistant Professor
Thomas M. Tynan	Lecturer

Part-Time

Edward J. Donnelly	Teaching Assistant
Edmund Morris	Instructor

121.0: 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.

Text: To be announced.

Lectures and group discussions: three hours a week, two semesters.

201.0: SCOPE AND METHODS OF POLITICAL SCIENCE

Prerequisite: Political Science 121

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.

Text: To be announced.

Lectures and group discussions: Three hours a week, two semesters

202.0: DEMOCRATIC GOVERNMENT

An examination of the basic features of western democratic government. Great Britain, the United States and Canada are used as the main examples of this type of government. Considerable attention is paid to the ideological foundations of the modern liberal democratic state.

Text: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

203.0: GOVERNMENT AND POLITICS IN THE SOVIET UNION

A survey of the history, culture and political institutions — from the old Kievan Rus to the Russian Empire, the Russian Soviet Federal Socialist Republic, and the Union of Soviet Socialist Republics; the development of political institutions and processes from the Revolution to the present, with attention to the largest non-Russian Soviet republics in Europe (Ukraine) and Asia (Kazakhstan, Uzbekistan).

Texts: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

204.0: CANADIAN GOVERNMENT AND POLITICS

Prerequisite: Political Science 121 or equivalent.

A study of Canadian constitutional democracy, encompassing an analysis of both political institutions and political behaviour.

Text: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

205.0: INTERNATIONAL RELATIONS

Prerequisite: Political Science 121 or equivalent

An introduction to the foreign policies of the major democracies, the Communist powers, and the new states, and a survey of processes of conflict and co-operation in the world community, with special reference to trends towards regional integration and to problems of arms control and economic development.

Texts: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

206.0: COMPARATIVE STUDY OF GOVERNMENTS: WESTERN EUROPE

Prerequisite: Political Science 121 or equivalent.

A detailed comparative analysis of the institutions and functions of the national political systems, primarily of the United Kingdom, France, Western Germany, Switzerland and Austria.

Text: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

212.0: GOVERNMENT AND POLITICS OF THE U.S.A.

Prerequisite: Political Science 121 or equivalent.

An inquiry into the theory and practice, the nature and operation, and the form and function of the American system of government, with particular emphasis upon the overlapping spheres of the governmental structure, the constitutional order and the political process.

Text: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

317.0: COMPARATIVE STUDY OF GOVERNMENTS: EASTERN EUROPE

A survey of political and institutional developments from 1848 to 1918, with special attention to multi-national Austria-Hungary; a comparative study of contemporary political institutions and processes in Communist Party-States of Eastern (or East Central) Europe: German Democratic Republic, Poland, Czechoslovakia, Yugoslavia, and others.

Text: To be announced.

Lectures and group discussions: Two hours a week, two semesters.

318.0: INTERNATIONAL LAW AND ORGANIZATION

Prerequisite: Political Science 121 or equivalent.

The principal features of public international law as they have developed and have been invoked in diplomatic practice, international adjudication, and national courts; a study of the structures and the processes of co-operation and conflict within the United Nations, the Commonwealth and other international organizations.

Texts: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

319.0: COMPARATIVE CONSTITUTIONAL LAW

Prerequisite: Political Science 121 or equivalent.

A comparative analysis of constitutional systems. It 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.

Text: To be announced.

Lectures and group discussions: Two hours a week, two semesters.

330.0: INTRODUCTION TO PUBLIC ADMINISTRATION

Prerequisite: Political Science 121 or equivalent.

A study of the structure and operation of the administrative branch of government — both in theory and in 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 experience in other nations. The administrative responsibilities and powers of the modern state will be assessed, and a sampling of recent organization theories will be undertaken.

Texts: To be announced.

Lectures and group discussions. Three hours a week, two semesters.

335.0: POLITICAL THOUGHT TO THE FRENCH REVOLUTION

A historical treatment of the most important political ideas from the earliest writings on politics to the immediate precursors of the French Revolution. Some attention is paid to the mutual interaction of social conditions and ideas.

Text: To be announced.

Lectures and group discussions: three hours a week, two semesters.

336.0: MODERN POLITICAL THOUGHT

An examination of political ideas from the French Revolution era to the present.

Text: To be announced.

Lectures and group discussions: Three hours a week, two semesters.

340.0: THE POLITICS OF THE DEVELOPING AREAS

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.

Texts: *The Politics of the Developing Areas* — G.A. Almond and J.S. Coleman eds. (Princeton U. Press, 1960) and *Political Culture and Political Development* — L.W. Pye and Sidney Verba (Princeton U. Press, 1965).

Lectures and group discussions: Three hours a week, two semesters.

341.0: GOVERNMENT AND POLITICS IN EAST ASIA

A study of government structures and political dynamics in mainland China, Southeast Asia and Japan, with emphasis on current trends in the Chinese system.

Texts: Major Governments of Asia – G. McT. Kahin ed., 2nd edition (Cornell U. Press, 1963), Ideology and Organization in Communist China – F. Schurman (U. of California Press, 1966) and Governments and Politics of Southeast Asia – G. McT. Kahin ed., 2nd edition (Cornell U. Press, 1964).

Lectures and group discussions: Three hours a week, two semesters.

345.0: POLITICAL PARTIES AND VOTING BEHAVIOUR

An analysis of the structures and functions of individual parties and party systems, with emphasis on the United States, Canada and Britain.

Lectures and group discussions: Two hours a week, two semesters.

450.0: SEMINAR IN THE HISTORY OF POLITICAL THOUGHT

An intensive study of major trends in political thought, early and modern, with special attention to contemporary political doctrines and ideologies, their transformation in the course of history and their interrelation in the course of history and their interrelation with social and political conditions.

Sessions: Two hours a week, two semesters.

451.0: CANADIAN GOVERNMENT SEMINAR

A study of selected aspects of Canadian government and politics, especially some of the dynamic forces which operate outside the formal constitutional framework.

Sessions: Two hours a week, two semesters.

452.0: SEMINAR IN COMPARATIVE GOVERNMENT

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.

Sessions: Two hours a week, two semesters.

453.0: INTERNATIONAL STUDIES SEMINAR

A seminar on the contemporary interaction of the major powers, with special consideration of selected world problems, tensions, trends and developments.

Texts and references are provided in the International Studies Research Room.

Sessions: Two hours a week, two semesters.

455.0: SEMINAR ON CANADIAN FOREIGN POLICY

An examination of the factors shaping Canada's external policy, the major issues in her foreign relations, and her roles in the international community. Special attention is given to Canada's participation in the United Nations, NATO and the Commonwealth, and to her aid programmes in the developing areas. Texts and references are provided in the International Studies Research Room.

Sessions: Two hours a week, two semesters.

PSYCHOLOGY

G. Gordon
S. Ahmad
C. Hayes
I. Lenzer
J. Darley
T. Hefele
D. Chard

Chairman, Assistant Professor
Assistant Professor
Lecturer
Assistant Professor
Assistant Professor
Assistant Professor
Instructor

201.0: INTRODUCTION TO PSYCHOLOGY

Prerequisites: Sophomore standing, or permission of the department.

The science of behaviour. Methods and Measurement. Physiological basis of behaviour. 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 must act as a subject for psychological experiments for a certain number of hours as a prerequisite for his credit. The number of hours will be announced at the beginning of the course.

Text: To be announced.

Lectures: Three hours a week, two semesters.

301.0: PSYCHOLOGY OF LEARNING

Prerequisites: Psychology 201.0, (as of 1971-72 a Grade of C will be required, or the permission of the Department) The student is recommended to take Psychology 305.0 or 306.0 concurrently.

Classical conditioning and instrumental learning will be studied as examples of the learning process. In addition, factors such as reinforcement, punishment, generalization, discrimination, transfer of training, extinction, short-term and long-term retention, interference, all-or-none versus incremental learning and the physiological correlates of learning will be studied.

Text: Marx, M. H., Learning: Processes. London: Collier-Macmillan, 1969.

Lectures: Two hours a week, two semesters.

Laboratory: Two hours a week, two semesters.

302.0: THE PSYCHOLOGY OF SENSATION AND PERCEPTION.

Prerequisites: Psychology 201.0, (as of 1971-72 a Grade of C will be required, or the permission of the Department). The student is recommended to take Psychology 305.0 or 306.0 concurrently.

The physical properties of stimuli, the physiological apparatus for sensing the environment, the perceptual process for extracting relevant information from sensory data and the interaction of the senses.

Text: The World of Perception – K. von Fieandt (Dorsey)

Books recommended: The Human Senses – F.A. Geldard
Human Senses and Perception – G.M. Wyburn, R.W. Pickford, R.J. Hirst.

Lectures: Two hours a week, two semesters.

Laboratories: Two hours a week, two semesters.

305.0: EXPERIMENTAL DESIGN AND PSYCHOLOGICAL STATISTICS

Prerequisites: Psychology 201.0, (as of 1971-72 a Grade of C will be required or the permission of the Department) and Mathematics 110.1 – 111.2 and Psychology 305.0 or Psychology 306.0 (Mathematics

314.0) are compulsory for all students wanting to take 400 level Psychology courses. Students are strongly advised to take Psychology 305.0 or 306.0 in the same year as 301.0 or 302.0.

Importance of Statistics in Psychology. Permutations and Combinations. Probability and Probability Distributions. Binomial and normal distributions. Characteristics of distributions: skewness, kurtosis, measures of central tendency and dispersion. Sampling and hypothesis testing. Parametric statistics: t, F, and chi-square tests; Analysis of Variance and Co-variance; Correlation and Regression. Non-parametric Statistics: Mann-Whitney and Wilcoxon; Friedman; Spearman's and Kendall's correlation coefficients.

Designing experiments in Psychology in the light of the above. Varying factors and observing changes in responses. Interpretation of results based on experimental design and application of the relevant statistic. Emphasis in this course will be laid on applications of statistics, and upon practical analysis of results obtained in laboratory courses 301.0 and 302.0

Text: To be announced.

Lectures and Laboratory: Three hours a week, two semesters.

306.0: SEE MATHEMATICS 314.0

403.0: PSYCHOLOGY OF MOTIVATION

Prerequisites: Psychology 301.0 or 302.0. Psychology 305.0 or 306.0 or permission of the Department.

A study of the impelling factors in behavior such as needs, drives and incentives. Behavioural and physiological components of hunger, thirst, sex, and intracranial self-stimulation.

Text: To be announced.

Lectures: Two hours a week, two semesters.

Laboratory: Two hours a week, two semesters.

404.0: COMPARATIVE AND PHYSIOLOGICAL PSYCHOLOGY

Prerequisites: Psychology 301.0 or 302.0, or permission of the Department. Psychology 305.0 or 306.0.

Physiological and neural mechanisms of behaviour. The sensory systems. Alerting mechanisms: sleep, arousal and attention. Physio-

logical basis of learning, memory, motivation and emotion. Physical control of the mind through electrical stimulation of the brain.

Text: Peter M. Milner: *Physiological Psychology*, Holt, Rinehart & Winston, 1970. Additional required reading: Strange & Foster, *Readings in Physiological Psychology*, Wadsworth Publishing Co., 1966.

Lectures: Three hours a week, two semesters.

Laboratory: Two hours a week, two semesters.

410.0: SOCIAL PSYCHOLOGY

Prerequisites: Psychology 201.0. Psychology 305.0 or 306.0. One of Psychology 301.0 or 302.0 or any 300.0 level sociology.

The Social Behaviour of Animals. Motives. Attitudes. Social Influence. Society, Culture and Personality. Communication. Leadership and Group Behaviour. Prejudice. Aggression and its Management. Deviant Behaviour. Collective Behaviour and the Psychology of the Crowd. Social Psychology in International Affairs.

A project will be undertaken as part of the course by students working individually or together.

Text: To be announced.

Books recommended.

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|---------------------------------------|--|
| Lindgren, H.C. (1969) | An Introduction to Social Psychology, Wiley. |
| Collins, B.E. (1970) | Social Psychology, Addison Wesley. |
| Krech, Crutchfield & Ballachey (1962) | Individual in Society, McGraw Hill. |
| Klineberg, O. (1954) | Social Psychology, Holt, Rinehart Winston. |
| Brown, R. (1965) | Social Psychology, Free Press. |
| Lindgren, H.C. (1969) | Contemporary Research in Social Psychology, Wiley. |
| Wrightsmann, L.S. (1969) | Contemporary Issues in Social Psychology, Brooks/Cole. |

Lectures: Three hours a week, two semesters.

Projects: Preparation first semester, completion second semester.

411.0: INDUSTRIAL AND APPLIED PSYCHOLOGY

Prerequisites: Psychology 301.0 or 302.0. Psychology 305.0 or 306.0.

The Individual within the Organization. Inter-personal relations and organizational structure. Selection, placement, training and performance. Motivation and morale. Leadership and decision-making. Psychomotor coordination in the carrying out of tasks. Cybernetics, work study, linear programming and critical path analysis.

Text: To be announced.

Lectures: Three hours a week, two semesters.

412.0: COGNITIVE PROCESSES

Prerequisites: Psychology 301.0. Psychology 305.0 or 306.0.

Symbolic processes. Problem solving, creativity, concept formation and rule learning. Choice. Logic and psycho-logic. Communication, elements of language processing and psycholinguistics. Perception and memory as determiners of the decision-making process.

Text: A.W. Staats – Learning, Language and Cognition (Holt, Rinehart and Winston)

Lectures and Laboratory: Three hours a week, two semesters.

413.0: ARCHITECTURAL AND ENVIRONMENTAL PSYCHOLOGY

Prerequisites: Psychology 301.0 or 302.0 Psychology 305.0 or 306.0; or permission of the Department.

The functions of buildings; the role of the architect in society. The criteria for design and patterns of research; performance, comfort, stimulation; curiosity, and arousal. Perception of space, personal and movement space, territoriality. Lighting: apparent brightness, gloom, glare. Acoustics: noise and stress, speech interference, distraction. Thermal environment: temperature and arousal, behavior under heat stress. Perception of the city: cognitive maps, the sonic environment, visual complexity. The street and its social functions. Stress in the urban environment: Calhoun's rats and the rat race.

Text: To be announced.

Lectures: Three hours a week, two semesters.

421.0: HISTORICAL AND CONTEMPORARY SYSTEMS OF PSYCHOLOGY

Prerequisites: Psychology 301.0 or 302.0. Psychology 305.0 or 306.0, or permission of the Department.

Greek Psychology. Arabian and Western European development. Mediaeval and Renaissance approaches. Early scientific influences: ideas from physics, mathematics and physiology. Nineteenth and twentieth century theories and experiments. Psychology as a natural, biological and social science. The outlook.

The basic issues: Classical and scientific Psychology. Voluntary and involuntary behavior. Respondent and Operant behavior. Choice and preference. Drives and values. Uncertainty and Information. Intelligence. Symbolic Processes and Language. Problems of measurement and evaluation. Organization and evaluation.

Text: To be announced.

Lectures: Three hours a week, two semesters.

431.0: CHILD PSYCHOLOGY AND ADOLESCENT DEVELOPMENT

Prerequisites: Psychology 301.0 or 302.0. Psychology 305.0 or 306.0, or the permission of the Department.

Research Methodology in Child Development. Theories of Behaviour and Development. Prenatal development. The Neonate. Maturation and Learning. Nature versus nurture. The Development of Intelligence and Personality. Psychological Assessment of Children. Problems of early life. Pathological versus normal development. Puberty. Changes and Problems of Adolescence.

Text: Child Development and Personality – Mussen, Conger and Kagan (3rd edition).

Lectures: Three hours a week, two semesters.

432.0: CLINICAL PSYCHOLOGY

Prerequisites: Psychology 301.0. Psychology 305.0 or 306.0. Students are recommended to take Psychology 433.0 before Psychology 432.0. If they elect not to do so, they **must** take Psychology 433.0 concurrently with Psychology 432.0.

Mental illness and Mental health. Normal and abnormal behaviour. Origin, development, symptoms and cures of certain behaviour disorders. Neurosis and Psychosis. Psychological and physiological factors as joint causes of psychological problems. Counselling, psychotherapy, behaviour therapy, group therapy. Mental retardation. Functions of mental hospitals, child guidance clinics, psychotherapists and psychiatrists.

Text: To be announced.

Lectures and Laboratory: Three hours a week, two semesters.

433.0: PSYCHOLOGY OF PERSONALITY

Prerequisites: Psychology 301.0, or 302.0. Psychology 305.0 or 306.0.

Personality Theories of Freud, Jung, Adler, Fromm, Horney, Sullivan, Murray, Lewin, Allport, Sheldon, Eysenck, Rogers, Maslow and others. Psycho-dynamic, behaviour, factor and physiological approaches to personality development. Projective and scale measures of personality. Normal and abnormal personality. Neurosis and psychosis.

Text: To be announced.

Lectures: Three hours a week, two semesters.

440.0: EDUCATIONAL AND PSYCHOLOGICAL TESTS AND MEASUREMENTS

Prerequisite: Psychology 301.0 or 302.0. Psychology 305.0 or 306.0.

Basic principles: Statistical sampling and testing: Psychological measurement and the construction of scales. Test construction: standardisation, validity, reliability. Types of tests in common use: intelligence, aptitude, ability, personality, educational, vocational. Special tests: language, clerical, perceptual, speed, mechanical. Uses of testing and evaluation in teaching, counselling, educational and vocational selection, diagnosis and follow-up.

Text: A. Anastasi: Psychological Testing (3rd edition) (MacMillan)

Lectures and Laboratories: Three hours a week, two 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.

Course Outline: A reading course in diverse areas of Psychology, recommended for senior students. Each section of this course will be overseen by the member of the department most specialised in the area. The specific topics will vary from year to year.

Texts: To be announced.

RELIGIOUS STUDIES

S.A. Armstrong	Chairman, Assistant Professor
D. Clarke	Assistant Professor
G.R. Hoffmann, S.J.	Assistant Professor
T. Macho, S.J.	Associate Professor
L.B. Miller	Lecturer
L.F. Murphy, S.J.	Assistant Professor
T. Rigelhof	Lecturer
E. Stiegman	Assistant Professor
G.W. Tait, S.J.	Part time
M. Waida	Lecturer

The purpose of the university study of religion is to analyze the meaning of religion in human experience and to investigate its role in personal and social structures. In this pursuit it employs the perspectives afforded by numerous other disciplines — anthropology, art, history, literature, philosophy, psychology, sociology, etc. — as well as those afforded by its own — ascetics, liturgics, mythology, theology, etc.

Commencing September 1971, the Department of Religious Studies will offer its courses in terms of three general areas:

RELIGION IN WESTERN CIVILIZATION HISTORY OF RELIGIONS (COMPARATIVE RELIGION) RELIGION IN CONTEMPORARY SOCIETY

Complete details of the arts degree program with a concentration in Religious Studies are available to students in the departmental office. Individual, specialized guidance and instruction are available to students of proven academic ability.

Some of the courses listed below which are taught by members of this department are marked as “cross-listed” in other departments. Students taking such courses are normally allowed to count the course as a credit in whichever of the departments they choose. Students who wish to count such a course towards a **major** in another department should double check with that department.

At the end of this department’s listings will be found a list of courses taught in other departments which are cross-listed in the Department of Religious Studies. These courses can be counted as Religious Studies credits. This option is subject to the restriction that religious studies **majors** must have the permission of their advisor if they wish to count the course toward their minimum five courses in the major.

A partial list of related courses follow many course descriptions. These courses cannot be counted as credits in Religious Studies, but are suggested as an aid to students who wish to construct an integrated program.

All courses, unless otherwise specified, are two semester courses, have no prerequisites, and provide for group discussion.

Because the largest number of students enrolled in religious studies courses at all levels are non-majors, a few notes on the department's interpretation of the numbering system may be helpful. We offer four levels of courses: 100.0, 200.0, 300.0, 400.0. The 100.0 level course provides a general introduction to the whole field of religious studies. The 200.0 level courses provide foundations for the three general areas of our program. The 300.0 level courses provide work in particular areas of more special interest. The 400.0 level course provides independent, guided study for students of proven ability. We recognize that a non-major's interest in religious studies may be restricted to a particular area and that he may have room for only one or two courses in our department; consequently, the introductory and foundational courses are not prerequisites for the 300.0 level courses. A student may take courses at any level regardless of his year with these restrictions: Freshmen will not normally be allowed in courses above the 200.0 level, and sophomores will not be allowed in the 400.0 level. Courses marked with brackets, [] , will not be offered in 1971-72.

Courses

100.0: MAN'S EXPERIENCE OF THE SACRED: INTRODUCTION TO RELIGIOUS STUDIES

This course seeks to understand man's visions of what has been variously thought of as the Transcendent, or Sacred powers, or dark human forces. It asks such questions as: Is the sacred a fiction man has outgrown? How has man integrated his experience of suffering, maturing, change, sexuality, and death with the sacred? The course will therefore analyze such samples of religious experience as Israelite cosmology, Babylonian New Year festivals, Confucian ethics, Indian yoga, Buddhist monasticism, Christian mysticism, etc.

D. Clarke
L.B. Miller

E. Stiegman
M. Waida

RELIGION IN WESTERN CIVILIZATION

201.0: BELIEF AND UNBELIEF (cross-listed as Philosophy 306)

Does God exist? The apparent contradiction of faith and reason. The problem of intellectual responsibility in any "leap" to faith. Is a faith necessary to man? Can there be a "natural theology"? Can we demythologize the Bible? Consideration of the principal authors who discuss the problem of belief.

Related courses: Philosophy 120-129, 354, 455, 459, etc.

E. Stiegman

202.0: INTRODUCTION TO THE BIBLE

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 modern man.

Related courses: History 205, Anthropology 151, Anthropology 155.

D. Clarke

[301.0: RELIGIOUS ELEMENTS IN WESTERN CIVILIZATION]

Has man today outgrown religion? "The human situation" and religious faith. A study of the principal elements of the religious mind, the origins of these elements, their influence as traced in cultural evolution of the West; religious directions for the 70's.

E. Stiegman

302.0: GOD AND MAN

The course will study the divinity and humanness of Christ, disputed from His own time to the present, hammered out as dogma by the historic - and controversial - Church councils. We shall see the political influences, stresses and strains, which resulted in the formulation of the dogma that Christ is both God and man. We shall study the theological interpretations of the person and works of Christ as chronicled in the New Testament and by early ecclesiastical writers. The general aim of the course is to see dogma developing in the particular conditions of the time and place within which much development takes place. The particular problem of the Incarnation is chosen as providing an instance in which the development has reached relative finality.

G.R. Hoffmann, S.J.

[303.0: THE GIFT OF THE SPIRIT]

Creation, sin, birth and rebirth. Death, resurrection of the body. Law, freedom, and spirit. The natural and supernatural structure of the universe. This course studies the theology of Grace or the Divine Indwelling in Christianity. Main areas of study will be the Bible, St. Augustine, St. Thomas Aquinas, the Reformation period and especially contemporary theology. What are the implications for today of belief in the resurrection of the body? How is God present in our contemporary world? Does Grace mean that man need not be concerned for this world?

L.F. Murphy, S.J.

304.0: THE CHURCH

A discussion of the reality, which is the Church, mainly by considering the actions and discussions of Vatican II (1962-1965).

Text: Abbot & Gallagher (editors), *The Documents of Vatican II* (Guild Press, N.Y., America Press, Association Press: An Angelus Book, 1966).

G.R. Hoffmann, S.J.

305.0: DRAMA AND RELIGION (Cross-listed as English 306.0)

A close reading of ten great plays, together with secondary examples, from world literature, emphasizing Greek tragedy, Shakespeare, and the modern English-American stage. The course strives for an awareness of the religious dimensions of the fictional universe which every play creates, and of the mythical character of the play's central action. Attention is drawn to the birth from religious ritual of both classical and modern drama, and to the "dramatic" essence of Judaism and Christianity as religions of event.

Related courses: History 223, English 120, 204, 205, 305, 306, 316, French 315 etc.

E. Stiegman

306.0: MYTH AND HISTORY: THE PROBLEM OF INTERPRETING HUMAN EXISTENCE

Man's search for meaning. The life of man in relation to his past and that of his communities: the question put to Marc Bloc; "Papa, what good is history?" Students in this course coregister in History 334.

S. Armstrong

R. Bollini

Prerequisite: One University History course or consent of the instructor.

Related course: Philosophy 453.

307.0: ST. AUGUSTINE

A man who witnessed the fall of Rome, Augustine is one of the greatest makers of history. His genius helped, as no one else did, to shape our Western Christian civilization. Harnack has called him the first modern man. Every philosophical and theological movement has always claimed some roots in Augustine's thought.

Special attention will be given to Augustine's anthropology. His theories of truth, love, freedom, sex, and marriage will be studied in detail.

Related course: Philosophy 457.

T. Macho, S.J.

308.0: TOWARDS THE REFORMATION (cross-listed as History 309)

Problems — political, intellectual and religious — which originated in early mediaeval Christendom, reached their climax in the middle ages, and resulted in the reformation. Students will see that the Church exists in time, as well as space, and that the times were ripe for a sweeping revolution. Western Christendom was torn asunder. What made this possible? And what is the significance of that split for us today, who shall live with it?

G.R. Hoffmann, S.J.

309.0: THE REFORMATION (This course may, with the permission of the Chairman of the History Department, count as a History credit.)

The Reformation in Germany, France, Switzerland, and England: Luther, Calvin, Zwingli, Bucer. The Radical Reformation. The Counter-Reformation, the Council of Trent and Post-Tridentine developments in Roman Catholic Theology in this period.

Did the divisions among Christians contribute to the weakening of Christianity in western civilization? What is the ecumenical movement?

L.F. Murphy, S.J.

310.0: STUDIES IN EIGHTEENTH CENTURY SOCIAL AND RELIGIOUS THOUGHT (cross-listed as History 330 and in Philosophy)

A study of the intellectual foundations of political and religious liberalism. This course concentrates on the social and religious philosophies of the Enlightenment and their influence on the contem-

porary Western civilization. Emphasis is placed upon reading, analyzing, and interpreting selected writings of the period.

T. Rigelhof

Texts: E. Cassirer, *The Philosophy of the Enlightenment*.

Selected readings in Newton, Locke, Descartes, Voltaire, Diderot, Rousseau, Hume, Gibbon, Herder, Kant, Franklin, etc.

Related courses: English 308, History 306, Philosophy 352.

[311.0 THE TRACTARIANS]

A course which deals with the part played by Pusey, Keble, Newman, Froude, and R.I. Wilberforce in nineteenth century religious thought and some of the effects of their thinking on Ecumenism.

G.W. Tait, S.J.

HISTORY OF RELIGIONS (COMPARATIVE RELIGION)

[220.0: THE COMPARISONS OF RELIGION]

This course offers a general introduction to the study of religions from their primitive beginnings to their more developed forms. The course will survey the basic theories of religion and the methodologies employed in their genesis — history, ethnology, psychology, sociology, philosophy, linguistics, etc. — and their application to specific problems in religion through representative examples, including Plato, Voltaire, Hume, Darwin, Freud, Jung, Eliade et al.

T. Rigelhof

M. Waida

321.0: PRIMITIVE AND ASIATIC MYTHS IN RECENT INTERPRETATION (cross-listed as Anthropology 324, included in the Asian Studies Program)

A survey of myths, symbols, and initiation ceremonies among (1) hunters and food gatherers and (2) agriculturalists in Asia. Various modern theories of myth and mythic thought; e.g. W. Schmidt, Ad. E. Jensen, R. Pettazzoni, M. Eliade, will be correlated with readings and interpretations of specific myths and symbols in Asian communities. In the second semester this course will concentrate on a study of various types of "cosmogonic myths," their meanings and functions in Asian societies.

Related course: Anthropology 351.

M. Waida

322.0: EURASIAN RELIGIONS: CRISIS AND RENEWAL (cross-listed as Anthropology 325 and included in the Asian Studies Program.)

A survey of the new religious patterns emerging in the ancient Near East, Iran, India, and China. Special emphasis will be paid on the problem of man and his destiny in the religion of Zarathustra in Iran, Brahmanism, Hinduism, and also be paid to the recent progress in the study of various forms of Asian mysticism, e.g., Indian Yoga, Chinese Taoism, and "Shamanism," the religious phenomenon predominant in Central and North Asia.

M. Waida

[323.0: THE RELIGIONS OF INDIA (cross-listed as Anthropology 326 and included in the Asian Studies program)].

A survey to the religious traditions of India from the Indus Valley civilization to the present. This course will concentrate on the foundations and development of the Hindu, Buddhist, and Jain traditions in India and will consider their characteristic doctrines in some detail. Attention will also be given to the general methodological problems in the study of Oriental religions.

T. Rigelhof.

324.0: THE RELIGIONS OF CHINA AND JAPAN (cross-listed as Anthropology 327 and included in the Asian Studies Program)

A survey of the religious traditions of East Asia from their foundations to the present day. The course will concentrate on folk religions, on Taoism, Confucianism, Shinto and the East Asian reception of Buddhism, particularly Zen Buddhism in Japan.

T. Rigelhof

325.0: MYSTICISM AND MEDITATION: EAST AND WEST

Mysticism is a specific type of religious orientation wherein man attempts to unite himself to the "other" through the realization of internal resources. Meditation is the principal means it employs to effect this unity. This course will systematically investigate several mysticisms – old and new, Eastern and Western – and some of the systems of meditation they have produced. It will also investigate the roles played by chants, symbols, drugs, etc. in the meditative processes. Special attention will be paid to the uneasy relationship between the "mystical" and the "scientific".

T. Rigelhof

RELIGION IN CONTEMPORARY SOCIETY

230.0: THE MEASURE OF MAN

There are many distinct modes of human experience. Each mode is capable of providing a unique measure of our humanity. Each assigns central importance to one among many dimensions of our lives. No single perspective on man is adequate for dealing with the complexity of life. The theologian's interest is in the "depth" dimension of human existence. However, we seriously misunderstand ourselves if we ignore the insight to be had from other perspectives. Consequently, we shall study the relationship of the depth dimension to a number of measures of man such as those offered by science, history, art, and myth.

Related courses: English 317, History 211, Psychology 333, Philosophy 121, Philosophy 126, Philosophy 127, Philosophy 452, Philosophy 355.

S. Armstrong

331.0: THE FUTURE OF MAN

Contemporary man is undergoing a radical transformation. No longer affirming the primacy of the past, he now looks resolutely towards the future. The question he asks today is not "What has happened to man?", but "What is going to happen to man?"

This cultural transformation radically informs man's religious experience and the forms in which it is expressed. This course will explore some of these emerging forms, including the emergence of a new concept of God.

Related courses: Philosophy 355, Philosophy 452, Philosophy 200, Sociology 318, Sociology 319.

D. Clarke

332.0: ATHEISTIC HUMANISM

After a study of the meaning of modern atheism and man's transcendental dimension as affirmed by Christian anthropology, our attention will be focused on the atheistic humanism of Freud's psychoanalysis, Marx and Lenin, and the French existentialism of Sartre and Albert Camus.

T. Macho, S.J.

333.0: DEVELOPMENT OF CHRISTIAN PERSONALITY

This course studies the role of sacrament in Christianity. Why does man approach God and God approach man through material things and symbolic actions? The notion of person and personal relationships, and the place of freedom in the development of the Christian person. How do sacraments transform man and give man the role of transforming the world? The Eucharist as passover, cult, sacrifice, banquet, What is the liturgical movement? Why has Christian worship changed?

L.F. Murphy, S.J.

334.0: LOVE'S BODY: IN SEARCH OF WHOLENESS, WONDER AND WISDOM

A discussion of attempts to deal with the re-integration of our differentiated and fragmented culture, where the religious has been alienated from the secular, the poetic from the scientific. Drawing on the resources of the world's religious thought we will discuss the following: the techniques for integrating body, mind, and nature; the cultivation of wonder and the art of surrender; fantasy, play, and the work ethic; the exploration of human time; reflection on myths which have influenced our style of life and discussion of the search for wisdom, wholeness and fulfillment.

L.B. Miller

[335.0: RELIGION IN A SCIENTIFIC AGE]

An exploration of the nature, history, powers, and limitations of science with attention of some of its wide-ranging effects on our understanding of ourselves and the world. We will ask how the role of science in our lives may aid, hinder, or be irrelevant to religious concerns. There are no prerequisites either in the sciences or in theology.

Related courses: Philosophy 351, History 211.

S. Armstrong

[336.0: RELIGION IN 20th CENTURY POETRY (cross-listed as English 307.0)]

Extensive readings in 20th century English-language poets with emphasis on Hardy, Yeats, Eliot, the Imagists, H. Crane, Frost and Auden. Intensive consideration of how the poet's religiosity is rooted in an experience which is broader than rational thought. The occasion of

the poem is distinguished from its true subject, which is discovered to be, generally, those matters of ultimate concern which are bound up with religion — questions such as, what is real? Who am I? Can I explain beauty? What is love? The student learns that in poetry man's religious awareness may go far beyond the possibilities of doctrinal formulation.

Related courses: English 120, English 314, English 315, English 317.

E. Stiegman

337.0: CHRISTIANITY, MARXISM, AND REVOLUTION

This course compares two opposing views of man — the theistic and the atheistic — to see whether Marxism is basically compatible or incompatible with Christianity and to see the convergences and divergences that this comparison reveals, which in the process reveals, while in the process singling out the various basic themes around which a doctrinal dialogue between Christians and Marxists ought to be built.

Attention will also be given to the so-called theology of revolution: can there be a "Christian Violence"?

T. Macho, S.J.

338.0: CONTEMPORARY ROMAN CATHOLICISM

The Roman Catholic Church in the nineteenth and twentieth centuries. Theological developments that flowed into the Second Vatican Council (1962-1965). The First Vatican Council (1870) and papal infallibility. The Oxford Movement and John Henry Newman. The crisis of Modernism. The Social Encyclicals. Biblical research and the Liturgical Movement. "Transcendental theology." Freedom of conscience? Has the Church changed? What does the contemporary Church teach? How does the Church confront the world of today?

L.F. Murphy, S.J.

[339.0: CONTEMPORARY PROTESTANT THOUGHT]

An exploration of the central insights of some of the major Protestant thinkers of our time. Special attention will be given to determining the usefulness of these insights for our understanding of ourselves and the world in which we live. The major work of the course will be the discussion, both in the classroom and in written form, of selected readings.

S. Armstrong.

340.0: SOCIAL ETHICS: MAN AND FREEDOM IN A TECHNOLOGICAL SOCIETY

An inquiry into the nature of the technological society; its contours, possibilities and dangers; the possibility of cultural alternatives; an analysis of the counter-culture (Black Power, The New Left, the cultural revolution etc.); foundational analyses of the nature of freedom, social reality, the conditions for a participatory world, the politics of social transformation.

Related courses: Philosophy 209, Sociology 207, 308, 318, Economics 304, Political Science 202, English 313, 314, History 302, 305.

L.B. Miller

[341.0: CHRISTIAN MORAL THEOLOGY]

The old question in Lc. "what are we to do?" (Lc. 3:10, Acts 2:37) is still with us today. Slogan-status have been acquired by phrases like "the new morality" and "situation ethics".

During the first semester of this course, the emphasis will be on the basic moral question "what ought I to do?", that is, on the formation of a right Christian conscience.

In the second semester, the attention will be focused on some of the problems concerning the worth of human life, like genetics, contraception, abortion, homicide and suicide, heart transplants, euthanasia, capital punishment and war.

T. Macho, S.J.

[342.0: THE CATHOLIC SOCIAL TEACHINGS: FROM LEO XIII TO PAUL VI]

Beginning with Leo XIII's reaction to Laissez-faire capitalism and Marxian socialism in his *Rerum Novarum* – the first official social teaching of the Church in modern society – this course intends to trace the development of this teaching as it confronted Nazism, Marxism-Leninism, War and Development.

T. Macho, S.J.

[343.0: SOCIOLOGY OF RELIGION]

This course will be a discussion of various topics in the scientific study of religion: What are the different scientific models appropriate for understanding religious phenomena? Is religious behaviour measurable? What are the dimensions of religiosity? What is the relationship of

religion to social change, conflict, the fulfillment of individual and group needs? Is our secular age the end of religion? What do recent studies tell us about religion in contemporary society?

Related course: Anthropology 151

L.B. Miller

[344.0: PROBLEMS IN SOCIAL ETHICS]

A discussion of the various traditions in Christian ethics leading to the emergence of social ethics: the Puritan ethic, the pietistic tradition, the Social Gospel; the emergence of Christian realism; the debate over situational ethics: the dialogue between Ethics, Philosophy, and the Social Sciences. In these discussions, the course will concentrate on the question of war and the uses and abuses of power to give the course thematic unity.

Related courses: Philosophy 456, Philosophy 300.

L.B. Miller

400.0: SPECIAL TOPIC

Students will choose a theme or movement in collaboration with a member of the department and pursue it through specialized readings and tutorials.

Staff – Permission of Chairman is required.

Courses offered in other Departments which are cross-listed in Religious Studies:

- | | |
|-------|---|
| 312.0 | PHIL. 205 MEDIEVAL PHILOSOPHY & POLITICS |
| 313.0 | PHIL. 350 MEDIEVAL PHILOSOPHY |
| 314.0 | PHIL. 354 METAPHYSICS AS THE KNOWLEDGE OF GOD |
| 315.0 | GREEK 120 INTRODUCTORY GREEK |
| 345.0 | PHIL. 355 THE EXISTENTIALIST VIEW OF MAN |

SOCIOLOGY

Ronald Coper	Chairman, Assistant Professor
Brian Joseph	Lecturer
Patricia Loiselle	Lecturer
Daniel MacInnes	Lecturer
Jannie Poushinsky	Lecturer
Linda Ruffman	Assistant Professor

In order to graduate with a major in sociology, a student must be admitted to the program, meet all course requirements, and maintain the required grade average. Normally Introductory Sociology is the first course taken. The student wanting to be admitted to standing as a sociology major must so petition the department during the second semester of his introductory course, at the earliest. Standing as a sociology major is subject to review at the end of the student's Junior year. To major in sociology, a student must get credit for Introductory Sociology, normally taken in the Sophomore year; Research Methods and Sociological Theory, normally taken in the Junior year; and one Senior level course, either Modern Sociology or Senior Seminar. In addition a sociology major must take a minimum of three other courses from allied fields (anthropology, economics, political science, psychology), at least one of which must be on the 300 or 400 level. The student majoring in sociology must receive an average of "C" or more in his sociology courses.

Prerequisites for all courses are either as stated or by consent of instructor. Courses are all the equivalent of three hours per week per academic year, although specific course schedules are decided by the department.

200.0: INTRODUCTORY SOCIOLOGY

An introductory study of sociological perspectives, basic sociological concepts, man's interaction and organization in society, particularly in modern Canadian society, and the relationship between sociological theory and research; analysis of major social institutions (familial, religious, educational, economical, and political), and of major trends in society (urbanization, industrialization, bureaucratization, and the technological revolution).

300.0: RESEARCH METHODS

Prerequisite: One Sociology course.

An examination of the basic methods and techniques employed at various stages in social research. Topics to be discussed include selecting a research problem research designs, methods of Data collection, content analysis and problems of measurement. Practical experience will be provided by means of a research project.

301.0: SOCIOLOGICAL THEORY

Prerequisite: One Sociology course.

A critical examination of sociological theory with emphasis on difference and congruance in the writings of European and American scholars from Saint-Simon and Comte to Parsons and other contemporary theorists. Analysis of major sociological concepts to discover conceptual links between past usages and meanings and current trends and realities. Relationship of specific theories and their ideas to modern times.

302.0: SOCIAL PROBLEMS INVOLVING DISORGANIZATION AND DEVIANCE

Prerequisite: One Sociology course.

A positive approach to establish proper perspectives for adjustment of personal, family, industrial, religious, social and various other problems such as addictions, health, handicaps; vocational difficulties; emotional controls and suicide; industrial hazards, community problems, national problems, minority groups, war, population, prejudice and discrimination; family problems.

303.0: CRIMINOLOGY AND PENOLOGY

Prerequisite: One Sociology course.

The philosophies of causation and prevention of crime; types of criminal behavior; organized crime and vice. Agencies of apprehension, trial, custody, and after-care of prisoners. World trends in penological philosophy.

304.0: COMPARATIVE SOCIAL SYSTEMS

This course is designed to analyse systematically the major social organizations such as: economic structures, kinship structures, political structures, work structures, recreational structure, of a variety of differently organized social systems. The focus of the course is to compare sociologically the structure and functioning of large social systems. This is presented from a sociological perspective.

305.0: SOCIAL AND ECONOMIC DEVELOPMENT

Prerequisite: One course in Sociology or Economics.

The application of sociological principles to problems of the third world, economic development, urbanization, and modernization. Problems in the transition from agrarian to urban societies.

306.0: (EDUCATION 407.0) SOCIOLOGY OF EDUCATION

Prerequisite: Two or more Sociology courses or for students in Education.

The institutional structure of education and the social roles of administrators, teachers, and students.

307.0: MASS COMMUNICATIONS

Prerequisite: One Sociology course.

An analysis of the role of mass communications in modern society with particular emphasis on communication media: their structure and control, content, audience, and effects. Theories of mass communication and research data concerning their impact upon the individual in society.

308.0: URBAN SOCIOLOGY

Prerequisites: One course in Sociology.

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. Emphasis is on theory and research and their application to selected problems in the metropolitan area.

309.0: (PHILOSOPHY 402.0) PHILOSOPHY OF THE SOCIAL STUDIES

Prerequisite: One course in Sociology.

310.0: HUMAN ECOLOGY

Prerequisites: One Sociology or Biology course.

The course will cover basically the biological underpinnings of society. Non-human and human social structure will be compared. The general theory of ecology will be outlined, and the place of man in nature will be examined. Finally, the conclusions of what is generally considered to be human ecology will be treated in light of the above.

311.0: POPULATION

Prerequisite: One Sociology course.

Determinants and consequences of population, size, growth, rates, composition, distribution, fertility, mortality, and immigration.

313.0: SOCIOLOGY OF KINSHIP AND FAMILY

Prerequisite: One Sociology course.

Cross-cultural analysis of family and changing family patterns; relationship between family and other institutions; appropriate roles and patterns of interaction at each stage of family life-cycle. This will be presented from a sociological perspective with emphasis on theoretical and methodological issues.

316.0: ORGANIZATIONAL THEORY AND BUREAUCRACY

Prerequisite: One Sociology course.

An examination of the formal structure and bureaucratic organization of systems of modern society, deals with organizational theory in relation to occupational, professional, industrial, and work situations.

317.0: (RELIGIOUS STUDIES 317.0) SOCIOLOGY OF RELIGION

Prerequisite: One Sociology or Religious Studies course.

Analysis of the nature of the sociological study of religion and of its theoretical development. The relationship between religion and society. Applications of the major theoretical concepts of the contemporary religious situation.

318.0: SOCIAL CHANGE

Prerequisite: One Sociology course.

This course has two objectives: (1) to present a sociological view of history, and (2) to introduce the student to the more important theories of the form, causes, and processes of social change.

319.0: SOCIALIZATION

Prerequisite: One Sociology course.

An analysis of the mechanisms by which individuals acquire from birth to death, the necessary attributes, values and skills for adequate functioning in society. A major concern of the course will be to analyze the processes which operate to cause both conformity and deviance within a particular culture and social system. The course will also include a sociological analysis of some of the main socializing agents in society such as: mass media, schools, family, reference groups, peer groups, etc.

320.0: ETHNIC AND MINORITY GROUPS

The concept of race and ethnicity; the Problems of Minority groups; ethnic differentiation and assimilation in Canadian and American Societies; Segregation, Inequality and Race Conflict. Selected Canadian and American Minorities. Selected World Minority Groups; Race and collective behaviour.

321.0: CANADIAN SOCIETY

Prerequisite: One Sociology course.

An examination of the institutional framework and value basis of Canadian Society. Topics to be discussed include ethnic composition, class structure, economic institutions, political institutions and industrialization. A look will also be taken at the broad spectrum of social problems confronting Canada, both externally and internally.

322.0: POLITICAL SOCIOLOGY

The seminar will examine the connections between large structural changes in societies (notably industrialization and urbanization) and the appearance of collective violence, protest and revolution. The course will deal especially with European experience, although there will be plenty of opportunity to use materials from other parts of the world.

323.0: THE INDIVIDUAL AND SOCIETY

Prerequisite: One Sociology or Psychology course.

The course will emphasize the development of the self in society with particular reference to role theory, symbolic interaction, reference groups, motives, influence, conformity, social performance and group structure.

324.0: SOCIAL STRATIFICATION

Prerequisite: One Sociology course.

An analysis of the main features of social inequality in modern industrial societies. Analysis of the distribution of power and wealth, the existence of 'power elites' or 'governing classes', comparative community power structures, the institutionalisation of class conflict, problems of social mobility, the political expression of class and status groups, will all be dealt with. Also, a critical examination of varying sociological perspectives on stratification, both classical (Marx, Weber) and contemporary (Functionalist and Conflict theorists).

325.0: THE SOCIOLOGY OF LANGUAGE AND MEANING

Prerequisite: One Sociology course.

The study of language or communication as a social institution, and the social foundations of meaning. These topics are treated in the first term: biosocial basis of language, structure of language, language change, dialectology, relationships with other institutions, writing. The second term considers: social definitions of reality, ethnomethodology, and sociology of knowledge.

430.0: MODERN SOCIOLOGY

Prerequisite: Open only to Senior majors in sociology.

Issues in contemporary sociology are examined. The course emphasizes student participation and development.

433.0: SENIOR SEMINAR

Prerequisite: Open only to senior majors in Sociology.

An opportunity for a small group of students to intensively study selected topics in sociology and to gain experience in advanced skills in sociology. Recommended primarily for majors planning to do graduate work.

SPANISH

Annabelle Edwards
Thomas Macho, S.J.

Lecturer
Associate Professor

101.0: INTRODUCTION TO THE SPANISH LANGUAGE

Concentrated study of basic structures with particular emphasis on oral aspects.

Text: Modern Spanish. (Longman. Second Edition).

Lectures: Three hours a week, two semesters.

201.0: ELEMENTARY SPANISH

Prerequisite: Spanish 101.0 or Spanish matriculation.

Continuation of work begun in Spanish 101.0 with particular emphasis on conversation and reading with understanding. Systematic building of vocabulary through study of Spanish civilization.

Text: Beginning Spanish. Second Edition by Zenia Sacks da Silva. (Harper and Row.)

Lectures: Three hours a week, two semesters.

Laboratory: Three half hour (periods) a week.

301.0: COMPLETION OF THE AUDIO-LINGUAL PROGRAM

Prerequisite: Spanish 201.0.

Particular emphasis on conversation and writing using a style and vocabulary appropriate to the material or the occasion. Building of vocabulary through study of cultural materials and especially the anthropological concept of culture.

Texts: Audio Lingual Materials: Level Three

Lectures: Three hours a week, two semesters.

Laboratory: Three½ hour (periods) a week.

302.0: PROSE AND STYLISTICS

Prerequisite: Sound knowledge of Spanish grammar.

Aim: Students learn to "feel" the most appropriate expression in particular circumstances. Class time involves mainly the correction of exercises prepared at home, concentrating on choice of words, imagery, shades of meaning etc.

Text: Spanish Composition through Literature by Candido Áyllón and Paul Smith. Publisher — Prentice Hall. A good Spanish Dictionary. No pocket Editions.

Lectures: One hour weekly. Spanish — English.

One hour weekly. English — Spanish.

303.0: SPANISH DRAMA

An interpretation of the Spanish Drama from the Middle Ages to our days, with particular emphasis on modern Spanish drama and its peculiar characteristics.

Text: To be announced.

Lectures: Three hours a week, two semesters.

304.0: THE GENERATION OF 1898

The Spanish culture before and after this generation. Particular emphasis on Baroja, Unamuno, and Ortega.

Text: To be announced.

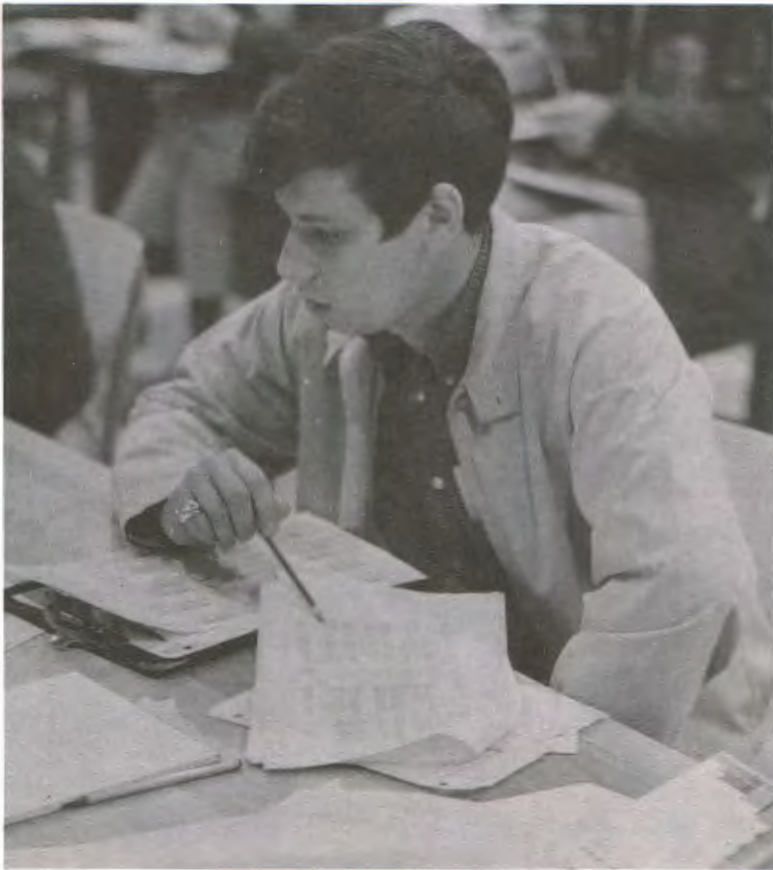
Lectures: Three hours a week, two semesters.

305.0: DON QUIJOTE (NOT OFFERED 1971-72)

Cervantes and his time.

Text: To be announced.

Lectures: Two hours a week, and one hour seminar, two semesters.





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To June 1971

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M.W. Burke-Gaffney, S.J., B.A., B.E., Ph.D., D. Eng.
W. Dalton, B.A., M.A., Ph.D.
I. Donahoe
W. Gillis
E. Hayes, B.Sc., M.Sc., Ph.D.
B. Housser
D. Murty, B.Sc., M.Sc., M.A., D.Sc.

To June 1972

G. Benoit
O.P. Cormier, B. Comm., M.B.A., C.A.
T. E. Flynn, B.A., M.A.
G. Gordon, B.Sc., Ph.D.
R. Haynes

R. Marshall, B.A., M.A.
U. Merdsoy, B.Sc., M.Sc.

To June 1973

R. Crowther, B.A., B.Ed., M.A.
L. Dewan, B.A., M.A., Ph.D.
W. Gillis
A.P. Monahan, M.A., Ph.D., M.S.L.
D. Murphy
W.A. Stewart, S.J., B.A., S.T.L., Ph.L.
J. Sullivan
D. Warner, B.E., M.S.M.E.

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