# General Calendar of SAINT MARY'S UNIVERSITY for the academic year 1964-65

Under the Direction of the Jesuit Fathers

May 1964 Halifax - Nova Scotia - Canada



Air view of Saint Mary's University, Saint Mary's University Campus, and Halifax Harbour.

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# ACADEMIC CALENDAR YEAR

1964-65

AUGUST	A	U	GI	JS	T	
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Saturday......Last day for receiving applications for entrance and supplemental examinations.

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### SEPTEMBER

- 5 Saturday......Entrance and supplemental examinations begin at 9:00 a.m.
- Wednesday.....Registration for all second year students.
   9:00 a.m.—12:00 noon; 2:00 p.m.—5:00 p.m.
   Thursday.......Registration for all third year students.
- 9:00 a.m.—12.00 noon.

  Registration for all fourth year students.
  2:00 p.m.—5:00 p.m.
- Friday......Registration for all first year students.
  9:00 a.m.—12:00 noon; 2:00 p.m.—5:00 p.m.
- 12 Saturday......Registration for returning resident students. 9:00 a.m.—12:00 noon.
- Monday......Instruction begins for all classes.

  Late registration fee of \$5.00, with an additional fee of \$3.00 for each day after this date.
- Wednesday.....College Mission begins at 9:00 a.m. Mass of the Holy Spirit in the University Chapel at 4:15 p.m.
- Thursday..........General meeting of the Faculty in the Board Room at 11:30 a.m.
- Wednesday.....Final date for late registration. Inauguration of extra-curricular activities.
   Wednesday.....Last day for change of registration.

### OCTOBER.

- 2 Friday.....Fall Convocation.
- 12 Monday......Thanksgiving Day. No classes.

## NOVEMBER

- 2-7 Test week.
- 11 Wednesday ..... Remembrance Day. No classes.
- Wednesday.....Solemn Requiem Mass for Most Reverend John T. McNally and deceased professors and alumni in the University Chapel at 12:00

DECEMI	BER
8	TuesdayFeast of the Immaculate Conception. Fatronal Feast of the University. Solemn High Mass in the University Chapel at 11:30 a.m. No
12-19	classes.  Mid-year examinations. Christmas recess begins after the last examination.
JANUAH	R.A.
3	SundayAnnual Closed Retreat begins.
7	Classes resume at 8:30 a.m.
7-11	De registration of all students for second semosters
14	ThursMonGeneral meeting of the Faculty in the Board Room at 11:30 a.m.
FEBRU	ARY
15-20	Test week.
24	WednesdayPublic Speaking Contest in the Debating Theatre at 8:15 p.m.
26	FridayStudent Council elections.
MARC	H Datase of Schools
7	SundayFeast of St. Thomas Aquinas, Patron of Schools.
1-31	Pre-registration of all students for next academic year.
APRIL	
3	Saturday Extra-curricular activities cease.
14	Wadnesday Easter recess begins after the last class.
20	Classes resume at 8:30 a.m.
26	MondayFinal examinations begin at 9:00 a.m.
MAY	
7	FridaySurvey Camp begins.
9	SundayBaccalaureate Ceremony in the University Chapter
10	MondaySpring Convocation in the University Auditorium
JUNE	G
21-24	MonThursRegistration for Summer Session.
28	MondaySummer classes begin.
AUG	UST
13	FridaySummer Session examinations begin at 9:00 a.m

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# SAINT MARY'S UNIVERSITY

### CHANCELLOR

MOST REVEREND J. GERALD BERRY, D.D. Archbishop of Halifax

# **BOARD OF GOVERNORS**

### Members Ex Officio

The Chancellor, Chairman of the Board

 R. W. McColough, B.Sc., D.Eng., M.E.I.C.
 1964

 Right Reverend Cyril J. Martin, D.P., P.P.
 1966

 John W. Merritt, M.D.C.M., F.R.C.S. (C), F.I.C.S., F.A.C.S.
 1966

 Alban Murphy, Esq.
 1966

 Colonel Sidney C. Oland, V.D., LL.D.
 1965

 Bernard A. O'Leary, B.Sc., C.E., M.E.I.C.
 1964

 Reverend J. L. Quinan, S.T.B., J.C.B.
 1966

 Norman Stanbury\*
 1965

 John A. Walker, M.A., LL.B., Q.C., K.S.G.
 1966

\*Alumni Representative

## ACADEMIC SENATE

#### Members Ex Officio

Very Reverend C. J. Fischer, S.J., Chairman
Reverend J. E. Healey, S.J., Vice-Chairman
K. J. Cleary, B.A., B.Ed., M.A., Secretary
H. G. Beazley, B.Comm., R.I.A.
Reverend D. Fogarty, S.J.
Reverend E. G. Hallam, S.J.

Vice-Chairman
Sara Judd (Mrs. A.)
Reverend H. J. Labelle, S.J.
J. L. Ryan, B. Sc., B.E.

#### Members Elected

Reverend M. W. Burke-Gaffney, S.J. W. Dalton, B.A., M.A., Ph.D. A. P. Monahan, M.A., L.M.S., Ph.D.

A. T. Sabean, B.A., B.Sc., M.Sc Reverend W. A. Stewart, S.J.

# OFFICERS OF ADMINISTRATION

Very Reverend C. J. Fischer, S.J	President
Reverend E. M. Brown, S.J.	
Reverend C. S. Bathurst, S.J.	Treasurer
Reverend J. E. Healey, S.J.	Dean of Studies
K. J. Cleary, B.A., B.Ed., M.A.	Assistant to the Dean
H. G. Beazley, B.Comm., R.I.A.	Dean, Commerce
Reverend D. Fogarty, S.J.	
J. L. Ryan, B.Sc., B.E.	Dean, Engineering
Sara Judd (Mrs. A.)	Registrar
Reverend J. J. Hennessey, S.J.	
Reverend M. J. Belair, S.J.	Director of Adult Studies
Edmund Morris, B.A	Assistant to the President

### COMMITTEE ON ADMISSIONS

The Registrar and the Deans of the various Faculties.

### LIBRARY

Reverend E. G. Hallam, S.J., Librarian; S. V. Rountree, B.A., M.A., B.L.S., Assistant Librarian; Florence E. Foley, Catalogue Librarian.

## **OFFICES**

Donald J. Markley, Bursar; Carol Markesino (Mrs. J.), Secretary to the President; Barbara Hubley, Secretary to the Dean.

## STUDENT AFFAIRS

Reverend M. J. O'Donnell, S.J., Student Counsellor; Reverend J. J. Masterson, S.J., Assistant Student Counsellor; Reverend R. S. O'Connor, S. J., Sodality Director; J. J. Vorstermans, Econ. Drs., Placement Officer; Albert McCusker, B.Sc., Director of Residence; J. T. Walsh, Bookstore Manager.

## ATHLETICS

Reverend J. J. Hennessey, S.J., Faculty Moderator; Robert Hayes, Director of Athletics, Football Coach; Leslie Goodwin, B.Ed., M.Ed., Assistant Director of Athletics, Basketball Coach; Albert McCusker, B.Sc., Hockey Coach.

## UNIVERSITY RESERVE TRAINING PROGRAMMES

Captain R. E. Duffy, B.Comm. (Resident Staff Officer)

## SURGEONS

A. L. Murphy, B.A., M.D., C.M., F.A.C.S.; John W. Merritt, M.D. C.M., F.R.C.S. (C), F.I.C.S., F.A.C.S.

### PHYSICIANS

E. T. Granville, M.D., C.M.; C. H. Reardon, M.D., C.M.; A. B. Crosby, M.D., C.M.; Michael MacSween, M.D., C.M.

### DENTISTS

F. C. Fennell, D.D.S.; A. Borden Haverstock, D.D.S.; W.V. Hogan, D.D.S.

### OCULIST

1963-64

E. I. Glenister, B.A., M.D., C.M.

# OFFICERS OF INSTRUCTION

Ph.D., University of Ottawa B.A., B.Comm., Saint Mary's University; C.A. ......Instructor, Accounting Reverend F. J. Devine, S.J. Associate Professor, French M.A., McGill University; Ph.D., Universitè Laval; Diplomé de l'Ecole Supérieure des Professeurs de Français à l'Etranger. (Sorbonne) Charles Dixon Instructor, Accounting B.Comm., Saint Mary's University; C.A.

Frederick Dockrill Lecturer, Education B.A., B.Ed., Saint Mary's University Edward Flynn (On Leave of Absence) ........... Assistant Professor, English B.A., Memorial University; M.A., Dalhousie University
Reverend Daniel Fogarty, S.J......Dean, Associate Professor, Education M.A., Ph.D., Columbia University Otto Haenlein Lecturer, German B.A., B.Ed., Dalhousie University B.A., M.A., Dalhousie University Mildred B. Harrington Lecturer, Classics B.A., B.Ed., Saint Mary's University

John Hawkins

Instructor, English B.A., Saint Mary's University Reverend J. E. Healey, S.J. Dean of Studies, Associate Professor, History B.A., University of Montreal; M.A., University of Toronto; S.T.L., West Baden P. J. Heckman .....Instructor, Drawing B.A., M.A., Gonzaga University F. Joseph Hill..... .....Instructor, Accounting S.T.L., Ph.L., Immaculate Conception Elizabeth A. Hutton Lecturer, History B.A., M.A., Dalhousie University

Maurice E. Keating ......Instructor, Education B.A., M.A., LL.B., Dalhousie University; LL.D., Saint Mary's Univer-Reverend H. Labelle, S.J. Associate, Professor Philosophy B.A., University of Montreal; M.A., St. Louis University; S.T.L., Immaculate Conception; Ph.D., Gregorian University John Loewenstein Associate Professor, French Ph.D., University of Vienna; F.R.A.I.

J. R. MacCormack

B.A., M.A., Dalhousie University; Ph.D., University of Toronto

Kenneth MacKinnon

B.Sc., Saint Dunstan's University; M.A., Dalhousie University

B.Sc., Saint Dunstan's University; M.A., Dalhousie University 

Rowland Marshall Lecturer, Philosophy B.A., M.A., University of Western Ontario Urhan S. Merdsoy ...... Assistant Professor, Physics B.Sc., M.Sc., University of Rochester

Arthur P. Monahan

M.A. (Tor.); L.M.S. (Pont. Inst. Med. Studies); Ph.D. (Tor.) S.T.L., Immaculate Conception Joanne Nugent Joanne Nugent Instructor, English
B.A., Dalhousie University; B.Ed., M.A., Saint Mary's University
Reverend Raymond O'Connor, S.J. Assistant Professor, Theology
B.A., University of Montreal; S.T.L., Immaculate Conception
Reverend M. J. O'Donnell, S.J. Associate Professor, Classics
B.A., University of Montreal; S.T.L., Immaculate Conception ......Instructor, English Johanna Richter Assistant Professor, German M.A., University of Toronto

Alfonso Rojo

B.Sc., Valladolid; M.Sc., Ph.D., University of Madrid Enriqueta Rojo. Lecturer, Biology
B.Sc., M.Sc., University of Madrid
S. V. Rountree. Instructor, French .....Instructor, French B.A., M.A., Dalhousie University; B.L.S., McGill University Reverend Daniel Rourke, S.J. Associate Professor, Sociology B.A., St. Francis Xavier University; M.A., Gonzaga University J. L. Ryan, E.D. Dean, Associate Professor, Engineering B.Sc., Saint Mary's University; B.E. (Mechanical) Nova Scotia Technical College Allan T. Sabean Associate Professor, Chemistry B.A., B.Sc., Saint Mary's University; M.Sc., McGill University

Adolfo Sarabia

Assistant Professor, Spanish
B.A., Valladolid; M.A., University of Madrid

Charles W. Schandl

Associate Professor, Accounting Dr. Jur., University of Budapest; C.A. B. S. Sheehan (On Leave of Absence) .... Assistant Professor, Engineering B.E. (Electrical), Nova Scotia Technical College; M.S.E.E., Massachusetts Institute of Technology David Hope Simpson Associate Professor, Geology
B.Sc., M.Sc., Ph.D., McGill University Reverend W. A. Stewart, S.J. ................................ Associate Professor, Philosophy B.A., University of Montreal; S.T.L., Immaculate Conception

Stanislas Swianiewicz Professor, Economics
Dr. Jur., University of Vilna

Frank Tomscha Assistant Professor, Physics
B.A., B.Sc., M.Sc., Diplom Physiker, State University, Frankfort-on-Main Joseph J. Vorstermans Associate Professor, Economics
Econ. Drs., Catholic University, Tilburg

Donald Warner Assistant Professor, Engineering
B.E. (Mechanical), Nova Scotia Technical College;

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M.S.M.E., Purdue University

Augustus Wedderburn	Instructor, Latin
B.A., B.Ed., Mount Allison University; M.A., Saint M.	Mary's University
B.A., University of Montreal; M.S., Fordham Univers	
Julius Zarand Inc. Diplomas, Academy of Fine Arts, Budapest.	structor, Fine Arts

# **AFFILIATE INSTITUTIONS**

## IGNATIUS COLLEGE

GUELPH, ONTARIO

## OFFICERS OF ADMINISTRATION

Very Reverend James J. Farrell, S.J.	Rector
Reverend F. C. Elliott, S.J.	Vice-Rector
Reverend Thomas F. Hoey, S.J.	Dean of Studies
Reverend Paul H. Hoppe, S.J.	Registrar
Reverend Frank West, S.J.	Librarian
Reverend Leonard J. Fischer, S.J.	Student Counsellor
Reverend Donald F. Beaudois, S.J	Student Counsellor
Reverend William D. Connor, S.J	Bursar

## OFFICERS OF INSTRUCTION

Reverend Henry B. Bedard, S.J.	Latin
Reverend Donald F. Beaudois, S.J.	Mathematics
Reverend Thomas F. Hoey, S.J.	Greek, Latin
Reverend Paul H. Hoppe, S.J.	
Reverend Eric C. Smith, S.J.	
Reverend John F. Wickham, S.J.	English

## REGIS COLLEGE

3425 BAYVIEW AVENUE WILLOWDALE, ONTARIO

# OFFICERS OF ADMINISTRATION

Very Reverend E. F. Sheridan, S.J.	Rector
Reverend K. J. Scott, S.J.	Vice-Rector
Reverend J. Hochban, S.J.	
Reverend D. T. Asselin, S.J.	
Reverend V. J. MacKenzie, S.J.	Librarian
Reverend F. E. Brennan, S.J.	Bursar

# **GENERAL INFORMATION**

HISTORY

**ASSOCIATIONS** 

STATEMENT OF OBJECTIVES

STUDENT ORGANIZATIONS

SERVICES TRAINING

# **HISTORY**

Saint Mary's University had its beginnings as a small college founded in Halifax in 1802, under the inspiration of 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.

The young college faced many difficulties and had, on occasion, temporarily to suspend activities. Times of trouble, however, did not prevent it from producing its share of eminent men among whom were Archbishop McCarthy of Halifax; Sir Malachi Bowes Daly, Lieutenant-Governor of Nova Scotia; and Martin Griffin, Parliamentary Librarian for Canada.

In 1881, Saint Mary's received a handsome bequest from the will of Mr. Patrick Power, a prominent Halifax business man. This generosity came at a critical period in the history of Saint Mary's, since without it the institution might not have survived. Santamarians remember the name of Mr. Power with gratitude.

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.

## IGNATIUS COLLEGE; REGIS COLLEGE

In the early seventeenth century Jesuits came to the New World as missionaries. From the beginning they considered the work of education

and the establishment of schools in Canada of primary importance. The first Canadian houses for the training of Jesuit teachers were established in Montreal in 1848. In 1913, a further centre, St. Stanislaus Novitiate, was founded at Guelph, Ontario, for the training of members of the Order in English-speaking Canada; in 1930, the College of Christ the King was opened in Toronto for Philosophical and Theological studies.

By an agreement of January 2nd, 1957, both St. Stanislaus Novitiate and the College of Christ the King affiliated with Saint Mary's University, and were incorporated as 'Ignatius College' and 'Regis College' respectively. These Colleges, offering degree courses in the Humanities, Philosophy and Theology, provide young Jesuits with the basic preparation for their work in the educational institutions directed by the Order across Canada.

# ASSOCIATIONS

Saint Mary's University is a member of the National Conference of Canadian Universities and Colleges, of the Association of Commonwealth Universities, of the Canadian Association for Adult Education, and of the Jesuit Educational Association.

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 and Metallurgical, or Chemical 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

Saint Mary's University shares in the renowned Jesuit tradition of Catholic education. While it strives to keep faith with modern advances in knowledge, it considers that the resources of the past, especially the intangible ones, are vitally important to the education of the citizens for tomorrow.

### GENERAL AIMS

Saint Mary's firmly believes that education must entail the full balanced development of man's faculties. And this development centres chiefly on three ideals: KNOWLEDGE, CHARACTER, and LEADER-SHIP.

By KNOWLEDGE, men are formed to whom the treasures of ancient and modern learning are unlocked; men are trained to think and assess values; to deal with fact and abstract thought; equipped to do the task of today; inspired with creative ideas for the task that will be theirs tomorrow.

By CHARACTER, men are formed with a capacity to act according to the values learned; who in their chosen careers act steadfastly in accordance with the highest standards of right living and gentlemanly conduct under the guidance of supernatural faith; men who so live the truth that they know that their conviction and courage will give hope and confidence to the world of tomorrow.

By LEADERSHIP, men are formed to take an enlightened place in society and meet the challenge of the times undaunted; professional men, men in the realm of communications, businessmen, scientists, engineers who in their profession will radiate principles of Faith and sound citizenship.

In the pursuit of these ideals, Saint Mary's requires of all students, whatever their vocational or professional interests, a large number of courses in the cultural areas of languages and history, philosophy and religion, mathematics and science. A broad education is considered as the one most worthy of the dignity of the human soul and the one best fitted to preserve a free society.

## SPECIFIC AIMS

But the University is conscious of the dignity of the individual. And in recognition of divergent inclinations and aptitudes leading to differing vocational choices, it offers a reasonable variety of course programmes leading to: Master of Arts (in Education), Master of Social Work, Bachelor of Education, Bachelor of Arts, Bachelor of Science, Bachelor of Commerce, Diploma in Engineering, Diploma in Education. Special provisions are made for students who intend to enter professional studies in Theology, Dentistry, Law, Medicine, etc.

## DISCIPLINE

It is assumed that students come to the University for a serious purpose, and that they will cheerfully conform to duly established customs, policies and rules. Regulations are intended to maintain favourable study conditions, to promote character development and to foster gentlemanly deportment. No young man of integrity and good breeding can misunder-

stand the purpose of each regulation—and no other kind of student is desired at the University. The faculty, therefore, reserves the right to censure or penalize students who are guilty of breaches of school discipline. It is the aim of the faculty to administer academic discipline so as to maintain the highest standards of integrity. The registration of the student is considered an acceptance of regulations.

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

# STUDENT ORGANIZATIONS

The extra-curricular organizations listed below are officially recognized by the University. The activities of these societies, which aim at developing Christian Leadership, are directed by their respective officers with the co-operation and guidance of a member of the faculty.

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.

### RELIGIOUS ORGANIZATIONS

Sodality of the Blessed Virgin Mary. The purpose of the Sodality is to develop Catholic leadership and to form lay apostles under the protection of the Mother of God.

The Apostleship of Prayer and League of the Sacred Heart. The object of the Apostleship is to instill in students an apostolic outlook and a spirit of reparation for sin.

Saint John Berchman's Society. Its purpose is to train students for ecclesiastical functions and to develop in them appreciation of the liturgical life of the Church.

#### GENERAL ORGANIZATIONS

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

World University Service of Canada. Through this national organization Saint Mary's participates in an international programme of material

assistance, student exchange, and interchange of ideas throughout the world university community.

Canadian University Students. It strives to encourage better understanding among students across Canada, and to promote effectively student needs and represent their interests here and abroad. Membership is open to all students.

**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. This Society sponsors the Student Placement Programme and organizes talks and interviews to open opportunities for summer work and permanent employment.

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 complement the training of the Public Speaking courses, and include Intercollegiate and Interfaculty Debates, Radio Debates and Forums, etc.

The Philosophers' Academy has for its purpose the promotion of philosophical study and of the investigation of philosophical problems by the presentation and discussion of philosophic topics at its regular meetings.

Saint Mary's University History Society provides a forum for the discussion of significant themes and problems in History, with emphasis on Modern History. Members should have at least one University History course as background.

Saint Mary's University Dramatic Society presents each year a major dramatic production. It co-operates in the entertainment programmes offered by other student organizations.

The Saint Mary's Journal is the newspaper published by the students.

TANK TO LES

Saint Mary's University Athletic Association regulates the athletic activities of the students. All external and intramural contests, the conferring of athletic prizes, Letters and other awards, are under the direction of the executive of the Association.

The Young Liberals' Club and The Young Progressive-Conservative Club strive to arouse on the campus an informed interest in civic and government affairs through a programme of Model Parliaments, guests speakers, meetings, etc.

The Alumni Association. All former Saint Mary's students are eligible for membership. The Association, in addition to an annual social programme, has established an Annual Fund for university support. The Association nominates six members for appointment to the University's Board of Governors. Saint Mary's alumni are encouraged to avail themselves of many of the University's facilities for recreation and study.

# SERVICES TRAINING

# REGULAR OFFICER TRAINING PLAN (ROTP)

Under the Regular Officer Training Plan successful applicants who have completed Senior Matriculation are enrolled in the Armed Force of their choice and are provided with College or University training.

On successful completion of academic and military training, cadets will be promoted to Commissioned Officer rank in the Regular Force. The privilege of release, if desired, will be granted after three years' Commissioned Officer service. Further details may be obtained from the Resident Staff Officer or from any recruiting office.

# UNIVERSITY NAVAL TRAINING DIVISION (UNTD)

The University Naval Training Divisions have been established to select and train suitable University Students for commissioned rank in all branches of the Royal Canadian Naval Reserve.

For details contact RCNR Recruiting Teams at the University during registration. For further information contact LCDR R. C. Marshall, RCNR, Philosophy Department.

# CANADIAN OFFICERS TRAINING CORPS (COTC)

Saint Mary's University participates in the programme of academic and practical studies approved by the Department of National Defence

for University undergraduates whereby students may qualify for a commission in the Canadian Army—Active Force, Reserve Force, or Supplementary Reserve.

For full information contact Major J. L. Ryan, E. D., Dean of Engineering.

## ROYAL CANADIAN AIR FORCE UNIVERSITY RESERVE TRAINING PLAN (URTP)

The purpose of the URTP is to select students for training in Officers' branches or professions allied to their studies and aptitudes. Where specialist training is required, students spend up to two summers at RCAF schools acquiring theoretical and practical knowledge which both supplements and complements their university studies, while a further year of practical experience qualifies them as Junior Officers in their respective branches. The liaison officer at Saint Mary's University is Prof. A. T. Sabean, Chemistry Department.

# FINANCIAL INFORMATION

FDDS

BURSAR'S REGULATIONS

WITHDRAWAL AND REFUNDS

SCHOLARSHIPS AND BURSARIES

## FEES

As first term fees, students are required to make an initial payment of \$275.00 (resident students \$575.00) on or before the date of Fall registration.

Second term fees, payable on the dates of re-registration, January 7th-11th, are the balance of the student's account.

### TUITION FEES

These fees include all regular charges of the University for registration, tuition, laboratories, library, athletic programme, insurance, Students' Council. They apply to all students registered for three or more courses, up to the normal full-time load. A course over the normal load is \$100.00.

## SPECIAL FEES

Late registration: \$5.00, and an additional \$3.00 per	
day after September 14th	
Graduation: with Degree\$	15.00
with Diploma	
in absentia (additional fee)	15.00
Supplemental or Special examination	
at an outside centre (additional fee)	5.00
Re-reading.	5.00
Official transcript (after first copy)	2.00

## STUDENTS' COUNCIL FEE

At the request of the student body, all full-time students are required to pay \$12.00 in support of student projects. This fee is administered by the Students' Council and is included in full-time Tuition Fees noted above.

## RESIDENCE FEES

The residence fee covers room rent and board for the academic year from the day before Fall registration to the day after the final examination, but excluding the Christmas recess. Outside this period and during the Christmas recess the charge for resident students is \$4.00 per day; no reduction of this rate is made for meals not taken at the University.

Room and board \$640.00 Personal laundry, per term 25.00

# **BURSAR'S REGULATIONS**

- 1. The University reserves the right to make changes without notice in its published schedule of tuition, residence, and other fees.
- 2. To confirm his acceptance, a resident student must forward a deposit of \$25.00 for room reservation before August 15th. This is credited towards the student's residence account; it is not transferable to tuition and is not refundable unless the reservation is cancelled before august 25th.
- 3. No reduction in fees is granted to a student who enters the University after the date of opening.
- 4. Outside accounts will not be handled by the Bursar unless a deposit has been made to cover them.
- 5. The University will not advance money for the purchase of text books, stationery, travel or personal expenses.
- Any damage done to University buildings, furniture or equipment will be charged to the offending students.
- 7. The University accepts no responsibility for injuries or loss of time incurred by students while taking part in student activities.
- 8. The premium for an accident insurance policy is included in the general academic fee paid by all full-time students. As residents of Nova Scotia are covered by the Province's Hospitalization Plan, the University's insurance plan supplements this coverage.

Students from outside Nova Scotia, not covered by hospitalization should provide for it either through their family or personally.

- 9. No student will be admitted to a semester examination or be promoted from one year to another or receive any report, degree, diploma, certificate, transcript, or testimonial whatsoever, until his financial accounts have been satisfactorily settled.
- 10. Drafts, cheques, money orders, etc., should be made payable at par to SAINT MARY'S UNIVERSITY and addressed to the Bursar, Saint Mary's University, Robie Street, Halifax, N. S.

#### WITHDRAWAL AND REFUNDS

Students who withdraw from the University within two weeks of the opening of classes may receive a refund of all fees, less \$25.00 (service charge) and \$4.00 per day residence room and board.

When a student withdraws from the University, he will at once notify the Registrar. In all cases this notification will be taken as the official date of withdrawal from the University.

A proportionate refund of Board and Tuition fees may be granted to a student who withdraws from the University for a reason approved by the proper authorities if application is made in writing to the Bursar. Students withdrawing at the beginning of a month or at any time within the month are charged tuition for the whole month.

A student is accepted for residence on the understanding that he remain in residence for the whole session, or, in the case of withdrawal during the session, that he obtain a mutually satisfactory substitute resident. All students are charged room and board for the complete session and no refund is made on withdrawal unless or until an acceptable substitute has assumed obligation to the University for the balance of the session.

No refund of any fee will be granted to a student who withdraws from the University after November 15th for the first semester, or after March 15th for the second semester.

# SCHOLARSHIPS AND BURSARIES

In an effort to help needy and deserving students, Saint Mary's University annually awards many scholarships and bursaries. Entering students who wish to make application for scholarships must have an average of 75 per cent or over in their high school work. University students who apply for continuing scholarships must have a minimum average of 70 per cent. Bursaries are awarded on the basis of need for students of less than scholarship average but whose abilities give promise of solid and successful university work.

All scholarship applications must be made in writing to the scholarship officer of the University before June 30. Each scholarship is awarded on a yearly basis; students who wish a renewal must reapply by this date.

### SCHOLARSHIPS OPEN TO ALL STUDENTS

Ashwood Scholarship: Valued at \$200.

Flinn Scholarships: Two, valued at \$250 each.

Mary C. Daley Scholarship: Valued at \$100 and awarded in alternate years.

Union Carbide Scholarships: Two, tenable for 4 years. Valued at \$700 each for the first year, \$600 in each subsequent year.

**Duncan W. Lynch Memorial Scholarship:** Valued at \$400. Open annually to a Catholic student from Dartmouth.

John Glenister Memorial Scholarship: Valued at \$150. Open annually.

Halifax Rifles Centenary Scholarship: Valued at \$200 minimum a year.

University Scholarships: 3 valued at \$500 each, 9 valued at \$300 each, and 8 valued at \$100 each.

## SCHOLARSHIPS OPEN TO ENTERING STUDENTS

Saint Mary's University Ladies' Auxiliary Scholarship: Valued at \$350. Open to a student of Saint Patrick's High School, Halifax, Nova Scotia.

Brother Stirling Scholarship: Donated by Mr. John H. Dickey. Valued at \$300. Open annually.

University Scholarship: Valued at \$500. Awarded annually to a leading student of Saint Patrick's High School, Halifax, Nova Scotia.

University Scholarship: Valued at \$500. Awarded annually to a leading student in the graduating class of St. Peter's High School, Dartmouth, Nova Scotia.

University Scholarship: Valued at \$500. Awarded annually to a student of Saint Malachy's High School, Saint John, New Brunswick.

University Scholarship: Valued at \$200. Awarded annually to a Catholic student from Moncton, New Brunswick.

University Scholarship: Valued at \$500. Awarded annually to a student of the graduating class of Gonzaga High School, St. John's Newfoundland.

University Scholarship: Valued at \$500. Awarded annually to a student of the graduating class of Brother Rice High School, St. John's, Newfoundland.

University Scholarships: A number of university scholarships are available to students of Bishop Burke House.

University Scholarships: 2 valued at \$300 each, and 4 valued at \$100 each.

# SCHOLARSHIPS OPEN TO SOPHOMORE, JUNIOR, AND SENIOR STUDENTS

Nova Scotia Light and Power Company Scholarship: Valued at \$300. Open to a Science or Engineering student.

James E. Donohue Memorial Scholarship: Valued at \$100. Open to students in Engineering and awarded in alternate years.

University Scholarships: 4 valued at \$500 each, 6 valued at \$300 each, and 12 valued at \$100 each.

#### BURSARIES

Rebecca Cohen Memorial Bursary: Valued at \$100. Open annually.

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University Residence Bursaries: 15 valued at \$100 each. Open annually to resident students from parishes in the Archdiocese of Halifax.

University Bursaries: Nine additional university bursaries: 2 valued at \$400 each, 3 valued at \$200 each, and 4 valued at \$100 each.

#### BIRKS FOUNDATION AWARDS

The national firm of Henry Birks and Sons has established a foundation award plan. Four awards, covering all or half tuition costs, are made annually.

### 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.

### PARISH SCHOLARSHIPS

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.

Saint Agnes Parish Holy Name Society Scholarship: Valued at \$100.

Saint Joseph's Parish Scholarships: Two: one valued at \$100 and one at \$150.

Saint Mary's Basilica Parish: The Monsignor Carroll Memorial Scholarship valued at \$300.

Saint Peter's Parish Holy Name Society Scholarships: Varying in number and value.

Saint Rose of Lima Parish Holy Name Society Scholarship: Valued at \$100.

Saint Stephen's Parish Scholarships: 4 valued at \$100 each.

Saint Stephen's Educational Association Scholarships: 8 valued at \$100 each.

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#### HOME AND SCHOOL SCHOLARSHIPS

The Home and School Association of various schools offer scholarships to deserving students. Students needing scholarship assistance should seek further information from their respective Home and School Association.

Bedford Home and School Association Scholarship: Valued at \$100.

Oxford Home and School Association Scholarship: Valued at \$50.

Saint Thomas Aquinas Home and School Association Scholarship: Valued at \$100.

#### KNIGHTS OF COLUMBUS SCHOLARSHIPS

Many councils of the Knights of Columbus offer scholarships to deserving students. Students interested in such scholarships are advised to make inquiries to the council in their area.

Knights of Columbus Council 313 (Dartmouth) Scholarships: Two valued at \$200 each.

Knights of Columbus Council 1997 (Halifax) Scholarships: 7 valued at \$150 each.

Knights of Columbus Council 2181 (Yarmouth) Scholarships: Valued at \$200.

#### COLOMBO PLAN SCHOLARSHIPS

Each year the Colombo Plan offers a number of awards to deserving students from Colombo Plan countries.

### READERS AND LABORATORY ASSISTANTS

Each year a number of positions are open to Junior and Senior students to act as course readers and assistants in the various laboratories. Remuneration is based on hours of employment during the term.

#### ALUMNI LOAN FUND

Saint Mary's University Alumni Association offers interest free loans of up to \$500 a year. Application forms may be obtained from the alumni office.

#### GOVERNMENT LOANS

The Nova Scotia Government offers loans to Sophomore students who have resided in Nova Scotia for at least five years previous to the date of their loan application. Applications and letters requesting information should be addressed to the scholarship officer of the University.

Most Provincial Governments offer student loans. Interested students may obtain further information from their Provincial Governments.

# **ADMISSION INFORMATION**

APPLICATION

ADMISSION REQUIREMENTS

ADMISSION TO ADVANCED STANDING

REGISTRATION

# APPLICATION

All correspondence concerning admissions should be addressed to the Registrar.

The application form is intended for new students, i.e., those not in attendance at Saint Mary's last year, and should be forwarded to the Registrar not later than August 15th. This application form must be accompanied by the following:

- 1. a testimonial of good character.
- 2. the official certificates received from the Department of Education or other source, stating the courses taken and the marks obtained in Grade XI and/or Grade XII. (These should be forwarded as soon as they become available at the Department of Education). Students who have attended another university should present a transcript of their marks and a testimonial of honourable dismissal. Failure to do this may result in expulsion.
  - 3. a recent photograph. (Passport size).
  - 4. a \$5.00 application fee if the applicant is not a resident of Canada.
- 5. where necessary, students should send a certificate stating that their mastery of English is such as to enable them to follow courses at university level.

All students must submit to the Registrar by September 1st the "Confirmation of Application" card. All students intending to reside at Saint Mary's are required to make a deposit of twenty-five dollars (\$25.00) for room reservation before August 15th. This amount is a deposit on first term residence fees. It will be returned if the University is unable to provide accommodation or if the reservation is cancelled before August 25th; otherwise it is not refundable or transferable to tuition.

# **ADMISSION REQUIREMENTS**

### JUNIOR MATRICULATION

To be admitted to university as an undergraduate a candidate must offer credit in seven matriculation subjects. The matriculation standing must be 50% in each subject with a general average of 60%.

Candidates for university should during their High School keep in mind the requirements for admission and plan their courses accordingly. When in doubt concerning entrance qualifications they should consult the University Registrar for evaluation of certificates and guidance.

The normal Junior Matriculation requirements for the various faculties and diploma courses are as follows:

English Foreign Language Algebra Geometry

Three of: Chemistry, Physics, Biology, History, Economics, Latin or another language.

Candidates for Science and Engineering should offer Chemistry, Physics and/or Trigonometry. The marks in Science and Mathematics should be above average.

### ACCEPTABLE CERTIFICATES

Satisfactory marks in any of the subjects listed above will be accepted as credit toward the entrance requirements if such marks are granted by any of the following examining bodies.

- (a) Certificates of the Common Examining Board of the Atlantic Provinces.
  - The pass mark on Grade XI is 50%. Marks of 40% or over on Grade XII subjects may be counted as equivalent to passes in corresponding Grade XI subjects.
- (b) High School or Accredited High School certificates of the Province of New Brunswick.
- (c) Equivalent Certificates issued by Education Departments of other Provinces.
- (d) Second Year Certificates issued by Prince of Wales College, Charlottetown, Prince Edward Island.
- Equivalent Certificates of Matriculation Examinations taken at Universities.
- (f) Certificates similar to the above issued by University or other official examining bodies, when found adequate.

# ADMISSION TO ADVANCED STANDING

An applicant who presents a satisfactory Senior Matriculation Certificate (Nova Scotia Grade XII), or the equivalent, may receive credit in: English, Mathematics, History, Latin, French, Chemistry, Physics, Biology, Geology, under the following conditions:

 A maximum of five credits is allowed for Senior Matriculation work.

- (2) These credits must be obtained before courses at the University are begun.
- (3) The student must have a mark of 60% in subjects other than the Sciences; a student must have a mark of 75% in Science subjects and give evidence of adequate Laboratory work.
- (4) Advanced standing is rarely granted to applicants for Engineering or Science for Senior Matriculation Mathematics, Physics, Chemistry.
- (5) Any courses taken at other institutions or by Senior Matriculation after first registration at Saint Mary's University will not be credited by the University unless the student has obtained prior, written approval of the Dean.

The certificates to which these provisions apply are the following:

- (a) Grade XII Certificate of the Atlantic Provinces Common Examing Board;
- (b) Third Year Certificate as issued by the Prince of Wales College, Prince Edward Island;
- (c) Certificate of the first year of Memorial University College, Newfoundland;
- (d) Equivalent Senior Matriculation Certificates issued by Departments of Education of other Provinces, or approved by the Committee on Admissions.

# REGISTRATION

To facilitate Registration, students who foresee difficulties in arranging their studies' programme should make an appointment at the student Inquiry Office for a pre-registration interview.

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.

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.

#### PROVISIONAL AND LATE REGISTRATION

If official documents are not received by the Registrar and approved by the Committee on Admissions two weeks before registration dates, provisional registration may be permitted. In case of such provisional registration the student is responsible for having all official entrance documents filed with the Registrar not later than two weeks after the regular registration date. A student is not officially registered in the University until provisional registration has been confirmed.

Students registering on any other date than that designated in the Academic Calendar are required to pay a late registration fee (see 'Particular Fees').

# CHANGE IN REGISTRATION AND DROPPING COURSES

Any change after the initial registration is permitted only with the written consent of the Dean of the Faculty concerned. For each course added, dropped, or changed, even with the consent of the Dean, a fee of \$2.00 is charged. In the case of a change initiated by the University authorities no fee is charged.

No change in registration is permitted after the second week of instruction in a semester. Students who drop a course without authorization between this time and the end of the semester will be given a grade of 'WF' (Withdrawal Failure) on the University records. A note of 'W' signifies authorized withdrawal. No term tuition refund will be granted on individual courses dropped after the second week in a semester. Should registration prove insufficient, the University reserves the right to cancel any listed course.

Without the approval of the Dean of the Faculty, no student may register for an advanced course in his third year until all required 100 number courses have been completed, or for an advanced course in his fourth year until all required 200 number courses have been completed.

# **ACADEMIC INFORMATION**

ATTENDANCE

**EXAMINATIONS AND GRADES** 

EVENING DIVISION

ADULT STUDY SERIES

THE ATLANTIC SUMMER SCHOOL FOR ADVANCED BUSINESS ADMINISTRATION

# **ATTENDANCE**

Attendance at all lectures, discussion groups, and laboratory periods of any course in which a student is registered is mandatory. For Catholic students this requirement extends to religious functions.

A student whose absences from a course have been excessive will be debarred from tests and examinations in the course. Early in the session each instructor, after consultation with the Dean of Studies, will inform his students what is considered "excessive".

Properly documented appeals based on legitimate absence from a course may be made to the Committee on Academic Standing. The appeal must be made no later than one week before the beginning of the test or examination period.

# **EXAMINATIONS AND GRADES**

In full courses there will be a final examination, a mid-year examination, and two tests, at assigned times (v. Academic Calendar for times), The first-term examination and test, together with assignments, etc., will be worth  $40\,\%$  of the total mark in each subject. However, assignments, etc., will not exceed  $20\,\%$  of this total. A student whose record of assignments in a course is considered unsatisfactory may be debarred from writing the examinations in that course.

The pass mark in each subject is 50%.

### SUPPLEMENTAL AND SPECIAL EXAMINATIONS

Supplemental examinations cover the same work and texts as the immediately preceding regular examinations, and normally are of three hours duration.

A student who receives a mark between 40% and 50% is eligible to write a supplemental examination under the following conditions:

- The supplemental is written at the prescribed time the following September.
- (2) No more than two subject marks are between 40% and 50%.
- (3) No subject mark is below 40%, or recorded as WF (Withdrawal Failure).

Supplemental examinations are not graded but recorded as pass (50%) or failure.

No more than three full courses passed by supplemental examinations will be credited towards any degree or diploma.

Only one supplemental examination is permitted in any course. No course may be taken more than twice, except with the permission of the Committee on Academic Standing.

A special examination is an examination written outside the times assigned for regular and supplemental examinations. Permission to write a special examination is granted rarely and only for extraordinary reasons. Not more than two special examinations may be written in any one subject.

Applications for supplemental, special, or entrance examinations must be made no later than August 15th.

#### FAILURES

A student who defaults a final examination is considered to have failed the course and a WF will be entered on his record. He will have to repeat the course.

If the student defaults an examination for medical reasons, a medical certificate covering the precise period of absence must be filed with the Registrar's Office before the end of the period of examinations.

A student who fails in more than 40% of his year's work at the regular examinations fails his year, and is not eligible for supplemental examinations.

A student who fails the first test with a mark of less than 20% will be formally warned. A student whose combined mark on the first test and the mid-year examination is less than 20% will be withdrawn from the course and will receive a WF on his record for the year's work. A student who withdraws from a course in the second semester after a first semester mark of less than 40% in that course, receives a WF entry on his record for the year's work.

If a student fails a course which involves both lectures and laboratory work, he must repeat both parts of the course, or an approved equivalent to be determined by the department concerned.

#### ACADEMIC PROBATION

A person who is on academic probation is subject to dismissal at any time at the discretion of the Dean of Studies.

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.

Any student who fails more than 40% of his work at either the midyear session or the end of the year is placed on academic probation. Any student who fails in two years of his work is automatically subject to dismissal.

# SPECIAL PROGRAMMES

#### EVENING DIVISION

Courses leading to the degrees of Bachelor of Arts, Bachelor of Commerce, Bachelor of Science, Bachelor's and Master's degrees in Education are offered at the University in evening and summer sessions; they are open to men and women. Students entering these courses must have fulfilled the usual requirements for college entrance. They must maintain the same standards as students in the Day Division.

Evening Division courses begin in September and end with the May examinations. Summer sessions are held in the daytime for seven weeks during July and August. All inquiries for further information should be addressed to the Registrar or to the Dean, Evening Division.

#### 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 offers a five weeks' course for executives from mid-June to mid-July. It is sponsored jointly by the following Universities: New Brunswick, Acadia, Mount Allison, King's College, Dalhousie, Saint Mary's, Nova Scotia Technical College, Saint Francis Xavier, Memorial, Saint Dunstan's and Prince of Wales College.

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.

Full 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

#### COURSE NUMBERING SYSTEM

The present system of numbering was adopted in 1962. The 100 number signifies an introductory course normally taken in Freshman year which may not be taken in Junior or Senior year. The 200 number signifies an introductory or continuing course normally taken in Sophomore year. Such a course may not be taken in Junior or Senior year without the permission of the Dean of the Faculty and the department controlling the major concentration. The 300 number signifies advanced courses to be taken in Junior and Senior years. These are not normally open to Freshmen or Sophomores. The 400 number signifies honours courses normally open only to honours students. The 500 number signifies graduate courses.

Where a change has been made in the course number listed in the previous calendar, the present calendar shows the old course number in brackets after the new number.

# ARTS

The curriculum in Arts is planned to lay the foundation of a broad and liberal education and to encourage at the same time some specialization in a specific branch of the Humanities or Social Sciences. It fosters an appreciation of what is sound in philosophy and beautiful in literature, and seeks to familiarize the student with the great facts and movements of history. In this, as in all courses, classes in religious and moral topics are essential requirements.

#### DEGREE OF BACHELOR OF ARTS

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

- 1. The completion of twenty-one courses subject to the regulations set forth in this Calendar.
- 2. The completion of the following prescribed courses:
  - (a) Three courses in Theology are required for Catholic students. Non-Catholic students may replace these courses with other courses approved by the Dean of their faculty.
  - (b) Three courses in Philosophy.
  - (c) Two courses in English.
  - (d) Two courses in Latin and one course in a second foreign language OR
  - (e) Three courses in one foreign language and a course in the Classics in translation.
  - (f) One course in History.
  - (g) One course in Mathematics.
  - (h) One Natural Science course (Chemistry, Physics, Biology, Geology).
- 3. A major concentration of work to the amount of not fewer than five courses in one subject. Of these, a minimum of three courses must be advanced (300) courses In addition, two supporting courses to be determined by the director of the concentration are required.

At the end of Freshman year, students must decide their area of major concentration. Major concentrations for the Arts degree may be taken in English, French, History, Latin, Philosophy, Political Science, Sociology.

Six courses is the normal load in the Freshman year. No student may carry more than five courses in each of the following years except for extraordinary reasons and with the approval of the Dean of the faculty concerned and the department of the major concentration.

The following is an outline of the normal sequence of courses. Course designated as "elective" are courses in the field of major concentration and those approved as supporting courses.

	ESHMAN	SO	PHOMORE	JU	NIOR	SE	NIOR
11	Theology	1.	English	1.	Theology	1.	Theology
2.	English	2.	Philosophy	2.	Philosophy	2.	Philosophy
8.	Mathematics 101	3.	elective	3.	elective	3.	elective
K.	History	4.	Mod. Lang.	4.	elective	4.	elective
5.	Natural Science	5.	Latin		or Mod.	5.	elective
B.	Latin		or Classics		Lang.		N.
	or Mod. Lang.		in Trans	5.	elective		

#### ARTS AND COMMERCE COURSE

Provided courses in Accounting 201 and Economics 202 have been completed concurrently with the requirements for a Bachelor of Arts degree, the degree of Bachelor of Commerce may be obtained in one additional year. The additional year consists of five full courses which will normally be Accounting 302, Business Administration 302, Commercial Law 201, Economics 306, Economics 307. All programs are subject to the approval of the Dean of Commerce.

# SCIENCE

The curriculum in Science is designed to give the student a solid grasp of basic technological, scientific knowledge and methods, without at the same time sacrificing his liberal and cultural education. Therefore, courses in philosophy, religious and moral topics, the languages, find their place in the Saint Mary's Science programme as a broadening complement to Mathematics and the Natural Sciences.

#### DEGREE OF BACHELOR OF SCIENCE

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

1. The completion of twenty-one courses subject to the regulations set forth in this Calendar.

- 2. The completion of the following prescribed courses:
  - (a) Three courses in Theology are required for Catholic students. Non-Catholic students may replace these courses with other courses approved by the Dean of their faculty.
  - (b) Three courses in Philosophy.
  - (c) Two courses in English.

- (d) Two courses in Mathematics.
- (e) Two courses in a foreign language at the University level. French and/or German are recommended.
- (f) A minimum of one course in Chemistry, one course in Physics, one course in Biology or Geology or Astronomy.
- 3. A major concentration to the amount of not fewer than five courses in one subject. Of these, a minimum of not fewer than three courses must be advanced (300) courses. In addition, two supporting courses to be determined by the director of the concentration are required.

At the end of Freshman year, students must decide their area of major concentration. Major concentrations for the Science degree may be taken in Chemistry, Physics, Biology, Geology, Mathematics.

Six courses is the normal load in the Freshman year. No student may carry more than five courses in each of the following years except for extraordinary reasons and with the approval of the Dean of the faculty and the department of the major concentration.

The following is an outline of the normal sequence of courses. Courses designated as "elective" are courses in the field of major concentration and those approved as supporting courses.

FRESHMAN		SOPHOMORE		JUNIOR		SENIOR	
1.	Theology	1.	English	1.	Theology	1.	Theology
2.	English	2.	Philosophy	2.	Philosophy	2.	Philosophy
3.	Mathematics 111	3.	Mathematics 202	3.	elective	3.	elective
4.	Language	4.	Language	4.	elective	4.	elective
5.	Natural Science	5.	Natural	5.	elective	5.	elective
6.	Natural Science		Science				

#### ENGINEERING AND SCIENCE COURSE

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

The programme of this additional (fourth) year will include: Theology 303 or 304, Philosophy 303, Mathematics 307, 408, or 310 and two electives from Chemistry 304, 306, 410, 411, Physics 304, 305, 307.

Students who plan to continue to the B.Sc. degree after the Diploma in Engineering should elect Philosophy 201 in second year, and may be permitted to substitute Philosophy 302 for Theology in the third year.

# COMMERCE

The course leading to a 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 a place in the business community, the public service, and professional life. The aim of the faculty is to combine the cultural aspects of education with the general principles of business.

Exemption from three years of in-service training and the primary, economics, and intermediate examinations of the Institute of Chartered Accountants of Nova Scotia is available to Commerce graduates who intend to become Chartered Accountants.

To gain the exemptions a mark of at least 60% must be made in each of the courses, Accounting 303, 304, 305, and Commercial Law 201.

The Registered Public Accountants' Association of Nova Scotia grants the following: "Bachelor of Commerce graduates from Saint Mary's University attaining a standard which in the opinion of the University faculty would qualify them for Intermediate exemption in the Certified Public Accountant's course will be granted this exemption by the Association".

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

#### DEGREE OF BACHELOR OF COMMERCE

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

- 1. The completion of twenty-one courses subject to the regulations set forth in this Calendar.
- 2. The completion of the following prescribed courses:
  - (a) Three courses in Theology are required for Catholic students. Non-Catholic students may replace these courses with other courses approved by the Dean of their faculty.
  - (b) Three courses in Philosophy.
  - (c) Two courses in English.

- (d) One foreign language course at the University level. French is recommended.
- (e) Two courses in Accounting.
- (f) Two courses in Economics.
- (g) One course in Commercial Law.
- (h) One course in Mathematics.
- 3. A major concentration to the amount of not fewer than five courses in one subject. Of these, a minimum of not fewer than three courses must be advanced (300) courses. In addition, two supporting courses to be determined by the director of the concentration are required.

At the end of Freshman year, students must decide their area of major concentration. Major concentrations for the Commerce degree may be taken in Accounting, Business Administration, and Economics.

Six courses is the normal load in Freshman year. No student may carry more than five courses in each of the following years except for extraordinary reasons and with the approval of the Dean of Commerce and the department of the major concentration.

The following is an outline of the normal sequence of courses. Courses designated as "elective" are courses in the field of major concentration and those approved as supporting courses.

RESHMAN	S	OPHOMORE	JU	JNIOR	SI	ENIOR
Theology	1.	English	1.	Theology	1.	Theology
English	2.	Philosophy	2.	Philosophy	2.	Philosophy
Mathematics 101	3.	Accounting	3.	Accounting	3.	elective
Language	4.	Economics	4.	elective	4.	elective
elective	5.	Commercial	5.	elective	5.	elective
Economics 101 or History 102		Law				
	Theology English Mathematics 101 Language elective Economics 101 or History 102	Theology 1. English 2. Mathematics 101 3. Language 4. elective 5. Economics 101 or	Theology 1. English English 2. Philosophy Mathematics 101 3. Accounting Language 4. Economics elective 5. Commercial Economics 101 or Law	Theology 1. English 1. English 2. Philosophy 2. Mathematics 101 3. Accounting 3. Language 4. Economics 4. Economics 101 or Law	Theology 1. English 1. Theology English 2. Philosophy 2. Philosophy Mathematics 101 3. Accounting Language 4. Economics 4. elective elective 5. Commercial 5. elective Economics 101 or Law	Theology 1. English 1. Theology 1. English 2. Philosophy 2. Philosophy 2. Mathematics 101 3. Accounting 3. Accounting 3. Language 4. Economics 4. elective 4. Economics 101 or Law

#### Note:

- 1. Political Science 201 is recommended for first year elective.
- The Junior and Senior year electives will depend upon the area of concentration or major work. All programs are subject to the approval of the Dean of Commerce.

#### ARTS AND COMMERCE COURSE

For details of this programme see under 'Arts'.

# **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, University of King's College, Memorial University, Mount Allison University and Saint Francis Xavier University.

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

#### DIPLOMA IN ENGINEERING

The requirements for the Diploma in Engineering are as follows:

FIRST YEAR	SECOND YEAR	THIRD YEAR
Theology 101 English 101 Mathematics 111 Physics 101 Chemistry 101 Engineering 101	Theology 202 English 202 Mathematics 202a* Mathematics 202b Chemistry 202 Engineering 201*	Theology 303 Mathematics 303 Physics 303 Engineering 301* Engineering 302 —Engineering 303*
Engineering 102	Engineering 202*Engineering 203* Elective	Engineering 304 Engineering 305

#### Note:

- \*indicates one semester courses. For details see 'Courses of Instruction'.
- Non-Catholic students may replace requirements in Theology by elective courses in the Humanities or Social Sciences; at least two of these elected courses must be in the same subject.
- 3. Students who plan to enter Chemical Engineering at the Nova Scotia Technical College must substitute a course in organic chemistry (Chem. 304) for the second year elective.

4. Students who plan to enter Civil, Mining or Metallurgical Engineering at the Nova Scotia Technical College must substitute Geology 201 for the second year elective.

#### 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 these two years and who have been recommended by the Dean of Engineering are admitted without further examination to the Third Year in the School of Architecture, Nova Scotia Technical College, Halifax, where they complete the four year professional phase of the curriculum. For the present, the course work for the two years in Architecture at Saint Mary's University is the same as that of the first two years in the Engineering Diploma Course.

#### ENGINEERING AND SCIENCE COURSE

For details of this programme see under 'Science'.

# 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.

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 timetable will allow the completion of minimum pre-professional requirements in less than the full time required for the Bachelor's degree.

**Pre-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.

**Pre-Law.** Students planning to enter Law should do major concentration work in Philosophy or Social Science. Their programme should include at least two courses in History, Economics, or Political Science.

**Pre-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).

Credits in the sciences must include Biology 101, 202; Chemistry 101, 202, 304; Mathematics 101; Physics 101. Of the remaining eight courses (of a required minimum of fifteen courses), at least seven must be taken in the Humanities; English 101, 202, Philosophy 201, are required courses. At least two advanced courses must be included in the minimum programme.

**Pre-Dentistry.** Pre-dental students must complete a minimum of ten required courses which include the seven science courses listed above, along with English 101, and two electives from English 202, French 102, German 102, History 101, Philosophy 201.

# **HONOURS COURSES**

Students of above-average ability are urged to make application at the time of registration for Sophomore year to follow an honours programme and thus have their plan of studies controlled by the department concerned. At the invitation of the department of proposed honours work, the student may then register for honours at the beginning of Junior year. In order to begin an honours programme the student must have a 65% average in his previous work. The Junior-Senior programme will be under the supervision of the department concerned. Prescribed summer readings are required of honours students.

In general, the requirements for an Honours Degree are as follows:

- 1. The fulfilment of all regulations for the Bachelor's Degree.
- 2. The completion of not less than five courses prescribed by the department concerned.

- 3. The completion of an additional prescribed course in both Junior year and Senior year, thus making the total of twenty-three courses required for the honours degree. These special additional courses may be given in any way the department decides.
- 4. The passing of a comprehensive examination (written and/or oral) in all work of the honours field.
- 5. The attainment of not less than 70% in all courses in the honours field and in the comprehensive examination.

Candidates for an honours degree will normally be required to have spent four full-time academic years at Saint Mary's University.

# **GRADUATE COURSES**

MASTER OF SOCIAL WORK
BACHELOR OF EDUCATION
MASTER OF ARTS
IN EDUCATION

# SOCIAL WORK

The Maritime School of Social Work was incorporated in 1941 to meet an urgent need for trained social workers in the Maritime Provinces. The school is recognized by the Canadian Association of Social Workers and its graduates are accepted for membership.

Saint Mary's University, along with the Universities of Acadia, Mount Allison, Saint Francis Xavier, and University of King's College, grants the Master of Social Work degree to students who meet the requirements of the University and who are recommended for the degree by the Maritime School of Social Work.

#### DEGREE OF MASTER OF SOCIAL WORK

The academic requirement for admission to candidacy for the degree of Master of Social Work is a Bachelor of Arts degree with high standing, or equivalent university training.

Students planning graduate work in Social Work should, where possible, emphasize psychology or sociology in their undergraduate courses. It would be desirable to complete a major and minor in these disciplines. Courses should also be taken in Political Science (Government of Canada), Economics, Philosophy and Biology.

In the discretion of the Admissions Committee of the Maritime School of Social Work, applicants may be required to undertake work in these fields as a prerequisite to admission.

Further information regarding courses, requirements for admission, living costs and other matters, may be obtained by addressing: The Maritime School of Social Work, 6414 Coburg Road, Halifax, N. S.

# **EDUCATION**

#### ADMISSION

For the degree of **Bachelor of Education:** Candidates must hold the degree of Bachelor of Arts, Science, or Commerce with second class honours or the equivalent. They must further satisfy the professional aptitude requirements of the Committee on Admissions.

The courses leading to the degree of Master of Arts are offered by the school of Education to provide teachers with graduate study in the philosophical and psychological foundations of the art of teaching and in the particular fields of their own secondary teaching. Candidates therefore should hold the degree of Bachelor of Arts, Science or Commerce and the further degree of B.Ed. with second class honours or the equivalent. They must further satisfy the graduate requirements of the Committee on Admissions.

# COURSES OF INSTRUCTION

ACCOUNTING

ARCHAEOLOGY

AND ART

ASTRONOMY

BIOLOGY

BUSINESS ADMINISTRATION

CHEMISTRY

CLASSICS

IN TRANSLATION

COMMERCIAL LAW

**ECONOMICS** 

EDUCATION

ENGINEERING

ENGLISH

FRENCH

GEOLOGY

GERMAN

HISTORY

HISTORY OF ART

LATIN

**MATHEMATICS** 

PHILOSOPHY

PHYSICS

POLITICAL SCIENCE

**PSYCHOLOGY** 

SCIENCE

SOCIOLOGY

THEOLOGY

NOTE: See explanation of Course Number System on page 43

# ACCOUNTING

### 201: Introductory Financial Accounting

A study of the accounting cycle. The application of accounting theory to business transactions. Journals, ledgers, working papers, statements as applied to individual proprietorships, partnerships, and corporations.

TEXTS: Principles of Accounting, Introductory (Canadian Edition) -Finney and Miller (and Mitchell) (Prentice-Hall) Fifth Edition. Principles of Accounting, Intermediate (Canadian Edition)—Finance and Miller (and Byrd) (Prentice-Hall) Fifth Edition.

Lectures: Three hours a week, two semesters.

Full course.

Laboratory: Two hours a week, two semesters.

#### 302: Intermediate Financial Accounting

Prerequisite: Accounting 201.

An intensive study of asset, liability, and equity accounts. Year-end procedures, and the application of funds statement.

TEXT: Principles of Accounting, Intermediate (Canadian Edition)— Finney and Miller (and Byrd) (Prentice-Hall) Fifth Edition. Full course. Lectures: Three hours a week, two semesters. Laboratory: Two hours a week, two semesters.

### 303: Advanced Financial Accounting

Prerequisite: Accounting 201 and 302.

Advanced financial accounting-Partnerships: consolidations: mergers and reorganizations; branches, insurance; analysis of financial state-

TEXT: Principles of Accounting, Advanced-Finney and Miller (Prentice-Hall).

Workbook-Principles of Accounting, Advanced-Finney and Miller (Prentice-Hall)

REFERENCE: Accounting Systems—Gillespie (Prentice-Hall) Lectures: Three hours a week, two semesters. Full course.

### 304: Cost Accounting and Taxation

Prerequisite: Accounting 201 and 302.

The principles, procedures, and managerial uses of cost accounting will be studied in the first term. The second term will be devoted to an intensive study of the Income Tax Act and its application to corporate and individual taxpayers.

TEXT: Basic Cost Accounting-Specthrie (Prentice-Hall) Canadian Income Tax for Accountants-Leonard (C.C.H. Canadian

Lectures: Three hours a week, two semesters.

205: Auditing

Prerequisite: Accounting 201, 302.

Auditing principles and procedures. Verification and statement presentation of assets, liabilities, equity, and profit and loss accounts.

TEXTS: Auditing Procedures-Dell and Wilson (C.I.C.A.): Auditing Principles—H. Stettler (Prentice-Hall); Bulletins of the Canadian Institute of Chartered Accountants; Audit reports, their nature and significance—(C.I.C.A.); Practice Case for Auditing—Machine Products Co. -Newton and Stettler (Prentice-Hall)

Lectures: Three hours a week, two semesters.

Full course.

# ARCHAEOLOGY AND ART

201: Early Civilization

Prerequisite: One University history course.

An outline of the prehistory and early history of the world and of the spread of civilization. Illustrated by slides and filmstrips.

TEXTS: What Happened in History—Childe (Penguin); World

Prehistory-Clarke (Cambridge)

Lectures: Two hours a week, two semesters.

Full course.

# **ASTRONOMY**

301: Descriptive Astronomy

Prerequisite: Mathematics 111, Physics 101, Chemistry 101.

Mechanical aspects: the earth in motion, time, light, the telescope. The solar system. Stellar astronomy. The systems; interstellar matter. Radio astronomy.

Note: Students who register for this course may not register for any other evening lectures as the laboratory periods may be on any evening of the week depending on the weather.

TEXTS: Astronomy—R. H. Baker (Van Nostrand) Seventh Edition; The Observer's Handbook, 1964 (R.A.S.C.)

Lectures: Two hours a week, two semesters

Full course.

Laboratory: Two hours a week, two semesters.

302: Celestial Mechanics

Prerequisite: Astronomy 301, Mathematics 303.

This course may be counted as an advanced mathematics credit.

Fundamental principles: questions of central forces, potential and attraction. Problems of two bodies; determination of orbits, consideration of perturbations. The general integrals of the problem of n bodies.

TEXT: Fundamentals of Celestial Mechanics—J. M. A. Danby

(Macmillan) REFERENCE: An Introduction to Celestial Mechanics-F. R. Moulton (Macmillan)

Full course Lectures: Three hours a week, two semesters.

# **BIOLOGY**

### 101: General Biology

An introductory study of the structure and function of living organisms, leading to an understanding of the principles of anatomy, physiology, ecology, genetics and evolution.

TEXT: Biology—Villee (Saunders)
Lectures: Three hours a week, two semesters.
Laboratory: Three hours a week, two semesters.

Full course.

## 202: Comparative Anatomy

Prerequisite: Biology 101.

A comparative study of the anatomy, embryology and evolution of the different classes of vertebrates, covering the integumentary, skeletal, muscular, nervous, digestive, respiratory, circulatory, urinogenital, and endocrine systems.

TEXT: Evolution of Chordate Structure—H. M. Smith (Holt)
Lectures: Two hours a week, two semesters.

Laboratory: Six hours a week, two semesters.

#### 203: Vascular Plants and Vertebrates

Vascular Plants

A descriptive and systematic study of ferns and flowering plants leading to a knowledge of the fundamental principles of their classification. Emphasis will be given to identification of the local flora.

TEXT: To be announced.

Vertebrates

A descriptive and systematic study of the five classes of vertebrates as a basic course for other courses (comparative anatomy, biology of fishes, embryology, etc.)

TEXT: To be announced.
Lectures: Two hours a week, two semesters.
Laboratory: Three hours a week, two semesters.

Full course.

#### 301: Invertebrates

Prerequisite: Biology 101.

The study of the structure, life history, parasitic relations to man and ecology of the main groups of land, fresh-water and marine invertebrates (with emphasis on the latter).

TEXT: To be announced.

Lectures: Two hours a week, two semesters. Laboratory: Three hours a week, two semesters.

#### 302: Cytology

Study of the microanatomy of the cells and tissues (epithelium, connective, blood, bone, muscle and nerve).

TEXT: To be announced.

Lectures: Two hours a week, two semesters. Laboratory: Three hours a week, two semesters. Full course.

#### 303: Biology of Fishes

A study of the embryology, anatomy, physiology and classification of the class fishes, covering the integumentary, skeletal, muscular, nervous, digestive, respiratory, circulatory, endocrine, excretory and reproductory systems.

In classification and geographical distribution, emphasis will be given to the marine fauna of the North Atlantic area and fresh-water species of Nova Scotia.

TEXT: To be announced.

Lectures: Two hours a week, two semesters
Laboratory: Three hours a week, two semesters.

Full course.

#### 304: Genetics and Embryology

Study of the principles of inheritance and of their application to plant and animal breeding. Embryology of the vertebrates with emphasis on the development of the chick.

TEXT: To be announced

Lectures: Two hours a week, two semesters. Laboratory: Three hours a week, two semesters. Full course.

#### 305: Animal Physiology

An introduction to the chemistry and physics of life, with particular emphasis on energy relations.

TEXT: To be announced.

Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters. Full course.

# **BUSINESS ADMINISTRATION**

#### 301: Introduction to Business

A case method study of three general areas of administration. Marketing, human relations, and labor relations will be discussed with reference to specific business situations. The emphasis will be on the qualitative aspects of executive decision.

TEXT: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

#### 302: Finance

Prerequisite: Accounting 201.

The Financial policies of large and small businesses are studied with heavy reliance on the case method of instruction. Special attention is given to the timing, cost, marketing, and valuation problems of both major and day to day financial decisions.

TEXT: Basic Business Finance-Text and Cases-Hunt, Williams,

Donaldson (Richard D. Irwin, Inc.) Lectures: Two hours a week, two semesters.

Full course.

### 303: Principles of Control and Production

Prerequisite: Accounting 201.

Important procedures and techniques of the manufacturing process, and the quantitative data needed to formulate pricing, inventory, and investment decisions are examined, using descriptive notes and selected cases.

TEXT: To be announced.

Lectures: Two hours a week, two semesters.

Full course.

### 304: Business Organization and Management

Principles, practices and problems of organization, management, production, personnel, marketing and control.

TEXT: Business Administration in Canada—Thain, Laufer, Morton, and Loenders (McGraw-Hill)

Lectures: Three hours a week for two semesters.

#### 305: Business Problems

Prerequisite. Two Business Administration courses.

The written presentation of solutions to advanced problems in all the important fields of business administration.

Equal attention will be given to English usage, clarity of expression and depth of analysis.

TEXT: To be announced.

Lectures: On seminar basis by arrangement.

# **CHEMISTRY**

### 101: General Chemistry

An introduction to fundamental principles; valence, molecular, ionic theories, reaction rates, equilibrium, the periodic table, radio activity and other basic phenomena.

TEXT: Textbook of Chemistry-J. V. Quagliano (Prentice-Hall) 5th

Printing 1960 Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

Full course.

# 202: Elementary Physical and Analytical Chemistry

Prerequisite: Chemistry 101.

Theory and techniques of qualitative and quantitative analysis. Ionic equilibria, pH, phase equilibria.

TEXT: Principles of Phase Equilibria-Wetmore and LeRoy (Mc-

Graw-Hill)

Lectures: Two hours a week, two semesters. Full course. Laboratory: Three hours a week, two semesters.

### 304: Organic Chemistry

Prerequisite: Chemistry 101.

A comprehensive course of organic chemistry with accent on the accepted modern theories related to aliphatic and aromatic compounds.

TEXT: Organic Chemistry-Brewster & McEwan (Prentice-Hall)

Senior Edition 1961

Lectures: Two hours a week, two semesters. Full course. Laboratory: Three hours a week, two semesters.

# 306: Physical Chemistry

Prerequisite: Mathematics 202, Chemistry 202.

States of matter, properties of solutions, heat of reaction, entropy and free energy, kinetics.

TEXT: Physical Chemistry—Daniels and Alberty (Wiley)
Full course. Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

# 307: Advanced Quantitative Analysis

Prerequisite: Chemistry 202.

A comprehensive extension of Chemistry 202 with particular emphasis on advanced laboratory procedures used in inorganic analysis.

TEXT: Textbook of Quantitative Analysis-Kolthoff and Sandell (Macmillan).

Laboratory and Conferences:

430

Six hours a week, two semesters.

### 308: Advanced Inorganic Chemistry

Periodic classification of the elements, and valence theory.

Lectures: Two hours a week, two semesters. Full,

Full course.

### 315: Theory of Physical Chemistry Measurements

Prerequisite: Chemistry 202.

A course intended primarily for pre-medical students.

Lectures: Three hours a week, two semesters.
Laboratory: Three hours a week, two semesters.

Full course.

#### 410: Organic Qualitative Analysis

A course covering the methods of detection and identification of fundamental organic chemical groups and compounds.

TEXT: The Characterization of Organic Compounds—McElvain (Macmillan) Revised Edition

Laboratory and Conferences: Six hours a week, two semesters.

Full course.

### 411: Chemical Thermodynamics

Prerequisite: Chemistry 306.

Energy, heat, entropy, free energy changes. Electro-chemistry.

TEXT: Chemical Thermodynamics-Steiner

Lectures: Three hours a week, two semesters.
Laboratory: Six hours a week, two semesters.

Full course.

# 416: Advanced Organic Chemistry

Advanced concepts of organic chemistry, mechanisms, resonance theory, modern day theories and research study.

TEXTS: Reference Library

Lectures: Two hours a week, two semesters.

Full course.

### 419: Kinetic Theory

Prerequisite: Chemistry 306.

Lectures: Two hours a week, two semesters.

Full course.

# CLASSICS IN TRANSLATION

201

The classical literature of Greece and Rome in translation. This course is required of all Arts students who are not taking Latin in their programme.

TEXT: To be announced.

Lectures: Three hours a week, two semesters.

# COMMERCIAL LAW

201

Law and courts; contracts; negotiable instruments; real property; sale of goods; chattel mortgages; company structure; bankruptcy; Mechanics' Lien Act: partnership law: etc.

TEXTS: Summary of Canadian Commercial Law-Anger (Pitman and Sons): Recent Cases and Materials in Business Law-Stimson and Lazar (Houghton Mifflin)

Lectures: Three hours a week, two semesters.

Full course.

# **ECONOMICS**

### 101: Economic History of Europe

The economic history of Europe from the Roman Empire to the present day. Manor system of the middle ages, guilds and mercantilism; laissez-faire, capitalism and industrial revolution; background of the 20th century.

TEXT: Economic History of Modern Europe-Friedlander and Oser (Prentice-Hall); Rerum Novarum—Leo XIII; Quadragesimo Anno— Pius XI; Mater et Magistra—John XXIII. Lectures: Three hours a week, two semesters. Full course.

### 202: General Principles of Economics

This course is a prerequisite for Economics 306, 307, 408, 409.

Difference between free enterprise and socialist economics; national income, its determinants and fluctuations; the role of Government in Economics; fluctuations of the business cycle; the function of money and banking systems; pricing of the production factors; current events.

TEXTS: Principles of Economics-Salmuelson (McGraw-Hill); Rerum Novarum—Leo XIII; Quadragesimo Anno-Pius XI; Mater et Magistra-John XXIII.

Lectures: Three hours a week, two semesters.

Full course.

#### 203: Business and Economic Statistics

Functions of statistics; statistical enquiries; analysis and tabulation; error in derived statistics; presentation techniques; measures of average and dispersion; time series; index numbers; correlation; sampling; probability; sources of statistics.

TEXTS: Statistics for Economists-R. G. D. Allen (Hilliary); Canada Yearbook, 1963 (Queen's Printer); other texts and reading to be announced during course.

Lectures: Three hours a week, two semesters.

Full course.

## 304: Economic History of Canada and the United States

Economic aspects of American history from the Revolution to the New Deal.

Canadian economic history; fisheries, fur trade, timber trade; railways and confederation; the St. Lawrence canals. The strategy of development; wheat economy; new industrialism; St. Lawrence Seaway.

TEXTS: American Economic History—Faulkner (Harper); Canadian Ecomonic History—W. T. Easterbrook and Hugh G. J. Aitken (Macmillan)

Lectures: Three hours a week, two semesters. Regular compulsory assignments.

Full course.

### 306: Advanced Economic Analysis

Prerequisite: Economics 202.

Scope and method of economic science; national income; consumption theory; production theory; price determination; factor combination, wages, interest, rent and profits; interdependence of the elements of the system.

TEXT: A Textbook of Economic Theory—Stonier and Hague (Longmans). General reading will be recommended during course.

Lectures: Three hours a week, two semesters.

Full course.

### 307: Money, Banking, International Payment

Prerequisite: Economics 202.

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

TEXT: Capita Selecta—J. J. Vorstermans Lectures: Three hours a week, two semesters.

Full course.

### 308: Business Cycle Theory

Prerequisite: Economics 202, 307.

Description, history and measurement of the business cycle; theories, of the business cycle; control, domestic and international, of excessive business fluctuations.

TEXTS: Prosperity and Depression—Haberler (United Nations); Business Cycles—Hamberg (Macmillan). General reading will be recommended during course. Lectures: Three hours a week, two semesters.

Full course.

## 310: Theory of Economic Development

The concept of economic dynamics: determinants of economic growth: consumption, savings and capital formation; capital-output ratio; the problem of balanced growth; a survey of recent experience in development planning.

TEXTS: The Theory of Economic Growth—Lewis; Economic development: principles, problems, and policies—Higgins; Macroeconomic Theory—Ackley.

Lectures: Three hours a week for two semesters.

### 409: Applied Economics

Prerequisite: Economics 202, 303, 306, 307.

Comparative economic systems; determinants of economic growth; underdeveloped countries and depressed areas within developed countries; concentration of industry and control of monopoly and restrictive practices; agricultural problems; economics of public utilities; distribution of national income.

TEXTS: The Canadian Economy, Selected Readings—Deutch et al (Macmillan); Stages of Economic Growth—Rostow (Cambridge); Economies of the World Today—Wilcox et al (Harcourt, Brace); Economic Principles and Public Issues—Oxenfelt (Holt). General reading will be recommended during the course.

Lectures: Three hours a week, two semesters.

Full course.

# **EDUCATION**

### 401: 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.

Full course.

#### 402: Psychology of Education

Prerequisite: Psychology 201.

A study of the nature, equipment, growth, development, evaluation and adjustment of the learner.

TEXTS: Educational Psychology—Kelly (Bruce)

Lectures: Three hours a week, two semesters.

Full course.

#### 403: General and Special 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.

Full course.

### 404: History of Education

The general outline of the history of educational ideas with emphasis upon modern theories.

Lectures: Three hours a week, two semesters.

Full course.

### 405: Practice Teaching

One hundred hours of observation and practice teaching in the public school system.

# 407: Sociology of Education

The principles connecting the social, political and economic life of the community with the education of their young.

Lectures: Three hours a week, two semesters.

# **GRADUATE COURSES**

### 511: The Metaphysics of Love

A seminar and lecture course on the cultural significance of the metaphysics of love.

Sessions: Three hours a week, two semesters.

Full course

# 521: The Metaphysics of Thought

A seminar and lecture course in the development of epistemological theory.

Sessions: Three hours a week, two semesters.

Full course

## 531: Classicial Metaphysics

The foundations of the Ancient Philosophies.

Sessions: Three hours a day, five days a week, seven weeks.

Full course.

# 514: British Literature for Teachers

The cultural background and methodology for the teaching of high school English.

Sessions: Three hours a week, two semesters.

Full course.

## 524: Philosophy of Drama

A seminar course in the source, nature and purpose of the modern drama.

Sessions: Three hours a week, two semesters.

Full course.

#### 534:

A seminar and lecture course in the psychological and epistemological obstacles to good communication.

# 510: Graduate research seminar

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

Sessions: One hour a week, two semesters.

Full course.

# 513: Comparative Education

A seminar and lecture course analyzing the differences and similarities among the educational systems of various nations.

Sessions: Three hours a week, two semesters.

Full course.

# 523: Advanced Sociology of Education

This is a seminar and lecture course on various phases of the social context of education.

Sessions: Three hours a week, two semesters.

Full course.

#### 519: Educational Administration

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

Sessions: Three hours a week, two semesters.

Full course.

#### 529: Educational Supervision

A seminar and lecture course in the requirements for the direction of teachers, courses, and student development in the public school.

Sessions: Three hours a week, two semesters.

Full course.

# **ENGINEERING**

#### 101: Engineering Drawing

An introductory course in drawing, the use of the slide rule and other aids to calculation; orthographic projection, sectioning and auxiliary views; lettering. Theoretical work designed to lead directly into Engineering 201 (Descriptive Geometry).

TEXTS: Engineering Drawing—Luzader (Prentice-Hall); Lessons in Lettering, Book I—French and Turnbull (McGraw-Hill); Problems in

Engineering Drawing—Luzader.
Lectures and Laboratory: Three hours a week, two semesters.

#### 102: Surveying

Care and use of instruments, surveying methods; measurement of distance, difference in elevation, direction angles. The elements of circular and vertical curves; applications of astronomy to engineering. Course credit requires the successful completion of Survey Camp.

TEXT: Smirnoff Measurements for Engineering and other Surveys-

(Prentice-Hall)

Lectures: Three hours a week, two semesters.

### 103: Survey Camp

Prerequisite: Engineering 102

Survey course applied to practical surveying problems; the orderly compilation and recording of survey data. Transit and tape surveys, curve layouts, plane table work, astronomical observations.

TEXTS: Elementary Surveying—Davis (McGraw-Hill); Surveyors\* Field Note Forms—Bardsley and Carlton (International Textbook Company)

Three weeks field course immediately following spring term.

# 201: Descriptive Geometry

Prerequisite: Engineering Drawing.

Problems on points, lines; plane and warped surfaces and development. Practical application of descriptive geometry as an engineering tool; problems related to construction, topographical, geological and mining applications.

TEXTS: Applied Descriptive Geometry—Warner and McNeary (McGraw-Hill); Applied Descriptive Geometry Problems—Warner and Douglass (McGraw-Hill)

Lectures: One hour a week, one semester. Laboratory: Three hours a week, one semester.

#### 202: Thermodynamics

Prerequisite: Physics 101, Mathematics 202 (concurrently).

Energy in general and the laws of thermodynamics; non-flow and steady-flow equations with applications; Carnot cycle and development of the entropy concept; steam power plants, refrigeration.

TEXTS: Thermodynamics—Durham (Prentice-Hall) Lectures: Three hours a week, two hours lab, one Semester

#### 203: Graphic Statics

Prerequisite: Engineering 101, Mathematics 202 (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 cantelevers.

TEXT: Mechanics for Engineers—Beer and Johnson (McGraw-Hill)
Lectures: Two hours a week, one semester.
Laboratory: Three hours a week, one semester.

#### 301: Kinematics

Prerequisite: Engineering 101, Mathematics 101.

Displacement diagrams for linkages, instant centres, layout and drawing of some common mechanisms. Velocity determinations for linkages using instant centres and velocity vectors. Acceleration determination with the use of acceleration diagrams, coriolis acceleration. Solution of velocity problems by analytical methods.

TEXTS: Kinematics of Machines—Hinkle (Prentice-Hall); Problems in Kinematics—Hinkle (Prentice-Hall)

Lectures: Two hours a week, one semester. Laboratory: Three hours a week, one semester.

# 302: Applied Mechanics

Prerequisite: Mathematics 202, Mathematics 303 (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 of momentum.

TEXT: Mechanics for Engineers—Beer and Johnson (McGraw-Hill)

Lectures: Three hours a week, two semesters.

#### 203: Fluid Mechanics

Prerequisite: Mathematics 202.

A study of fluid mechanics fundamentals 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 an 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: Materials

Prerequisite: Mathematics 303 (may be taken concurrently).

An analytical treatment of stress-strain relationships for tension, compression and shear; torsion in shafts; shear and moment and stresses in beams; and statically indeterminate problems.

Physical properties of common materials used in structures and machines; their manufacture and fabrication. Testing machines and standard tests.

TEXT: Mechanics of Materials-Popov (Prentice-Hall) Lectures: Three hours a week, two semesters.

#### 305: Electric Circuits

Prerequisite: Mathematics 202, Physics 303 (concurrently).

Circuit elements; Ohm's Law, Kirchhoff's Laws, equilibrium equations (mesh and node); the principle of duality; network theorems; energy and power; complex impedence and the use of phasors; steady state analysis of circuits; two-terminal networks; two-terminal-pair networks and basic measurements.

TEXT: Electrical Engineering Circuits—H. H. Skilling (Wiley)

REFERENCE: Networks, Lines and Fields-J. D. Ryder.

Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

# **ENGLISH**

N. B. Students intending to complete Honour's requirements must take courses numbered 303 to 308 inclusive in their Junior and Senior years.

#### Special English:

Instruction is given in grammar, syntax, punctuation, etc. This course is obligatory for students whose ranks in the English placement test are below average: no credit is given any University English course until this special course is successfully passed.

Lectures: Two hours a week, two semesters.

No course credit.

### 101: Survey of English Literature

From Anglo-Saxon to the twentieth century. Selected readings in poetry and prose. One play of Shakespeare.

Composition and Speech: Compulsory theme writing. Public Speaking attendance and participation are compulsory.

TEXTS: English Literature-Clark, Dickinson, Hudson and Pace

(Bret-Macmillan); Pocket Dictionary and Thesaurus.

Lectures: Four hours a week, two semesters. Full course.

202: Introduction to major literary forms

TEXTS: Palgrave's Golden Treasury, The Portable Milton, Gulliver's Travels, Wuthering Heights, Heart of Darkness, Other texts to be announced.

Lectures: Four hours a week, two semesters.

Full course.

### 303: The Prose and Poetry of the English Renaissance

An examination of the age and its non-dramatic literature.

Composition: Formal writing, an examination of the principles and techniques of research writing. Term papers will be required.

TEXTS: Tudor Prose and Poetry—Hebel, Hudson (Appleton-Century); Seventeenth Century Prose and Verse—White, Wallerstein and Quintana (Bret-Macmillan).

Students are advised to see the department for summer reading. Lectures: Three hours a week, two semesters. Full course.

#### 304: Dramatic Literature of the English Renaissance

Composition: Formal writing, an examination of the principles and techniques of research writing. Term papers will be required.

TEXTS: Shakespeare; Typical Elizabethan Plays-Schelling and Black (Harper)

Students are advised to see the department for summer reading. Lectures: Three hours a week, two semesters. Full course.

#### 305: English Neoclassicism

A study of Restoration and Eighteenth Century Literature.

Composition: Formal term papers, critical analyses.

TEXTS: Eighteenth Century Prose and Poetry-Bredvold, McKillop

and Whitney (Ronald Press)
Students are advised to see the department for summer reading. Lectures: Three hours a week, two semesters. Full course.

#### 306: Pre-Romantic and Romantic English Literature

A study of the prose and poetry of the late eighteenth and early nineteenth centuries.

Composition: Formal term papers, critical analyses.

TEXTS: English Romantic Poetry and Prose-Noyes (Oxford) Students are advised to see the department for summer reading. Lectures: Three hours a week, two semesters. Full course.

#### 307: English Literature of the Victorian Age

Poetry: Tennyson, Arnold and Browning. Prose: Carlyle, Newman, Ruskin, Morris and Arnold.

Composition: Formal term papers, critical analyses.

TEXTS: Victorian Prose-Harold and Templeman Poetry, paperback editions of the authors.

Lectures: Three hours a week, two semesters.

#### 308: Middle English

An examination of the language and literature of Chaucer and his contemporaries. English and Scottish.

Composition: Formal term papers critical analyses. TEXTS: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

Full course.

## 309: Introduction to Literary Criticism

Prerequisite: three University English courses.

A review of the major phases and tendencies in the development of literary theory, instruction in the techniques of practical criticism, and close analysis of prescribed literary texts.

TEXTS: Literary Criticism: A Short History—Wimsatl & Brooks Anthology of English Verse—Hayward.

Lectures: Three hours a week, two semesters.

### 310: Twentieth Century Literature

Prequisite: English 101 and 202.

Analysis and criticism; dramas, poetry, essays, short stories, novels.

Composition: Essays, formal and informal, imitative of modern, trends in style; speeches, debates, radio talks.

TEXTS: Four Modern Plays—Ibsen, Shaw, O'Neill, Miller (Rinehart)
The Waste Land and Other Poems—T. S. Eliot (Faber and Faber);
Modern Verse—Jones (Oxford Univ. Press); Short Story Masterpieces— Warren and Erksine (Dell); Library.

Lectures: Three hours a week, two semesters.

Full course.

# 311: Comedies of Shakespeare

Prerequisite: Two University English courses.

Seven prescribed plays. The Sonnets of Shakespeare. Weekly themes assigned on the background of Shakespeare, the theatre of his time. critical studies of the comedies.

Lectures: Three hours a week, two semesters.

Full course.

#### 312: The Novel

Prerequisite: Two University English courses.

Historical development of the English novel. Critical book reports on authors studied. First semester: Defoe to Dickens. Second semester: Thackeray to twentieth century.

Prospective students must consult instructor and arrange for summer reading.

Lectures: Three hours a week, two semesters.

Full course.

# 313: Shakespearean Tragedy

Hamlet, Othello, King Lear, Macbeth, Timon of Athens. Themes assigned on the life of Shakespeare. The Theatre of his time, critical studies of the tragedies.

TEXTS: Complete works of Shakespeare. Bradley's Shakespearean Tragedy. What Happens in Hamlet-J. Dover Wilson. Full course. Lectures: Three hours a week, two semesters.

#### 314: Modern Poetry

An examination of the development of modern poetry. Attention will be given to foreign influence and relevant criticism. Work will be concentrated on Hopkins, Yeats, Pound, Eliot and Auden.

Students wishing to enroll in this course shall be required to do pre-

paratory reading.
TEXTS: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

#### 315: Modern British Drama and Fiction

A study of important modern literature with special reference to Wilde, Shaw, Synge, O'Casey, James, Conrad, Forster, Lawrence, Joyce, T. S. Eliot, Fry, Huxley, Waugh, Cary, Golding and Murdoch.

TEXTS: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

# **FRENCH**

### 101: Elementary French

A rapid survey of French grammar along with composition and translation designed to provide the student with a foundation in the understanding and active use of spoken French.

TEXT: A Conversational Introduction to French-Heise and Muller

(Dodd, Mead)

Lectures: Four hours a week, two semesters.

Full course.

#### 102: Intermediate French

Prerequisite: Matriculation French.

The course comprises (a) intensive practice in spoken and written French; (b) an introduction to literary French through selected readings. Students are required to pass an oral and written examination at the end of each semester. Use of the language laboratory is a required part of the course.

TEXT: Oral and Written French—Stack (Oxford) Lectures: Three hours a week, two semesters. Laboratory: Three half hours a week, two semesters.

Full course.

### 202: Advanced Composition and Translation

Prerequisite: French 102.

A course in advanced composition and translation. A study is made of selected literary works. Students are required to pass an oral and written examination at the end of each semester.

TEXTS: Cours de langue et de civilisation française, Vol. IV: La France et ses écrivains—G. Mauger (Hachett); French Review Grammar—Dondo and Ernst (Holt & Co.); Harrap's Concise French English Dictionary.

Lectures: Three hours a week, two semesters. Full course.

Arrangements will be made for classes in spoken French.

### 303: An Introduction to the History of French Literature

Prerequisite: French 202.

This course is a prerequisite for French 304 to 306 inclusive. The lectures are given in French.

TEXTS: IV La France et ses écrivains—G. Mauger (Hachette); Lectures Classiques et Modernes—Michaud (Odyssey Press).

Lectures: Literature, two hours a week, two semesters. Full course.

Composition, one hour a week, two semesters.

# 304: French Literature: From the Romantics to the Present Day

The lectures are given in French.

TEXTS: Manuel des Etudes Littéraires Françaises, XIXe siècle, XXe siècle—P. Castex & P. Surer (Hachette)

Lectures: Three hours a week, two semesters.

Full course.

### 305: French Literature: From the Renaissance to the Revolution

The lectures are given in French.

TEXTS: Manuel, XVIe siècle, XVIIe siècle, XVIIIe siècle—P. Castex & P. Surer (Hachette)

Lectures: Three hours a week, two semesters.

Full course.

### 306: French Literature: The Middle Ages

The lectures are given in French.

TEXT: Manuel, Moyen Age-P. Castex & P. Surer

Lectures: Three hours a week, two semesters.

Full course.

# **GEOLOGY**

# 201: General Geology

The earth as a planet; igneous activity; weathering and erosion; sedimentation; earth movements; metamorphism; economic minerals. Historical Geology; the history of Geology.

TEXTS: Principles of Geology-Gilluly, Waters and Woodford (Free-

man)
Lectures: Three hours a week, two semesters.
Laboratory or field work: Three hours a week, two semesters.

Full course

# 202: Mineralogy

Crystallography; atomic structure of crystals; morphological classification of crystals. Chemical mineralogy; determinative mineralogy; occurence and associations of minerals.

TEXT: Mineralogy—Kraus, Hunt and Ramsdell (McGraw-Hill) Fifth Edition

REFERENCES: Mineralogy—Berry and Mason (Freeman); Dana's Mineralogy—Palache et al (Wiley)

Lectures: Three hours a week, two semesters.

Laboratory or field work: Three hours a week, two semesters.

Full course.

#### 303: Optical Mineralogy and Petrology

Prerequisite: Physics 101, Chemistry 101, Geology 202.

The optical properties of minerals. The description and interpretation of igneous, sedimentary, and metamorphic rocks.

TEXTS: Optical Mineralogy—Kerr; Principles of Petrology—Tyrell.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

#### 304: Historical Geology

Prerequisite: Geology 201.

The history of the evolution of the North American continent as recorded by the sedimentary rocks, by the fossils they contain, and by the evolution of mountain ranges.

TEXT: The Geological Evolution of North America—Clark and Stearn. REFERENCES: Structural Geology of North America—Eardley; Geology and Economic Minerals of Canada—Econ. Geol. Series No. 1, Geological Survey of Canada.

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

Full course.

Full course.

# **GERMAN**

101: Elementary German

This is an intensive first college course for those beginning the study of German. It is not open to students offering German as a matriculation subject. The work comprises a study of the elements of grammar, composition and the reading of easy literature. Oral work will be stressed Credit will be given on completion of German 102 or 103.

TEXTS: Elementary German—Meyer (Houghton Mifflin); Ein Briefwechsel—Meyer (Houghton Mifflin); Lebendige Literatur—Ryder-McCormick (Houghton Mifflin).

Lectures: Four hours a week, two semesters.

Full course.

### 102: Intermediate German (Arts)

Prerequisite: Matriculation German or German 101.

This course includes practice in spoken and written German, the reading of texts and the study of grammar and syntax. A student may not offer both German 102 and 103 for degree credit.

TEXTS: To be announced.

Lectures: Three hours a week, two semesters.

Language Laboratory: Three periods a week, two semesters.

### 103: Intermediate German (Science)

Prerequisite: Matriculation German or German 101.

This course will enable Science, Pre-medical, Pre-dental and Engineering students to use German scientific texts. It will not be counted towards an Arts Degree.

TEXTS: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

### 202: German Literary Prose

Prerequisite: German 102. German 103 or entrance examination.

The aim of this course is to familiarize the students with the artistic qualities of German literary prose. Advanced grammar and syntax will be studied and short essays written. Emphasis will be laid on oral exercises.

TEXTS: Die Kunst der Prosa—Fleissner; Simpler German Course for first examinations—Russon (Longmans).

Lectures: Three hours a week, two semesters.

Full course.

#### 300: German Literature since Goethe

Prerequisite: German 202.

German Literature Since Goethe, Ernst Feise and Harry Steinhauer. TEXTS: To be announced. (Houghton Mifflin Company)

# **HISTORY**

### 102: Modern Europe, the formative years, 1300-1815

A survey course designed primarily for Freshman students, covering the Renaissance, the Reformation, the Puritan Revolution and the French Revolution.

TEXT: To be announced

Lectures: Three hours a week for two semesters.

### 202: History of Canada

A survey 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.

TEXT: To be announced

Lectures: Three hours a week for two semesters.

# 203: 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.

TEXT: A History of Civilization, vol. 2—Brinton, Christopher & Wolff.

Lectures: Three hours a week for two semesters.

## 204: History of the United States to 1865

A survey course from colonial times to the end of the Civil War with special emphasis on the growth of democracy and the conflicting idealogies which culminated in civil war.

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TEXT: To be announced.

Lectures: Three hours a week for two semesters.

## 205: History of the United States, 1865 to the present

A survey course with emphasis on the political aspect of the evolution of the United States, especially during the Reconstruction Era; the Progressive Era, the New Freedom and the New Deal. Attention will also be paid to the emergence of the United States as a world power.

TEXT: To be announced.

Lectures: Three hours a week for two semesters.

## 206: Modern England

A survey course covering English political and social history from 1660 to the present day, with particular emphasis on the 19th and 20th centuries.

TEXT: To be announced.

Lectures: Three hours a week for two semesters.

## 301: History of Canada to 1867

French Canada with special reference to its culture, the personalities of the period, and the struggle with the British for possession of the region. The British attempts to incorporate British North America into the British colonial system.

TEXT: To be announced.

Lectures: Three hours a week for two semesters.

# 302: History of Canada, 1867 to present

Confederation, the development of Dominion status, Canada's role in the two World Wars and international affairs.

TEXT: To be announced.

Lectures: Three hours a week for two semesters.

# 303: Tudor and Stuart England

The history of England with special emphasis on the development of the English parliament.

TEXT: The Tudors and the Stuarts-M. M. Reese.

Lectures: Two hours a week for two semesters.

## 306: Europe, 1648-1815

Europe from 1648 to 1815 with special emphasis on the history of France.

TEXT: A History of Europe, 1610-1751, 1715-1814-W. F. Reddaway. Lectures: Two hours a week for two semesters.

#### 309: Renaissance and Reformation

TEXT: To be announced

Lectures: Three hours a week for two semesters.

### 311: Medieval England

Emphasis will be placed on constitutional developments and churchstate relations.

TEXTS: From Alfred to Henry III—Brooke; The Later Middle Ages—

Lectures: Three hours a week for two semesters.

#### 312: Medieval Europe

The main currents of medieval European history with special emphasis on the intellectual and cultural aspects.

TEXT and READINGS: To be announced.

Lectures: Three hours a week for two semesters.

### 313: Europe, 1815-1870

TEXT: A History of Europe, 1815-1939—Marriott. Lectures: Two hours a week for two semesters.

### 314: Europe, 1870-1945

Emphasis on the diplomatic history of the period, and the background to World Wars I and II.

TEXT: A History of Europe-Marriott.

Lectures: Two hours a week for two semesters.

#### 401: The Puritan Revolution and the Cromwellian Protectorate

A seminar with particular emphasis on political and economic changes during the Puritan Revolution.

Seminar: Two hours a week.

#### 402: The Era of the French Revolution

A seminar on the course of the French Revolution and its impact on Europe.

Seminar: Two hours a week.

# 403: German Foreign Policy, 1890-1945

The history of Germany with special emphasis on German foreign policy.

Lectures: Two hours a week.

### 404: British Foreign Policy, 1890-1945

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.

Lectures: Two hours a week.

### 405: United States Foreign Policy, 1890-1945

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 up to 1941.

Lectures: Two hours a week.

### 406: The Politics of the Peace Settlement, 1919-1921

A seminar in which students will be expected to work closely in the documentary sources.

Seminar: Two hours a week.

### 407: Philosophy and History

This course will be conducted as an inter-departmental seminar and will explore such problems as the nature of historical knowledge and its philosophical significance as well as the relationship between the work of the historian and his explicit or implicit philosophical assumptions. Seminar: Two hours a week.

### 408: Church and State through the Ages

An inter-departmental seminar made possible by the cooperation of the following departments: History, Philosophy, Political Science, and Theology.

# 410: A Period in the History of Nova Scotia

A course designed 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 presentation of papers on given topics as well as discussion of these papers and related topics.

Seminar: Two hours a week.

# HISTORY OF ART

301:

Prehistoric art; the art of Ancient Egypt, Crete; Classical Greek and Roman art; Early Christian Art; the Romanesque and Gothic era; the Art of Northern Europe; the Italian Renaissance.

TEXTS and READINGS: The Magic of Art—A. Czakó (Pageant Press, New York); History of World Art—Upjohn, Wingert, Mahler (Oxford Univ. Press) Second Edition; Histoire de l'art, Vol. I-II—P. Lavedan (Presses Universitaires de France, Paris); Geschichte der Kunst, Vol. I-II—R. Hamann (Munchen)
FOR ILLUSTRATIONS: Key Monuments of the History of Art—

H. W. Janson (Prentice-Hall)

Lectures: Three hours a week, two semesters.

Full course.

302:

Mannerism; the Age of the Baroque and Rococo; Flemish and Dutch art; Neo-classicism; Romanticism; Impressionism, Neo-impressionism; Expressionism; the art of the 20th century.

TEXTS and READINGS: As for History of Art 1 Lectures: Three hours a week, two semesters.

Full course.

# LATIN

101: First College Course for Beginners

A first year college course for those beginning the study of Latin. A rapid study is made of Latin grammar and syntax, along with composition and passages for translation.

TEXT: Latin Course for Schools, Parts I and II-Wilding (Faber and

Lectures: Four hours a week, two semesters.

Full course.

102: First College Course

Prerequisite: Matriculation Latin.

A thorough study of Latin syntax. Literature: Cicero's Pro Archia. TEXT: Latin Course for Schools, Part III - Wilding (Faber and Faber) Lectures: Three hours a week, two semesters. Full course.

202: Introduction to Latin Epic Poetry

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

TEXTS: Aeneid II, VI-Virgil (Other parts of the Aeneid in translations); Pro Lege Manilia, Cicero; Bradley's Arnold, Prose Composition, Ex. 1-28.

Lectures: Three hours a week, two semesters.

Full course.

#### 303: Horace

Prerequisite: Latin 202.

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

TEXTS: Odes I, II, III: Satires, Horace—Bennett and Rolfe (Allyn and Bacon); Ars Poetica, Horace—Wilkins (Macmillan); Bradley's Arnold, Prose Composition, Ex. 29-53.

Lectures: Three hours a week, two semesters.

Full course.

#### 304: Cicero's Rhetoric

An intensive study of Cicero's rhetoric. Selections from Catullus. Prose composition.

TEXTS: Pro Marcello; Pro Ligario, Cicero; Selections, Catullus; Bradley's Arnold, Prose Composition, Ex. 54-64
Lectures: Three hours a week, two semesters.

Full course.

#### 405:

A tutorial course on Cicero (De Amicitia, De Senectute), Lucretius (DeRerum Natura). Roman history from its beginnings to the end of the Republic.

Full course.

#### 406:

A tutorial course on Tacitus (Agricola), Livy (Books XXI and XXII)

Juvenal (Satires). Roman history from Augustus to the beginning of the

Middle Ages.

Full course.

#### 407:

A tutorial course; directed readings and research; ecclesiastical Latin, or Latin philosophical sources.

Full course.

# **MATHEMATICS**

#### 101: Arts and Commerce Mathematics

Algebra: Exponents and radicals; variation; progressions; imaginary quantities and cube roots of unity; permutation and combination; binomial theorem with positive integral index.

Trigonometry: Radian measure; trigonometrical identities; complementary and supplementary angles; properties and solution of triangles; simple problems on heights and distances.

Analytical geometry: Cartesian co-ordinates; equation to straight

TEXTS: To be announced

Lectures: Three hours a week, two semesters.

Full course.

## 111: Algebra and Trigonometry

This course is a prerequisite for all subsequent Mathematics courses. Operations with real numbers; concept of functions; inequalities; logarithms; exponential functions; trigonometric functions; complex numbers; theory of equations; systems of equations (matrices); binomial theorem and probability; sequences.

TEXT: Integrated Algebra and Trigonometry—Fisher, Ziebur (Prentice-Hall)

Lectures: Five hours a week, two semesters.

Full course.

### 202: Analytic Geometry

Prerequisite: Mathematics 111.

Curves and equations, straight line, circle, parabola, ellipse and hyperbola; parametric equations; polar coordinates; rotation and translation of axis; solid analytic geometry.

TEXT: Introduction to Analytic Geometry—Love and Rainville (Mac-millan)

Calculus

Prerequisite: Mathematics 111.

Limits, derivatives; related rates, extreme values; integral calculus; methods of integration and applications; length of a curve, areas, volumes, centroids, etc.; different systems of coordinates, partial differentiation; iterated and multiple integration.

TEXT: Calculus—Sherwood and Taylor (Prentice-Hall)
Lectures: Six hours a week, first semester.

Three hours a week, second semester.

Full course.

#### 213: Mathematical Statistics I

Prerequisite: Mathematics 202.

Definition; central tendency; dispersion; moments; regression; association and contingencies; simple, partial and multiple correlation; rank interclass and intra-class correlation; sample survey.

TEXTS: Mathematical Statistics—Weatherburn (MacMillan); Theory of Statistics—Yule and Kendall (Griffin)

Lectures: Three hours a week, two semesters.

Full course.

### 303: Advanced Calculus

Prerequisite: Mathematics 202.

Differential equations, functions of two or more variables, vector analysis, infinite series, Taylor series, Fourier series, complex variable, double and triple integration.

TEXT: Advanced Calculus for Applications—F. B. Hildebrand (Prentice-Hall)

REFERENCE: Advanced Calculus—Kaplan (Addison-Wesley)

Lectures: Three hours a week, two semesters.

Full course,

# 304: Boolean Algebra and its Applications

Prerequisite: Mathematics 202.

The algebra of sets, symbolic logic and the algebra of propositions, switching algebra, relay circuits and control problems, circuits for arithmetic computation, introduction to probability of finite sample spaces.

TEXT: Boolean Algebra and its Applications-J. E. Whitesitt (Addi-

son-Wesley)

REFERENCES: Applied Boolean Algebra—F. E. Hohn (Macmillan). Lectures: Three hours a week, two semesters. Full course.

### 305: Theory of a Complex Variable

Prerequisite: Mathematics 202, 307.

Complex plane; fraction, powers, and roots; analytic functions, power series, some elementary functions, complex integration, representation theorems, the calculus of residues.

TEXT: Analytic Function Theory, Vol. 1—E. Hille (Ginn & Co.) REFERENCES: Introduction to Complex Variable & Applications— R. V. Churchill (McGraw-Hill)

Lectures: Three hours a week, two semesters.

Full course.

### 306: Mathematical Probability

Prerequisite: Mathematics 202.

Computation of probability by direct enumeration of cases, theorems of total and compound probability, repeated trials, probabilities of hypotheses and Bayes' theorem, Bernoulli's theorem, approximate evaluation of probabilities in Bernoullian case, mathematical expectation, law of large numbers, probabilities in continuum, concept of distribution, limit theorems, normal distribution in two dimensions, Euler's summation formula, Stering's formula.

TEXTS: To be announced.

Lectures: Three hours a week, two semesters

Full course.

# 307: Modern Algebra

Prerequisite: Mathematics 202.

Sets, rings, integral domains, fields, polynomials, groups, vector spaces, Boolean algebra.

TEXT: Introduction to Modern Algebra-N. H. McCoy (Allyn &

REFERENCE: Elements of Abstract Algebra—J. T. Moore (Macmillan)
Lectures: Three hours a week, two semesters.

Full course.

# 310: Ordinary and Partial Differential Equations

Prerequisite: Mathematics 202.

Separation of variables; homogeneous and linear differential equations; higher order linear differential equations with constant coefficients; Laplace transformation, differential equations of higher order and degree, partial differential equations, Fourier series, applications.

TEXT: Elementary Differential Equations-Rainville (Macmillan) REFERENCE: Applied Differential Equations—M. R. Spigel (Prentice-Hall)

Lectures: Three hours a week, two semesters.

Full course.

### 312: Theory of Matrices

Prerequisite: Mathematics 202.

Introductory concepts, vector spaces, equivalence, rank, and inverses, determinants, congruence, and hermitian congruence, polynomial over a field, matrices with polynomial elements, similarity, characteristic roots, linear transformation.

TEXT: Theory of Matrices—S. Perlis (Addison-Wesley)

REFERENCE: Matrices and Linear Transformations-Finkbeiner (Freeman)

Lectures: Three hours a week, two semesters.

Full course.

### 314: Mathematical Statistics II

Prerequisite: Mathematics 213.

Probability, theory of distributions; Fisher's Z-transformation elementary analysis of variance.

TEXTS: Advanced Statistics, Vol. I—Stuart and Kendall (Griffin) Industrial Experimentation—K. A. Brownley (H. M. S. Stationery) Lectures: Three hours a week, two semesters. Full course.

### 405: Topology

Prerequisite: Mathematics 202, 307.

Introductory set theory, the real line, topological spaces, metric spaces, arcs and curves, partitionable spaces, the axiom of choice.

TEXT: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

#### 408: Functions of a Real Variable

The continuous real variable; Dedkind's theorem; Weierstrass theorem; rational functions; loci in space; complex numbers; limits of a function; the infinite in analysis.

TEXT: Mathematical Analysis, Vol. I-Goursat-Hedrick (Ginn) Lectures: Three hours a week, two semesters. Full course.

# PHILOSOPHY

# 201: Introduction to Christian Philosophy

An introduction to basic philosophical problems in the philosophy of nature, ethics, and the philosophy of man designed to familiarize students with (a) the origins of these problems in Greek and medieval Christian philosophy, and (b) a doctrinal response in terms of a contemporary Christian synthesis based on the philosophy of St. Thomas Aquinas.

TEXTS: Beginning Philosophy—Monahan; Sources for a Christian Philosophy of Man-Monahan.

Lectures: Three hours a week for two semesters. Full course.

## 302: A Christian Philosophy of Man and God

Prerequisite: Philosophy 201

An introduction to basic philosophical problems in the philosophy of man, metaphysics and natural theology designed to familiarize students with (a) the origins of these problems in medieval Christian philosophy. and (b) a doctrinal response in terms of a contemporary Christian synthesis based on the philosophy of St. Thomas Aquinas.

TEXTS: Sources for a Christian Philosophy of Man-Monahan; Sources for a Christian Philosophy of Being and God-Monahan. Full course.

Lectures: Three hours a week for two semesters.

# 303: Moral Philosophy: General and Applied

Prerequisite: Philosophy 201

An introduction to the morality of human conduct and its norms. Natural law and conscience. Rights and duties of man as an individual and as a member of society, domestic and civil.

TEXTS: Right and Reason-Fagothey; Introduction to St. Thomas Aquinas-Pegis (ed).

Lectures: Three hours a week for two semesters.

Full course.

### 408: Phenomenology

Prerequisite: Philosophy 201 and a second course in Philosophy.

The origins, development, concepts, method and influence of the Phenomenological movement in contemporary philosophy.

TEXTS: The Phenomenological Movement (2 Vol.)—Spiegelberg; Selections from Husserl, Heidegger, Sartre, Merleau-Ponty.

Lectures: Three hours a week for two semesters (2 hours seminar; 1 hour tutorial)

## 410: The Metaphysics of Love

Prerequisite: Philosophy 201, Philosophy 302.

A seminar and lecture course on the cultural significance of the metaphysics of love. Full course.

# 411: The Christian Philosophies of Augustine and Aquinas

Prerequisite: Philosophy 201.

A seminar and lecture course to explore the concept of philosophy in St. Augustine and St. Thomas Aquinas, and their views on the relation between faith and reason.

TEXT: Selected readings in Augustine and Aquinas

Full course.

# PHYSICS

NOTE: Students failing to complete a laboratory course prior to the date of examination will not be eligible to write the examination. Marks wil be awarded for the practical work and combined with the examination results for the final mark.

### 111: General Physics

Basic treatment of mechanics, sound, heat, light, electricity and atomic and nuclear physics.

This course is prerequisite for all other physics courses.
TEXT: Physics Principles—Ballard, Slack and Hausmann (Van Nostrand)

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

Full course

# 202: Heat, Sound, Light, Electricity, Modern and Nuclear Physics

Prerequisite: Physics 111. Mathematics 111. Mathematics 202 (may be taken concurrently).

More advanced treatment of heat, sound, electricity and modern and

nuclear physics will be given. Calculus will be used.

TEXT: University Physics—Sears, Zemansky (Addison-Wesley

Publishing Co.).
Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

Full course.

# 303: Electricity and Magnetism

Prerequisite: Physics 202, Mathematics 202, Mathematics 303 (Concurrently).

Coulomb's law, electric field, dielectrics, capacitance, magnetic field, inductance, D.C. Motors and generators, alternating currents, resonance power, transformers, three phase alternating current, thermionic emission. multi-electrode vacuum tubes and cathode-ray oscillograph.

TEXT: Electricity and Magnetism—Duckworth (Macmillan)

Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

Full course.

# 304: Vector Algebra, Vector Analysis and Mechanics

Prerequisite: Physics 202, Mathematics 303.

Unit vectors, sum of vectors, difference of vectors, scalar products of vectors, cross product of vectors, multiple products of vectors, the gradient. mechanics.

TEXT: Theoretical Physics-Joos.

Lectures: Three hours a week, two semesters.

Full course

# 305: Electrical Measurements and Measuring Instruments

Prerequisite: Mathematics 202, Physics 303.

Measurements of inductance, capacitance, and resistance, potent iometers, 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.

Full course.

#### 306: Electric Circuits

Prerequisite: Mathematics 202, Physics 303 (concurrently).

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: Net-works, Lines and Fields—Ryder (Prentice-Hall).

Lectures: Three hours a week, two semesters.

Laboratory: Three hours a week, two semesters.

Full course.

### 307: Atomic and Nuclear Physics

Prerequisite: Mathematics 202, Physics 303, Mathematics 303 (May be taken concurrently).

An introduction to quantum theory and wave mechanics by way of a review of the classical experiments of atomic physics, the hydrogen atomoptical and x-ray spectra—natural radioactivity—disintegration of nucleifission and fusion of nuclei—nuclear processes—fundamental particles—partical accelerators.

TEXT: Nuclear Physics—Kaplan (Addison-Wesley).

Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

Full course

#### 308: Electronics

Prerequisite: Physics 303, Mathematics 303 (may be taken concurrently).

Liberation of electrons from atoms, emissions, ionizations, discharges in gases, vacuum tubes, rectifiers, oscillators, amplifiers, wave-shaping and control circuits, Transistor circuits, electronic instruments.

TEXT: Radio Engineering—Terman. Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

Full course.

# 309: Physical optics and optical Instruments

Prerequisite: Physics 202, Mathematics 202, Mathematics 303 (concurrently).

Electromagnetic theory, interference, diffraction, polarization, spectrum analysis, use of glass and quartz spectrographs, lumber plates, interferometers, polarimeters and other optical instruments.

TEXT: Fundamentals of optics—Jenkins and White (McGraw-Hill)

Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

Full course.

# 310: Thermo-dynamics and Statistical Mechanics

Prerequisite: Physics 202, Mathematics 303.

Thermo dynamic systems, work, first law of thermodynamics, transfer of heat, ideal gases, second law of thermo dynamics, reversibility and irreversibility, carnot cycle, entropy, steam engine and refrigerator, change of phase, physics of very low temperature.
TEXT: Heat and Thermodynamics—Zemansky (McGraw-Hill).

Lectures: Three hours a week, two semesters.

Full course.

# 311: Introduction to Modern Physics

Prerequisite: Physics 303, Mathematics 303.

Electromagnetic waves and moving charges, Photoelectric and thermionic effects, theory of relativity, origin of quantum theory, nuclear atom and origin of spectral lines, wave mechanics, atomic structure and optical spectra, x-rays, the nucleus, cosmic rays, fundamental particles.

TEXT: Introduction to Modern Physics-Blanchard, Burnett, Staner,

Weber (Prentice-Hall).

Lectures: Three hours a week, two semesters. Laboratory: Three hours a week, two semesters.

Full course.

# POLITICAL SCIENCE

# 201: Introductory Political Science

The scope and methodology of Political Science. The natural law; the nature of the state; the purpose of the state; constitutional government.

TEXT: Fundamentals of Government-Schmandt and Steinbicker (Bruce)

Lectures: Three hours a week, two semesters.

Full course.

# 302: Democratic Government

The essential features of democratic government as observed in the governments of Britain, the United States and Canada. Special attention to such topics as pressure groups, political parties and the growth of the executive in modern government.

TEXT: Democratic Government and Politics-Corry and Hodgetts (Univ. of Toronto Press)

REFERENCE: Politics: Canada—Paul Fox (McGraw-Hill) Full course. Lectures: Three hours a week, two semesters.

# 303: Government and Politics in Russia and the Soviet Union

History, culture and political institutions of the Russian Empire and the U.S.S.R. An analysis of the social and economic backgrounds of the ideological and political setting in the Soviet Union; the development and techniques of the one-party state; and the impact of party on domestic and international policies.

TEXT: The Soviet System of Government—Hazard (Univ. of Chicago)

Government and Politics in East Central Europe

The political and constitutional systems of the states of Poland, Czechoslovakia, Hungary, Austria, Yogoslavia, Rumania, and Bulgaria before and after World War II; the installation of Communist regimes in East Central Europe, the Sovietization of political institutions.

TEXT: Lecture notes; required readings. Lectures: Three hours a week, two semesters.

Full course.

#### 804: Canadian Government

Prerequisite: Political Science 201 or 302.

A study of the Canadian form of constitutional democracy.

TEXTS: Government of Canada—R. McG. Dawson (Univ. of Toronto Press)

Politics: Canada—Paul Fox (McGraw-Hill)

Lectures: Three hours a week, two semesters.

Full course.

### 305: International Relations

Prerequisite: Political Science 201, History 101 or equivalent.

A survey of international relations from the emergence of the modern state system to the present; nationalism, analysis of national sovereignty, imperialism and the balance of power, power politics and international organizations.

TEXT: Introduction to International Relations—C. Schleicher (Prentice-Hall)

Lectures: Three hours a week, two semesters.

Full course.

## 306: Comparative Study of Governments

Prerequisite: Political Science 201 or 302.

A detailed analysis of the institutional function of the governments of the United Kingdom, France, Germany and the U.S.S.R.

TEXT: Major Foreign Powers—Carter, Ranney, Herz (Harcourt

Brace and Company)
Lectures: Three hours a week, two semesters.

Full course.

#### 307: The Middle East

Not open to Freshmen

A brief historical and political survey of the area, with a study of the modern political institutions of the Middle Eastern States.

TEXT: A Short History of the Middle East—G. Kirk (Metheun)
Lectures: Two hours a week, two semesters.

Full course.

# 308: International Law and Diplomacy

Not open to Freshmen.

The principal mores, customs, rules and laws set up to regulate and control international relations among states in the political, diplomatic, cultural and other fields.

TEXT: Introduction to the Law of Nations-O. Svarlien (McGraw

Lectures: Three hours a week, two semesters.

Full course.

#### 309: The British Common wealth

Prerequisite: Political Science 201 or equivalent History course.

The development of governmental institutions in the nations of the Commonwealth, with particular attention to area problems in India, South Africa and Canada.

TEXT: To be announced.

Lectures: Two hours a week, two semesters.

Full course

### 310: The History of Political Thought

Major political writings from ancient to modern times are studied and political doctrines such as democracy, liberalism, socialism, fascism, and communism are examined. Emphasis is centered on a comparison of basic ideas and on the relationships between theories and contemporary historical circumstances.

TEXT: A History of Political Philosophy—Schmandt (Bruce) Full course. Lectures: Three hours a week, two semesters.

#### 311: Government and Politics in the Far East

A comparative study of the political and constitutional systems of China, Japan, Korea, and the states of Southeast Asia. Recent processes of political development in China; the practice of democracy in postwar Japan and the heritage of feudal and imperial institutions; problems of government and administration in those countries which have recently become independent.

TEXT: Governments and Politics of Southeast Asia-Kahin (Ed.) (Cornell Univ.)

Lectures: Two hours a week, two semesters.

Full course.

# **PSYCHOLOGY**

#### 201: General Psychology

The general principles of sensation, perception, response and integration, stressing comprehension, retention and the nature and control of intelligence and personality.

TEXT: Psychology: The Unity of Human Behaviour—Gannon (Ginn) Full course. Lectures: Three hours a week, two semesters.

### 302: Systems and Theories of Psychology

Examination and analysis of the theories and systems of thought in modern psychology, tracing key concepts to their historical origins.

TEXT: Systems and Theories of Psychology, Chaplin and Krawiec (Holt, Rinehart and Winston)

REFERENCE: Contemporary Schools of Psychology, Woodworth (Ronald Press) Lectures: Three hours a week, two semesters. Full course.

# SCIENCE

#### 101: General Science

This course is designed to acquaint Arts students with basic scientific principles. The course includes:

Physics: mechanics, heat, sound, light and modern physics.

Chemistry: matter, atomic theory, chemical reactions, oxidation and reduction, solution, ionization, electrochemistry, reaction rates, periodic classification of the elements, organic chemistry.

Biology: characteristics of living organisms: structure classification, relationships, physiology, heredity and evolution with emphasis on the study of man.

Geology: the earth as a plant, earth materials, surface processes, deep-

seated processes, history of geological thought. Lectures: 84 lecture periods, to be given by members of the Science faculty Full course.

# SOCIOLOGY

### 201: Introductory Sociology

Man's biological and cultural heritage; man's social nature, problems of group life; racial conflicts; social institutions; social maladjustments. An essay covering field work investigation is required.

TEXT: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

# 302: Social Problems Involving Disorganization and Deviance

A positive approach to establish proper perspectives for adjustment to 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.

TEXT: Social Problems-J. A. Kane (Prentice-Hall)

REFERENCES: Current Social Problems-Mihanovich (Bruce); The World of Work—Robert Dublin (Prentice-Hall); Psychology of Personal Adjustment—F. McKinney (Wiley); Social Problems and Social Action—Walsh & Furfey (Prentice-Hall) Canadian Society—Blishen, Jones, Naegele, Porter (Macmillan).

Lectures: Three hours a week, two semesters.

Full course.

305: Anthropology

Through the comparative study of primitive man we examine various aspects of the character and function of mankind's social groupings and institutions. We study briefly the nature of man's cultures and relate this to the physical and social development of man himself.

TEXT: To be announced.

REFERENCES: The Science of Man-Titiev (Holt and Co.); General Anthropology-Turney-High (Crowell Co.): Anthropology-Kroeber

Lectures: Three hours a week, two semesters.

Full course.

306: Criminology

Causation theories; background factors; characteristics of criminals; types: maladjusted criminal; organized crime; vice and addictions; women offenders; juvenile delinquency: criminal behavior and public tolerance.

TEXT: Criminology-Cavan (Crowell Co.) Third Edition.

REFERENCE: Standard texts by: Reckless, Sutherland, Glueck,

Teeters, etc.

Lectures: Three hours a week, two semesters.

Full course.

Field work in correctional areas is an essential part of this course.

307: Penology

History and theory of punishment in past; modern philosophy of treatment.

Apprehension of criminals and police systems; judicial procedure of courts, trials, sentencing; classification of institutions; study of the prison community with stress on administration, services, activities, criminal philosophy; riots; release of prisoners on probation and parole; world trends in penological philosophy.

TEXTS: Standard texts by: Cavan, Teeters, Sutherland, Glueck, Reckless, Clemmer.

Lectures: Three hours a week, two semesters. Field work is essential.

Full course.

308: Urban Sociology

Study of modern cities including: physical patterns and location; city planning and redevelopment; problems of population composition and mobility; social problems arising out of class distinction, leisure and changing human relations; community behavior; metropolitan planning.

TEXTS: The City—Rose Hum Lee (Lippincott); Urban Sociology—J. A. Quinn (American Book Co.); Urban Society—W. E. Cole (Houghton Mifflin).

Lectures: Three hours a week, two semesters. (Not offered in 1964-65)

Full course.

309: The Family

The course is designed to promote greater stability in family life.

(a) Marriage: its concepts, church law, preparation.

(b) The modern family: characteristics; changing roles and relationships; internal crises arising from children, finances, discipline, recreation; disorganization; multi-problem families; programs for survival; agencies such as Cana Groups, courts and counselling, welfare.

TEXTS: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

# 310: History of Social Theory

A history of the ideas about social behaviour from the Greeks to the moderns. Emphasis placed on the writings of Comte, Spencer, Marx, Durkheim and Weber.

TEXTS: The Nature and Types of Sociological Theory—Martindale; Consciousness and Society—Hughes. Lectures: Three hours a week for two semesters.

# **SPANISH**

## 101: Elementary Spanish

This course is intended for students who have had no Spanish or whose previous training does not qualify them for a more advanced course. During the course emphasis will be placed on development of listening comprehension, reading, writing and practice in easy conversation. A complete elementary knowledge of the Spanish grammar will be the basic work of the course.

TEXT: To be announced.

Lectures: Four hours a week, two semesters.

Full course.

## . 102: Intermediate Spanish

The course comprises an intensive practice in spoken and written Spanish with an introduction to Spanish literature through selected readings from Spanish and South American authors.

Students are required to pass an oral and written examination.

TEXT: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

# 202: Modern Spanish Literature

A special study of Spanish literature of the nineteenth and twentieth centuries. The students will be required to make a more practical usage of the language in composition and conversation. Classes as far as possible will be conducted in Spanish.

TEXT: To be announced.

Lectures: Three hours a week, two semesters.

Full course.

# THEOLOGY

#### 102: The Church

This course, intended for Freshmen, consists of two parts. In the first part the nature of the Church as God's people is studied. second part the sacraments as initiating or fostering the Church's life in its members are studied.

TEXTS: The Bible (Confraternity Edition) Benziger, New York. First part of the course, on the nature of the Church: To be announc-

Second part of the course: Of Sacraments and Sacrifice-C. Howell (Liturgical Press, Collegeville, Minn.)

Lectures: Three hours a week, two semesters.

### 301: Christian Faith and its Cultural Expression

A study of the historical phenomenon which is Christianity. This course seeks to discover, as far as possible, the historical faith common to all Christian communions. Christian faith is here presented as a total faith: a vision of the world and man and their meaning; a set of attitudes towards nature and self and towards others as individuals and in groups; a set of expressions in worship and art, literature and action, association and thought. It informs the student of the elements of Christianity formative of our culture. The sources of this study are the Bible and the most significant writings of Christian thinkers of various Christian communions from the early centuries to our own day. This course is recommended for Non-Catholics.

TEXTS: The Bible (any good translation)

Christian Faith and its Cultural Expression—Gordh, George (Prentice-Hall).

Lectures: Three hours a week, two semesters.

### 303: Theology of Christian Living

The Church; juridical structure; Church and State; the layman's role in the Church. The supernatural life; its growth and development. The sacraments: with special emphasis on the sacrament of marriage. Lectures: Three hours a week, two semesters.

# 304: The Development of the Dogmas regarding the Word Incarnate

After a careful examination of New Testament teaching as the basis for the subsequent development, the Christology of the more important early Fathers and ecclesiastical writers will be studied. Next the Arian controversy and the two Ecumenical Councils dealing with it, Nicaea I, and Constantinople I, will be examined. Finally the great Christological controversies and Councils, particularly of the fifth century, will be studied, leading to a clear understanding of the Christological formulae that emerged from these.

TEXTS: The Bible (Confraternity Edition), Benziger, New York.

A History of the Church, Vol. I; The Church and the World in which the Church was founded—Hughes, Philip (Sheed and Ward, N. Y.)

Lectures: Three hours a week, two semesters.

#### 305: Old Testament

Introduction to all the books of the Old Testament; attempts to discover, in the light of modern biblical scholarship, the divine message, as expressed in Israel's historical, legal, prophetic, poetical, sapiential, devotional, and apocalyptic writings, which are the inspired books of the Old Testament.

TEXT: The Bible.

Lectures: Three hours a week, two semesters.

### 306: Theology of the Spiritual Life

Christian perfection: its meaning and principles, applied to the various states of life, married, single, religious, priestly. Union with Christ through grace, theological and moral virtues, gifts of the Holy Ghost, prayer, the sacraments.

TEXT: The Spiritual Life—Tanqueray, A. (Desclée, N. Y.).

Lectures: Three hours a week, two semesters.

#### 307: New Testament

Attempts to discover, in the light of modern biblical scholarship, the divine message in the New Testament writings, with special emphasis on the writings of St. Paul and of St. John.

TEXT: The Bible.

Lectures: Three hours a week, two semesters.

# 310: The Social teaching of the Church from Leo XIII to John XXIII.

Taking Leo XIII as expressing in his Encyclical, Rerum Novarum the basic teaching on Christian social thought and action, the interpretation and development of this in the documents of the subsequent Popes is studied.

TEXTS: The Church Speaks to the Modern World—Pope Leo XIII (Doubleday, N. Y.); The Church and the Reconstruction of the Modern World—Pope Pius XI (Doubleday, N. Y.); Mater et Magistra—Pope John XXIII (The America Press, N. Y.); Pacem in Terris—Pope John XXIII (The America Press, N. Y.).

Lectures: Three hours a week, two semesters.

### 311: Sacramental Theology

A careful study of the sacraments from the point of view of their historical development in doctrine and practice.

TEXTS: To be announced.

Lectures: Three hours a week, two semesters

# CONVOCATION - - - MAY 6, 1963

#### MEDALS AND PRIZES

GOVERNOR-GENERAL'S MEDAL......Thomas Mabey
Awarded to the student who has made the most outstanding
contribution to scholarship and student activities

#### ARTS

Highest Aggregate in Four Years Arts......Thomas Mabey Gold Medal donated by Most Reverend J. Gerald Berry, D.D.

### SCIENCE

Highest Aggregate in Fourth Year Science......Stanley Jenkinson Gold Medal donated by Saint Mary's University Ladies' Auxiliary

#### COMMERCE

#### ENGINEERING

#### EDUCATION

Highest Aggregate in Education......Frederic Perry, B.A.
Gold Medal donated by Truro Printing & Publishing Co. Limited

# GRADUATES-MAY 6, 1963

# BACHELOR OF ARTS

Amyoony, Peter Henry	Halifax, N. S.	
Beary, Robert Francis	.Brockton, Mass.	
Cable, Paul Joseph		
Cassivi, David Stephen	.Halifax, N. S.	
Clattenburg, Donald Paul (magna cum laude)		
Collins, Arthur William	Dorchester, Mass.	
Cunningham, William Malcolm (cum laude)	Moncton, N. B.	
Dyer, David Albert	Halifax, N. S.	
Furlong, Patrick James (cum laude)	Buchans, Nfld.	
Healy, Robert Andrew	Manchester, N. H.	
Johnson, Malcolm Edgar	Newport Station, N.	S.
Kelleher, Thomas Stephen	Kitchener, Ont.	
Kilvert, Kenneth Gordon	Halifax, N. S.	
Mabey, Thomas Alfred (summa cum laude)	Halifax, N. S.	
Miller, Lillian Mae	Halifax, N. S.	
Moore, Terrence Burke	Woodside, N. S.	
Scott, Peter Patrick	Halifax, N. S.	
Spatazzo, Joseph John	Hamilton, Ont.	

# BACHELOR OF SCIENCE

Branch, Robert David	Halifax, N. S.
Connolly, David Paul	Halifax, N. S.
Garagan, Edward Seamus	Halifax, N. S.
Jenkinson, Stanley (cum laude)	Stockport, Eng.
Kilvert, Robert Francis	Halifax, N. S.
Lewis, Roland Gerard	Halifax, N. S.
McMullin, Louis John	North Sydney, N. S.
Moore, Edward Arthur	Spryfield, N. S.
O'Neill, Paul Francis	Yarmouth, N. S.
Tang, Louis King Yuen	Kowloon, Hong Kong
Williams, Kenneth Borden	Cold Lake, Alta.

# BACHELOR OF COMMERCE

Bendelier, Kenneth Parker	Halifax, N. S.
Briggs, Frederick George	Manchester, N. H.
Buckland, Raymond	Halifax, N. S.
Dube, John Louis	Halifax, N. S.
Dunphy, Ronald Joseph	.Halifax, N. S.

King, Donald Earl	Halifax, N. S.
Kneeland, John Joseph	Saint John, N. B.
McEachern, Duncan Anthony	Portsmouth, N. H.
MacGillivray, John Reginald, B.A	Halifax, N. S.
Manning, William Joseph	Milton, Mass.
Moore, George Cameron	Sydney, N. S.
Morrow, Andrew Howard	Baie Comeau, P.Q.
O'Regan, Vaughn Joseph	Joggins, N. S.
Roy, Raymond Arthur	Manchester, N. H.
Tsoumas, Thomas Anthony	Brockton, Mass.

# DIPLOMA IN ENGINEERING

Ahern, Terrence Sean	Halifax, N. S.
Borde, David Edgar	Port-of-Spain, Trinidad
Kho, Kwang Hui (with distinction)	Kuching, Sarawak
Nadeau, Camille Donald	Saint John, N. B.
O'Hearn, Mark Alan	Halifax, N. S.
Roma, Wayne Michael	Hd. Chezzetcook, N. S.

# DIPLOMA IN JOURNALISM

Cable, Paul Joseph	Halifax, N. S.
Cassivi, David Stephen	Halifax, N. S.
Kelleher, Thomas Stephen	Kitchener, Ont.
Kilvert, Kenneth Gordon	
Makhan, Chris Anthony, B.A.	Port-of-Spain, Trinidad
Mwangi, Joseph Wanyoike	

# BACHELOR OF EDUCATION

Halifax, N. S.
Halifax, N. S.
Halifax, N. S.
Dartmouth, N. S.
Halifax, N. S.
Halifax, N. S.
Halifax, N. S.
Halifax, N. S.
Halifax, N. S.
Rockingham, N. S.
Halifax, N. S.
Halifax, N. S.

Miller, Frank James, B.Sc.	Fall River, N. S.
Murphy, David Francis, B.A.	
Myers, Barbara Jean, B.A.	
Noonan, Margaret Lilja, B.A. (magna cum	
laude)	Halifax, N. S.
Perrott, Blair Graham, B.A	Spryfield, N. S.
Perry, Frederic Arnold, B.A. (magna cum	-
laude)	Jollimore, N. S.
Smith, Frances Mary, B.A.	
Webber, Reginald Wilfred, B.A	Dartmouth, N. S.
Williams, James Einon, B.A.	Shearwater, N. S.
MASTER OF SOCIAL WORK	
	TT 111
Burton, Barbara Jean, B.Sc.	
Chiasson, Jean-Paul, B.A.	· · · · · · · · · · · · · · · · · · ·
McGinn, Louis Aulder, B.A.	
MacNeil, William Gerard, B.Comm	Halliax, N. S.
MASTER OF ARTS	
Daley, Dolores, B.Sc., B.Ed	Dartmouth, N. S.
Nugent, Joanne Marie, B.A., B.Ed. (magna	
cum laude)	Halifax, N. S.
O'Neill, Catherine Mary, B.A., B.Ed	Halifax, N. S.
CD ADVANCE OCH	OPER 1000
GRADUATES-OCT	OBER, 1963
BACHELOR OF ARTS	
Complete Management	Halifara N. C.
Campbell, Josephine Mary Gougeon, Francis Lane	
Greene, Paul Frederick	
Kuniski, Leonard Joseph	
Lavers, David Joseph	
O'Sullivan, Joseph Timothy	
Pertch, William Kurt	
Tercen, william Rure	Dartmouth, 14. 5.
BACHELOR OF SCIENCE	
Ahern, Terrence Sean	Halifax. N. S.
Cheung, Tsang-Chung	
Jakobszen, Csaba Jose	
McCluskey, Stephen Brian	
Mullane, Terrence Francis	
Transfer a direction i reliable	

# BACHELOR OF COMMERCE

Doherty, Patrick Joseph Mark	Halifax,	N. S.		
Hart, Peter Michael	Rocking	ham,	N.	S.
Leslie, Bernard Sydney	Halifax,	N.S.		

# DIPLOMA IN ENGINEERING

Chiasson, Ernest Leo	N.	S.
Morse, Eric Arthur	N.	S.