CALENDAR

1968-1969

University of King's College

FOUNDED A.D. 1789

HALIFAX, NOVA SCOTIA

180th SESSION

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GENERAL UNIVERSITY ALMANAC 1968-69

June 16 Su. —The Atlantic Summer School for Advanced Business Administration begins.

July 6 S. —Last day for receiving applications for supplemental examinations in Arts and Science to be written at outside centres.[1]

10 W. —Last day for receiving applications for Fall Supplemental examinations in all faculties.[2]

20 S. —The Atlantic Summer School for Advanced Business Administration ends.

Aug. 13 Tu. —Supplemental examinations begin in Arts and Science.

30 F. —Last day for receiving applications for admission to Faculties of Arts and Science and Divinity.

Sept. 9 M. —Supplemental examinations begin in Divinity. Registration (and payment of fees) begins for new students in Faculty of Arts and Science,[3] and in the School of Divinity. The only regular registration day for new students from Halifax and Dartmouth area.

10 Tu. —Registration (and payment of fees) for NEW students not from Halifax and Dartmouth area in Faculty of Arts and Science,[4] and in the School of Divinity.

Sept 11 W. —Registration and payment of fees for RETURNING students in Arts and Science[5] and Divinity.

12 Th. —Registration continues for RETURNING students in Arts and Science and Divinity.

1. Fee must accompany application. No late applications will be considered.
2. Fee must accompany application for examination. If a late application is accepted, an additional fee of $2.00 per day (maximum $5.00) must be paid. The late fee applies between July 16 and 31. No application will be considered after July 31, and no refund of fee will be paid after this date.
3, 4, 5. Students whose surnames begin A to J inclusive register from 9 a.m. to 12 noon; those whose surnames begin K to Z inclusive register from 1:30 p.m. to 5:00 p.m.

Sept 13 F. —Registration continues for RETURNING students in Arts and Science and Divinity.

14 S. —12 noon. Registration period ends for students in Arts and Science and in the School of Divinity. Halifax and Dartmouth students will not be registered on this day. Late fee payable after this date.

16 M. —8.30 a.m. Classes begin in Arts and Science and Divinity.

23 M. —Last day for change of course or class in Faculty of Arts and Science and School of Divinity without penalty.

Oct. 1 Tu. —Final date for late admission of students who have been accepted before September 15 (Arts and Science and Divinity).

—Meeting of the Faculty of Arts and Science.

—Meeting of the Divinity Faculty.

14 M. —Thanksgiving Day. No classes.

15 Tu. —Last day for change of course or class in Arts and Science.

Nov. 11 M. —Remembrance Day. No classes.

26 Tu. —Meeting of Faculty of Arts and Science.

Dec. 12 Th. —Last day of classes in Arts and Science.

21 S. —12.30 p.m. Christmas vacation begins.

1969

Jan. 6 M. —Classes resumed.

31 F. —Last day for withdrawal from classes in Arts and Science, without penalty.

Feb. 7 F. —Munro Day. No classes.

8 S. —Winter Carnival. No classes.

Mar. 3 M. —Study break.

10 M. —Classes resumed.

Mar. 31 M. —Last day for receiving applications for Spring supplemental examinations. (Fee must accompany application.

Apr. 4 F. —Good Friday. No classes.

16 W. —Last day of classes in Arts and Science and Divinity.

21 M. —Spring examinations begin in Arts and Science and Divinity.

May 9 F. —Meeting of Faculty of Arts and Science.

11 Su. —11.00 a.m. Baccalaureate Service (King's)

14 W. —Encaenia Day — King's Convocation — Arts and Science, Divinity, and Social Work.

10.30

15 Th. —University Convocation.

16 F. —University Convocation. Regular session ends.

OFFICE HOURS

Week days (Monday-Friday)	—9.00 a.m. - 5.00 p.m.
June, July, August (Monday-Friday)	—9.00 a.m. - 4.30 p.m.

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University of King's College

HISTORICAL SKETCH

The history of higher education in Canada began in 1789 with the founding at Windsor, Nova Scotia, of the University of King's College. At the time of its establishment it was, with the exception of the fifteenth-century King's College in Cambridge and in Aberdeen, the only foundation of that name in existence. Although there had been a King's College, New York, chartered by George II in 1745, it did not survive the end of the colonial period in America and its re-organization in 1784 under the name of Columbia College was undertaken on an entirely different plan. The Loyalist political and religious principles upon which the New York seminary had been founded migrated, along with the Loyalists themselves, to Eastern Canada, and in 1802 a Royal Charter was granted by George III proclaiming King's College, Windsor, "the Mother of an University for the education and instruction of youth and students in Arts, to continue forever and to be called King's College."

Since that time, King's has maintained in Canada certain of the Oxford traditions. In 1920, when the original buildings were destroyed by fire, the University moved to Halifax, where, with the assistance of the Carnegie Corporation, new buildings were eventually erected on the campus of Dalhousie University. In 1930 it entered into partnership with Dalhousie which, with a Royal Charter dating from 1820, is the third of Canada's senior universities. This novel arrangement, by which the English and Scottish University traditions were united, is upheld by a special agreement under which the two have maintained joint faculties of Arts and Science, so that undergraduates of King's read for the B.A. and B.Sc. of Dalhousie. King's has left her own degree-granting powers in abeyance in these faculties and now gives degrees in theology by examination, together with honorary degrees in Divinity and Laws, and a Master's Degree in Social Work on recommendation of the Maritime School of Social Work.

In May 1941, the King's College buildings were taken over by the Royal Canadian Navy as an Officer's Training

Establishment, and during the next four years, until May 1945, nearly 3100 officers were trained for sea duty with the R.C.N. The students and academic staff of King's carried on during this period through the kindness of Dalhousie University and Pine Hill Divinity Hall.

King's College is residential, on the Oxford and Cambridge pattern, and, in addition to the day students who live out, 125 men and 100 women can be accommodated in residence. Dinner in Commons Hall is formal with Latin grace; the wearing of academic dress is required of all members of the College *in statu pupillari* and the emphasis is everywhere upon the corporate life. The inestimable benefits of life in a small residential college are, in England at least, an accepted part of the "Oxbridge" tradition, but this is certainly not so in North America, where universities have in general followed either the German policy of having no residential facilities at all, or the English provincial plan of housing a proportion of the student body in "halls of residence" entirely separated from the university itself. The corporate life in King's thus emerges as something rare on the North American continent, since it is designed to educate "the whole man" and not simply to train him for specific examinations.

In addition to its athletic activities, the College runs a vigorous Debating Society, known as the "Quintilian", and a Dramatic Society which stages two plays each year. Daily services are held in the Chapel for those who wish to participate; although the College is an Anglican foundation and incorporates a School of Divinity for the training of Anglican clergy, there is no denominational bar aimed at the exclusion of non-Anglicans from membership of the College, either as lecturers or students. Members of Faculty may themselves be resident and function in the traditional manner as "dons" for the staircases (i.e "bays"). The bays are named Chapel Bay, Middle Bay, Radical Bay, North Pole Bay, and Cochran Bay. Alexandra Hall is the residence for women.

Now that there are many large overcrowded universities which find it difficult if not impossible to concentrate upon anything not strictly connected with a student's graduation at the earliest possible time, there is all the more reason for

the encouragement of the small residential university wherein the future leaders of society may be educated towards the acceptance of social and moral responsibility. The education of such people must be conducted on an individual, not a mass, basis.

King's tries to be a miniature of the Christian ideal of the larger community and as such can never be considered an anachronism. It is this, rather than any of the more superficial observances, which links King's with the older universities of Britain and makes it unusual in Canada.

CONSTITUTION

The Board of Governors is the Supreme Governing Body of the University. It consists of the Bishops of the Diocese of Nova Scotia and Fredericton, the President of the University, the Vice-President, the Treasurer, two members elected by each Faculty, together with eight members elected by the Alumni Association, six by each of the Synods of Nova Scotia and Fredericton, and not more than eight co-opted members. The Governors have the management of the funds and property of the College, and the power of appointment of the President, professors and officials. The Board appoints an Executive Committee.

Convocation consists of the Chancellor and the Vice-Chancellor, together with all Bachelors of Divinity and Masters and Doctors of the University; Members of the Board of Governors and of the Faculty of Arts and Science who hold the degree of Master or Doctor from any recognized University; members of the Faculty of Divinity; Fellows of the University and Bachelors of the University of five years' standing who are recognized by the Clerk of Convocation. All degrees are conferred by Convocation.

The Faculties consist of the members of the teaching staff on the King's Foundation in the Faculty of Arts and Science under the Agreement of Association with Dalhousie University and the members of the teaching staff in the School of Divinity.

FACULTIES

Faculty of Arts and Science

The University of King's College having entered an association with Dalhousie University, the students registered in Arts and Science attend classes jointly with Dalhousie students. These classes are given by Dalhousie professors or by professors on the King's Foundation, depending on the course taken. **The students of both institutions follow the same curriculum, take the same examinations, and must attain the same academic standard.**

Faculty of Divinity

The school of Divinity is under the direction of the Divinity School Council which is responsible to the Board of Governors. Degrees and diplomas in Theology are awarded to candidates fulfilling the necessary academic requirements, regardless of religious denomination or sex. Students are also prepared to meet ordination requirements in the Anglican Church of Canada. The Course of Study for these candidates is subject to the Bishops in the Dioceses of Nova Scotia and Fredericton.

AFFILIATED INSTITUTIONS

The Maritime School of Social Work was incorporated in 1941.

The Atlantic Summer School of Advanced Business Administration was founded in 1952.

The Institute of Pastoral Training was founded in 1955.

EXEMPTIONS GRANTED TO KING'S COLLEGE BY OTHER INSTITUTIONS

The University of Oxford exempts from Responsions an undergraduate in Arts of this University who has passed in the subjects of the second or a higher year. A Bachelor of Arts with Honours is further exempted from four terms of residence. The Trustees of Rhodes Scholarships exempt from the qualifying examination candidates who are exempt from Responsions by the University of Oxford.

The University of London exempts Bachelors of this University from the preliminary examinations leading to the LL.B. degree of that University; and students in Medicine are exempted from the Course of Study anterior to the First and Second Examinations for Medical degrees if they have pursued equivalent courses at this University.

PRIVILEGES GRANTED TO UNIVERSITY OF KING'S COLLEGE STUDENTS BY FINE ARTS GROUPS

Students of University of King's College have the privilege of attending a variety of musical and dramatic events at reduced rates. Organizations which extend this privilege include:

Halifax Community Concerts
Halifax Ladies' Musical Club
Halifax Symphony

Travelling art exhibits are on display in the University Art Gallery throughout the academic year.

CHAPEL

Regular worship is an integral part of the facilities afforded by the University. All students are encouraged to attend the daily morning and evening services in the College Chapel. On Sunday mornings, all students are expected to attend the Chapel Service or some other service of their choice.

Sunday Services:

8:30 a.m. Holy Communion.
11:00 a.m. Morning prayer and Sermon.

The times of week day services are announced at the beginning of each session.

The service on Wednesday morning is a College Corporate communion.

While the services in the Chapel follow the Anglican rite, students of all denominations are welcome and encouraged to attend.

The Rev. D. F. L. Trivett, University Chaplain, is available to all students and conducts discussion groups for students and faculty.

DISCIPLINE

The maintenance of discipline is in the hands of the College Board which is composed of Faculty and Students with the President as Chairman. The students exercise a large measure of self-government in maintaining good order and discipline in the residences. Students conducting themselves in an unbecoming manner, within the precincts of the college, may be fined, suspended or expelled. When a student is expelled from residence there is no return of fees.

Each student who has a car on campus may obtain a parking permit from the General Office upon the presentation of insurance and license number, for a charge of $5.00.

In keeping with the traditions of the college, students are expected to wear gowns when attending chapel, when seated for formal meals, and when calling upon the President of the University. Gowns may be obtained from the Dean of Women.

Students are expected to attend lectures and laboratories regularly and punctually and to perform all exercises assigned by the Faculty. Habitual absence from classes and laboratories will be viewed most seriously by the Board of Studies.

Rules and regulations governing residence life are contained in the "Students' Handbook".

Dons in the Bays, the Dean of Men, the Dean of Women, the Registrar, Bursar, Faculty and President are willing to help, counsel, and advise any student at any time, and will act as much as is within their power in the best interest of the students and the College.

KING'S COLLEGE LIBRARY

King's College Library was founded in 1789. Just after the Royal charter was granted to the College in 1802, Bishop Inglis sent his son to England with $250 to begin the purchase of books. The library grew steadily during the 19th century and was probably one of the best libraries in English-speaking

Canada of the time. There were various benefactors over the years, chief of whom was Thomas Beamish Akins. From Mr. Akins the library received most of its rare collection of some 40 incunabula (books printed before 1500, that is, during the first fifty years since the invention of printing with movable type). This is a remarkable number of these very rare books to be found in such a small library.

King's Library is very rich in the field of English literature. Much of the credit for the development in this field must go to the late Professor Burns Martin. The Professor Burns Martin Memorial Fund continues to aid the library's growth in this area.

With the help of the William Inglis Morse Endowment for Canadiana, this important area of study is growing steadily as more and more works are being published about our country.

The largest proportion of books, however, is found in the field of Theology. This collection is large and comprehensive and constantly kept up to date. The John Haskell Laing Memorial Bequest helps with the purchase of books in this field.

Book purchases in the general field are aided by memorial funds to the following persons: the Hon. William Johnston Almon, Frances Hannah Haskell, James Stuart Martell, and Thomas Henry Hunt (Alumni Memorial).

The library is open Monday to Friday from 9.00 a.m. to 5.00 p.m., and 7.00 p.m. to 10.45 p.m. On Saturdays the hours are 9.00 a.m. to 12.00 noon. For part of the session the reading room will be open on Saturday and Sunday from 2.00 to 5.00 p.m.

The student loan period for all books except those on reserve is one week. Books on the reserve lists may be borrowed for a period of three days or overnight only. Overnight books may be used in the library during the day and taken out anytime after 3.30 p.m. They are due at 10.00 a.m. the following morning.

Fines will be charged for overdue books at the rate of twenty-five cents a day for seven day books and fifty cents

per day for three-day books. Overnight reserves will have an overdue charge of five cents an hour while the library is open.

Students are given the privilege of borrowing books for the summer.

DEGREES AND COURSES

The degrees of Doctor of Divinity and Doctor of Civil Law, may be conferred *honoris causa* in recognition of eminent literary, scientific, professional or public service.

The dignity and honour of Fellow may be conferred by the vote of Convocation upon any friend of the University for noteworthy services rendered on its behalf.

Convocation confers the degrees in course of Doctor of Divinity and Bachelor of Divinity and Associate of Theology (on recommendation of the Board of Examiners of the General Synod of the Anglican Church of Canada), Master of Social Work (on the recommendation of the Maritime School of Social Work), Bachelor of Sacred Letters and Bachelor of Sacred Theology. Courses are prescribed for the diplomas: Licentiate of Theology, Testamur, Associate of King's College, (Nova Scotia).

Pre-professional work in Arts and Science by students intending to enter one of the Dalhousie professional schools may be taken as a student of King's College.

OTHER COURSES

Master of Social Work

King's, like most other Maritime Universities, has entered into an agreement with the Maritime School of Social Work to confer the degree of Master of Social Work on those students who have completed successfully the requirements laid down for this degree. For further details a prospective student should write to the Director, Maritime School of Social Work, 6414 Coburg Road, Halifax.

Master of Arts and Master of Science

In accordance with the Terms of Association, a graduate cannot take a Master's degree while enrolled at King's, but the

attention of undergraduates is especially drawn to the standing and conditions needed in their courses before being admitted to work for a Master's degree.

Bachelor of Education

King's College graduates are eligible for the course leading to a degree in Education. Either Education 1 or 2 may be taken by undergraduates for credit towards a degree; but not both.

KING'S COLLEGE RESIDENCE 1968-69

Dean of Men—(Pending)

Dean of Women—Mrs. G. S. Clark

Dons—W. Lloyd Brown
Michael Burslem
Richard W. Cregan
L. Doran
Dr. John McC. Gourley

Residence life at the University is **enccuraged for all students** because the community life there enjoyed forms an essential part of the student's education. Exceptions will be made in the case of a student wishing to reside in a home or lodging outside the university.

Male students live in the men's bays (Chapel, Middle, Radical, North Pole and Cochran), each housing 22-26 men, under the supervision of a resident Don. Female students live in Alexandra Hall, a residence accommodating 100 girls, under the supervision of the Dean of Women.

All rooms are furnished with bed, dresser, desk and chairs. **Students are required to provide their own bedding and towels,** and to attend to their own laundry arrangements. Coin-operated washing and drying equipment is provided in both men's and women's residences.

Single and double rooms are available to both men and women, priority for single rooms being given to students in their senior years.

The residences have been designed to provide for the comfort and convenience of the students, **and to facilitate study.** In the men's residence, two students occupy a suite of two rooms (bedroom and study). The men's common room and lounge is open to residents of all bays, as is the Haliburton Room, a gathering place for all students and the site of many student activities.

The women's residence was built in 1962 and is modern in every respect. It contains, besides the rooms in which female students live, a reading room, lounges, a service elevator and ample storage space.

Both residences are designed so that it is not necessary to go outside for meals and extra-curricular activities.

Meals are prepared and served to all resident students in Prince Memorial Hall, erected in 1962.

Students accepted in residence must remain for the whole session, or, in the case of withdrawal during the session, must obtain substitutes satisfactory to the Dean. All residents will be charged with room for the complete session and will be liable for this charge unless or until a substitute has assumed obligation to the University for the balance. No student may withdraw from the residence without notice to the Dean.

The residence will be opened for students from the evening of September 9th, 1968 until December 21st, 1968, and from the evening of January 5th, 1969, to the morning of May 16th, 1969. Resident students in faculties whose terms exceed these periods may reside in the College by permission of the Dean on payment of rent; and, when Prince Hall is open, meals may be eaten by arrangement with the Steward.

(Students not in their graduating year will be expected to vacate the residence 48 hours following their last examination).

Confirmation of accommodation will not be made until the student has been accepted by the University for the coming session and a $50.00 residence deposit has been received by the Business Office. Deposits for all applications made prior to July 15th must be received by that date. Applications for Residence accommodation made after July 15th must be accompanied by the $50.00 deposit. Cancellation of application received by the Registrar prior to September 1st will entitle the student to a refund of the $50.00 deposit.

GENERAL UNIVERSITY REGULATIONS†

Registration

All students of the University are required to appear in person at registration and to enter their names in the Register annually, agreeing to obey all the regulations of the University already made or to be made, and to pay the required fees and deposits before entering any class or taking any examination.

Under no circumstances may a student register unless all previous accounts to the university are paid.

Students withdrawing from the University or intending to discontinue the work of any Arts or Science class must notify the Registrar and the Bursar.

Discipline

If a student is required by a Faculty to discontinue attendance in the Faculty solely because he has failed to maintain the required academic standing, he is not regarded as dismissed on grounds of general discipline and his right to be considered for admission to another faculty is unaffected.

When the work of a student is unsatisfactory, or his attendance is irregular without sufficient reason, he may be dismissed from one or more classes, or from the University.

No return of fees will be made to any student dismissed from classes or from residence, or from the University.

† It is to be distinctly understood that the regulations regarding courses of study, examinations, fees, etc. contained in this Calendar are applicable to the current year only; and that the University does not hold itself bound to adhere absolutely to the curriculum and conditions laid down.

Non-Academic Student Activities

Students representing the College in non-academic activities must be in good standing. Those who are ineligible for such representation are as follows:*

(a) Students on probation in any Faculty. (b) Students registered for fewer than ten lectures per week, a period of two laboratory hours being regarded for this purpose as equivalent to one lecture. (c) Students who have more than two failures in college subjects.

Dalhousie Libraries

King's students enjoy the same privileges in the Dalhousie Libraries as Dalhousie students. For regulations and hours see the current Dalhousie calendar.

Other Libraries

Arrangements can be made for King's students to use the Halifax Public Library, the Nova Scotia Technical College Library, Pine Hill Library and the Legislative Assembly Library.

Conferring Of Degrees

Successful candidates for degrees are required to appear at Convocation in the proper academic costume to have the degree conferred upon them.

By special permission degrees may be conferred, in exceptional cases, **in absentia.** Written application giving reasons for the request must be made well in advance to the Secretary of Senate. The additional fee for such degrees conferred at Convocation is $10.00.

Student Employment

The Department of Manpower and Immigration, in co-operation with the University, maintains a year-round office on campus. This is done to assist students in obtaining employment and to assist employers wishing to recruit at this University.

* These regulations do not apply to the Dramatic Society.

All students wishing assistance in obtaining part-time, summer, or graduates seeking permanent employment, are urged to register early in October with the University Placement Officer, Howe Hall.

(The student Placement Office, now at 1339 LeMarchant St., will be located on the 5th floor of the Student Union Building in the Fall of 1968.)

There are opportunities for students to earn part of their college expenses by working in the Library, Gymnasium and Dining Hall.

Student Counselling Service

Students worried or anxious about any matter, whether a personal or learning problem, are invited to visit the Student Counselling and Psychological Services Centre. Counsellors with broad experience in solving personal problems offer a free confidential service to students.

Office hours: 9 a.m. to 5 p.m., Monday through Friday, Room 134, Arts Annex.

Tutors

For students whose proficiency in languages is not satisfactory, the department concerned will recommend accredited tutors.

Student Health Services

1. All students registering for the first time at the University are required to submit a certificate of health. This requires a physical examination by the student's personal physician and the completion by the physician of the University's Health record.

2. All students returning to the University are required to complete an annual medical questionnaire at the time of registration. Those who have been out for a year or more for any reason are required to resubmit a certificate of health, as above.

3. Other examinations may be required of all students who are found on admission to be in a low medical category, and also of students participating in major sports.

All information gained about a student by the Health Services is confidential and may not be released to anyone without signed permission by the Student.

4. Tuberculin Tests.

(1) All students are required to have an annual tuberculin test. The purpose of this test is to protect students from the risk of infection by carriers who may not display any visible signs of disease or be aware of their condition. The effectiveness of such precautionary measures is reduced very considerably unless every student is tested. The co-operation of students in this simple and harmless test is vital to the welfare of the entire student body.

(2) Students will be required to return for the interpretation of the test. If the reaction is positive a chest X-ray will be required.

(3) **The tuberculin test is a requirement for registration. Those who do not complete this requirement will not be fully registered and will be required to pay the fee for late registration.**

5. Medical Care.

Students must be able to provide proof that they are properly enrolled in any Hospital-Medicare Scheme in their home province in order to qualify for service after July 1968. This applies particularly to residents of Ontario and Sackatchewan. The Service is prepared to advise in the prevention, diagnosis, treatment, and rehabilitation of any condition which may threaten to impede the development, or diminish the fitness, of an individual functioning as a student.

Although the Service is expanding rapidly, and staff appointments are keeping pace with the needs of the students, at present there are two full time general practitioners employed to provide twenty-four hour comprehensive medical care. In addition, two psychiatrists are retained by the Health Service and are available for prevention, diagnosis, and treatment of emotional conditions which may in any way interfere with the individual's function as a student.

Further specialist services in a modern, fully accredited medical centre are available wherever indicated.

6. Emergency Treatment.

In the event of a medical emergency students should telephone the Student Health Service.

7. Hospital Care.

Canadian students remaining in Nova Scotia less than twelve months have their hospitalization paid by their home Province. **For residents of Saskatchewan and Ontario this requires the student's premium for hospitalization be paid annually.**

Non-Canadian students who have resided in Nova Scotia for more than three months and show intention of remaining more than twelve months are regarded as residents of Nova Scotia and hence qualify for hospitalization under the Provincial Plan.

8. The University Health Services do not provide for the following:

(a) Medical or Surgical care other than that provided by, or arranged through, the Student Health Service.

(b) X-ray or Laboratory service, except as authorized by the University Health Services.

(c) Prescriptions other than those prescribed in the University Health Services. (WARNING: Except in emergencies, students who are admitted to hospital or have other medical services, to include X-ray laboratory services, and prescriptions, except by prior arrangement with the University Health Services will not have their accounts for hospital or medical services paid.)

(d) Dental treatment.

(e) Illnesses attributable to misconduct.

(f) Eyeglasses and examinations for same.

9. **All students entering the University who can not present certificates of having been successfully vaccinated against smallpox will be required to submit to vaccination. A free** clinic for immunization against diphtheria and smallpox is **held every Wednesday at 2.00 p.m. at the Halifax Health Centre, 5970 University Avenue.**

10. Coverage under the University Health Services applies to all registered students with the exception of (a) Students

registeded for the six-year Bachelor of Nursing Programme—for the period of hospital training only; (b) Students in 5th year Medicine; (c) Students in Graduate Psychiatry; (d) Occasional students; (e) Part-time students. In the event that Medicare is instituted in July 1968 these exemptions would no longer apply.

11. Further services or requirements may be announced at the time of registration.

Health and Physical Education

All students in their first year of attendance at the University are advised to follow a prescribed course in health and physical education, unless they are exempted by a medical certificate or by satisfactory evidence that they have already completed a similar course at an approved institution. During registration, each new student will be given guidance and advice concerning the physical activity courses being offered by the School of Physical Education.

Church Attendance

The University provides facilities for chaplains on the campus, extends its facilities to all denominations and religions to make contact with their adherents following registration. All students are invited to make themselves known to their respective chaplains. The chaplains are available at all times for guidance and conversation.

The University chaplains are as follows: **Anglican**—The Rev. Donald F. L. Trivett, 1665 Oxford St.; **Baptist**— The Rev. Willis Henderson, First Baptist Church, Oxford St.; **Lutheran**--The Rev. R. E. Rock, 44 Summit St., Dartmouth; **Presbyterian**—The Rev. R. D. MacLean, 6357 London St.; **Hebrew**—Rabbi Daniel Levine, 6674 Quinpool Rd.; **Roman Catholic**—Fr. Gordon McLean, St. Agnes Rectory, Mumford Rd.; **United**—The Rev. Donald S. MacDougall, 6232 Cedar St.

Articles Lost and Found

Students are required to report promptly at the Business Office the loss or finding of any article in or about the University buildings or grounds. The University will not accept any responsibility whatever for books, clothing, etc., lost or removed from the University premises.

Regular Officers Training Plan

Approved students may obtain subsidization under the Regular Officers Training Plan by undertaking to do the prescribed cadet training of any of the three services while attending the University and to serve a limited full-time engagement in the regular force on completing their course

All persons enrolled under the terms of the Regular Officers Training Plan must be Canadian citizens. Full details may be obtained from the recruiting office.

Children of War Dead (Education Assistance)

Children of War Dead (Education Assistance Act) provides fees and monthly allowances for children of veterans whose death was attributable to military service. Enquiries should be directed to the nearest District office of the Department of Veterans' Affairs.

EXPENSES*

Resident Students

The annual charges for board, light, etc., to Resident Students from Arts and Science registration day (including Sunday, September 8th) until Dalhousie Convocation Day **(except that students not in their graduating year will be expected to vacate the residence 48 hours following their last examination)** are as follows:

	Double	Single
Men's Residence	$775.00	$850.00
Women's Residence	$775.00	$850.00

Students in residence must make a deposit of $400.00 at commencement of the first term, the balance of the bill to be paid in January. New students are expected to deposit $50.00 when pre-registering and returning students $20.00. This will be credited to first term account.

* Payment must be made at par, Halifax, N. S. Please make cheques payable to the University of King's College for the required amount and for convenience add "plus exchange", if outside Halifax area.

Non-Resident Students

Non-resident students must pay for the following at commencement of the first term:

Student Body Fees	$30.00
Gown	15.00
Cap	5.00

and any tuition fees payable to the University of King's College.

Surcharges

If deposit is not paid within 21 days of registration day a surcharge of 3% will be charged and a further 2% for each additional complete month until paid. The same applies to charges payable by Non-Resident Students.

Second term residence fees are due in January and surcharges as above will be levied after January 30th.

Fee For Student Organizations

At the request of the King's student body, a fee of $30.00 is collected on enrolment from each student who takes more than one class. This fee entitles the student to the privileges of the various students' organizations and clubs, and a copy of the King's College RECORD.

Caution Deposit

On enrolment each resident student is required to make a deposit of $15.00 as caution money to cover damage done to furniture, etc. This amount, less deductions, will remain a credit on the books until the student graduates or leaves, when the balance will be returned by cheque, usually during June. No refund in whole or in part will be made before that month.

Each year a student, on returning, is expected to settle for the previous year's deductions so that his credit may be maintained at $15.00.

The items above, together with a key deposit of $5.00, are payable at King's Business Office.

FEES

Payment to be made to Dalhousie University Business Office. Fees must be paid in CANADIAN FUNDS at par in Halifax (add ⅛ of 1%, minimum 15 cents, on cheques outside of the Halifax area). Post-dated cheques cannot be accepted.

FOR FULL TIME STUDENTS (students registered for more than two classes), fees are payable on registration or in two instalments. The first instalment is $360.00 including deposit. The second instalment, $203.00, is due by January 10th. Any student whose fees are not paid in full by January 31st will be suspended from the university. A carrying charge of $5.00 is added if fees are not completely paid on registration.

FOR PART TIME STUDENTS, registering for one or two classes only, the total fees due must be paid on registration.

SCHOLARSHIPS paid through King's College will normally be applied to charges at King's. If a student has a larger scholarship than his obligation to King's, the balance may be paid by King's to Dalhousie University for tuition fees. The student should enquire at the King's Business Office to ascertain if the Dalhousie Business Office has been informed of the arrangement.

The Dalhousie Business Office does not issue bills for fees; the receipt issued at registration will show the balance, if any, which is outstanding.

Application Fee

A person who submits an application for acceptance as a new student, must send an application fee of $10 with the application. This is a processing charge to new students, is not refundable, and does not constitute a partial payment on tuition or other fees. **Unless this is received the application will not be processed.** Within a maximum of ten days of being advised of acceptance, the student must pay a deposit of $50 to Dalhousie, which will be credited to his fee account; failure to do this will result automatically in cancellation of

the acceptance and a fresh application, with appropriate fee, must then be made. The $50 deposit is forfeited if the student fails to register or fails to advise the Registrar by **registered letter** before August 30 that he will not attend.

Where fees are paid in full by an outside organization refund of application deposit will be made on November 15.

King's College requires a deposit of $50.00 for each student requesting residence. The **tuition fee deposit** is returnable by Dalhousie if the application is withdrawn before **August 30th** and the **residence deposit** is returnable if the application for residence is withdrawn by **September 1st.**

LATE REGISTRATION

Students are required to register on the regular registration date as shown on page 4. Late registration requires approval of the Dean of the Faculty and extra fee not to exceed $5.00 per day or a total of $35.00. A student registered for one or two classes is not considered registered until **full** fees are paid.

CHARGES

Full time students registered for more than 2 classes. (*Additional fee in graduating year only—Year Book* $5.00).

FACULTY OF ARTS AND SCIENCE

King's Students $563.00

The above charges include class fees, laboratory fees, examination and diploma fees, instrument rental charges, and hospital clinic where applicable, and the following incidental fees:

a. Registration Fee $5.50
b. Student Health Fee 5.00
c. Library Fee 5.00
d. Faculty Society Fees (Arts and Science) .. .50

But does not include student council fee of $30.00 payable to King's.

Part time students (These charges include incidental fees of registration and library only):

Students registering for 1 or 2 classes in all Faculties for University credit, per class $115.00

Occasional students (This charge does not entitle students to any privileges other than attendance at class):

Students not candidates for University credit who wish to take one University lecture class because of their interest in it. No credit or official transcript will be issued to such a student $50.00

EVENING CLASSES

For students wishing to enrol in a single Arts class, take the examination and obtain a certificate $75.00

For students wishing to audit such a class without writing the examination or obtaining a certificate $50.00

In all other cases regular tuition fees apply.

Payment of fees for evening classes is required on registration.

A printed folder describing courses offered in the evening programme is available upon request from Dalhousie Registrar's Office.

LIBRARY FEE

Divinity students who are not registered for any Arts courses must pay a Library fee of $5.00 to King's College Business Office.

(A student enrolled at King's is required to pay the King's Council of Students' fee of $30.00, but not the Dalhousie Council of Students' fee, or the Rink and Athletic Field fee. However, any King's student who wishes to participate in the Dalhousie Council of Students' activities must pay both of the above Dalhousie fees. Dalhousie students resident at King's College must pay King's College Council of Students' fee of $25.50).

FACULTY OF THEOLOGY

Fees

Full-time students	$300.00
Part-time students for each course	$ 60.00
Arts and Science courses, when necessary	$115.00
A.K.C. Registration	on application $ 10.00
A.K.C. Examinations: per paper to be paid by the preceding December 1, and non-refundable	$ 5.00

EXAMINATIONS

An application for examinations must be accompanied by the proper fee:

Supplemental and Special (per examination)	$15.00
At an outside centre (each—extra)	$10.00
For re-examination of a paper	3.00

(Application for re-marking must be made in writing to the Registrar within three months of the date of the examination).

For any application accepted after July 12th, and additional fee of $2.00 per day (maximum $5.00) must be paid. If application for refund of supplemental examination fee is not made on or before July 31, the fee will be forfeited.

DIPLOMAS

Diploma Fees are payable at registration in the final year of the course.

L.Th., A.K.C., Testamur	$12.00
B.S.Litt., B.S.T., M.S.T.	20.00
M.S.W.	20.00
B.D., A.Th.	40.00
Additional fee for any degree in absentia at the Spring Convocation	10.00

TRANSCRIPTS

An application for a transcript must be accompanied by the proper fee:

First transcript	No charge
Additional copies: each original	$1.00
Extra copies, each	.50

STUDENT PHOTOGRAPH

At time of first registration at King's each student will be required to supply four pictures. These should be approximately one inch by one and one-half inches.

LABORATORY CHARGE

No laboratory deposit is charged. Individual students will be charged for careless or wilful damage.

REFUND OF FEES

Within two weeks of registration date a student may retire from a class or course for which he was registered, and his fee will be refunded.

A student withdrawing after two weeks from the date of commencement of classes will be debited in full for the incidental fees and may receive a refund of the balance on a proportional basis, calculated in monthly units; a full charge will be made for the month in which the withdrawal is approved, including the month of December. A student withdrawing in January will be charged the full first instalment of fees.

No refund shall be made for reduction in classes by action of the Faculty, dismissal from classes or from the University, or for a class or classes voluntarily discontinued by the student.

In cases of withdrawal from the University or from a class during a session the student must obtain an interview

1. No transcript will be issued until all charges owing by the student to the University have been paid in full.

with the Dean of his or her Faculty and a written report must be made by the student to the office of the Registrar at Dalhousie, stating date and reason of withdrawal. A student withdrawing from the University must report personally to the Dalhousie Business Manager before any refund of tuition fees will be considered.

N.B.—King's College students must report AS WELL to the Registrar and Bursar, King's College.

Regulations Regarding Entrance

The Academic Year begins on September 9, 1968 and ends on May 17, 1969. For University regulations applicable to all students of all Faculties, see **General University Regulations.**

1. Admission of Students from Canadian High Schools.

The requirement for admission to the Faculty of Arts and Science (or to the Faculty of Health Professions) for applicants writing Senior Matriculation (Nova Scotia Grade XII or the equivalent) for the first time in 1968 or thereafter is:

a. Complete Junior Matriculation year with passes in five subjects, of which Mathematics, English and a language other than English are three;

b. A total of seven points from Grade XII subjects. Points are allocated on the following basis:

Mathematics, English, other recognized languages —2 points each.

Other recognized subjects[1] —1 point each

A grade of at least 50% is required for point allocation, with an overall average of at least 60% in the subjects offered.

Applicants who have an average of 75% or more in four subjects but who fail to meet the exact requirements detailed above may, nevertheless, be considered for admission. If accepted, they **must** make up any deficiency before registering for their second year of study, either by passing the required non-credit class (identified by numbers less than 100) in their first year of study or at a Dalhousie Summer Session, or by passing the required Nova Scotia Grade XII or equivalent examination.

[1] At present, Biology, Chemistry, Geography, Geology, History, Physics.

An applicant who has obtained the minimum standard is academically admissable.[1] Certificates of Matriculation must be presented for appraisal before 1 September.

In **exceptional** cases, students not fulfilling the above requirements may be admitted with credit for completed matriculation.

CERTIFICATES OF MATRICULATION

For purposes of consideration for admission, official certificates and records of marks at the completion of the following levels are considered as Senior Matriculation:

Atlantic Provinces of Canada

Nova Scotia	—Grade XII
New Brunswick	—Grade XIII, (but see page 39)
Newfoundland	—First year, Memorial University.
Prince Edward Island	—First year, Prince of Wales College or St. Dunstan's University(but see paragraph below)

Other Canadian Provinces

Quebec	—McGill Senior Matriculation; or Senior High School Leaving Certificate; or Certificat d'immatriculation (Belles-Lettres) of Laval, Montreal or Sherbrooke Universities.
Ontario	—Grade XIII (Secondary School Honour Graduation Diploma)
Manitoba, Saskatchewan, Alberta	—Grade XII
British Columbia	—Grade XIII

[1] In addition to the requirements set forth in this section, a student contemplating entry to either the course for the Bachelor of Music Education or the Bachelor of Arts with emphasis in Music must have attained adequate competence in voice or on an instrument. See also the special note on Music; Classes of Instructions.

Corresponding certificates issued in the preceding class (e.g., the Grade XI certificates in the Province of Nova Scotia) are normally recognized as being at the level of Junior Matriculation. Although the Grade XII certificates from New Brunswick and from Prince Edward Island are classified as Junior Matriculation, students from these provinces with consistent averages above 80% may be considered for admission provided they have passes in five subjects of which Mathematics, English and a language other than English are three.

SELECTION OF MATRICULATION SUBJECTS

Students are urged to ensure as far as possible that their Senior Matriculation subjects provide adequate preparation for the degree programmes they plan to follow. It is recommended that those planning a course in the Humanities should include two foreign languages; those planning a course in the Social Sciences, a language and Mathematics; those planning a Science course, Mathematics and Physics or Chemistry.

NON-CREDIT SUPPLEMENTARY CLASSES

It is recognized that a student may wish to undertake a degree programme for which his high school background does not include all the preparatory work desirable. Supplementary classes to make up the deficiencies most frequently encountered are offered by King's, but they can not be counted as credit towards a degree. A student who is aware of the need for such a class is advised to take it at the Dalhousie Summer Session before his first year of university work so that he may thereafter follow the normal degree programme as though the deficiency had never existed. It is also possible to take the supplementary class during the first university year and the normal first-year class in the Summer Session immediately following, but this may be less satisfactory.

Non-credit classes to make up deficiencies are provided in Mathematics, French, and Latin as the normal first-year classes in these disciplines assume previous knowledge of the subjects at the Senior Matriculation level. Other modern languages may be taken without previous training. Where the deficiency is in Mathematics, students may also encounter

difficulties with first-year Physics and Chemistry. A non-credit class in English is offered for students who are inadequately prepared for admission to English 100.

EARLY ACCEPTANCE

Students who have completed Junior Matriculation (Nova Scotia Grade XI or the equivalent) at a sufficiently high standard and who have maintained this standing at the mid year examinations in Nova Scotia Grade XII (or the equivalent) in their own high schools may be accepted for admission on the basis of this standing provided that they also complete the work of their Senior Matriculation year.

APPLICATION

A student who wishes to be admitted to the Faculty of Arts and Science should make application to the Admissions Office as early as possible after January 1. Application forms are available in most of the high schools in the Atlantic provinces, or may be obtained from the Admission Office at King's College*

Those seeking admission directly from high school should forward the application through the school principal or guidance officer as the school is required to send in a transcript and report. The original Junior Matriculation certificate or a certified copy must accompany the application.

As soon as the above documents are received, the Admissions Office will assess them and those applicants who meet the requirements for early acceptance will be advised without delay. Candidates for admission should not defer their applications, even though they may not expect to qualify for early acceptance, as their documents can be evaluated and they may be granted provisional acceptance pending their final results. Senior Matriculation certificates should be forwarded as soon as they are available.

Applicants not in high school should send their applications to the Registrar's Office and request their former high

*From students contemplating entry to the Bachelor of Music Education either one of the Bachelor of Arts courses emphasizing Music, additional information is required; see the special note on Music under Classes of Instruction.

school principal to forward to the Registrar's Office the transcript and report.

The Admissions Office, in selecting from applicants at or close to the minimum standard, will consider carefully the recommendations of the high schools and will take account of College Entrance Examination Board (CEEB) scores, or other achievement tests, where available.

SCHOLASTIC APTITUDE AND ACHIEVEMENT TESTS

All students who apply for admission directly from High School are urged to take the tests offered by the College Entrance Examination Board. These consist of the Scholastic Aptitude Test (in two parts—Verbal and Mathematical) and three Achievement Tests selected by the student in consultation with his school principal. The English composition test is compulsory; the other two tests may be chosen from any of the following: Mathematics, Level I or II; Physics; Chemistry; Biology; French; Latin; German; Spanish; Russian; European History and World Culture; and, for United States applicants only, Social Studies.

These tests must be written not later than in March of each year. They may be written on one testing date, but it is recommended that applicants write the Scholastic Aptitude Test in December or January, and the three Achievement tests in January or March. Students from the eastern parts of Canada and the United States may obtain information about tests, and the test centres, etc., by writing to the Educational Testing Service, Box 592, Princeton, New Jersey, 08540.

It is expected that by September, 1969, Canadian-oriented tests will be introduced by the Service for Admission to Colleges and Universities (SACU) and their use will be preferred as they become available.

II ADMISSION OF STUDENTS FROM OTHER CANADIAN COLLEGES OR UNIVERSITIES

Junior College

A student from a recognized Junior College who presents satisfactory certificates may be granted Senior Matriculation standing for the work of the appropriate grade. For work beyond this level, the student may receive credit on admission

for a maximum of five equivalent classes, making it possible for him to complete the requirement for a General degree in two years or an Honour degree in three years. This recognition is regularly offered to the Convent of the Sacred Heart in Halifax, and to the Nova Scotia Teacher's College in Truro.

UNIVERSITIES

1. A student from another university will not be admitted if, on academic grounds, he is ineligible for re-admission to that university.

2. A student who was admitted to another Canadian university from the Junior Matriculation level and is in good standing at that university, may present FIVE approprite university credits in lieu of Senior Matriculation subjects in order to meet the entrance requirements for admission to the first year of study. If he has more than five university credits, he may surrender five for matriculation purposes and retain credit for other appropriate classes in accordance with regulations set out below in paragraph 4 and 5.

3. A student who was admitted to another Canadian university from the Senior Matriculation level and is in good standing, may be admitted to King's and may retain credit for appropriate classes in accordance with regulations set out below in paragraphs 4 and 5.

4. If a student is admitted from another university or from a junior college, he can be given credit only for classes essentially equivalent in content and level to those offered at King's-Dalhousie University. No credits will be given unless the classes are credited to him unconditionally at the other university.

5. No student will be granted credit for more than ten classes taken elsewhere, beyond the senior matriculation level.

6. A student must undertake all or most of the advanced work of his course at King's-Dalhousie. This must include at least one-half of those senior classes in his areas of

specialization which are normally taken in the second and subsequent years of study.

7. A student enrolled in an Honour programme must attend King's-Dalhousie as a full time student in his last two years unless the Committee on Studies gives special permission for this requirement to be waived.

III ADMISSION OF STUDENTS EDUCATED OUTSIDE CANADA

Certificates will be evaluated in terms of general entry requirements. Students whose native language is not English must pass the English Language test of the University of Michigan, Ann Arbor, Michigan, U.S.A. For otherwise qualified applicants, the university will arrange for the test to be administered at centres in various parts of the world.

The following standards are accepted as equivalent to Senior Matriculation and will admit a student to the first year of study.

U.S.A. The minimum entrance requirement for candidates from the United States is high school graduation with exceptionally high standing (high CEEB scores and/or advanced placement work). Normal admission to the first year of a three-year Bachelor's degree programme requires completion of one year of study (minimum of 30 semester hours) at an accredited institution of higher learning in the U.S.A.; students so admitted will not be granted advanced standing.

U.K., West Indies, West Africa—G.C.E. with standing in at least five subjects, of which at least two must be passed at advanced level; or four subjects of which three must be passed at advanced level, English and Mathematics are imperative at least at ordinary level.

Hong Kong—G.C.E. as above or University of Hong Kong Matriculation Certificate on same basis as G.C.E.

India and Pakistan—Bachelor's degree with first or second class standing from an approved university or, in certain circumstances, first class standing in the Intermediate examinations in Arts and Science; provided that the can-

didate has passes at the university in English, Mathematics and a language other than English. (It should be noted that this is the requirement for entry to the first year course in Arts and Science and will not qualify for admission to the Diploma in Education or to the B.Ed. year.)

APPLICATION

A student from abroad who is satisfied that he can meet fully the academic and financial terms of admission and attendance should write to the Admissions Office, Office of the Registrar, and request an application form and high school Principal's report form. These documents, together with official academic transcripts (or certified copies), constitute a basic application but must be accompanied by a non-refundable application fee of $10. College Entrance Examination Board (CEEB) scores, when available, are a valuable aid in assessing an application. Records of other tests, as well as letters of personal and academic reference can also be of assistance in the consideration of applications from students educated abroad. If an original certificate is in a language other than English or French, a translation into one of these languages should accompany the certificate.

Applications from the United States may be received up to August 15; those from other parts of the world must reach the Admissions Office, in full and completed form, by May 1, and preferably much earlier. Students from the United Kingdom and the West Indies who write qualifying G.C.E. examinations in June may request delayed consideration if thay can ensure that their examination results can be made available to the Admissions Office by August 21; otherwise the May 1 deadline must apply.

Every person wishing to enter Canada as a university student must comply with passport, visa and immigration requirements. In some cases the formalities may take several months to complete and potential students are urged to contact the nearest Canadian or British consulate in good time.

General Faculty Regulations

Changes of regulations become effective when designated by Senate or the Board of Governors; usually this will be upon publication in the Calendar. Students are subject to changes in regulations and courses made after their first registration unless specifically excused by the Faculty. All enquiries about the regulations hereunder should be made at the Office of the Dean. Enquiries about Honour courses should be made to the head of the department concerned.

GENERAL

1. Degrees are normally earned by credit given for studies in classes of the Faculty of Arts and Science of King's-Dalhousie during the regular (September to May) academic year; by exception, credit may be obtained for university-level studies

   (a) at other institutions prior to entrance to King's Dalhousie (see 9 and 10 below)

   (b) in other Faculties of the University (see 3 below)

   (c) during a Summer session (see 37 to 39 below)

   (d) by extension courses (see 37 to 39 below)

   (e) at other institutions while still registered at King's-Dalhousie with special permission of the Committee on Studies, (see 4 below)

2. A student possessing advanced knowledge of a subject which he has acquired otherwise than at a university, will be encouraged to begin his studies in that subject at a level appropriate to his knowledge, as determined by the Department concerned, and will be exempted from any classess which are normally prerequisites for the one to which he is admitted. However, the student must substitute for the exempted classes an equal number of other classes, not necessarily in the same subjects (i.e., he must complete at the university the full number of classes required for a General or an Honour degree).

3. A student taking classes in another Faculty as part of an affiliated course must conform to the regulations of that Faculty with respect to these classes.

4. Ordinarily, no student may register at King's-Dalhousie in the same session in which he is taken work in another educational institution. In exceptional circumstances the Committee on Studies may permit deviations from this regulation.

CLASS WORK, ATTENDANCE AND CREDIT

5. No student shall be admitted to a class until he has satisfied the "Regulations Regarding Entrance" (page 37) and complied with General University Regulations (page 23).*

6. In order that his class work may be recognized as qualifying for a degree or diploma, a student must meet the regulations for the degree or diploma concerned, and conform to the following requirements;

(a) He must attend the classes of his prescribed course regularly and punctually.

(b) He must appear at all examinations, prepare such essays, exercises, reports, etc., as may be prescribed and, in a class involving field or laboratory work, complete such work satisfactorily.

7. Five classes shall be regarded as constituting a normal year's work for a student, and may not be exceeded without written permission from the Committee of Studies. Such permission will not normally be granted to any student who is in his first year of study or to any student who, in the preceding academic year had failed any class or had an average of less than 60%.

8. A full-time student registered in this University may, with the permission of the instructor concerned, audit any class in the Faculty of Arts and Science, provided that it is clearly understood that he will not be eligible to write examinations in the class and will not, under any circumstances, be granted credit for it.

TRANSFER CREDITS

9. No student will be granted credit for more than ten classes taken elsewhere beyond the Senior Matriculation level.

*Late Registration. Students who do not register on the proper day are warned that they may not be able to obtain places in some classes for which size limits have to be set.

10. A student must undertake all or most of the advanced work of his course at King's-Dalhousie. This must include at least one-half of those classes in his areas of specialization which are normally taken in the second and subsequent years of study.

A student enrolled in an Honour programme must attend King's-Dalhousie as a full time student in his final two years unless the Committee on Studies gives special permission for this requirement to be waived.

SESSIONAL AND CLASS EXAMINATIONS

11. In all classes, at least two examinations (or their equivalent) are held: the Christmas examination (or its equivalent) at the end of the first term, immediately before the Christmas vacation; and the Spring examination after the close of lectures in the Spring. Other examinations in any class may be held at dates appointed by the instructor. The papers set at the Spring examination in any subject cover the work of the whole session in that subject, and not merely the work of the second term, and approximately 25% of the questions will be set on the work covered before Christmas.

CLASS LISTS

12. The names of candidates successful in the examinations are arranged in the published lists in three divisions; according to works awarded: First Division, 80-100%; Second Division, 65-79%; Third Division, 50-64%.

SUPPLEMENTAL AND SPECIAL EXAMINATIONS

13. A student may be permitted to write a supplemental examination in one class in which he failed.

(a) he has otherwise fulfilled the requirements for class work stated in paragraph (6) above;

(b) he has obtained a mark of not less than 40% in the final examination in that class;

(c) he has not failed his year (see paragraph 34 below).

14. The supplemental examination must be written in the August immediately following the failure. It may not be deferred.

15. A student who fails to pass the supplemental examination can obtain credit for that class only by repeating it.

16. No more than one supplemental examination may be written by any student on the work of any one year.

17. The supplemental examination may, at the descretion of the department concerned, constitute the same proportion of the final mark as did the Spring examination in the original class.

18. No student may write both a supplemental examination and an examination at the end of the Summer Session in the same class in the same year.

19. No supplemental examinations are allowed for classes taken at the Summer Session.

20. No more than three passes obtained as a result of supplemental examinations may be counted towards a degree*.

21. Special examinations may be granted to students in case of genuine illness, supported by a medical certificate or in other unusual or exceptional circumstances. Medical certificates must be submitted at the time of the illness and will normally not be accepted after a lapse of one week from the date of the examination.

22. A student wishing to appear as a candidate at a Supplemental or Special examination shall be required to give notice of his intention to the Registrar's Office on or before July 12, the fee (see page 34) to be remitted with the notice. Students wishing to write at outside centres must apply by July 8.

*Students registered and continuing "old regulations" may count up to five such classes for credit (see page 63).

MINIMUM STANDING FOR GENERAL DEGREE

23. In order to qualify for the award of a General degree, candidates must have obtained a minimum of ten points on the fifteen classes required.* Points are awarded for each class as follows:

Division	Grade	Class Marks	Points
I	A	(80-100%)	3
II	B	(65- 79%)	2
III	C	(56- 64%)	1
	D	(50- 55%)	none

Note that, while a pass is recorded for a D grade result, no points are awarded. For a half-credit class, the points awarded for the grade assigned will be one-half the above values; e.g., for an A grade, 1½ points will be awarded.

24. A General degree will be awarded "With Distinction" to a student who has achieved an aggregate of 40 points in the 15 classes taken for his degree (or a proportional figure if he has taken more than 15 classes).

MINIMUM STANDING FOR AN HONOUR DEGREE

25. Students in Honour courses are expected to maintain an average of at least 60% in each year of study and, if they fail to do so, may be required by the Committee on Studies to transfer to a General degree course.

COUNTING OF CLASSES TOWARDS TWO UNDERGRADUATE DEGREES

26. A student who already holds one undergraduate degree (B.A., B.Sc. or B.Com.) and who wishes to gain a second undergraduate degree must fulfill the following requirements:

(a) only classes on the 100 and 200 levels may be carried forward for credit;

(b) of these, only classes that are applicable to the course for the second degree may be counted for credit.

(c) each applicable class must bear at least one merit point in order to receive credit (i.e. be over 55%);

(d) a new major field of concentration must be chosen.

*This regulation does not apply to students registered under "old regulations" in 1965 or earlier.

FAILURE, LOSS OF CREDIT, WITHDRAWAL

27. A student desiring to change a course or class for which he has registered should do so within one week of the first day of classes in September. No changes may be made after October 15. The student must complete the appropriate application form and have it approved by the instructor of the class which he wishes to enter. After the first week, the student must pay a fee for each change and must obtain the approval of the instructors both of the class which he wishes to drop and of the class which he wishes to enter. Forms bearing the approval of the instructors must be sent to the Registrar's Office.

28. If a student wishes to withdraw from a class, he must notify the Office of the Registrar in writing not later than January 31; all classes in which he remains registered after this date will be counted in applying the regulations set forth in paragraph 34 below.

29. When the work of a student becomes unsatisfactory or his attendance irregular, his case will be discussed by the Committee on Studies which may require him to withdraw from the class or classes concerned and to be excluded from the relevant examinations.

30. At the beginning of January the Committee on Studies will review the results obtained by each student. Any student who has not shown reasonable proficiency in the Christmas examinations may be required to withdraw from the University for the remainder of the session or to reduce the number of classes he is taking.

31. A student who fails to obtain a mark of at least 15% in a class at the Christmas examination is required automatically to discontinue attendance in that class.

32. A registered student who wishes to withdraw from the university, or one who wishes to change from full-time to part-time status, must write to the Dean explaining his circumstances. In either case, the student should not discontinue attendance at any class until his application has been approved. A student proposing withdrawal will normally be invited to

discuss his situation with the Dean or the Assistant Dean for Student Affairs.

33. In determining pass lists, the standings attained in prescribed class exercises, in field or laboratory work, and in the various examinations, are taken into consideration. A student who fails to obtain a pass mark on the work of the session in any class shall lose credit for attendance in that class and can gain credit only by repeating it.

34. A student is considered to have failed his year if, in the Spring Pass lists he passes fewer than three of the classes for which he is registered; unless

(a) the year is the first he has spent at any university, when passes in only two classes are required;

(b) he is a part-time student, when he must pass at least one class.

The results reported in the Spring pass list determine whether a student has passed or failed his year. A student who fails his year is not entitled to supplemental examinations.

35. A student who has failed his year for the first occasion is required to re-apply to the Faculty for consideration for re-admission.

36. A student who fails a year on two occasions will be ineligible to return to the university as either a full-time or a part-time student. An appeal against the application of this rule may be addressed to the Committee on Studies but will be allowed only if illness has seriously interrupted the student's studies, or in other very exceptional circumstances. An appeal on the grounds of illness will only be considered if a medical certificate from the physician attending the student is submitted to the Registrar at the time of the illness.

SUMMER SESSION AND EXTENSION CLASSES

37. Up to five credits from summer session and correspondence classes may be accepted towards the requirements for a degree, not more than two of them by correspondence. Such classes must have been passed at an adequate level and can be accepted only if they are closely equivalent in content to classes normally given at Dalhousie -Kings.

38. No student may take more than one summer session class for credit in any one year. Exceptions will normally be granted by the Committee on Studies only in respect of attendance at a university which operates a trimester system or its equivalent. In all cases, permission must be obtained in advance, following the procedure detailed below. (In some cases, two one-semester credits may be allowed to count as one full credit).

39. A student wishing to take, at a university other than Dalhousie - King's, a summer session class to be counted for credit towards a Dalhousie degree must:

(a) obtain an application form from the Office of the Registrar at Dalhousie University;

(b) obtain from the university he proposes to attend a full description of the summer session classes (or alternative classes) he wishes to take; usually the summer session calendar will suffice.

(c) make application to the head of the department concerned at Dalhousie University and submit to that department the class description or the class he wishes to take (alternatives should be indicated where possible).

When a decision has been reached, the Department will pass the application to the Registrar's Office and the student will be notified directly by that office of the Department's decision. If the decision is favourable, the receiving university will be so advised by the Registrar's Office.

The latest date on which application can be made is **March 15** and students are advised to make the necessary arrangements earlier than this as many summer sessions close their applications for admission early in April.

Similar regulations relate to correspondence classes and at the present time only the correspondence classes offered by Queen's University, Kingston, Ontario, will be considered.

Degrees and Courses

From September 1966, admission to the University was from Senior Matriculation only. Students registered at Dalhousie - King's in 1965 or in earlier years will continue under the degree and course regulations set out in the Calendar in the year of their registration, except that no student may continue under **old regulations** after August 1970. A student whose studies have been interrupted for more than one year will be required to seek readmission as if he were a new student or a transfer student and will be required to enrol under the regulations for the new degree and course programmes.

The regulations relating to the course requirements under **old regulations** will be found as an appendix to this chapter on page 63.

All students will be bound by the **General Faculty Regulations** set out in the current Calendar, except that students continuing their studies under **old regulations** will retain the privilege of being allowed to count up to five classes passed by supplemental examination for credit towards their degree and will not be bound by the **point system** of minimum standing for a General degree.

TRANSFER FROM THE OLD TO THE NEW CURRICULUM

(i) A student who entered the University with Junior Matriculation and who has FIVE university credits (including Mathematics, English and a foreign language) may use all of these credits as if they constituted Senior Matriculation, and may enter the **First Year** of a General or Honour degree under the new regulations.

(ii) A student registered under the **old regulations, who** has completed a period of not less than TWO years of full-time study after Junior Matriculation and has university credits which together meet the equivalent of Senior Matriculation (as in (i) above), **and** essentially all the requirements of the first year of the new Honour course which he wishes to enter may, on the recommendation of the Department concerned, be admitted by the Committee on Studies to the new

Honour programme. (Senior Matriculation passes which were not granted university credit on admission may not be counted for re-evaluation except in the case of Senior Matriculation science passes which carried a mark of not less than 75%.)

(iii) Students registered under **old regulations** who have already met the requirements of (ii) above and who have,in addition, credits such as to bring their total standing to the equivalent of the first TWO years of a new Honour programme may, on the recommendation of the Department concerned, apply to the Committee on Studies for admission to the new Honour programme. However, no student may graduate with an Honour degree without completing at least ten credits after admission by the Committee on Studies to the new Honour programme.

Courses are prescribed leading to the degree of Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Music (B.Mus)[1], Bachelor of Fine Arts (B.F.A.)[2] and to the Diploma of Licentiate of Music (L.Mus)[1].

The course for the General B.A. and B.Sc. degrees extend over three years and for the Honour degrees over four years. The various Honour programmes offered by the Faculty are described in detail in the section **Classes of Instruction** where each Department lists the classes offered and the sequence and pattern of courses required for the Honour degree. Students with high academic standing are urged to consider registering for an Honour course, and to consult with those departments in which they might wish to engage in Honour studies. An Honour degree, or its equivalent, is normally required for admission to the Faculty of Graduate Studies.

1 The course of study for the diploma of Licentiate of Music and that for the degree of Bachelor of Music are at present under review and students will not be enrolled in 1968. Courses with emphasis in Music and leading to General and Honour Bachelor of Arts degrees are offered.

2 A course leading to the degree of Bachelor of Fine Arts is offered in affiliation with the Nova Scotia College of Art, but is at present under review and students will not be enrolled in 1968.

NUMBERING OF CLASSES

Classes are numbered in order to indicate their general level and to suggest the year of study in which they might first be taken. Classes in the 100 + series are introductory and can usually be taken by fully matriculated students without any special prerequisites. Completion of a 100 level class is normally a prerequisite for admission to further classes in the subject. Classes numbered in the 200 + series are second level (second year) classes, 300 + third level, and 400 + fourth level. Classes numbered in the 500 +, and 600 + series are normally regarded as graduate classes, however, some may be open to senior undergraduates. Classes numbered in the 250 +, 350 + and 450 + series are open **only** to Honour students and may not be taken by students in the General degree programmes, except with special permission.

The letters A, B, and C, suffixed to a three-digit class number indicate a half-credit class, i.e. a class having the following characteristics:

(1) All the material is presented in one term. The letter indicates the term:

A—a class offered only in the first term with the final examination at Christmas;

B—a class offered only in the second term, with the final examination in the Spring;

C—a class offered twice during the session, once in the first term (final examination at Christmas) and repeated in the second term (final examination in the Spring).

(2) Half-credit classes will have one-half the value of full classes in determining the standing of students. Points will be awarded amounting to one-half the value for a full class of equivalent standing.

Half-credit classes must be taken in pairs, in the same department and normally during the same session. Students in a General degree programme may not count for credit more than one pair of half-credit classes.

Classes with numbers below 100 do not carry credits in the new degree programmes but may be prerequisites for entry to credit classes for students whose matriculation backgrounds are deficient; some of these classes are credits under the **old regulations** which apply to students registered in 1965 or earlier years.

A table showing the relationship between the new numbers and those given in the 1965-66 Calendar will be found at the end of the list of classes of instruction for each department.

SUBJECT GROUPING FOR DEGREE COURSES

In the curriculum, subjects offered as essential parts of the degree programmes are grouped as follows:

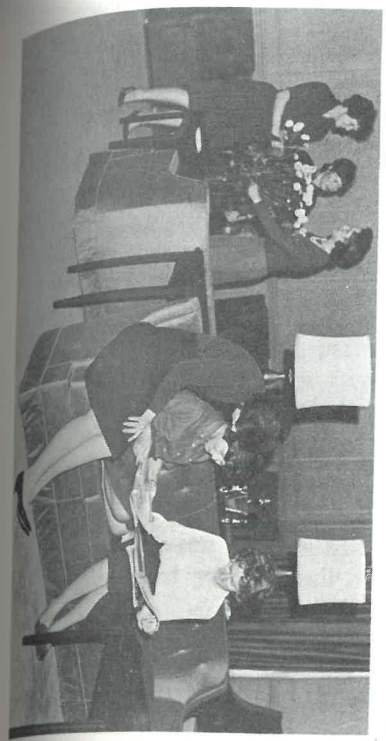
A	B1	C	D
French	Classics	Economics	Biology
German	English	Political Science	Chemistry
Greek	History	Psychology	Geology
Hebrew	Philosophy	Sociology	Mathematics
Latin			Physics
Russian	**B2**		
Spanish	Drama		
	Music		

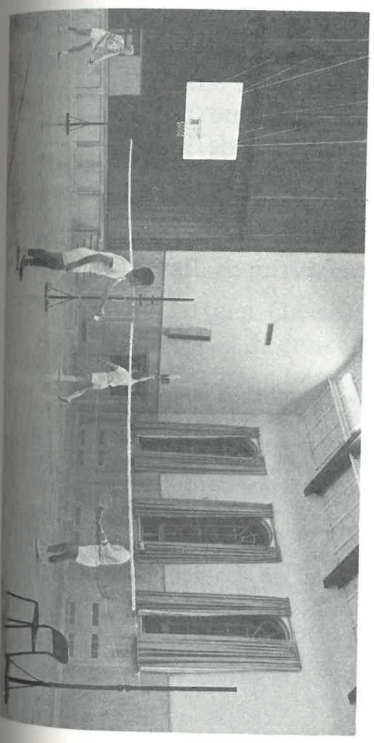
Specific regulations indicate the minimum number of classes which must be selected from each group.

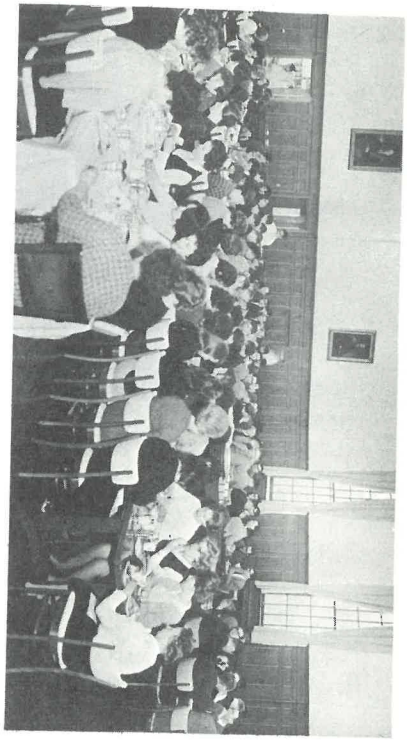
Classes are offered also in other subjects, which may be taken as electives where no particular group is specified in the requirements. These subjects are:

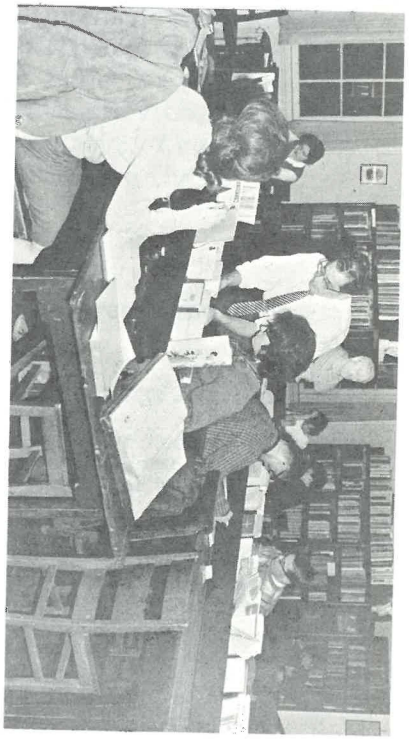
Art History 101, 102, 103
Hebrew 101, 202, 303
Education 101, 102
Commerce 100
Religious Studies 100

Classes within the groups may also be taken as electives.









The life of a college invariably centres around its buildings and its rooms and meeting places. The spiritual, social, academic and physical life at King's is designed to produce a greater development of the individuality and ability of each student.

COURSE FOR THE GENERAL BACHELOR OF ARTS[1]

The General Bachelor of Arts Degree requires fifteen classes.

1. **First year requirements** (common to General and Honour courses):

   Every student planning to take a B.A. degree will in his first year take five classes as follows: one class in each of groups A, B, C and D, together with one class chosen from any group. (But, see 3(a) and 3(d) below).

2. **Requirements** for the second and third years:

   The ten classes making up the course for the second and third years shall consist of:

   (a) Six classes beyond the 100-level in two subjects, one of which must be declared by the student as his **major[2] area of** concentration and the other as his **minor.**

   (b) Four classes, normally in subjects other than the two offered to satisfy requirement 2(a) above, at least one of the four to be beyond the 100-level in the subject treated[3]. The subjects may be selected from Groups A,B,C and D above, or from Art History, Hebrew, Education 101 or 102, Commerce 100, Religious Studies in so far as the Overall Requirements permit.

3. **Overall requirements**

   The fifteen classes making up the overall course for the General B.A. must inculde:

1 For Honour courses see **Classes of Instruction** where each Department gives the contents of its Honour programmes.

2 The designation of a **major** is intended to bring students into closer contact with the departments concerned and with one another, and to assist departments in giving such students guidance in designing their programmes.

3 Students who wish to offer under section 2(a) above, a subject begun only in the second year may, by exception, offer the introductory class in that subject as one of the four classes required in section 2(b) above.

(a) One class in English, which must be taken in the first or second year of study[1].

(b) One class in Group A. Students making progress in a language begun for the first time at the University are strongly advised to take a second class in the same language in order to consolidate what they have learned.

(c) At least one class from each of two subjects in Group B other than English, and at least one class from each of two subjects in Group C. Only one subject from Group B2 may be counted to satisfy the Group B requirement.

(d) If a science class was not passed in Senior Matriculation, one class from Physics, Chemistry, Geology or Biology must be included among the fifteen taken at the University. If a science was passed as part of the Senior Matriculation course, the Group D requirement stated for the first year may be waived.

For details of classes in the various departments, see **Classes of Instruction.**

An Honour class may be taken by students who are not in an Honour course, if approved by the Department.

Lists of the classes chosen by students must be submitted to the Registrar's Office for approval not later than Monday September 23, 1968.

All students contemplating entry to the teaching profession after graduation are required to consult the Head of the Education Department, before registration, concerning their programme of study. Students contemplating Music Education should similarly consult the Head of the Department of Music.

1 Students who have obtained a grade of 80% or better in Senior Matriculation English are offered the option of taking a special examination in which the grading will be of the same standard as for end-of-year performance in the basic university class in English. Application for this examination should be made to the Registrar not later than 1 September in the year of intended admission. If the student obtains a grade of 65% or better in this examination, he may elect to substitute some other class for this basic class in English. The class substituted may be in any subject listed in groups A, B, C and D (including English), or in Art History, Hebrew, Education 101 or 102, Commerce 100, Religious Studies.

COURSE FOR THE GENERAL BACHELOR OF SCIENCE[1]

1. **First year requirements** (common to General and Honour courses):

   Every student planning to take a B.Sc. degree will in his first year take five classes as follows: namely, two classes in Group D, one class in Group A and one class in either Group B or Group C, together with one class chosen from any group.

2. **Requirements for the second and third years:**

   The ten classes making up the course for the second and third years shall consist of:

   (a) Six classes beyond the 100-level in two subjects chosen from Biology, Chemistry, Geology, Mathematics, Physics, Psychology, Engineering.

   (b) Four classes normally in subjects other than the two offered to satisfy requirement 2(a) above, at least one of the four to be beyond the 100 level in subject treated[2]. The subjects may be chosen from Group A, B, and D above; or from Art History, Music, Hebrew, Education 101 or 102, Commerce 100, in so far as the **Overall Requirements** permit.

3. **Overall Requirements**

   Any B.Sc. programme must include at least one class in Mathematics, one in English[3] and one in another language.

HONOUR COURSES

Students of ability and ambition are urged to take a course leading to the Bachelor's Degree with Honours. The course entails: (a) a concentration in selected studies; (b) a number of advanced courses; (c) a higher quality of work

1 For Honour courses see **Classes of Instruction** where each department gives the contents of its Honour programmes.

2 Students who wish to offer under section 2(a) above a subject begun only in the second year may, by exception, offer the introductory class in that subject as one of the four classes required in section 2(b).

3 See footnote 1, page 58.

than that for the General Bachelor's degree. Although the regulations for the first year of study are the same for both General and Honour courses, it is desirable that the students should embark upon the particular programme best suited to the Honour course he wishes to follow. **Students considering an Honour course are advised to consult as soon as possible with the Departments in which they may wish to do their major work, preferably before their first registration.**

The following are general rules relating to Honour courses:

1. A student may obtain Honours in four years from Matriculation.

2. Honour students must be accepted by the department concerned. Their whole plan of study must be under the supervision of that department. (Formal application for admission of a student by the Faculty to an Honour course must be made by the head of the department concerned, in triplicate, on forms that are available in the Registrar's Office.)

3. The various Honour programmes are set out in section of the Calendar headed **Classes of Instruction.** It will be observed that in all cases the Honour programmes satisfy the requirements for the General Degree so that a student may transfer from the Honour to General programme without serious inconvenience.

4. Twenty classes are needed for the B.A., B.Sc. degree with Honours. A student must pass a comprehensive examination covering his Honour work at the end of his course and he must make an average of not less than 65% in the required classes of his major and minor field.

5. In order to obtain **First Class Honours,** a student must pass the classes in his major and minor field (including any comprehensive examination) with an average of at least 80%.

MAJOR HONOUR PROGRAMMES AND COMBINED HONOUR PROGRAMMES

1. The regulations for the first year of study are the same as for the General B.A. or General B.Sc. degree

2. (a) Honours in a **Major Programme** are based on the general requirement that the 15 classes beyond the first year of study comprise:

   (i) Nine classes beyond the 100-level in one subject (the major subject);

   (ii) Two classes in a major subject satisfactory to the major department;

   (iii) Four classes not in the major field.

COURSE FOR BACHELOR OF MUSIC EDUCATION*

Offered for the first time in 1968-69, this is a special four-year programme. By arrangement with the Nova Scotia Department of Education, students completing this course may receive a Teacher's Certificate, Class 5. To be admitted to this course, a student must meet the general Faculty Entrance Requirement and also possess sufficient competence in voice or an instrument to undertake the instruction offered.

Year I

English 100; Language 100; Music 100; Music 140; Music 210.

Year II

Elective; Music 200; Music 310; Music 240; Music 245.

During the course of the year, students will be expected to observe selected music classes in elementary and secondary schools in the area.

Year III

Education 101; Music 410; Music 330; Music 335; Music 340; Music 345.

Year IV

Education 6; Music 420; Music 430; Music 435; Music 440; Music 445.

Participation in instrumental and choral ensembles will be required of all students.

*Students contemplating entry to one of these courses must submit a special supplementary application form and demonstrate their ability in voice or on an instrument. See the special note on Music in the **Classes of Instruction** section.

SOCIAL WORK

Students looking forward to professional training at the Maritime School of Social Work should include in their undergraduate curriculum a choice of classes from such fields as sociology, psychology, political science, anthropology, biology, economics, history, and philosophy, with special emphasis on sociology, psychology, and political science. It is in the student's interest that from one-third to one-half of his undergraduate curriculum be made up of these classes.

COURSES FOR BACHELOR OF FINE ARTS BACHELOR OF MUSIC, LICENTIATE OF MUSIC

The above courses are under review and no student will be admitted for the time being. Courses with emphasis in Music leading to General and Honour degrees of Bachelor of Arts* are offered. (See Music in the Classes of Instruction.)

*Students contemplating entry to one of these courses must submit a special supplementary application form and demonstrate their ability in voice or on an instrument. See the special note on Music in the Classes of Instruction Section.

APPENDIX

Requirements for Degree and Courses Under Old Regulations

Students registered before September, 1966, will normally continue under "Old Regulations". For their benefit, the main requirements are set out below. (New numbers are shown in brackets, the old numbers remain in the text itself.)

Courses are prescribed leading to the degree of Bachelor of Arts (B.A.) Bachelor of Science (B.Sc.).

The course for the degrees of Bachelor of Arts and Bachelor of Science extend over four years.

ORDINARY COURSE FOR BACHELOR OF ARTS

The ordinary course of study prescribed for the degree of Bachelor of Arts consists of the following twenty classes:

(i) Two classes in English; one class in Mathematics; three classes in one foreign language, or Greek A, Greek 1(100), and Hebrew 2(202).

(ii) One class in Biology, Chemistry, Geology, or Physics.

(iii) Any **two** of: a university class in European History, Philosophy 1(100), Psychology 1(100)*.

(iv) Any **one** of: Economics 1(100), Political Science 1(100), Sociology 1(100), Anthropology 1(100 or 102, but 102 does not admit to advanced classes).

(v) Classical Literature in translation or a class in Latin or Greek beyond Latin 1(099) or Greek 1(100). A student who has elected Latin or Greek to satisfy the language requirements of Section (i) may substitute for this class one additional class in Section (vi) or (vii).

(vi) Six classes which require a university class as prerequisite selected from not more than two of the following departments:

*Students looking forward to securing a teacher's license should select Psychology.

Pre-1966 Students only

Biology; Chemistry (including Biochemistry); Classics (Greek and Latin); Economics (including Sociology and Anthropology); English Language and Literature; Geology; German; History; Mathematics; Philosophy; Physics; Political Science; Psychology; Religious Studies; Romance Languages French, Spanish); Russian.

(vii) Three elective classes, so that of the nine classes chosen from sections (vi) and (vii) not more than seven are in any one Department. Students taking affiliated courses may substitute the first year of Law or Medicine or Dentistry, for **three** elective classes. Hebrew 1(101) may count as a credit in this Section.

For details of classes in the various departments, see **Classes of Instruction.**

An Honour class may be taken as an elective by students who are not in an Honour course, if approved by the Department.

Affiliated Courses*

An undergraduate looking forward to the study of Law, Medicine, or Dentistry may offer one of the following groups in place of the **three** electives of group (vii) above. (1) Law. The classes of the First Year, provided conditions are satisfied for entry into the Second-Year-Law. (2) Medicine and Dentistry. The classes of the first year.

ORDINARY COURSE FOR A BACHELOR OF SCIENCE

The ordinary course of study prescribed for the degree of Bachelor of Science consists of the following twenty classes:

(i) Two classes in English. Two classes in French or in German or in Russian.

*Not applicable after 1968.

Pre-1966 Students only

(ii) One class in Mathematics and one class in each of any three of the following: Chemistry, Physics, Biology, Geology.

(iii) One class in **one** of the following: Classical Literature in translation, English, History, Economics, Political Science, Philosophy, Psychology, Sociology, Anthropology, or a Foreign Language. If a Foreign Language is offered it may be a third class in the language offered in Section (i) above or a class in another language; if the latter is an "A" class (e.g., German A) a second class in the same language must be offered in Section (v) below.

(iv) Seven other classes which require a university class as prerequisite selected from not more than three of the departments of Science, Mathematics, and Psychology.

(v) Four elective classes of which Mathematics 2(100), if not taken in Section (iv) must be one. Candidates taking at least four classes in Geology may offer Drawing 1, Drawing 2 and Surveying 1 and 2 (210 and 211) as two classes in this group. Students taking affiliated courses may substitute the classes for the Diploma in Engineering or the classes for the first year of Medicine or Dentistry for three classes in this group. Students not taking the affiliated course with Engineering may count Drawing 1 under his section.

AFFILIATED COURSES

An undergraduate looking forward to the study of Engineering, Medicine, or Dentistry may offer one of the following groups in place of three electives in group (v) above. (1) **Engineering.** All classes given by the Engineering Department for the Diploma. (2) **Medicine and Dentistry.** The classes of the first year.

Pre-1966 Students only

Times and locations of Lectures and Laboratories will be published in the Arts and Science Time-Table, available in August.

Classes of Instruction

ART HISTORY

Special Lecturer.....Donald C. MacKay

Classes Offered

101. Introduction to the History of Art

Lect.: 2 hrs.

An analysis of the styles of the main periods in the History of Western Art, and the relationship of these to the artistic, social and scientific environments.

Text: H. W. Janson, History of Art.

102. The Art of the Renaissance

A study of European painting, sculptures and architecture through the major artistic personalities of the period.

103. The Art of the 19th and 20th Centuries

A study of the development of painting, sculpture and architecture from Neoclassicism and Romanticism to the art of the present day.

Key to Class Numbers: Art History

New	Old
101	Survey
102	1
103	2

BIOCHEMISTRY

Professors.....C. W. Helleiner (Head of Dept.)
L. B. Macpherson, S. J. Patrick, S. D. Wainright
Associate Professor.....D. W. Russell
Assistant Professors.....A. H. Blair, L. C. Stewart, C. Mezei
F. B. Palmer, F. I. Maclean
Lecturers.....R. Ayengar, J. Scott, C. M. Harlow, M. S. DeWolf
Postdoctoral Fellow.....V. Saini

The Honour programme in Biochemistry aims to provide the student with the background necessary for graduate work in Biochemistry and allied fields. It is also a suitable preparation for the study of Medicine, Dentistry or the Health Sciences.

Honour Degree in Biochemistry

For the purposes of the Honour degree in Biochemistry, classes in Biochemistry and Chemistry are considered to be one subject. Three major programmes in Biochemistry are outlined below, with minors in Biology, Physics and Mathematics, respectively. Students intending to take a degree in Biochemistry are urged to consult with the Department at the earliest possible opportunity. The department offices are located on the 9th floor of the Sir Charles Tupper Medical Building.

Honour students must pass a comprehensive examination in Biochemistry at the conclusion of their period of study.

Major Programme in Biochemistry

Year	Biology Minor	Physics Minor	Mathematics Minor
I		English 100; Language 100; Mathematics 100; Chemistry 104;	
	Biology 101	Physics 110	Biology 101
II		Chemistry 230; Chemistry 240;	
	elective Physics 110 Biology 201	Biology 101 Physics 211 Physics 231	elective Physics 110 Mathematics 200
III		Biochemistry 302; Chemistry 210; additional Chemistry;	
	two Biology or Microbiology classes, of which at least one must be chosen from Biology 203, 204 or 205	elective additional Physics	elective additional Mathematics
IV		one of Biochemistry; 403, 404, 408; two of Biochemistry 405, 406, 407; an additional Chemistry;	
	one additional Mathematics or Physics	one additional Biology or Microbiology	

Classes Offered

302. Introductory Biochemistry.

A. H. Blair and C. W. Helleiner

Lect.: 2 hrs.; Lab.: 6 hrs.

A class dealing with the chemistry and biological function of amino acids, proteins, nucleic acids, carbohydrates, lipids and other constituents of living matter. Much of the course is devoted to enzymology and intermediary metabolism in bacteria, plants and animals. This course or an equivalent are prerequisites to advanced courses in Biochemistry. Prerequisites required: basic classes in organic and physical chemistry. Texts: Mahler & Cordes, *Biological Chemistry*, Patton, *Biochemical Energetics and Kinetics*, Christensen & Palmer, *Enzyme Kinetics*.

403. Advanced Biochemistry.

R. Ayengar, A. H. Blair and others

Lect.: 2 hrs.

Protein chemistry, enzymology and selected topics in metabolism.

404. Biochemical Regulations (1969-70).

S. D. Wainwright

Lect.: 2 hrs.

Biochemical genetics and regulatory mechanisms of protein synthesis. Offered in alternate years.

405. Modern Aspects of Biochemical Investigation.

A seminar class consisting of critical discussions of recent biochemical literature.

406. Advanced Laboratory Techniques.

Content is adapted to individual needs and may include preparation, purification, assay and analysis, measurements of physical properties, etc., enzymes and other proteins, or nucleic acids, employing advanced instrumentation.

407. Physical Biochemistry.

Enzyme kinetics, oxidation and reduction, thermodynamics, etc., by individual arrangement.

Text: Dawes, *Quantitative Problems in Biochemistry*, (3rd ed.)

408. Structure and Function of Nucleic Acids.

C. W. Helleiner

Lect.: 2 hrs.

This class is intended to complement No. 404, and is offered in 1968-69 and alternate years.

Graduate Studies

Graduate studies leading to the degrees of M.Sc. and Ph.D. are offered by the Department. Interested students should consult the revelant section of the General Calendar.

Special Classes for Students in Professional Faculties

The Department offers classes in biochemistry to students in the Faculties of Medicine, Dentistry and Health Professions. Descriptions of these classes will be found in the revelant parts of the General Calendar.

BIOLOGY

Professors.....M L. Cameron, K. E. von Maltzahn (Head of Dept.), A. C. Neish

Professor (Oceanography) .....G. A. Riley

Associate Professors.....L. M. Dickie, E. T. Garside, O. P. Kamra, K. H. Mann, I. A. McLaren, A. Ruthmann, L. C. Vining

Associate Professors (*Oceanopraphy*).....C. M. Boyd, E. L. Mills

Assistant Professors.....E. Angelopoulos, R. Brown, J. Farley, L. A. Hanic, M. J. Harvey, W. C. Kimmins, M. Ross, A. H. Wehrmaker

Assistant Professor (*Oceanography*).....W. D. Watt

The programme in Biology is designed to provide the student with a basic training in the Biological Sciences which may serve as a preparation for graduate and professional work in Biology, Medicine, Dentistry, Pharmacy, the Health Professions, Bioengineering and Education. A student looking forward to Biology as his main study is asked to consult the Department early in his course so that a proper programme can be worked out.

Art students with no senior matriculation in Sciences may satisfy their science requirements by taking Biology 100.

Science students will take Biology 101. Science students who have an exceptionally good background in high-school biology are invited to see the Head of the Department; if their preparation has been sufficiently good they may be allowed to proceed to Biology 201 in their first year. (They will not receive University credit for matriculation Biology, but will have the advantage of one year and one class over the non-matriculant).

The Department offers courses leading to the general degree in Arts and Science in Biology, a combined and major Honour programme in Science in Biology.

For entrance to the Graduate School, an Honour degree or equivalent background is required. Students should remember that if they enter Graduate School, they will be expected to have a reading knowledge in one or more of French, German and Russian.

General B.Sc. in Biology

Students reading for the general B.Sc. degree in Biology should arrange their classes in consultation with the Head of the Department.

General B.A. in Biology

Students who plan to read for a Bachelor of Arts degree in Biology must obtain permission from the Department before registration, and satisfy the requirements of the general B.A. degree and should arrange their classes in the following pattern:

YEAR I — Biology 101; one other introductory science (preferably Chemistry 100) or Mathematics class, one foreign language, one English or other Humanities; one Social Science.

YEAR II — Biology 201 and one of Biology 203-205; English (if not taken in Year I), otherwise another class from the Humanities or Social Science groups; one other Humanities class; one Social Science.

YEAR III — Normally two remaining classes of Biology 203-205, (or one of these and one Biology 300 class); one additional class in the minor Science or Mathematics; one additional class in Science or Mathematics; one class not in Science or Mathematics.

Prospective pre-medical students are advised that many medical schools prefer that candidates obtain a sound background in basic science and arts subjects.

Honour Degree in Biology

Students reading for a Bachelor of Science degree with Honours in Biology must satisfy the general requirements for Honours and arrange their course program as early as possible in consultation with the Department. The following course programme is recommended:

Major Programme

YEAR I — Biology 101; Chemistry 100; Mathematics 100 or Physics 100 or Geology 100; one foreign language; English 100.

YEAR II — Biology 201 and one of Biology 203-205; Mathematics 100 (if not taken in Year I) otherwise one of Physics 100 or Geology 100; one other class in Science or Mathematics; a second class in the foreign language of Year I or a class in the Humanities or Social Sciences.

YEAR III — Normally two remaining classes of Biology 203-205 and one of the Biology 300 group; one class in Mathematics or Science beyond the 100 level, one class from groups A, B or C.

YEAR IV — Normally two remaining classes of Biology 203-205, (or which one should normally be Biology 490, one class in the minor field.

Honour students must pass a comprehensive examination at the conclusion of their period of study.

Combined Programmes

Students interested in taking Honours in Biology and another Science as a combined programme and those interested in taking Honours in Biology and an Arts subject as a combined programme should consult the Head of the Department, through whom a suitable course of study can be arranged.

Classes Offered

A class whose number is suffixed by one of the lettters A, B, or C is a half-credit class... See comments on these classes under the heading "Numbering of Classes".

Biology 101 and 201 are pre or co-requisite for all other Biology 200 classes. Biology 203-205 are normally pre- or co-requisite for all 300 and 400 classes. Consideration will be given to those students wantiig to advance to 300 classes with only two of 203-305 as pre- or co-requisites. Honour students must complete all three of 203-305 by the end of their fourth year.

100. Biology. J. Farley & M. J. Harvey
Lect.: 3 hrs.; Lab.: 3 hrs.

A terminal introductory class designed primarily for Arts students not intending to take further classes in Biology. Arts students, wishing to take further classes in Biology, may present this class in place of Biology 101. Lectures are given in the Chemistry Theatre, laboratory work in the Forrest Building.

101. Principles of General Biology.
M. L. Cameron & other members
Lect.: 3 hrs.; Lab. 3 hrs.

Class designed for Science students. A discussion of criteria of living things in general and their analysis with emphasis on principles and topics of contemporary interest.

200. Diversity of Organisms.
I. A. McLaren & K. E. von Maltzahn
Lect.: 3 hrs.; Lab.: 3 hrs.
A study of diversity of animal and plant forms and their interpretation.

203. General Physiology and Chemical Biology.
W. C. Kimmins
Lect.: 2 hrs.; Lab.: 3 hrs.
Physico-chemical bases of function in organisms.

204. Cellular and Developmental Biology.
A. Ruthmann & A. H. Wehrmaker
Lect.: 2 hrs.; Lab.: 3 hrs.
Study of cells and cell systems with an introduction to qualitative and quantitative microscopy. Patterns of animal and plant development and their analysis.

205. Genetics and Evolutionary Biology.
O. P. Kamra, I. A. McLaren & M. D. Ross
Lect.: 2 hrs.; Lab.: 3 hrs.
A study of principles governing the origin and inheritance of variation in animals, plants and microorganisms and the theory of evolution. Students are advised to take this class in their third rather than in their second year.

306. Ecology.
E T. Garside & M. J. Harvey
Lect.: 2 hrs.; Lab.: 3 hrs.
Interactions of organisms with each other and with their environment.

311. Bacteriology, Virology and Mycology. R. Brown
Lect.: 2 hrs.; Lab.: 3 hrs.
Introduction to viruses, bacteria and fungi, with reference to their structure, function, and environmental interactions.

312A. Algology. L. Hanic
Lect.: 2 hrs.; Lab. 3 hrs.
Diversity, morphology, taxonomy and evolution in freshwater and marine algae.

312B. Lichenology and Bryology. L. Hanic
Lect.: 2 hrs.; Lab.: 3 hrs.
Diversitl, morphology, taxonomy, ecology and evolution in the lichens, liver-worts and mosses.

313. Vascular Plants. M. J. Harvey and K. E. von Maltzahn
Lect.: 2 hrs.; Lab.: 3 hrs.
A study of the diversity of form and function in the higher plants.

321. Invertebrates I J. Farley, C. M. Boyd & E. L. Mills
Lect.: 3 hrs.; Lab.: 3 hrs.
A survey of the invertebrate phyla, including field and laboratory studies of the local seashore fauna.

322A. Invertebrates II (Entomology). A. H. Wehrmaker
Lect.: 2 hrs.; Lab.: 3 hrs.
Natural history of insects and related arthropods.

322B. Invertebrates II (Animal Parasitology.
E. Angelopoulos
Lect.: 2 hrs.; Lab.: 3 hrs.
Parasites, their classification, morphology, life cycles, host-parasite relationships and evolutionary trends.

323. Vertebrates. E. T. Garside
Lect.: 2 hrs.; Lab.: 3 hrs.
Evolution and taxonomy of the vertebrata with emphasis on comparative and contrasting aspects of the gross anatomy of living groups.

410A. Biometrics. P. J. Wangersky
Lect.: 2 hrs.
Applications of mathematical models to biological systems.

401B. Biometrics. W. D. Watt
Lect.: 2 hrs. and 1 hr. problem session.
Experimental design and the statistical handling of biological data.

402. History and Theoretical Foundations of Biology
J. Farley & Members of Staff
Lect.: 3 hrs.
The first part of the class deals with the development of science from the beginnings of civilization to the Scientific Revolution of the 16th and 17th centuries. The second part deals with the growth of modern Biology and emphasizes those disciplines necessary for the development of evolutionary theories. Arts students majoring in history may take this class in their third year — but with the permission of the instructor only.

Special Classes

See *Faculty of Graduate Studies* for description of classes

404/504. Advanced Ecology. I. A. McLaren & K. H. Mann

406B/506B. Plant Ecology and Quaternary History. M. J. Harvey

408/508. Biological Oceanography. (1969-70) G. A. Riley & Members of Staff

410A/510A. Marine Algology. (1969-70) L. Hanic

410B/510B. Freshwater Algology. (1969-70) L. Hanic

412/512. Physiology of Marine Plants. J. S. Craigie

415/515. Biochemistry of Plants and Microorganisms. (1969-70) L. Vining

419/519. Advanced Topics in Microbiology. R. Brown & L. C. Vining

421A/521A. Biological Effects of Radiation. O. P. Kamra

423A/523A. Genetics of Breeding Systems. M. D. Ross

423B/523B. Cytogenetics. O. P. Kamra

425B/525B. Plant Biosystehatics. (1969-70) M. J. Harvey

431A/531A. Plant Physiology. W. C. Kimmins

431B/531B. General Virology. R. Brown & W. C. Kimmins

433B/533B. Plant Morphogenesis. (1969-70) K. E. von Maltzahn

435/535. Animal Physiology. M. L. Cameron

437/537. Animal Embryology. (1969-70)

438A/538A. Parasitism. J. Farley

439A/539A. Ichthyology. E. T. Garside

440/540. Human Physiology. C. B. Weld

447/547. Influence of Chemical Agents on Living Organisms. J. G. Aldous

480/580. Special Topics in Biology. Members of Staff

590. M.Sc. Research.

690. Ph.D. Research.

Biological Journal Club. Lectures and presentation of papers by members of staff and senior students. All Honour and Graduate students are required to attend.

Summer Classes. Students who complete creditably any of the classes in the curriculum of the Marine Biological Laboratory, Woods Hole, Massachusetts, may on the recommendation of the Department of Biology, present them for credit toward a degree.

Graduate Studies

Graduate studies leading to both the M.Sc. and Ph.D. degrees are offered by the Department. Graduate students may specialize in the following areas of Biology:

(1) Genetics and Cytology
(2) Cellular Physiology and Chemical Biology
(3) Comparative Physiology and Behavior
(4) Systematics and Evolution
(5) Developmental Biology
(6) Ecology

Candidates for graduate degrees must satisfy the general requirements of the Faculty of Graduate Studies. Interested students are referred to the appropriate part of the Calendar.

Key to Class Numbers: Biology

New	Old	New	Old	New	Old
100	101	314	223	415/515	315
101	102	315	224	417/517	317
200	—	321		419/519	311
201	—	322,A,B	241+	421A/521A	321
202	—	323	242	423A/523A	—
203	202	324	243	423B/523B	—
204	203	325	—	425B/525B	331
205	201+	326	—	431A/531A	223
301	201	401,A,B	—	431B/531B	—
302	202	402	—	433B/533B	224
303	203	404/504	—	435/535	243
304	244	406B/506B	—	437/537	244
305	204	408/508	308	438A/538A	—
306	204	410A/510A	—	439A/539A	338
311		410B/510B	—	440/540	340
312,A,B	221+	412/512	312	447/547	347
313	222			480/580	380
				490	290
				590	400
				690	500

+New class more extensive than old one.

CHEMISTRY

Professors.....W. J. Chute (Head of Dept.), D. E. Ryan
Associate Professors.....K. E. Hayes, O. Knop, K. T. Leffek, J. W. S. Jamieson
Associate Professors (Oceanography).....P. J. Wangersky
Assistant Professors.....G. A. Dauphinee, D. H. Davies, T. P. Forrest, W. E. Jones, R. W. Frei, D. L. Hooper, J. S. Grossert

All students intending to undertake the programme for the Honour degree should consult with the Head of the Department.

Requirements for Honour Degree — Major Programme

YEAR I Chemistry 100, Mathematics 100, Physics 110, English 100, one foreign language (French, German or Russian).

YEAR II Chemistry 210, 230 and 240, Mathematics 200 or 206 or 207; elective Ia.

YEAR III Chemistry 320, 330 and 340; one of Mathematics 200, 220, 240, 312; elective IIa.

(a) It is recommended that of the electives:
(i) One be a language other than English (It may be an advanced class of the foreign language taken in Year I or an introductory class in a different language).
(ii) One be a science class which is not aready taken as part of the major programme above (e.g., Biology, Physics or Mathematics).

YEAR IV Three classes from Chemistry 400, 410, 420, 430 and 440; Physics 230b, elective IIIa.

It is recommended that all students intending to study Chemistry should attempt to obtain Senior Matriculation standing in the subject.

Classes Offered

100. General Chemistry G. A. Dauphinee, D. H. Davies, J. W. S. Jamieson, D. L. Hooper

Lect.: 3 hrs.; Lab.: 3 hrs.
Introductory study of atomic structure, bonding, gases, liquids, solids, solutions, acid-base theory, oxidation-reduction, chemical equilibrium, and reaction kinetics. There will be five sections as follows:

101. (General Chemistry) G. A. Dauphinee

Texts: Bailar, Moeller and Kleinberg,*University Chemistry Schaum's Outline Series; Theory and Problems of College Chemistry.*

102. (General Chemistry) **D. H. Davies**

This section includes Engineering students and others studying Mathematics and Physics in the same year.
Texts: To be announced.

103. (General Chemistry) J. W. S. Jamieson

Texts: **To be announced.**

104. (General Chemistry) D. L. Hooper

This section includes pre-professional students also taking Biology.
Texts: To be announced.

105. (General Chemistry)* G. A. Dauphinee

This class is given for Dental Hygiene students.
Texts: To be announced.

*Not for B.A. or B.Sc. Credit. Not a prerequisite for Chemistry 210, 230, 240.

(b) Physics 230 may be taken in Year II or III if one of the electives is to be a Physics class in advance of Physics 230. The elective Physics would then be taken in Year IV.

210. Inorganic Chemistry R. W. Frei

Lect.: 2 hrs.; Lab.: 3 hrs.
The principles of chemical behaviour and their application in the laboratory to testing, analysis and synthesis of inorganic compounds.
Prerequisite: Chemistry 100, Mathematics 100.
Text: To be announced.

230. Physical Chemistry I W. E. Jones

Lect.: 2 hrs.; Lab.: 3 hrs.
Fundamental study of thermodynamics, thermochemistry, electrochemistry, reaction kinetics, equilibrium, colloids, modern theories of atomic and molecular structure.
Prerequisite: Chemistry 100, Mathematics 100.
Texts: To be announced.

240. Introductory Organic W. J. Chute, J. S. Grossert

Lect.: 2 hrs.; lab.: 3 hrs.
Nomenclature, classification, preparation and reactions of organic compounds, introduction to stereochemistry and organic reaction mechanisms.
Prerequisite: Chemistry 100.
There will be two sections as follows:

241. (Introductory Organic) W. J. Chute

This section includes stulents in pre-professional courses.
Texts: Brewster and McEwan, "Organic Chemistry". Others to be announced.
Lab.: 3 hrs.

242. (Introductory Organic) J. S. Grossert

This section includes Science students.
Text: Roberts and Caserio "Basic Principles of Organic Chemistry".
Lab.: 3 hrs.

320. Analytical D. E. Ryan

Lect.: 2 hrs.; Lab.: 6 hrs. first term.
3 hrs. second term.
Quantitative and Instrumental Analysis.
Prerequisite: Chemistry 210.
Text: Skoog and West, "Fundamentals of Analytical Chemistry".

330. Physical Chemistry II K. E. Hayes

Lect.: 2 hrs.; lab.: 3 hrs.
A study of advanced physical chemistry, primarily from a thermodynamic viewpoint. Includes an introduction to statistical thermodynamics.
Prerequisite: Chemistry 230, Mathematics 100 and 200 or 228.
Texts: To be announced.

340. Intermediate Organic T. P. Forrest

Lect.: 2 hrs.; Lab.: 3 hrs.
Identification of organic compounds and introduction to I. R. analysis. General Organic Chemistry with emphasis on heterocyclics, polynuclear hydrocarbons, alkaloids, dyes, terpenes, etc.
Prerequisite: Chemistry 242.
Text; Roberts and Caserio,*Basic Principles of Organic Chemistry;* Shriner, Fuson, and Curtin,*Identification of Organic Compounds.*

400. Theoretical Inorganic Chemistry. J. W. S. Jamieson

Lect.: 2 hrs.
An introduction to quantum mechanics, valence bond and molecular orbital theories, lattice energy calculations, ligand field theory, and other theoretical aspects of physical-inorganic chemistry.
Texts Murell, Kettle and Tedder, *Valency Theory.*
A study of phase equilibrium theory and structural inorganic chemistry.

410. Advanced Inorganic. O. Knop

Lect.: 2 hrs.; lab.: 3 hrs.
A study of phase equilibrium theory and structural inorganic chemistry.
Prerequisite: Chemistry 320 and 330.
Texts: To be announced.

420. Instruments in Chemistry D. E. Ryan, R. W. Frei, P. J. Wangersky

Instrumental measurements and their application to chemical problems.
Prerequisite: Chemistry 320.

430. Physical Chemistry III D. H. Davies, K. E. Hayes, J. W. S. Jamieson

Lect.: 2 hrs.; lab.: 3 hrs.
A study of advanced physical chemistry from a kinetic viewpoint. Introduction to Absolute Reaction Rate Theory. Discussion of modern

topics of physical chemistry with special emphasis on current research projects in the department.
Prerequisite: Chemistry 330.
Texts: To be announced.

440. Advanced Organic W. J. Chute, T. P. Forrest, D. L. Hooper, J. S. Grossert, K. T. Leffek
Lect.: 2 hrs; Lab.: 3 hrs.
Discussion of applied physical methods reaction mechanisms, molecular rearrangements, stereochemistry, conformational analysis, and synthetic organic chemistry.
Prerequisite: Chemistry 340.
Texts: To be announced.

Graduate Studies

The Department offers graduate classes leading to the degrees of M.A. and Ph.D. Details relating to admission, scholarships and fellowships, requirements for the degree, classes of instruction, etc., can be found under *Faculty of Graduate Studies*, (Dalhousie Calendar).

Key to Class Numbers: Chemistry

New	Old	New	OLD	New	Old
100	1	**240**	4	**420**	—
101	1(a)	**241**	4(b)	**430**	—
102	1(d)	**242**	4(a)	**440**	—
103	1(b)	**320**	7		
104	1(c)	**330**	5+		
105	—	**340**	6		
210	2b+, 2c	**400**	9		
230	2a+, 2b+	**410**	8		

*New class more extensive than old one.

CLASSICS

Professor.....J. A. Doull, (Head of Department)
Associate Professors.....R. D. Crouse, B. W. W. Dombrowski, M. A. Usmiani
Assistant Professor.....J. P. Atherton
Lecturer..... R. Friedrich

The Department of Classics studies the ancient world and the formation of the Christian-European tradition. On the basis of a sound knowledge of the classical languages, the Department introduces students to the history, literature and philosophy of classical antiquity. The history of the ancient Near East (including Biblical history) is also taught. Students interested therein may sometimes offer an Oriental language, with Greek, in place of Latin. The continuation of Greek philosophy in Christian times, its relation to theology and to later philosophy, are a special interest of the Department.

Of classes offered by the Department, Classics 100, 236 (=Philosophy 236 and 240 (=Philosophy 240) should be of special interest to students in the General course.

Requirements for Honour Degree
Major Programme

Honours in Classics

YEAR I — Greek 100 or Latin 100*; Classics 100;
1. (One from History 100, Philosophy 100, English 100); Social Science class (Group C);
2. (Class in Mathematics or a Natural Science; *or*, if not required, *either* the remaining of Greek 100, and Latin 100*, *or* a second class from those listed under No. 1).

YEAR II — Greek 100 *or*, if already taken, Greek 200; Latin 100 *or*, if already taken, Latin 200;
3. (English 100 *or*, if already taken, a remaining class from History 100 or Philosophy 100);
Second Social Science class; History 100, *or* Philosophy 100 *or* (if *both* groups have been taken under Nos. 1, 2 and 3, Latin 200 or Greek 200 (if the 100 class has been taken in Year I) *or* a Classics 200 (Ancient History) class *or* Philosophy 236 (= Classics 236).

YEAR III — Greek 200 or 300; Latin 200 or 300; a Classics 200 (Ancient History) class *or* Philosophy 236 (= Classics 236), the remaining of the history classes above and Philosophy 236 *or* Greek 300 (or 301 or 302) or Latin 300 (or 301 or 302) or elective.

YEAR IV — Greek 300 (*or* 301 or 302); Latin 300 (*or* 301 or 302); a second 300 Greek class *or*, if taken, elective; a second 300 Latin class *or*, if taken, elective; one of further Greek or Latin class, an Ancient History class or Philosophy 240 (= Classics 240).

*This course may still be completed within four years if neither Greek nor Latin has been taken in the First Year.

Honours in Classics (Ancient Philosophy)

YEAR I — Greek 100 or Latin 100*; Classics 100; Philosophy 100; a Social Science class; a class in Mathematics or a Natural Science *or*, if not required, History 100, or English 100.

YEAR II — Greek 100, *or*, if already taken, Greek 200; Philosophy 236 (Greek Philosophy = Classics 236); History 100 or English 100; Latin 100 *or*, if already taken, Latin 201; a second Social Science class.

YEAR III — The remaining of Greek 200 and Latin 201; Philosophy 240 (Medieval Philosophy = Classics 240); a class in Modern Philosophy; Classics 221 or 222 or 223 (Ancient History) or History 200 (Medieval History); Greek 300 (or 301 or 302) if Greek 200 was taken in Year II; otherwise, elective.

YEAR IV — Two of Greek 300 (or 301 or 302) or, if both have already been included, elective[1], Classics 461 or 463 or 464; a class in Modern Philosophy; a further class in ancient or medieval history.

Honours in Classics (Ancient History)

YEAR I — Latin 100 *or* Greek 100[2], History 100; Classics 100; a Social Science class; Mathematics *or* a Natural Science class *or*, if not required, Philosophy 100 or English 100.

YEAR II — Classics (Ancient History) 221 or 222 or 223 (as offered); Classics (Ancient History) 251 or 252 or 253 (as offered); Latin 200 or Greek 200; English 100 or, if taken, Philosophy 100; a second Social Science class.

YEAR III — Classics (Ancient History) 222 or 221 or 223 (as offered); Classics (Ancient History) 252 or 251 or 253 (as offered): Latin 202 *or* Greek 301; Philosophy 100 or, if taken, Philosophy 236 or 240 (= Classics 236 or 240); History 200.

*This course may still be completed without four years if neither Greek nor Latin has been taken in the first years.

1. At the discretion of the Department, a class in another ancient language may take the place of one of the Greek classes.
2. A student who does not take Latin (or Greek) 100 in his first year but some other foreign language may take the class in his second year. In that case a Latin (or Greek) class beyond Latin (or Greek) 200 will take the place of one Ancient History class and Medieval History (History 200) will be counted as an honour class for such a student.

YEAR IV — Classics (Ancient History) 253 or 251 or 252 (as offered); Classics (Ancient History) 223 or 221 or 222 as offered); a 300 Latin or Greek class, History 200 or Philosophy 236 or 240 (= Classics 236 or 240); Greek 100 or Latin 100 or an elementary class in another ancient language[1].

French-Latin Combined Honours
See under Romance Languages

German - Greek Combined Honours
See under German

Classes Offered

Ancient Languages

GREEK

100. Introductory Greek — R. Friedrich

Lect.: 4 hrs.
Text: White, *First Greek Book.*

200. Intermediate Greek — R. Friedrich

Lect.: 3 hrs.
Texts: Plato, *Apology and Crito*; Homer, *Iliad, VI. Grammar and Composition.* Prerequisite: Greek 100.

300. Greek Poetry (1968-69). — R. Friedrich

Lect.: 2 hrs.
Subject for 1968-69; Selections from Homer's *Iliad.*
Prerequisite: Greek 200.

301. Greek Historians. (1969-70) — B. W. W. Dombrowski

Lect.: 2 hrs.
Parts of Herodotus and Thucydides will be studied. Prerequisite: Greek 200.

302. Greek Philosophers. (1969-70) — R. Friedrich

Lect.: 2 hrs.
Selections from the texts of Plato and Aristotle will be studied. Prerequisite: Greek 200.

1. The second ancient language may be taken in the second or third year if convenient, and at the discretion of the Department, a further class in the second language may take the place of one Ancient History class.

LATIN

099. Introductory Latin

Lect.: 3 hrs.

For students who wish to begin the study of Latin in the University, special (non-credit) classes will be provided upon request.

100. Latin Language and Literature — M. A. Usmiani

Lect.: 3 hrs.

Cicero's *De Senectute*, selections from Catullus and from Horace's *Odes* will be read. Grammar and Composition. Prerequisite: Senior Matriculation Latin or Latin 099.

200. The Latin Poets — M. A. Usmiani

Lect.: 2 hrs.

Selections from Lucretius, Propertius, Ovid and Tibullus will be read. Prerequisite: Latin 100.

201. Latin Philosophical Texts. (1968-69) — J. A. Doull

Lect.: 2 hrs.

Selections from Latin Patristic and Medieval philosophers will be read. Prerequisite: Latin 100.

202. Roman Historians. (1969-70) — J. P. Atherton

Lect.: 2 hrs.

A Study of Roman Historical Texts (Writers, Inscriptions and other Documents). Prerequisite: Latin 100.

300. The History of Roman Satire (1968-69). M. A. Usmiani

Lect.: 2 hrs.

Selections from Horace and Juvenal will be read.
Prerequisite: Latin 200.

301. A Study of Vergil. (1969-70) — M. A. Usmiani

Lect.: 2 hrs.

Eclogues, Georgics and Aeneid. Prerequisite: Latin 200.

302. Roman Comedy. (1969-70) — M. A. Usmiani

Lect.: 2 hrs.

Selected comedies of Plautus and Terence and their relation to Greek new comedy will be studied. Prerequisite; Latin 200.

Near Eastern Languages.

Hebrew 101.
Hebrew 202. See under "Hebrew" in present Calendar.
Hebrew 303.
*Coptic 100. Introductory Grammar and Reading of Sahidic Texts. B. W. W. Dombrowski

*Coptic 200. Reading of Selections from other Coptic Dialects. B. W. W. Dombrowski

*Akkadian 100. Introductory Grammar and Reading of Texts. B. W. W. Dombrowski

*Arabic 100. Introductory Grammar and Reading of Texts. J. B. Hardie

**Note*: The classes in Hebrew Coptic, Akkadian and Arabic are available as electives at the discretion of the Department, only in relation to the needs of particular students.

LITERATURE, HISTORY AND PHILOSOPHY

Note: The History and Philosophy classes listed below may be given credit as Classics classes, or as History or Philosophy classes, respectively.

Classics 100. Classical Civilization.

J. A. Doull, R. D. Crouse, B. W. W. Dombrowski, R. Frierdich

Lect.: 3 hrs.

Homer's *Iliad*, Aristotle's *Politics*, Vergil's *Aeneid* and St. Augustine's *City of God* will be studied (in English translation), also Roman government and constitution, with a view to examining literary, political and philosophical aspects of Greek and Roman society, and the rise of Christianity. The class is intended to be both an introduction to further work in the several areas of Classical studies, and also, for other students of humanities, a general introduction to the intellectual foundation of European society.

*Classics 221. History of the Ancient Near East (1968-69).

B. W. W. Dombrowski

Lect.: 3 hrs. B. W. W. Dombrowski

An analysis of significant periods of the political and cultural history of the Near East from prehistorical times to the beginning of the Christ-

*To be taken any time in the course of studies after completion of prerequisites History 100 or Classics 100.

ian Era. Subject for 1968-69; Ancient Mesopotamia to the establishment of the Persian Empire. Prerequisite: History 100 or Classics 100.

***Classics 251/551 (1968-69) Seminar on problems of Ancient and near Eastern History.**
B. W. W. Dombrowski

Seminar: 2 hrs.
Primarily for Honour and Graduate students. Others may be admitted at the discretion of the instructor. Subject for 1968-69: the impact of Near Eastern religions on the religions of the Greeks and Romans.
Prerequisite: History 100 or Classics 100.

***Classics 222. Greek History** (1970-71)
J. P. Atherton, B. W. W. Dombrowski

Lect.: 3 hrs.
A study of main features of the history of the Greek World and of Hellenism.
Prerequisite: History 100 or Classics 100.

Classics 252/552. Seminar on Problems of the Hellenistic Period. (1970-71) B. W. W. Dombrowski

Seminar: 2 hrs.
Characteristics of the Hellenistic Period will be studied in detail as warranted. Honour, graduate, and theology students only.
Prerequisite: History 100 or Classics 100.

***Classics 223. Roman History.** (1969-70) B. W. W. Dombrowski
J. P. Atherton

Lect.: 3 hrs.
A survey of the origin and development of Roman political organization and culture with emphasis on special aspects as may be determined from time to time. Prerequisite: History 100 or Classics 100.

***Classics 253/553. Seminar on the Roman Empire and the Rise of Christianity.** (1969-70) J. P. Atherton

Seminar: 2 hrs.
Selected topics from the transition from Classical to Christian culture will be studied. Particular attention will be paid to the connection between religious innovation and change in political and social life and

*To be taken any time in the course of studies after completion of prerequisites History 100 or Classics 100.

the effect of the new beliefs on literature, art and philosophy. (Primarily for honour and graduate students. Others may be admitted at the discretion of the instructor).
Prerequisite: History 100 or Classics 100.

***Classics 224. The Bible in Relation to Classical Culture.**
Lect.: 3 hrs. To be announced
Prerequisite: Classics 100.
The formation of the Jewish tradition in the context of Ancient Near Eastern history and its confrontation with Hellenism in the formation of the traditional Christian theology.

Classics 236. (= Philosophy 236) Ancient Philosophy from Aristotle to St. Augustine. R. D. Crouse

Lect.: 2 hrs.
Prerequisite: Philosophy 100.
A study of the development of Classical and Patristic thought from Aristotle to St. Augustine, with concern to explore the manner in which the philosophical achievement of ancient Greece came to form, in the thought of the Church Fathers, the intellectual foundation of European culture. Works most closely considered will be Plato's *Timaeus*, parts of Aristotle's *Metaphysics*, parts of Plotinus' *Enneads*, and St. *Augustine's City of God* and *De Trinitate*.

Classics 240. (= Philosophy 240) Medieval Philosophy.
Lect.: 2 hrs. R. D. Crouse
Prerequisite: Philosophy 100.
A study of the development of philosophy in the formative age of European civilization, with attention to related political, institutional, literary and theological concerns. The authors studied most closely will be Boethius, Anselm of Canterbury, Thomas Aquinas, some 13th century Augustinians and Averroists, Ockham, and one or more of the late Medieval Mystics. The class will be conducted partly as a seminar, partly as a course of lectures.

Classics 461/561. Seminar on the Philosophy of Aristotle. (1969-70) R. D. Crouse
J. A. Doull

Seminar: 2 hrs.
The subject for 1969-70 will be Aristotle's *Metaphysics*, with Ancient and Medieval commentaries.

*To be taken anytime in the course of studies after completion of prerequisites History 100 or Classics 100.

Classics 463/563. History of the Interpretation of Aristotle. J. A. Doull

Some ancient and medieval interpretations of Aristotle.

Classics 464/564. Seminar on the Philosophy of the Church Fathers. R. D. Crouse

The doctrine of the creation in the Greek fathers, with particular attention to the exegesis of Genesis by Basil the Great and Gregory of Nyssa.

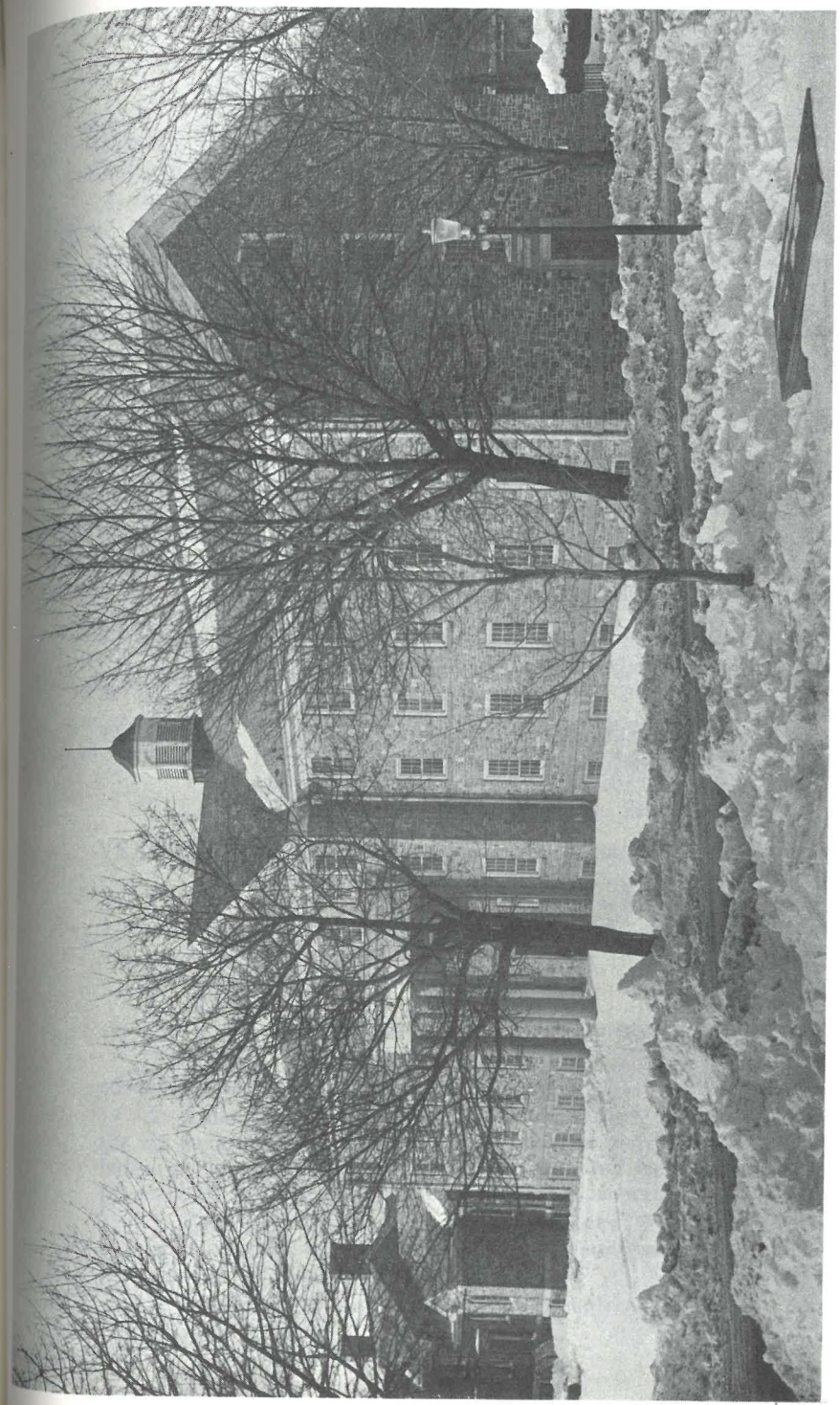
Graduate Studies

The Department offers an M.A. programme in Classical Literature, in Ancient History and in Ancient and Medieval Philosophy. For details see *Faculty of Graduate Studies*, (Dalhousie Calendar).

CLASSICS

Key to Class Numbers: Classics

GREEK		LATIN		LITERATURE, etc	
New	Old	New	Old	New	Old
100	A+1	099	1	Classics 100	1
200	2	100	2	102	History 2
		200	4	103	—
300	3+6	201	—	221	—
301	4	202	3	222	22
302	5	300	5	223	23
		301		224	
		302	7	235	Philos. 24
				236	
				240	25
				251/551	—
				252/552	—
				253/553	—
				Classics 452/552	110
				461/561	
				463/563	
				464/564	



Alexandra Hall in a Winter Setting

ECONOMICS

Professors.....J. F. Graham (Head of Dept.), N. H. Morse
Associate Professors.....A. M. Sinclair, C. Y. Chao
Assistant Professors.....R. L. Comeau, P. B. Huber, C. M. Ouellette
G. E. Fulton, E. Klein, J. M. Beauroy
Senior Killam Research Fellow.....Z. A. Konczacki
Killam Fellow.....C. Marfels

Members of other departments offering classes in Economics:
Professors..... R. S. Cumming, R. E. George (Commerce),
D. Braybrooke (Philosophy & Political Science)
Special Lecturer..... K. S. Wood (Institute of Public Affairs)

The Department offers undergraduate and graduate programmes in Economics. Students should consult the timetable and the Department at the time of registration for changes in or additions to the courses listed here.

Recommended programme for students majoring in Economics for the General B.A. degree (New Programme)

YEAR I — Economics 100; Political Science 100 or Sociology 100; History 100 or Philosophy 100; Mathematics 100; Modern Language.

YEAR II — Economics 200; Economics 202; Economics 300; English 100; Sociology 100 or Political Science 100, whichever not taken in first year; or a higher level class in whichever subject was offered in the first year.

YEAR III — Two classes in Economics; History 100 or Philosophy 100, whichever one was not taken in first year; two classes beyond the 100 level, ordinarily selected from fields related to Economics, such as Sociology, Social Anthropology, Political Science, History, Philosophy, or Mathematics.

Notes on General Programme

1. Students considering majoring in Economics are encouraged to consult the Department about their programme.

2. Although students may offer fewer classes in Economics than the six suggested, this number is necessary to give them a basic knowledge of the discipline and should be regarded as the minimum for preparation for a graduate programme in Economics.

3. Economics 200 and 300 are basic classes. It is highly desirable that students take them in Year II, in preparation for taking higher level classes in Year III.

4. Students must satisfy the overall requirements for the general B.A. degree.

Major Programme for Honours in Economics and Combined Programme with Major Concentration in Economics

	YEAR ONE	YEAR TWO	YEARS THREE & FOUR
Classes common to, and required of, all Honour students with major concentration in Economics	Econ. 100 Math. 110 or 100 Mod. Lang. at 100 level	Econ. 200 Econ. 202 English 100	
OPTIONS Major Programme in Economics	Hist. 100 or Phil. 100 Soc./Anth. 100 or Pol. Sc. 100	Econ. 302 (or other Ec. Hist.) Soc. /Anth. 100 or Pol. Sc. 100 or higher level class in whichever of Soc. or Pol. Sc. was taken in Year I.	Hist. 100 or Phil. 100, whichever was not taken in Year I. 6 Econ. classes including 300, 303, either 301 or 307, 2 classes in minor field 1 elective
Combined Programme in Economics with Sociology	Hist. 100 or Phil. 100 Soc./Anth. 100	2 classes in Sociology at the 200 level.	Hist. 100 or Phil. 100, whichever was not taken in Year I. 4 Econ. classes including 300 and 304 Soc. 301, Soc. 310 and Soc. 405 2 electives
Combined Programme in Economics with Political Science	Hist. 100 or Phil. 100 Pol. Sc. 100	2 Pol. Sc. Classes including at least 1 of Pol. Sc. 205, 240, 242,	Hist. 100 or Phil. 100, whichever was not taken in Year I. 4 Econ. classes including 300 2 Pol. Sc. classes including 300 1 additional class in Econ. or Pol. Sc., 2 electives
Combined Programme in Economics with Philosophy	Phil. 100 Pol. Sc. 100 or Soc./Anth. 100	Phil. 200 and 210	Hist. 100 4 Econ. classes including 300 2 Phil. classes including 1 of 205, 230, 320 1 additional class in Econ. or Phil., 2 electives

Combined Programme in Economics with History	Hist. 100 Pol. Sc. 100 or Soc. /Anth. 100	2 Hist. courses including Hist. 220	Phil. 100; 4 Econ. classes including 300 and 306; 1 class in Economic History; 2 Hist. classes; 2 electives.
Combined Programme in Economics with Mathematics	Hist. 100 or Phil. 100 Pol. Sc. 100 or Soc. /Anth. 100 or Physc. 100	2 Math. courses including Math 200 (Math. 200 may be substituted for Econ. 202)	Hist. 100 or Phil. 100 whichever was not taken in Year I; 4 Econ. classes including 300 and 501; 2 Math. classes; 1 additional Math. or Econ. class; 2 electives.
Combined Programme in Economics with Psychology	Hist. 100 or Phil. 100 Psych. 100	Psych. 200 and 201	Hist. 100 or Phil. 100 whichever was not taken in Year I; 4 Econ. classes including 300; 2 Psych. classes; 1 additional Econ. or Psych. class; 2 electives

NOTES ON HONOUR PROGRAMME

1. The student's programme will be chosen in consultation with the Department and must have the approval of the Department.
2. Honour students must pass a comprehensive examination at the end of their fourth year.
3. Students in the Major Programme will normally be required to take at least three classes in a minor field related to Economics (Sociology, Social Anthropology, Political Science, History, Philosophy, or Mathematics). In any case, of the classes selected outside of Economics in the third and fourth year, students must include at least two classes above the elementary level.
4. Departures may be made from the order of classes with departmental approval.
5. In some instances, the Department may permit students to take classes in other subjects in lieu of classes in Economics and may permit minor variations in the required classes.
6. The Department may require the student to prepare an Honours essay under its supervision.
7. Students may be required to attend Honour seminars in their third and fourth years.
8. Combined programmes with other departments may be arranged with a pattern similar to the ones above.
9. For combined programmes with Economics where the major concentration is in the other discipline, consult the other departments concerned.
10. Students must be careful in arranging their courses to assure that they satisfy the overall requirements for the general B.A. degree.

Classes Offered

100. Principles of Economics. Members of the Department

Lect.: 2 hrs.; Discussion in small groups; 1 hr.

The aim of this class is to acquaint the student with the main elements of economic theory, which explains how the scarce resources of a society are utilized to satisfy the wants of its members. This class is intended either as an introduction to higher level classes in Economics or as a terminal class for students who can take only one class in Economics. It is hoped that it will give students a better understanding of some of the main economic issues in public policy. The subject is treated as one important aspect of the over-all problem of understanding society, i.e., is considered in relation to other social sciences and in a historical and contemporary social context. The major sections of the class are: an introduction to the nature of economics; basic concepts and definitions; the law of diminishing returns and its implications; theory of value (demand, supply, price, types of competition, theory of the firm, imperfections in the market system); distribution; national income and employment; money, banking and credit; international trade and finance; comparative economic systems; economic growth.

200. Money, Banking and International Finance.

Lect.: 3 hrs. G. E. Fulton

The content of this class has been revised to lay more emphasis on macro theory and in particular to include material on national income accounting. The class now covers those elements of macro theory that are required for higher level classes in Economics, as well as dealing with financial institutions and monetary policy.* The following topics are considered: national income accounting; the determination of income and the rate of interest, with emphasis on the significance of money; the role of commercial banks, financial intermediaries and central banks; international monetary institutions; the balance of payments; monetary policy and its implications for employment, prices, exchange rates and the balance of payments.

Prerequisite: Economics 100.

201. Intermediate Economic Analysis Not offered in 1968-69.

202. Economic Statistics (same as Commerce 304)

Lect.: 3 hrs.; Lab.: 2 hrs. R. E. George

Functions of statistical methods; collection, analysis, and presentation of statistical information; measures of central tendency, dispersion, skewness, and kurtosis; analysis of time series; index numbers; two-variable correlation; curve-fitting and chi-square test; probability; sources of Canadian statistical information.

Prerequisite: Economics 100.

*See footnote page 93.

300. Economic Analysis I (Price Theory and Competitive Practices) C. Y. Chao

Lect.: 3 hrs.

This class has been revised so that it covers those elements of micro-theory required for higher level classes in Economics and, at the same time, shows how this theory provides an understanding of pricing behaviour in the market situations found in the real world.* The determinants of short-run costs; pure pricing theory of the firm; observed competitive practices; the many variants of oligopoly behaviour; economists' criteria of efficiency, income distribution, stability and growth; case studies in resource allocation; analysis of general equilibrium; derivation of aggregate supply curves and inter-relation of micro with macro theory are among the subjects discussed.

Prerequisite: Economics 100.

301. Economic Analysis II (macro-economic theory)

Lect.: 2 hrs. G. E. Fulton

A review of classical and Keynesian macro-economics; statistics and dynamics with some emphasis on money in a theory of finance.

Prerequisite: Economics 100 and Economics 200.

302. Canadian Economic History N. H. Morse

Lect.: 3 hrs.

A study of the economic development of Canada from the age of discovery to the present. Prerequisite: Economics 100.

303. History of Economic Thought N. H. Morse

Lect.: 3 hrs.

A survey of certain main streams of doctrine and analysis since Mercantilist times including classical and neo-classical writers, Marx and other socialists, the Austrians and the German Historical School, Institutionalists, and reviews of the works of selected writers in this century such as Veblen, Schumpeter, Keynes, and Galbraith.

Prerequisite: Economics 100.

304. Comparative Economic Systems P. B. Huber

Seminar: 2 hrs.

The characteristics of about ten actual economies, including the Soviet Union, China, France, India, Yugoslavia, and the United States, are

ascertained, compared and interpreted. Toward the end of the year theories of economic organization and control are examined. Emphasis is placed on the social, political, and economic processes through which the economic functions of society are institutionalized. A series of short papers are assigned. In the Autumn these will be based directly on the required readings, but in the second term, they will require independent research.

Preparatory summer reading should include R. L. Heilbroner, *The Making of Economic Society;* R. E. Campbell, *Soviet Economic Power* (2nd ed.); and C. B. Hoover, *The Economy, Liberty and the State.*

Prerequisite: Economics 100.

305. Labour Economics — R. L. Comeau

Lect.: 3 hrs.

The economics of the labour market with an examination of the theoretical basis of the demand and supply of labour, and particular application of the analysis for the Canadian market. The theory and practice of collective bargaining and an examination of the historical and legal foundations of labour relations in Canada.

Prerequisite: Economics 100.

306. Economic Development of Western Civilization (same as Commerce 303) — R. S. Cumming

Lect.: 3 hrs.

The historical growth of the economy of Western culture and the interrelationship of European and North American Economic history. The development of economic institutions and ideas, including modern views on such movements as imperialism, mercantilism, the industrial revolution, and the great depression. Prerequisite: Economics 100.

307. Theory of the Business Cycle (same as Commerce 453) — R. E. George

Lect.: 2 hrs.

National income and expenditure; description, history, and measurement of business cycles; theories of the business cycle; control, domestic and international, of business fluctuations.

Prerequisite: Economics 100 and 200.

308. Theory and Problems of Economic Development

Lect.: 3 hrs. — C. M. Ouellette

Nature of economic development and economic underdevelopment; standard analysis of the development process and of obstacles to development; English classical economists, Marxian economists, Schumpeter, contemporary writers; lessons from the original Industrial

Revolution and subsequent development revolutions; issues in developmental policy; planning and programming for development.

Prerequisite: Economics 100.

312. Economic Development in a Historical Perspective

Lect.: 3 hrs. — J. M. Beauroy

The class examines the problems of disparity and unbalance in the economic development of nations in the world since the Industrial Revolution in 18th and 19th century Britain. The contrast of the "Wealth of Nations" and the "Poverty of Nations" and development and underdevelopment in the present context are subjects examined through case studies of economic development since the 18th century in selected areas of Europe, Asia and Africa.

Prerequisite: Economics 100.

400. Public Finance — J. F. Graham

Lect.: 2 hrs.

This class is concerned with the allocation of resources between the public and private sectors of an economy and within the public sector, i.e., with the theory of the production of public as opposed to private goods. The main sections are fiscal policy (the influencing of the level of income and employment of a country by adjustments in taxation and public expenditure), the theory of public expenditure, the theory of public revenue (principally taxation), the theory of public borrowing, and inter-governmental fiscal relations.

Prerequisite: Economics 100.

401/511 International Trade: Theory & Policy. P. B. Huber

Lect.: 2 hrs.

This class considers the causes of international exchange of goods and services, and analyzes the effects of participation in the international economy on the income, growth, and monetary arrangements of countries. The theory and practice of commercial policy and other restrictions on trade are considered after the "pure" theory of international trade and its implications have been explored. In the second term international monetary analysis is taken up and causes and remedies of external imbalance of national economies are considered. Depending on class interest, some of the following topics may be treated in detail: issues of international development finance, theory and practice of customs unions, reorganizing the international monetary system, the Prebisch theory of trade and development. Two or more medium-length papers will be required in addition to the mid-year and year-end tests.

Prerequisite: Economics 200. Others may be admitted by permission of the instructor.

403. Regional Economic Development — K. S. Wood

Lect.: 2 hrs.

A class for advanced undergraduate students. Lectures during the fall and winter terms will include the following general topics: an introduction to the spatial problem in economics and to regional economics, spatial organization of the economy, location theory, regional economic development theory, techniques of regional analysis, and national policies for regional development. This class attempts to impart an understanding of the theoretical background for regional economic development, to develop student ability to use techniques of economic analysis as applied to regional problems, and to provide a number of case studies from European, North American and Atlantic Province experience.

Prerequisite: Economics 200, or permission of instructor.

405. Economic History of Great Britain and the British Empire Overseas (same as Commerce 456) — R. S. Cumming

Tutorial class. Admission is by permission of the instructor and is restricted to advanced students.

406. The Regional Economy of North and South America (same as Commerce 455) — R. S. Cumming

Time to be arranged.

Tutorial class. Admission is by permission of the instructor and is restricted to advanced students.

407/507. Philosophy, Politics, and Economics (same as Philosophy 340 and Political Science 349).

Lect.: 2 hrs. — D. Braybrooke

Seminar. Various topics on which the subjects of philosophy, political science, and economics converge will be investigated, among them: standards for evaluating governments such as natural rights, welfare, majority rule, and efficiency; the concept of rational action; the relationship between action explanations and behaviour explanations in social science; and the uses of social science in making decisions and choosing policies. Reading in such authors as Aristotle, Butler; Hicks, Little, Boulding; Marx, Webber, Herring, Downs, Arrow, Schelling; Popper, Dahl and Lindblom, and Simon.

408. Industrial Organization. — C. Marfels

Seminar: 2 hrs.

The class is concerned with examining the behaviour of firms in relation to the models of price theory. Structure, conduct and performance of industry are illustrated by means of case studies from the U.S. and Canadian economies. Special topics include industrial concentration, administered prices, resale price maintenance, and problems of delivered pricing (basingpoint system). The effectiveness and enforcement of Canadian and U.S. antitrust legislation are discussed.

Prerequisite: Economics 300, which may be taken concurrently.

Preparatory reading: R. Caves, *American Industry: Structure, Conduct, Performance*, Englewood Cliffs, Prentice-Hall, 1967 (2nd ed.)

409. Applied Economics (same as Commerce 454)

Lect.: 3 hrs. — R. E. George

The application of economic principles to the problems of economic control; optimum pricing and distribution of factors of production under private and public enterprise; control of monopoly and restrictive practices; location of industry; economics of underdeveloped areas.

Prerequisite: Economics 100 and 200.

412/512. Economic History of Europe in Pre-Industrial Times.

Lect.: 2 hrs. — J. M. Beauroy

This class involves a selection of topics concerning the development of thet Agrarian, Commercial and Industrial life of European societies from the early medieval period to the 18th century. It aims particularly to define the problems of interpretation of the stages and aspects of growth and crisis in the history of European economies and societies before the Industrial Revolution.

Prerequisites: Economics 100.

431. Intermediate Statistics.

Lect.: 2 hrs.

Prerequisite: Economics 202 or permission of instructor.

450. Senior Seminar on Economic Policy.

2 hrs.

Prerequisite: Economics 200 and two other economics classes above the 100 level, which may be taken concurrently.

Graduate Studies

The Department offers a graduate programme leading to the M.A. and Ph.D. degree. Details of these programmes, including a list of graduate courses, are given under *Faculty of Graduate Studies* in the

Dalhousie Calendar. Senior undergraduates may be admitted to graduate classes at the discretion of the instructors concerned.

Key to Class Numbers: Economics

New	Old	New	Old	New	Old
100	1	304	14	403	25
200	2	305	3	404	28
201	—	306	20	405	24
202	6	307	22	406	23
300	12	308	17	407/507	27
301	13	400	5	408/505	—
302	15	401/511	7	409	21
303	8	402	16	412/512	
				431	
				450	

ENGLISH LANGUAGE AND LITERATURE

Professors.....A. R. Bevan (Head of Dept. C. L. Bennet, M. M. Ross, S. E. Sprott
Visiting Professors.....J. M. S. Tompkins, A. L. Wheller
Associate Professors.....R. MacG. Dawson, J. Fraser, A. J. Hartley, S. Mendel, M. G. Parks, D. P. Varma, H. S. Whittier
Assistant Professors.....A. G. Cannon,, S. A. Cowan, R. S. Hafter, C. J. Myers, R. L. Raymond, R. J. Smith, H. D. Sproule
Post-Doctoral Fellow.....D. A. Cameron
Visiting Fellows.....Shamsul Islam, David Keppel-Jones
Killam Senior Fellow.....James Sambrook

Honour English*— Major Programme

This programme is recommended especially for students looking forward to graduate study in English (at Dalhousie or at other graduate schools) and for prospective specialist High School Teachers. It provides the student with the full coverage of English Literature required in many universities for subsequently completing *in one year* the course work for the M.A. degree.

All students intending to enter Honour English in Year II must consult the Department of English before the end of their first year.

* All Honour English programmes (Major and Combined) are under review, and changes in the outlined programmes are expected.

YEAR I — English 100; one of French 100, German 100, Latin 100, Greek 100; one of History 100, Philosophy 100, Classics 100; one of Economics 100, Political Science 100, Sociology 100, Psychology 100; one of Chemistry 100, Physics 100, Biology 100, Geology 100, Mathematics 100[1].

YEAR II — English 251; English 252; a second class from Economics 100, Political Science 100, Sociology 100, Psychology 100; a second class from History 100, Philosophy 100, Classics 100; a second class in the language chosen in Year 1[2].

YEAR III — English 351; English 352; English 254 or 353[3], one class above the 100 level, normally chosen from History, Philosophy, Classics, or a foreign language; a class in a second foreign language *or* a third class in the minor subject *or* a third class in the first foreign language.

YEAR IV — English 451; English 452; two of English 453, English 206, English 207, English 213, English 454, English 208, English 201; one class above the 100 level in History *or* Philosophy, *or* a class in Art History or Music.

The *standard* Honour course in English consists of the following 10 classes: English 253, 351, 251, 252, 352, 353, 353 or 254, 451, 452, 453, and 454. Students may wish, however, to take advantage of the wide choice offered for the two electives (see Year IV) in order to satisfy special interests. They are allowed to do so with the understanding that only the *standard* course as outlined earlier in this paragraph prepares the student to undertake graduate work in English (at Dalhousie or elsewhere) without possibly having to make up deficiencies and therefore extending his M.A. course to two years instead of one.

1. This requirement applies only to students with no Senior Matriculation credit in Science or Mathematics. Students having such credit **may** choose a second subject from History, Philosophy, Classics, or a class in a **second** foreign language.
2. Students intending to go on to graduate study in English should substitute here English 253 (Old English). Otherwise they may be obliged to make up the class in their M.A. programme, at Dalhousie, or elsewhere.
3. Students wishing to concentrate on the study of drama may, however, postpone English 353 until Year IV and substitute here Drama 350. Consequently, their course in Year IV will consist of English 451, 452, 353, 201, and the extra-departmental elective.
4. Students intending to enter graduate study are advised to choose English 454 as one of the two elective classes.

English and French: Combined Honour Programme

YEAR I — English 100; French 100 or French 102; one of Economics 100, Political Science 100, Sociology 100, Psychology 100; one of Classics 100, History 100, Philosophy 100; Science or Mathematics *or* (if not required) a second class from Classical Literature 100, History 100, Philosophy 100.

YEAR II — English 252; French 220; French (any other intermediate class); a second subject from Classics 100, History 100, Philosophy 100 (if not already taken in Year I), otherwise a class in European or French or British History; a second class from Economics 100, Political Science 100, Sociology 100, Psychology 100.

YEAR III — English 251 or English 352; English 254 or English 353; English 207 or French 321; French 322; a class from the Humanities beyond the 100 level.

YEAR IV — English 451 or English 452; English 453 or English 209; French 320 or French 453; one of French 350, French 451, French 452; free elective.

English and History: Combined Honour Programme

YEAR I — English 100; History 100; French 100 or German 100 or Latin 100; Economics 100 or Political Science 100 or Sociology 100; Chemistry 100 or Physics 100 or Biology 100 or Geology 100 or Mathematics 100[1]. This requirement applies only to students with no Senior Matriculation credit in Science or Mathematics. Students having such credit *may* substitute Classics 100 or Philosophy 100.

YEAR II — English 252; English 251 or English 352; History 314; a second subject from Economics 100, Political Science 100, Sociology 100; a second class in the language begun in Year I.

YEAR III — English 254 or English 353; English 451; History 211; History 200 or 201; Philosophy 100 or Classics 100.

YEAR IV — English 453 or English 209 or English 210, English 351 or English 206 or English 207 or English 454 or English 201; two of History 210, History 220, History 230, History 231, History 204, History 205[2], a second class in Philosophy chosen from Philosophy 230, 300, 303, 310, 315.

1. See footnote page 99.
2. Students in Year IV must consult the Department about correspondence of classes. As a general rule, classes in English and History in Year IV must be matched: e.g., if English 207 is chosen, History 220 must also be chosen.

English and Philosophy: Combined Honour Programme

YEAR I — English 100; Philosophy 100; French 100 or German 100 or Latin 100 or Greek 100; Economics 100 or Political Science 100 or Sociology 100 or Psychology 100; Biology 100 or Chemistry 100 or Geology 100 or Physics 100 or Mathematics 100[1].

YEAR II — English 252, English 251 or English 352; one of Philosophy 200, 205, 210; a second class from Economics 100, Political Science 100, Sociology 100, Psychology 100; a second class in the language chosen in Year I.

YEAR III — English 254 or English 353; English 451 or 452; a second class from Philosophy 200, 205, 210; History 211 or History 204 if History 100 has already been taken in Year I; if not, substitute History 100 here.

YEAR IV — One of English 453, 209, 208; one of English 351, 206, 207, 454, 201, Philosophy 235 or 240; Philosophy 315 or 320 or 325 or 330, elective chosen from History, Classics, Modern Languages, Art History or Music.

English and German

Combined Honour Programme

This course is arranged so that, by the choice of a seventh class in Year II, the emphasis is placed on either one of the Honour subjects.

English and Spanish

Combined Honour Programme

This course is arranged so that, by the choice of a seventh class in Year II, the emphasis is placed on either one of the Honour subjects. (See Department of Spanish).

Classes Offered*

1. Introduction to Poetry, Fiction, and Drama

Lect.: 3 hrs.

An introduction to the critical reading of literature, for students registered before 1966 who do not have the prerequisite for English 100. *Texts*: Laurence Perrine, *Sound and Sense, An Introduction to Poetry*; an anthology of short stories (to be announced); Bulfinch's *Mythology*; Shakespeare, *King Lear*; Synge, *The Playboy of the Western World*; Miller, *Death of a Salesman*; Dickens, *Great Expectations*;

1. Students with a Senior Matriculation pass in Science may substitute here History 100 or Classics 100.

* Changes or additions may be announced before the beginning of the term; students should consult the notice boards or the Department.

Crane, *The Red Badge of Courage*; James, *The Turn of the Screw*; Fitzgerald, *The Great Gatsby*. Handbook for theme correction; Baker, *The Practical Stylist*.

100. Survey of Major Writers.

Lect.: 3 hrs.

Prerequisite: English 1 or an equivalent class, or Senior Matriculation. A study of English literature through the works of major writers. *Texts*: To be announced.

201. History of the English Language — A. G. Cannon

Lect.: 3 hrs.

Prerequisite: English 100. An introductory class in language of particular interest to prospective teachers of English. A study of phonetics and of modern approaches to Grammar is included. *Texts*: John A. Sheard, *The Words We Use*.

203. Masterpieces of Western Literature — H. S. Whittier

Lect.: 3 hrs.

Prerequisite: English 100. A class of intensive reading in translations of selected major works from western literature designed to lead to an understanding of the continuity of that literature, *Basic Texts*: *Bible Selections* (Houghton Mifflin); *Metamorphoses*, Ovid (U. of Indiana Press); Dante's *Inferno* (Mentor); *Crime and Punishment* (Dell). Additional texts to be announced. Interested students should consult the instructor in the Spring or during registration.

204. The European Novel. (1969-70) — S. Mendel

Lect.: 2 hrs.

Prerequisite: English 100. A study of representative novels of the last two hundred years in translation. *Texts*: Goethe, *The Sorrows of young Werther* (Signet); Constant, *Adolphe* (Signet); *Stendahl, Scarlet and Black* (Penguin); Turgenev, *Fathers and Sons* (Signet); Flaubert, *Madam Bovary* (Norton); Dostoyevsky, *Crime and Punishment* (Penguin); Tolstoy, *Anna Karenina* (Signet); Gide, *The Immoralist* (Vintage); Mann, *The Magic Mountain* (Penguin); Kafka, *The Trial* (Modern Library); Koestler, *Darkness at Noon* (Signet); Sartre, *Nausea* (New Directions).

205. Victorian Literature — C. L. Bennet

Lect.: 2 hrs.

Prerequisite: English 100. A study of prose and poetry of the period. Carlyle, Newman, Ruskin, Arnold, Dickens, Thackeray, Tennyson, Browning.

206. American Literature of the Nineteenth Century.

Lect.: 3 hrs.

Prerequisite: English 100. This is a survey of American literature through selected major works by Poe, Hawthorne, Melville, Thoreau, Twain, James, Whitman, Dickinson, Crane. Summer reading is advisable. Interested students should obtain reading lists from the instructor in the Spring. *Texts*: To be announced.

207. Canadian Literature — M. G. Parks

Lect.: 2 hrs.

Prerequisite: English 100. A survey of English-Canadian literature with emphasis on poetry and fiction from the 1920's to the present. Among the poets represented are Isabella Crawford, C. G. D. Roberts, Bliss Carman, Archibald Lampman, D. C. Scott, E. J. Pratt, F. R. Scott, A. J. M. Smith, Earle Birney, A. M. Klein, and P. K. Page. The following prose works are studied: T. C. Haliburton, *The Clockmaker* (1st series); Stephen Leacock, *Sunshine Sketches of a Little Town, Arcadian Adventures with the Idle Rich;* F. P. Grove, *Fruits of the Earth;* Hugh MacLellan, *Barometer Rising* and one other novel; Robertson Davies, *Leaven of Malice;* Morley Callaghan, *Such is My Beloved;* Ernest Buckler, *The Mountain and the Valley*. Some changes and additions may be made. Summer reading of the novels is advisable. *Texts*: Klinck and Watters, *Canadian Anthology;* novels in the New Canadian Library series.

208. The English Novel to 1900 — D. P. Varma

Lect.: 2 hrs.

Prerequisite: English 100. A survey of the English novel, primarily to study the evolution of fiction and its chief landmarks during the eighteenth and nineteenth centuries: Antecedents and formative influences of fiction; chief works of eighteenth century novelists; efflorescence and disintegration of Gothic Romance; making of the Historical Novel; representative works of Victorian fiction.
Texts: Defoe, *Moll Flanders*; Richardson, *Clarissa*; Fielding, *Tom Jones*; Goldsmith, *Vicar of Wakefield*; Radcliffe, *Mysteries of Udolpho;* M. G. Lewis, *The Monk;* Mary Shelley, *Frankenstein;* Scott, *Kenilworth;* Jane Austen, *Emma;* George Eliot, *Silas Marner;* E. Bronte, *Wuthering Heights;* Dickens, *David Copperfield;* Thackeray, *Vanity Fair;* Hardy, *Tess of the D'Urbervilles*.

209. Twentieth-Century Fiction

Lect.: 2 hrs.

Prerequisite: English 100. A study of selected novels, novelettes and short stories of the twentieth century: Conrad, *Lord Jim;* James, *Daisy Miller* and *Turn of the Screw;* Lawrence, *Sons and Lovers;*

Joyce, *Portrait of the Artist;* Woolf, *Mrs. Dalloway;* Forster, *Passage to India;* Huxley, *Antic Hay;* Cary, *Horse's Mouth, Herself Surprised* and *To be a Pilgrim;* Golding, *Lord of the Flies;* Faulkner, *The Sound and the Fury;* Steinbeck, *The Grapes of Wrath;* Hemingway, *The Sun Also Rises,* and *The Old Man and the Sea.*

210. Modern Poetry — R. J. Smith

Lect.: 2 hrs.

Prerequisite: English 100. A study of poetry by representative authors, especially Hopkins, Yeats, Pound, Eliot, Auden and Thomas.

213. American Literature of the Twentieth Century. — R. S. Hafter

Lect.: 2 hrs.

Prerequisite: English 100. A study of representative poetry, drama, and prose. Some of the authors represented will be Hemingway. Faulkner, Frost, Anderson, Fitzgerald, Salinger, W. C. Williams, Eliot, O'Neill, Tennessee Williams, Arthur Miller. *Texts*: To be announced.

Classes for Honour Degrees

250. Bibliography. — R. L. Raymond

Lect.: 1 hr. per week for first term.

This is a non-credit but compulsory class for all students in the Honour course.

251. Sixteenth-Century Non-Dramatic — R. L. Raymond

Lect.: 2 hrs.

Prerequisite: English 100. A study of representative works of More, Erasmus, Cavendish, Wyatt, Surrey, Elyot, Ascham, Hooker, Sidney, Marlowe, Shakespeare, Daniel, Drayton, Lyly, Deloney, Greene, and Nashe, with special emphasis on the poetry of Spenser. *Texts*: More, *Utopia* (Yale); *The Essential Erasmus* (Mentor); *Two Early Tudor Lives* (Yale); Ashley and Moseley, *Elizabethan Fiction;* Spenser, *The Shepherd's Calendar and other Poems* (Everyman) and *The Faerie Queene,* Vol. I (Everyman); Rollins and Baker, *The Renaissance in England.*

252. Elizabethan and Jacobean Drama — S. E. Sprott

Lect.: 2 hrs.

Prerequisite: English 100. A study of representative plays of Lyly, Kyd, Marlowe, Peele, Greene, Dekker, Heywood, Jonson, Beaumont and Fletcher, Middleton, Massinger, and Ford; also a study of about a dozen of Shakespeare's plays. *Texts*: *Elizabethan and Stuart Plays,* ed. Baskerville, Heltzel, Nethercot; T. M. Parrott and R. H. Ball, *A Short View of Elizabethan Drama;* Shakespeare's *Complete Works,* ed. G. L. Kittredge, or Hardin Craig. Summer reading is advisable, for which direction should be obtained from the Department.

253. Old English — R. M. Dawson

Lect.: 3 hrs.

Prerequisite: English 100. For Honour and Graduate students, and others by special permission. Students intending to take this class should arrange for preparatory reading during the summer.

254. Restoration and Early Eighteenth-Century Literature. — A. R. Bevan

Lect.: 2 hrs.

Prerequisite: English 100. A study of English Literature from 1660 to 1740, including Restoration Drama, and selections from the writings of Dryden, Rochester, Pepys, Bunyan, Butler, Addison and Steele, Pope, Swift, Gay, and Defoe.
Texts: To be announced.

351. Middle English — A. G. Cannon

Lect.: 3 hrs.

Prerequisite: English 100. An introduction to literary traditions, 1100-1500, with close textual study of selected works. *Texts*: *Chaucer,* ed. Robinson; *Mediaeval English,* ed. Kaiser.

352. Seventeenth-Century Non-Dramatic — S. A. Cowan

Lect.: 2 hrs.

Prerequisite: English 100. A study of representative works of Bacon, Donne, Jonson, Herbert, Crashaw, Vaughan, Marvell, Cowley, Burton, Browne, and Taylor, with special emphasis on the poetry of Milton. *Texts*: Hughes (ed), *John Milton: Complete Poems and Prose;* Witherspoon and Warnke (eds.), *Seventeenth-Century Prose and Poetry.*

353. Eighteenth-Century Literature from 1740-1800. — H. D. Sproule

Lect.: 2 hrs.

Prerequisite: English 100. A study of the representative works of the period, including selections from Gray, Thomson, the Wartons, Cowper, Collins, Crabbe, Shenstone, Burns, Blake, Boswell and Johnson, Goldsmith, Sheridan and the Eighteenth-century novelists.
Texts: To be announced.

451. Nineteenth-Century Poetry A. J. Hartley, M. M. Ross

Lect.: 3 hrs.

Prerequisite: English 100. The purpose of this class is to study selected poems by the major nineteenth-century English poets: Wordsworth, Coleridge, Keats, Shelley, Byron, Arnold, Tennyson, and Browning. *Texts*: To be announced.

452. Nineteenth-Century Prose. C. J. Myers

Lect.: 2 hrs.

Prerequisite: English 100. A study of representative writers of the period, with emphasis on the history of ideas. *Texts*: Bentham and Mill, *The Utilitarians* (Dolphin); Mill, *On Bentham and Coleridge* (Harper); Dickens, *Hard Times* (Rinehart); Burke, *Reflections on the Revolution in France* (Dolphin); Coleridge, *Biographia Literaria* (Everyman); Carlyle, *Sartor Resartus* (Everyman), *Past and Present* (Everyman); Newman, *Apologia pro vita sua* (Houghton Mifflin); Eliot, *Middlemarch* (Houghton Mifflin); Ruskin, *Selections and Essays* (Scribner).

453. Twentieth-Century Literature J. Fraser

Lect.: 3 hrs.

Prerequisite: English 100. A seminar for senior students. A study of representative works of Hopkins, Conrad, Yeats, Forster, Joyce, Pound, Lawrence, Eliot, and Woolf. Summer reading is advisable.

454/513. Literary Criticism A. L. Wheeler

Lect.: Hours to be arranged.

For senior honour and graduate students. A study of the history, theory, and practice of literary criticism from Aristotle to the present. *Texts*: To be announced.

Graduate Studies

The Department offers graduate classes leading to the degrees of M.A. and Ph.D. Details relating to admission, scholarships and fellowships, requirements for the degree, classes of instruction, etc., can be found under *Faculty of Graduate Studies* in Dalhousie Calendar.

Key to Class Numbers: English

New	Old	New	Old	New	Old
1	1	206	8	351	3
100	2	207	10	352	23
201	13	208	16	353	15
202	—	209	21	451	4
203	30	210	11	452	22
204	33	211	9	453	32
205	5	212	18	454/513	12
		213	—		
		250	—		
		251	14		
		252	7		
		253	6		
		254	—		

ENGLISH: DRAMA DIVISION

Assistant Professors - - - - A. R. Andrews, L. H. Lawrence, R. G. Merritt

The Drama Division aims at studying plays in performance, since it is only in performance that a play is fully realized. The history of drama and theatre is studied so that the student may gain an understanding of differing theatrical conventions and possibilities. Other classes study in depth various components of the theatrical experience and the particular contributions made to it by the designer, the director, the actor, the playwright and the critic and theorist. Practical work plays a considerable part in the work of all classes, and the Division also produces plays under faculty and student direction throughout the academic year.

B.A. Degree with Honours in Drama and Theatre.

All students intending to enter this programme must consult the Drama and Theatre Division of the Department of English.

YEAR I

1. English 100.
2. Foreign language class (Group A); one of French, German, Greek, Latin, Russian, or Spanish 100.
3. Social Science class (Group C); one of Economics, Political Science, Psychology, or Sociology 100.
4. Drama 100.
5. (a) Students with science matriculation: a class in Classics, History or Philosophy;
   (b) Students without science Matriculation: a science class from group D.

YEAR II
6. Drama 250: The History of the Theatre from its Origins to the Renaissance.
7. Drama 270: Design in the Theatre.
8. A second class from Group B.
9. A second class from Group C.
10. A class in the Minor.

YEAR III
11. Drama 350: The History of the Western Theatre from the Renaissance to the Rise of Realism.
12. Drama 370: Theories of Play Production.
13. Drama 380: The Art and Craft of Acting.
14. A class in the Minor.
15. A class in Art History.

YEAR IV
16. Drama 450: The Modern Theatre.
17. Drama 470: Special Topics.
18. Drama 480: Theories and Techniques of Playwriting.
19. Drama 490: Dramatic Criticism and the Aesthetics of the Theatre.
20. Elective.

100. Introduction to Theatre.

Lect.: 3 hrs. Lab.: 3 hrs.

A study of theatre as distinct from other forms of art. Exploration of theatrical relationships. The actor and the audience; the actor and the playwright; the actor and the actor: the role of the playwright and the structure of the play; the designers; the director.

250. The History of the Theatre from its Origins to the Renaissance.

Lect.: 3 hrs.; Lab.: 1 hr.

The history of the primitive and ritual theatre. The theatre in the Far East. The theatre of Greese and Rome. The theatre of Europe to 1500. An examination of the nature of original conditions of performance. Discussion of contemporary significance of plays studied.
Prerequisite: Drama 100 or consent of instructor.

350. The History of the Theatre from the Rennaissance to the Nineteenth-Century.

Lect.: 3 hrs.; Lab.: 1 hr.

The theatre from the Renaissance to Nineteenth Century. Particular attention will be paid to the theatre in Europe and North America.
Prerequisite: Drama 100 or consent of instructor.

450. The Modern Theatre.

Lect.: 3 hrs.; Lab.: 1 hr.

The development of the theatre in Europe and North America since 1850. An examination of conditions of performance.
Prerequisite: Drama 100 or consent of instructor.

270. Design in the Theatre.

Lect.: 3 hrs.; Lab. 3 hrs.

The basic elements of design and their application to the theatre. The history of stage design; stage mechanics; lighting; costume; materials; properties, and furniture. *Texts*: To be announced.
Prerequisite: Drama 100 or consent of instructor.

370. Theories of Play Production.

Lect.: 3 hrs. Lab. 3 hrs.

The evolution of the director as a creative artist. A consideration of different directorial principles. A study of theories of production.
Prerequisite: Drama 100 or consent of instructor.

380. The Art and Craft of Acting.

Lect.: 3 hrs.; Lab.: 3 hrs.

A study of styles of acting for different forms: comic and tragic, from the Greek era to the present. Styles of acting for contemporary forms.
Texts: To be announced.
Prerequisite: Drama 100 or consent of instructor.

470. Special Topics.

Lect.: 3 hrs.
Individual study and research under the advice of the department.
Prerequisite: Consent of instructor.

480. Theories and Techniques of Playwrighting.

Lect.: 3 hrs.; Lab.: 1 Hr. (Offered for first time in 1969-70)

The playwright's use of his sources and resources. His motives for writing. Examination of the structure of a play. Analysis of the elements of a play.
Texts: To be announced.

490. Dramatic Theory and the Aesthetics of the Theatre.

Lect.: 3 hrs.

A study of standard works of dramatic criticism from Aristotle to Artaud. Attempts to define theatrical forms.

Prerequisite: Consent of instructor.

499. Play Production and Creative Dramatics in Elementary and Secondary Schools.

Key to Class Numbers: Drama

Drama	English
100	110
250	202
270	—
350	211
370	—
380	—
450	212
470	—
480	—
490	—
499	

GEOLOGY

Professors.....C. G. I. Friedlaender (Head of Dept.), H. B. S. Cooke, G. C. Milligan
Associate Professors.....R. A. Gees, M. J. Keen (Geophysics)
Assistant Professors.....F. Medioli, P. E. Schenk
Special Lecturers.....J. F. Jones, C. H. King, H. H. Majmundar, B. D. Loncarevic, D. H. Loring, J. I. Marlowe, B. R. Pelletier

Students who intend to study for a degree in Geology should consult with the Head of the Department and other staff members before registration.

Those who intend to make their career in Geology, or, who intend to undertake graduate studies in Geology, should consider taking an Honour course.

The tables show programmes suggested:

1. For a General degree (Table 1)
2. For an Honour degree

(a) Major programmes (Table 2)
(b) Combined programmes (Table 3)

Honour students may be required to submit a short thesis by the end of their last year. They will also be required to obtain field experience satisfactory to the Department.

TABLE 1

General Degree

FIRST YEAR	Geology 100 Language 100 English 100 (or elective) Mathematics 100 Physics 110 or Biology 100 or Chemistry 101
SECOND YEAR	Geology 201 Geology 202 Elective (or English 100 if not already taken) Physics 110 or Biology 100 or Chemistry 101 or Mathematics 200 Physics 200 or Biology 201 or Chemistry 210

	1	2
THIRD YEAR	Geology 301 Geology 302 Geology 303 Physics 220 or Biology 201 or Chemistry 210 Elective	Geology 301 Geology 302 Geology 304 Engineering 200 Elective

TABLE 2

Honours (Major)

	I Economic Geology	II Geophysics	III Geochemistry	IV Biological & Stratigraphic
FIRST YEAR	Geology 100 Language 100 English 100 (or elective) Mathematics 100			
	Physics 110	Physics 110	Chemistry 101	Biology 100
SECOND YEAR	Geology 201 Geology 202 Elective (or English 100 if not already taken)			
	Chemistry 101 Mathematics 200	Physics 220 Mathematics 200	Chemistry 210 Physics 110 or Biology 100	Biology 201 Chemistry 101 or Physics 110 or Mathematics 200
THIRD YEAR	Geology 301 Geology 302 Elective			
	Geology 304 Engineering 200	Geology 405 Physics 230 or Mathematics 300 or 227 or 206	Geology 305 Chemistry 230	Geology 303 Biology 321
FOURTH YEAR	Geology 401 or 406 Geology 403 Geology 404 Engineering 210, 211 Chemistry 210	Geology 303 Geology 304 Geology 451 or 401 Geology 452 Mathematics 200 or 227 or 206, or Physics 230	Geology 303 Geology 304 Geology 401 Geology 454 Physics 220 or Biology 201	Geology 304 Geology 401 Geology 455 Geology 457 or 506 Chem. 210 or Phys. 220 or Math. 200, 227 or 206

TABLE 3

Honours (Combined)

	I with Physics	II with Chemistry	III with Biology
FIRST YEAR	Mathematics 100 Language 100 English 100 or Elective Geology 100		
	Physics 110	Chemistry 101	Biology 100
SECOND YEAR	Geology 201 Geology 202 Elective (or English 100 if not already taken)		
	Physics 220 Mathematics 200	Chemistry 210 Mathematics 200, 220 or 228	Biology 201 Chemistry 101 or Physics 110 or Mathematics 200
THIRD YEAR	Geology 301 Elective		
	Physics 230 Physics 330 or 335 Geology 303	Chemistry 230 Chemistry 320 Geology 304	Biology 321 Biology 323 Geology 302
FOURTH YEAR	Physics 310 Mathematics 200 or 227 or 206 Geology 305 Geology 401 or Geology 405 Geology elective	Chemistry 410 Physics 110 or Biology 100 Geology 454 Geology 305 Geology elective	Biology Elective Chemistry or Physics 220 or Mathematics 200 or 227 or 206 Geology 401 Geology 455 Geology elective

Classes Offered

100. Introduction to Geology G. C. Milligan, P. E. Schenk

Lect.: 3 hrs.; Lab.: 3 hrs.

Introductory survey of main fields of Geology and their relation to one another. Intended for those who are not pursuing Geology as a career, as well as those who are preparing for specialized classes. Emphasizes the geological events and processes evident in the world about us. There is no prescribed text. Readings are assigned from suitable references in the departmental library.

101. Introduction to Geology. G. C. Milligan

A class designed for students not planning a career in Geology or Engineering. Presents the same basic material as Geology 100, but with less detail. The emphasis is upon the major concepts of geology and upon their relevance to the general scholar.

201. Elements of Optical Mineralogy and Petrography C. G. I. Friedlaender

Lect.: 2 hrs.; lab.: 3 hrs.
Aspects of determination with the mineralogical microscope.

202. Introduction to Invertebrate Palaeontology. F. Medioli

Major groups of fossil invertebrate organisms of particular geological interest; their ecology and stratigraphic distribution.

203. Concepts of Geology Staff

Lect.: 2 hrs.

An outline of the concepts basic to current geological ideas and the inter-relationships between them.

301. Petrology of Igneous, Sedimentary and Metamorphic Rocks C. G. I. Friedlaender, P. E. Schenk

Lect.: 2 hrs.; lab.: 3 hrs.

Descriptive petrography and elements of interpretative petrology.

302. Stratigraphy and Historical Geology P. E. Schenk

Lect.: 2 hrs.; lab.: 3 hrs.

Interpretation of depositional environment through geologic time from the study of the lithology, distribution, correlation, paleoecology, and lateral and vertical relationships of stratified rock.

303. Structural Geology G. C. Milligan

Lect.: 3 hrs.; lab.: 3 hrs.

Study of the geometrical aspects of geological structures, including the elements of descriptive geometry. Primary and secondary structures in igneous and sedimentary rocks.

304. Introduction to Ore Deposits. (1969-70) G. C. Milligan

Lect.: 3 hrs.

Case histories of selected mines and districts illustrating the types in a classification of ore-deposits and the factors controlling ore deposition.

305. Crystallography C. G. I. Friedlaender

Lect.: 2 hrs.; lab.: 3 hrs.

Introduction to geometrical and physical crystallography.

401. Sedimentation and Sedimentary Petrology R. A. Gees

Lect.: 2 hrs.; lab.: 3 hrs.

Sedimentary processes and sedimentary rocks, with special reference to marine conditions and the ocean floor.

403. Advanced Structural Geology (1967-68) G. C. Milligan

Lect.: 3 hrs.

Prerequisite: Geology 100, 201, 303. A seminar which includes discussion of major structural problems such as orogeny, isostasy, geosynclinical development granitization, etc. Exercises in interpretation of geological maps are also assigned.

404. Ore Deposits. Advanced Class (1968-69) G. C. Milligan

Hours to be arranged.

Prerequisites: Geology 100, 201, 303, 304 (Chemistry 330 is not a prerequisite but it is strongly recommended as preparation.) Controlling factors in deposition of ores, as illustrated by selected districts and mines. Includes exercises in structural problems in mining, and in sampling and valuation. Laboratory work in ore microscopy.

405. Introduction to Earth Physics M. J. Keen, B. D. Loncarevic

Lect.: 3hrs.; lab.: 3 hrs.

Prerequisites: Permission of the instructor. Practical exercises may be assigned. The origin, age and constitution of the Earth; the physical properties of rocks and minerals, and the application of geophysics to geological problems.

451/501. Advanced Petrology (1969-70)
C. G. I. Friedlaender

Hours to be arranged.
Universal Stage Methods; Study of Petrofabrics; Modal Analysis.

452/502. Advanced Earth Physics
M. J. Keen

Hours to be arranged.
Consideration of some of the applications of physics to the study of the earth.

453/503. Groundwater Geology
J. F. Jones

Hours to be arranged.
Concepts on the occurrence, movement and distribution of groundwater in earth materials.

454/504. Geochemistry (1968-69)
D. H. Loring, H. H. Majmunder

Hours to be arranged.
Abundance and distribution of elements in the lithosphere, and special discussion of the preponderant elements and their nuclides.

455/505. Advanced Historical Geology (1969-70)
P. E. Schenk

Lectures and seminars. Hours to be arranged.
Prerequisite: Geology 302. The sedimentary record of the North American continent.

456/506. Introduction to Microneontology
F. Medioli

Major groups of recent marine micro-organisms of particular geological interest.

457/507. Pleistocene Geology (1968-69)
H. B. S. Cooke

Seminars: 2 - 3 hours weekly.
Consideration is given to the nature of snow and ice; movement in glaciers and ice caps; glacial erosion and deposition; glacial stratigraphy, correlation and dating methods; sea-level fluctuations; climate changes evidenced in non-glaciated regions; theories of ice ages.

458/508. Advanced Marine Geology
R. A. Gees

Hours to be arranged.
Review of recent developments in marine geology.

459/509. Instrumental Methods in Crystal Chemistry (1969-70)
H. H. Majmunder, D. H. Loring

Theory and practice in X-ray emission and optical emission spectroscopy.

Geology Seminar. Presentation of papers by guest speakers, members of the staff, and senior students.

Spring Course in Field Geology. In co-operation with Mount Allison, St. Francis Xavier, St. Mary's, and Acadia Universities, a field course of approximately two weeks' duration is conducted at Crystal Cliffs, N. S. This course is held immedatiely following the conclusion of Spring examinations. It is compulsory for students specializing in Geology, after their third year. A fee of $50 for full board is payable with the second instalment of University fees.

Graduate Studies

Graduate studies leading to the degrees of M.Sc. and Ph.D. can be taken in different fields of Geology, including Mineralogy. See *Faculty of Graduate Studies* in Dalhousie Calendar.

Key to Class Numbers: Geology

New	Old	New	Old	New	Old
100	1	401	13	455/505	23
201	—	403	7	456/506	—
202	16	404	6	457/507	19
203	—	405	12	458/508	
301	3	406	11	459/509	—
302	17	451/501	15	520	10
303	—	452/502	—	521	22
304	4	453/503	21	522	20
305	2	454/504	9	523	8
101	—				

GERMAN

Assistant Professors.....Detlev Steffen (Acting Head of Dept)
Friedrich Gaede, Auguste Roulston

Lecturers.....Klaus Fricke, Gerta Josenhans

The Department of German studies the history of German literature and thought within the context of the European tradition. A sound acquaintenance with the language will enable the student to do advanced studies in a field of his interest. A Language Laboratory is at the disposal of the students. In elementary classes laboratory work is compulsory. In advanced classes the attendance of special oral classes may replace laboratory work. Students who have completed junior or senior matriculation in German are advised to consult the department before registration.

Requirements for Honour Degree
Major Programme

YEAR 1 — German 100; two classes from Classics 100, History 100, Philosophy 100; a Social Science; a Natural Science (if not passed in Senior Matriculation; otherwise English 100).

YEAR II — German 200, 202, 251; one class from Classics 100, History 100, Philosophy 100; English 100 (if not taken in the first year; otherwise an elective).

YEAR III — German 301, 303; one class from German 302, 351, 352, 353; a class in the minor subject; second Social Science.

YEAR IV — German 400; German 401 or 402; one class from German 401, 402, 451, 452; one class in the minor subject; an elective.

Modern Languages
Combined Honour Programme

(With German the first language, the second modern language (ML2) may be French, Russian, or Spanish.

YEAR 1 — German 100; a class in ML2; one class from Classics 100, History 100, Philosophy 100; a Social Science; a Natural Science (if not passed in Senior Matriculation; otherwise a second class from Classics 100, History 100, Philosophy 100).

YEAR II — German 200; German 202 or 251; one class in ML2, English 100; one class from Classics 100, History 100, Philosophy 100.

YEAR III — German 303; one class from German 301, 302, 352, 353; two classes in ML2; a second Social Science.

YEAR IV — German 400; German 401 or 402; one class from German 401, 402, 451, 353; one class in ML2. an elective.

German and English
Combined Honour Programme

This course is arranged so that, by the choice of a seventh class in Year II, the emphasis is placed on either one of the Honour subjects.

YEAR I — German 100; English 100; a class from Classics 100, History 100, Philosophy 100; a Social Science; a Natural Science (if not passed in Senior Matriculation; otherwise a second class from Classics 100, History 100, Philosophy 100).

YEAR II — German 200; German 202 or 251 *or* English 251 or 253; English 252; a second class from Classics 100, History 100, Philosophy 100 (if not already taken); otherwise History 203 or 204 *or* Philosophy 230 or 235; a second Social Science.

YEAR III — German 301, 303; English 353, 451; an elective.

YEAR IV — German 400; one class from German 353, 401, 402, 451; English 453 or 209 or 210 or 212; English 454 or 351 or 201; an elective.

German and Greek
Combined Honour Programme

YEAR 1 — German 100; Greek 100; Classics 100; a Social Science 100, a Natural Science (if not passed in Senior Matriculation; otherwise Philosophy 100).

YEAR II — German 200; German 202 or 251; Greek 200; Philosophy 100 or 235; English 100.

YEAR III — German 303; German 352 or 353; Greek 300; Philosophy 235 or 240; an elective (History 100 if possible).

YEAR IV — German 400; German 402 or 451 or 452; Greek 302; Classics 450 or a further class in Greek poetry; a second social science.

Classes Offered

100. Complete First Class in German.
F. Gaede, G. Josenhans, A. Roulston

Lect.: 3 hrs. (6-7 sections)

Text: *German For Beginners* (Cunz, Groenke, Vail; 2nd ed.)

200. Advanced Language Class

K. Fricke, G. Josenhans

Lect.: 3 hrs. (3 sections).

Prerequisite: German 100 or equivalent. The objectives of this class are a thorough review of grammar and to develop facility in reading, writing and speaking the language. Attention is placed on the literary qualities of the reading selections studied.
Text: Cochran, *A Practical German Review Grammar*, (2nd ed.).

201. Scientific German

A. Roulston

Lect. 3 hrs. (1-2 sections).

Prerequisite: German 100 or equivalent reading knowledge. Study of grammar and reading of scientific texts. The class will enable Science, Pre-medical, Pre-dentistry, and Engineering students to use German scientific publications. The class will not be counted as a credit towards an Arts degree.

202. Exercises in Translation and Composition (1968-69)

Lect.: 2 hrs.

English texts from various periods and of different nature will be translated into German. These translations will lead to the discussion of specific difficulties of grammar and composition.

221/251. German Civilization (1968-69)

Lect.: 2 hrs. K. Fricke, F. Gaede, D. Steffen

In these lectures the course of Germany will be examined; literary, artistic, and philosophical aspects will be represented in the context of their concrete historical and social appearance. Texts will be prepared by the department.

300. Introduction to the Study of German Literature (1968-69)

D. Steffen

Lect.: 2 hrs.

A study of Poetry, Drama, and Fiction of the various periods of German Literature since the sixteenth century. Special emphasis will be laid on basic questions of literary criticism.

301. The Baroque Age (1969-70)

Lect.: 2 hrs. F. Gaede

A study of the representative writers of the seventeenth century, the era of the Reformation and Counter-Reformation, the Thirty Years' War, and the destruction of Germany. The class will concentrate on the poetry of Gryphius and the mystics, the martyrdrama of Gryphius and Lohenstein, and the tradition of the picaresque story.

302. The Age of Enlightenment

Lect.: 2 hrs.

A study of the revival of German culture in the Age of Enlightenment (Leibniz, Baumgarten, Klopstock, Lessiny, Wieland).

303. The Period of Transition: Goethe and His Time. Part I (1968-69)

Lect.: 2 hrs. D. Steffen

From Herder to the death of Schiller, 1760-1805. A study of the writings of Hamann, Herder, Goethe, Schiller and others.

351. Composition in German (1968-69)

N.N.

Seminar: 2 hrs.

Exercises in free composition paying attention to various literary forms, styles and idiomatic expressions.

352. German Philosophy: Aesthetic Theories

Seminar: 2 hrs.

A study of Winckelmann, Herder, Kant, Schiller, Holderlin, Schelling and Hegel. Special emphasis will be laid on the understanding and interpretation of the Greek culture.

353. Kleist and Holderlin

Seminar: 2 hrs.

A study of their writings.

400. The Period of Transition: Goethe and His Time. Part II (1969-70)

Seminar: 2 hrs. D. Steffen

A study of the works of the later Goethe, of Holderlin, Kleist, and of German romanticism.

401. Literature and Society in the Nineteenth Century (1968-69)

Seminar: 2 hrs. K. Fricke

A study of German literature in the "Age of Realism". A play by G. Buchner (*Woyzeck*), the poetry of Morike and Heinrich Heine, and narrative prose by Stifter, Keller, Fontane, and Raabe will be studied.

402. Modern German Literature (1968-69)

Lect.: 2 hrs. F. Gaede

A study of the trends in modern German literature. Hauptmann, Hofmannsthal, Rilke, George, the Expressionists, Mann, Kafka, Brecht.

451. Faust

Seminar: 2 hrs.

452. German Philosophy: Hegel's Phaenomenologie des Geists (1968-69)

Seminar: 2 hrs. D. Steffen

Graduate Studies

The Department offers a graduate programme leading to the M.A. degree. Details of the M.A. programme are given under *Faculty of Graduate Studies* in Dalhousie Calendar.

Key to Class Numbers: German

New	Old	New	Old	New	Old
100	11/12	301	31	400	34
200	13	302	32	401	36
201	14(17*)	303	33	402	37
202	—	351	—	451	41
251	—	352	35	452	—
300	21	353	—		

*Misprint in 1965-66 Calendar.

HEBREW

Special Lecturer.....J. B. Hardie

The classes are held at Pine Hill Divinity Hall, Franklyn Drive.

Classes Offered

101. Introductory Hebrew

Lect.: 3 hrs.

Hebrew grammar and passages for easy reading.

202. Intermediate Hebrew

Lect.: 2 hrs.

Advanced grammar and syntax and historical reading.

303. Advanced Hebrew

Lect.: 2 hrs.

Seminar class.

HISTORY

Professors.....P. B. Waite (Head of Dept.), G. E. Wilson G. R. MacLean, J. E. Flint

Associate Professors.....P. Burroughs, C. B. Fergusson H. S. Granter, R. M. Haines, T. K. Hareven

Assistant Professors.....R. P. Bonine, D. H. Crook, D. A. Muise, L. D. Stokes

Lecturer.....J. Fingard

Special Lecturers.....*J. M. Beck, D. W. Stairs*

Classes in the History Department are set out as follows:

100 Introductory Classes.
200 Survey lecture classes.
300 Lecture classes with classroom discussion and short papers.
400/500 Seminars based on the presentation and criticism of research papers.
600 Directed reading and research classes for individual graduate students under supervision.

Classes are offered in European, British, British Imperial, African, Canadian, and American History, in the periods: ancient*, medieval, early mondern and colonial, modern.

For the general B.A. degree with a major in History, students elect any four classes after History 100, other than seminar classes.

For the B.A. Honour degree in History, students elect nine classes after History 100. The B.A. Honours in History affords considerable flexibility and scope in choosing a programme of study and yet provides for concentration.

Students may choose from several programmes:

European: a selection of classes in Medieval, Early Modern, and Modern European history with emphasis, if desired, on the national history of an European country.

North America: a concentration of classes in the history of Colonial North America and in Canadian and United States national history.

British and Imperial: a concentration of classes in the history of England and of the British Empire and Commonwealth.

General: a wide selection of classes from North American, British and Imperial, and Medieval and Modern history.

Combined Programmes: with other departments, e.g. History and English, for which the course of study will be arranged in consultation with each department.

*Any class in Ancient History (see Classics) may be offered for credit as a History class but no more than two may be so counted.

All programmes include related studies in language, literature, philosophy, economics and political science.

Detailed information is given in the Department's pamphlet: *Honours in History*. Any student contemplating B.A. Honours in History should consult the Department before initial registration, but in any case should register for History100, a language, English 100 Political Science 100, together with Economics 100, if the Group D requirement has been met.

Classes Offered

100. European History and Civilization, 400-1945. D. H. Crook, P. B. Waite

Lect.: 3 hrs. (2 sections)

A general survey of the politics and social history of Europe from the fall of the Roman Empire to the Second World War. Specific outside reading is required. *Texts*s Brinton, Christopher and Wolff, *Civilization in the West*; Hammond, *Historical Atlas*; selected paperbacks.

200. The Middle Ages R. M. Haines

Lect.: 2 hrs.
Prerequisite: History 100.
Concerns itself with the evolution of a distinctive society between the fifth-century barbarian invasions and the High Middle Ages. A connective outline of political and social development is allied to a more detailed analysis of such topics as Feudalism, Monasticism, the Crusades, the Papacy, the Empire, and Universities. There is no specific texts: selective reading will be suggested for individual themes. Students should read beforehand: Henri Pirenne,*A History of Europe From the Invasions to the XVIth Century*; and W. C. Bark, *Origins of the Medieval World*.

201. History of Europe, 1300-1555. R. M. Haines

Lect.: 2 hrs.
Prerequisite: History 100.
The principal themes will be the society of the later Middle Ages in its economic, political and ecclesiastical aspects, the Renaissance, and the Protestant and Catholic Reformations. Students should read in advance: E. P. Cheyney, *The Dawn of a New Era, 1250-1450*, and J. Huizinga,*The Waning of the Middle Ages.*

203. History of Europe, 1715-1815 G. E. Wilson

Lect.: 2 hrs.
Prerequisite: History 100. The chief subjects for study will be the French Revolution and the career of Napoleon. If possible, students should read a narrative account of the period before taking the class. For this purpose the following books are recommended: J.M. Thompson, *The French Revolution* and either A. Fournier, *Napoleon I* or J. H. Rose, *The Life of Napoleon I.*

204. History of Europe, 1814-1914 R. P. Bonine

Lect.: 3 hrs.
Prerequisite: History 100. An analysis of the period in terms of the development of ideologies.

205. History of Europe in the Twentieth Century L. D. Stokes

Lect.: 2 hrs.
Prerequisite: History 100. A survey which includes the two world wars, political developments within the major powers, international relations between the wars, the conflict of ideologies and the Cold War in Europe. Substantial outside reading in addition to the text is a requirement. *Text*: H. Stuart Hughes, *Contemporary Europe, a History*, (2nd ed.)

206. History of Russia and the Soviet Union R. P. Bonine

Lect.: 3 hrs.
Prerequisite: History 100. A survey from the ninth century to the present.

210. History of England to 1714. (1969-70) H. S. Granter

Lect.: 3 hrs.
Prerequisite: History 100. Aims to describe the foundations of society and government in England after the Germanic settlement and its evolution up to the end of the Stuart era.

211. History of England since 1714.
Lect.: 3 hrs. H. S. Granter
Prerequisite: History 100. The theme of the class will be the development of modern industrial England and the adaptation of its earlier institutions to a modern society. Emphasis will be given to the nineteenth century.

213. History of the British Empire and Commonwealth. P. Burroughs

Prerequisite: History 100. A survey of the growth of the British Empire with emphasis on the economic and constitutional aspects of British colonial policy and practice, and on the development of the Commonwealth.

220. History of Canada D. A. Muise

Lect.: 3 hrs.
Prerequisite: History 100. A general survey of Canadian social, political and economic development from earliest times to the present. Some themes to be followed include: the evolution of French society in North America; the emergence of political regionalism in the late eighteenth and nineteenth centuries; Confederation and the growth of federal-provincial relations; and the evolution of modern political parties.

229. History of North America in the Colonial Period.

Lect.: 2 hrs. To be announced

Prerequisite: History 100. An introduction to the History of Canada and the United States up to 1791. Emphasis will be placed on the evolution and interaction of the British and French Empires in North America. Some themes to be followed include: the concept of mercantilism; government and society in French Canada; the rise of New England; and the struggle for the continent.

230. American History. D. H. Crook

Lect: 2 hrs.

Prerequisite: History 100. A general survey of the American's history from discovery and foundation to the present.

300. The Medieval Church. R. M. Haines

Lect.: 2 hrs.

Prerequisite: History 200 or 201.
A survey of the Church and its institutions from St. Benedict to the Conciliar Movement. Against this background special emphasis will be given to such themes as the growth of papal government, monasticism, canon law, education, the inquisition, ecclesiastical organization and administration. Students should read in advance: J. W. Rand, *A History of the Early Church to A.D. 500*, and the compánion volume, M. Deanesley, *A History of the Medieval Church.*

307. History of Modern Germany. L. D. Stokes

Lect.: 3 hrs.

Prerequisite: History 100 and one additional course in history.
An examination of the principal developments in the history of Germany during the 19th and 20th centuries, with the emphasis upon the period since 1870. Extensive reading in addition to the text is required. Papers will be prepared and discussed, along with reading, in the tutorial meetings. *Text*: K. S. Pinson, *Modern Germany: Its History and Civilization* (revised ed., with K. Epstein, 1966).

309. Economic Development in a Historical Perspective (=1Economics 312). J. P. Beauroy

314. England under the Tudors and Stuarts 1485-1714 H. S. Granter

Lect.: 2 hrs.

Prerequisite: Two classes in History. An examination of the Tudor and Stuart revolutions in church, state, and society which established modern English polity before the Industrial Revolution of the late eighteenth and nineteenth centuries.

320. Church and State in Canada (1969-70). J. Fingard

322. Canadian Economic History (= Economics 302). N. H. Morse

327. The History of Nova Scotia. (1969-70) D. A. Muise

Lect.: 2 hrs.
Prerequisite:History 220 or permission of the instructor.
A survey of the evolution of Nova Scotia as a political, economic, social and cultural unit from earliest beginnings to the present. Students will be expectd to prepare and present papers using original sources.

331. American Society and Culture. T. K. Hareven

Lect.: 2 hrs.
Prerequisite: History 230.
Major aspects of American society and thought: their relationship to economic and political developments and their expression in art, literature and religion.

340. History of Africa. J. E. Flint

Lect.: 2 hrs.

Prerequisite: History 100. The first term will be devoted to the period before 1400, with emphasis on the emergence of the Negro race, the development of Negro agriculture and metal technology, and the creation of differing societies, states and empires, with consideration of Christian and Islamic influences. The second term will emphasise the effects of contact with Europe, the slave trade, the Islamic revolutions, the colonial period and the rise of nationalism. Recommended introductory reading: R. Oliver and J. D. Fage, *A Short History of Africa* (Penguin Books) and J. E. Flint, *Nigeria and Ghana* (Spectrum Books).

400/500. A History of Historical Writing and the Philosophy of History. T. K. Hareven

A seminar class for Honour and Graduate students.

Special emphasis will be placed on the variety of historical expression, the nature of historical causation, moral judgments in history; and the relationship of history to the social sciences. Students will have an opportunity to apply these problems to their fields of interest.

405/505. The Weimar Republic and Hitler's Germany.

Seminar: 2 hrs. L. D. Stokes

Prerequisite: Permission of the Instructor.
An intensive study of the history of Germany between 1918 and 1945. Papers will be prepared for presentation and discussion in class. A reading knowledge of German is highly desirable, but not essential. A preparatory reading list should be obtained from the instructor.

406/506. History of Russia Since 1790. R. P. Bonine

Prerequisite: History 206 or permission of the instructor. A seminar in Russian political thought and action: Slavophilism and Panslavism, Populism and Nihilism, Marxism.

414/514. Britain and the Empire, 1783-1855. (1969-70) P. Burroughs

A seminar class on the development of British Colonial policy and practice in the period between American independence and the grant of responsible government, the various movements for administrative colonial reform, and the attitudes of Englishmen to the expanding Empire.

417/517. England in the Nineteenth Century. H. S. Granter

A seminar class for Honours and Graduate students.

418/518. The Age of "Imperialism", 1870-1914. J. E. Flint

A seminar class for graduate students. A consideration of the themes and problems of "imperialism"; its economic background, political, and international aspects; its ideology. Selected studies of individual "imperialists" will be undertaken by students, as well as case studies of particular areas. A reading guide will be available from the Department of History.

420/520. History of Canada, 1837-1896. P. B. Waite

Prerequisite: History 220.

A seminar for Honour and Graduate students. Other students may be admitted at the discretion of the instructor. Students will have opportunity for some training in the use of original records.

421/521. History of Canada, 1896-1967. D. A. Muise

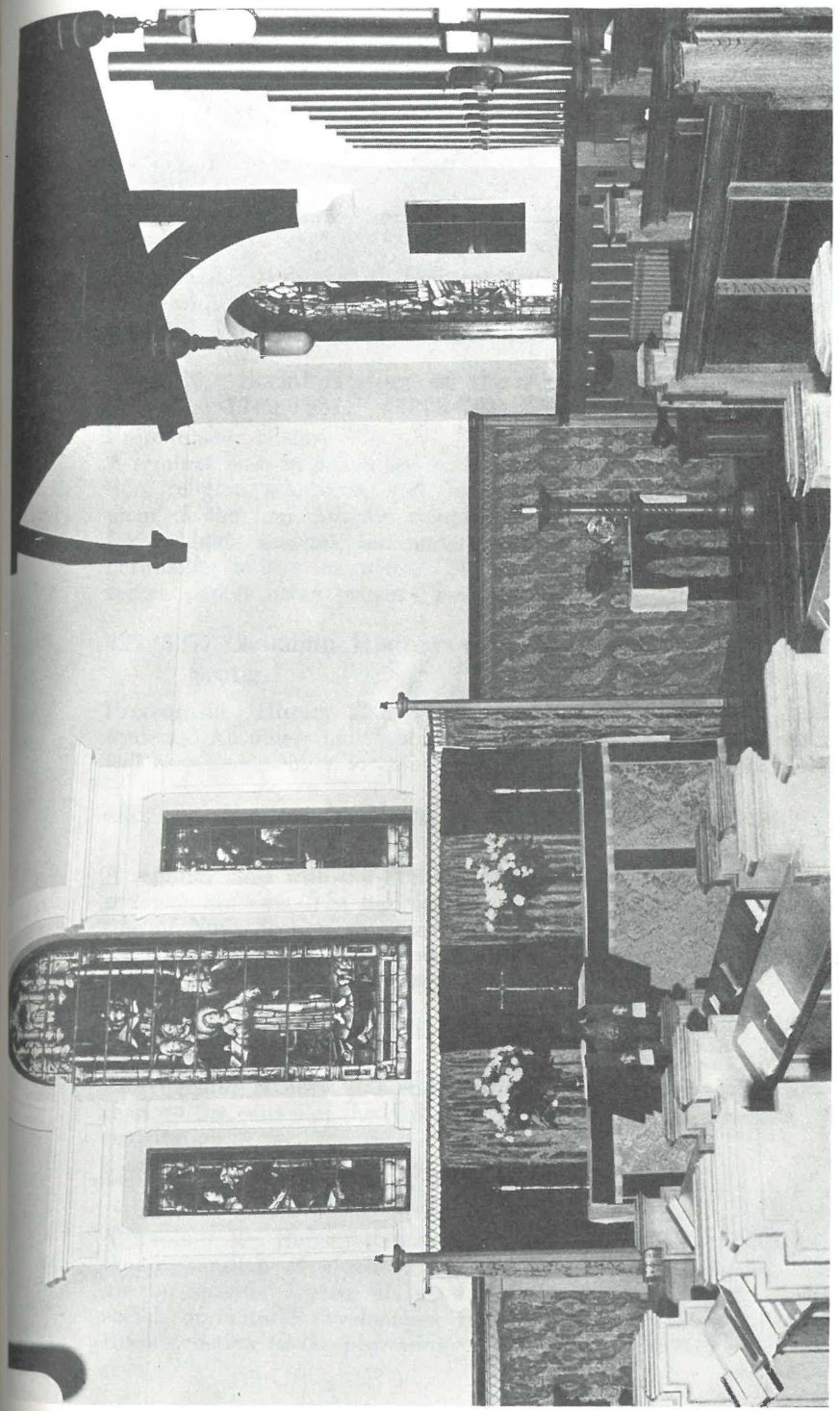
Prerequisite: History 220.

A seminar for Honour and Graduate students. Other students may be admitted at the discretion of the instructor. Some themes to be followed include: the growth of modern political parties; Canadian-American relations; Federal-Provincial affairs; social and economic developments. Students will be expected to prepare and present papers based on research in primary documents.

422/522. History of Canadian External Relations. D. W. Stairs

Seminar: 2 hrs.

A seminar class on the development of Canadian foreign and defence policy designed primarily for graduate students in history and political science. Participants will be expected to prepare research papers based for the most part upon documentary and other primary sources, and



KING'S CHAPEL

The window is in memory of Dr. C. E. Willetts, former President; the pavement lights in memory of Canon W. S. H. Morris, D.D., and the organ in memory of the Founder of the College, Bishop Chas. Inglis, first overseas Bishop of the Church of England.

434/534. The United States, 1916 to the Present.

T. K. Haraven

Open to Honour and Graduate studnts; others at the discretion of the instructor. A seminar on political, social, economic and intellectual developments in twentieth century America. Emphasis on the role of the city and on reform movements. Discussions of major interpretations and on research papers in original sources.

Graduate Studies

An M.A. and Ph.D. programme in History are offered. See *Faculty of Graduate Studies in Dalhousie calendar.*

Key to Class Numbers: History

New	Old	New	Old	New	Old
100	1			417/517	17
200	7			418/518	—
201	14	240	—	420/520	27
		300	—	421/521	—
203	5	307	—	422/522	—
204	4	309	—	424/524	—
205	19	314	26	426/526	—
206	13	320	—	427/527	10
210	3	322	—	428/528	31
211	6	327	—	431/531	18
213	20	331	—	433/533	12
220	8	340	29	434/534	25
229	—			500	—
230	11	400/500	—		
		405/505	21		
		406/506	28		
		414/514	—		

MATHEMATICS

Professors.....A. J. Tingley (Head of Dept.), J. G. Adshead, M. Edelstein

Associate Professors.....J. R. Baines, E. Blum M. J. L. Kirby, J. Lions, A. C. Thompson

Assistant Professors.....C. Atherton, H. Brunner, E. L. Heighton, P. Kall, G. Pederzoli, K. V. Menon, E. B. Mercer (Part-time)

Students who wish to take Honours in Mathematics will not be able to complete their courses in the usual four years if they do not have Senior Matriculation Mathematics, unless they take a "make up" class during the Summer immediately preceding or following their first year at the University. Such students should consult the Head of the Department when accepted. Other students interested in an Honour degree should consult the Head of the Department before the end of the first year.

Honours in Mathematics
Major Programme B.A.

The following programme will normally be followed by students who plan to take a B.A. with Honours in Mathematics. Adjustments which do not conflict with the general regulations may be made.

YEAR I — Mathematics 100, English 100, one class from Group A, one class from Group C, and one class from Group D in addition to Mathematics 100.

YEAR II — Mathematics 200, Mathematics 203, one class from Group B, one from Group C, and one other class.

YEAR III and YEAR IV — Seven classes in Mathematics including Mathematics 300 and Mathematics 303 of which at least four will be numbered 300 or above and at least two 400 or above, together with three additional classes which conform with the general regulations.

Major Programme B.Sc.

The following programme will normally be followed by students who plan to take a B.Sc. with Honours in Mathematics. Adjustments which do not conflict with the general regulations may be made.

YEAR I — Mathematics 100, Physics 110, English 100, a modern language (usually French, German, or Russian), a class from Group C.

YEAR II — Mathematics 200, Mathematics 203, a class in Physics, two classes from Group A, B and C (a second class in the language taken in Year I is strongly recommended).

YEAR III and YEAR IV — Seven classes in Mathematics including Mathematics 300 and Mathematics 303 of which at least four will be numbered 300 or above and at least two 400 or above, together with three additional classes which conform with the general regulations.

Combined Honour Programme

Students interested in taking Honours in Mathematics and another subject as a combined programme should consult the Head of the Department, through whom a suitable course of study can be arranged.

A combined Honour programme may be appropriate for many students. Students contemplating a combined Honours course in Mathematics and another subject should, however, bear in mind that the work in either subject would probably be insufficient for admission to a regular graduate programme. A qualifying year would usually be necessary.

Classes Offered

Alterations may be made in the list below at the beginning of the academic year. Students are asked to check, at the time of registration, with notices on the department and University bulletin boards.

001 Mathematical Analysis. E. B. Mercer

Lect.: 3 hrs.
Prerequisite: Junior Matriculation, Algebra and Geometry. This class is only for students registered before 1966. Algebra, including coordinates, graphs, logarithms, the binominal theorem, matrices and determinants, plane trigonometry, including the addition theorems and theoretical solution of triangles. Introduction to analytic geometry.

100 Calculus, With Analytic Geometry.

Lect.: 3 hrs. J. G. Adshead and others
Prerequisite: Senior Matriculation, Mathematics, including Algebra, Analytic Geometry and Trigonometry. Review of function and analytic geometry of two dimensions. Limits. Derivatives and Integrals. Convergence of infinite series. Analytic geometry of three dimensions.

Intermediate Classes

200. Advanced Calculus. K. V. Menon

Lect.: 3 hrs.
Prerequisite: Mathematics 100. The real and complex number systems. Infinite series. Partial derivatives and applications. Further work on integration (line, multiple, surface, and contour integrals). Analytic function theory. Differential equations.

203. Linear Algebra.

Lect.: 3 hrs.
Prerequisite: Mathematics 100. Algebra of matrices. Abstract vector spaces Linear equations. Linear transformations. Representation of linear transformations by matrices. Normal forms for matrices, including Jordan normal form. Determinates. Quadratic forms. Applications.

205. Projective Geometry. J. G. Adshead

Lect.: 3 hrs.
Prerequisite: Mathematics 100. The study of invariants under the group of linear transformations in the plane. Projective properties of lines and conics. Special subgroups leading to affine geometry and the metric geometries obtained by means of the absolute conic.

206. Probability and Mathematical Statistics

Lect.: 3 hrs.
Prerequisite: Mathematics 100. Elementary probability theory will be introduced and numerous applications considered. Topics in mathematical statistics will include measures of central tendency and dispersion, significance tests, confidence intervals, analysis of variance, correlation, etc.

220. Applied Mathematics. E. Blum

Lect.: 3 hrs.
Prerequisite: Registration in Mathematics 200. This class introduces students of Physics, Engineering and Mathematics to those fields of Mathematics which are connected with practical problems. The class includes the topics Vector Analysis, Matrices and Determinants, Fourier Series, Laplace Transforms, Orthogonal Functions and Complex Analytic Functions.

227. Numerical Methods and Fortran Programming. J. R. Baines

Lect.: 3 hrs.
Prerequisite: Mathematics 100. Fortran programming applied to practical computing methods. Numerical differentiation, integration, interpolation, solution of algebraic equations. Linear systems and differential equations. *Text*: McCracken and Dorn, *Numerical Methods and Fortran Programming.*

228. Applied Mathematics for Engineers I. J. R. Baines

Lect.: 3 hrs.
Prerequisite: Mathematics 100. Vector algebra and calculus, including vector operators. Multiple and line integrals. Introductory complex variables. Differential equations. This class is designed with applications specifically in mind. It is intended for engineering students who do not take Mathematics 200 and 220.

235. Foundations of Mathematical Astronomy. (Not offered in 1968-69) E. Blum

Lect.: 3 hrs.
Prerequisite: Mathematics 100, which, with the consent of the instructor, may be taken simultaneously. A mathematical treatment of the foundations of Astronomy. Diurnal motion, horizontal and equatorial coordinates, mean time, parallax, eclipses, problems in connection with the stars.

240. Introduction to Computer Science. J. Lions

Lect.: 3 hrs.

Prerequisite: English 100, Mathematics 100. An introductory class on the efficient use of digital computers.

(a) Characteristics of procedure-oriented languages. Formulation of problems in form suitable for compilation and execution using COBOL and FORTRAN.

(b) Description of digital computers. The general structure of computers, machine instructions, and the representation of information.

(c) Introduction to algorithms. The intuitive notion of an algorithm and its representation in narrative form by use of flow charts.

300. Introductory Analysis. M. Edelstein

Lect.: 3 hrs.

Prerequisite Mathematics 200. Number systems, metric spaces and elementary point-set topology, sequences, continuity, differentiation and integration. Holomorphic functions, contour integrals, power series and residues.

303. Modern Algebra. K. V. Menon

Lect.: 3 hrs.

Finite groups, homomorphisms, composition series, Abelian groups, algebraic fields, extension field, root fields of polynominals, the Galois group, Galois theory of equations.

304. Foundations of Analysis. A. C. Thompson

Lect.: 2 hrs.

Prerequisite: Mathematics 200. Finite and infinite sets; cardinal and ordinal numbers; transfinite arithmetic; axioms of choice and its equivalents; topological structure of the real line; metric spaces.

305. Differential Geometry and Tensor Analysis. (Not offered in 1968-69) J. G. Adshead

Lect.: 3 hrs.

Classical theory of curves and surfaces in three dimensions, leading to the finding of curvature and geodesics as dependent only on the surface metric. Surfaces of constant curvature and the derivation of the geometry and trigonometry of the plane, the sphere and the pseudosphere. Tensors, including vectors, and their application to classical differential geometry.

306. Probability. (Not offered in 1968-69) A. J. Tingley

Lect.: 2 hrs.

Topics covered will include axiomatic probability, Markov chains, probability distributions. Various distribution functions will be derived.

312. Differential Equations. E. Blum

Lect.: 2 hrs.

This class will discuss basic methods in solving differential equations, such as substitutions, operators, transforms, solution by series. The part ordinary differential equations includes the topics Leplace Transforms and solution by series, Bessel functions and Legendre polynomials. The part Partial Differential Equations includes solution of problems by Fouriers method.

320. Numerical Analysis. H. Brunner

Lect.: 3 hrs.

Prerequisite: Mathematics 200 and consent of instructor. Among topics to be discussed will be, interpolation, quadrature, approximation of functions and non-linear algebraic equations. Numerical solution of differential equations and problems in linear algebra will be introduced. Desk calculating machines will be available for problem solving and students will be encouraged to utilize the automatic digital computer.

328. Applied Mathematics for Engineers II. H. Brunner

Lect.: 3 hrs.

Prerequisite: Mathematics 228. An introduction to computing and numerical methods, probability, matrix theory, transform methods and partial differential equations. This class is designed as a complement to Mathematics 228.

330. Linear and Integer Programming with Applications M. J. L. Kirby

Lect.: 2 hrs.

Prerequisite:Mathematics 200, 203 and consent of the instructor. The development of the simplex algorithm for the optimization of a linear function subject to linear constraints. Theory and computational aspects of the simplex and dual methods. Special topics include Sensitivity Analysis, Game Theory, and Decomposition. Applications include transportation models and network models. Algorithms for integer programming problems. Applications to problems of finding economic optima in industrial operations will be stressed. Specific topics will includ applications to production scheduling and sequencing, capital budgeting decisions, allocation of resources, and optimization in economics at the levels of the firm and the economy. *Recommended Bookss* Hadley: *Linear Programming* and Dantzig; *Linear Programming and Extensions.*

401. Measure Theory and Integration.

Lect.: 2 hrs.

Prerequisite: Mathematics 300, Constructive and axiomatic set theory; measureable functions; Lebesgue and Daniell integrals; convergence theorems; Fubinis theorem; Radon-Nikodym Theorem; Haar measure.

402. Theory of Functions of a Complex Variable.

Lect.: 2 hrs.

Complex plane, elementary functions, conformal mappings, power series, Laurent series, Cauchy's integral theorem, calculus of residues, Riemann Mapping theorem, entire functions, harmonic and sub-harmonic functions.

403. Advanced Modern Algebra. K. V. Menon

Lect.: 2 hrs.

Prerequisite: Mathematics 303. This class will take up topics in Modern Algebra beyond the level of Mathematics 303.

406. Estimation and Testing.

Lect.: 2 hrs.

Prerequisite: Mathematics 200, 204, 206. Estimation: Methods of estimation. Maximum likelihood estimation. Asymptotic properties of estimators. Minimal and complete sufficient statistics. Rao-Blackwell and Blackwell-Lehmann-Scheffe theorems. Pitman's-Koopman's theorem on exponential family. Fisher's information measure. Multiparameter estimation. Minimax and Bayes' estimation. Confidence intervals. Non-parametric estimation.

Testing: Neyman-Pearson lemma on unbiased best critical regions and its generalizations. UMP and locally UMP tests. Composite hypothesis. Construction of similar regions. Likelihood ratio tests. Pitman's ARE. Short and shortest unbiased critical regions Bayesian testing of hypothesis. Nonparametric testing.

408. Applied Stochastic Processes. (Not offered in 1968-69)

Lect.: 2 hrs.

Prerequisite: Mathematics 300 and a class in Statistics. Characteristics of a stochastic process. Regular (or second order) stochastic processes. Stochastic differentiation, integration, mean value theorem, Taylor's theorem, etc. Stochastic difference, differential and (convolution type) integral equations. Stationarity properties. Markov chains and continuous and discontinuous Markov processes. Poisson and compound Poisson processes. Sums of independent random variables, random walks and fluctuation theory. Diffusion processes, Chapman-Kolmogorov and Feller-Kolmogorov equations. Brownian motion. Diffusion processes. Renewal theory. Queuing theory: single and multiple channels. *Recommended books*: Prabhu's book on Stochastic Processes, and Queuing theory from Karlin's book on Stochastic Processes.

414. Functional Analysis.

Lect.: 2 hours.

Prerequisite: Mathematics 204, 300, 304. Contraction mapping principle and applications; isometrics; the completion of a metric space. Linear spaces, bases, dimension. Convex sets.

Linear operators and functionals, extensions. Normed linear spaces; continuous linear operators and functionals, the Hahn-Danach Theorem. Separation theorems, Krein-Milman Theorem. Closed-graph and uniform boundedness theorems. Conjugate space, reflexivity, weak topologies. The algebra of continuous linear operators. Spectrum and resolvent. Hilbert space, spectral theory, compact operators.

418. Algebraic Topology.

Lect.: 2 hours.

Prerequisite: Mathematics 303, 420 (can be taken concurrently). Homotopy, the fundamental group. Homology of simplicial complexes; singular homology; theorems of Kelly-Pitcher and Mayer-Victoris; invariance of homology groups; cohomology, dualities.

420. General Topology.

Lect.: 2 hours.

Prerequisite: Mathematics 304. Topological spaces: Relativization, bases, compactness, connectedness. Moore-Smith Convergence: Nets, subnets, and convergence classes. Product and quotient spaces. Embedding and metrization. Compactifications. Uniform spaces and completion problems. Function spaces.

421. Eigenvalue and Boundary Value Problems. J. R. Baines

Lect.: 2 hrs.

Prerequisite: Work in analysis and differential equations beyond Mathematics 200. Eigenvalue problems in the theory of matrices and of difference, differential and integral equoations. In particular, the sets of orthogonal functions generated by Sturn-Louville problem will be treated together with their application to the solution of the partial differential equations of physics.

430. Analysis of Inventory Systems. M. J. L. Kirby (Not offered in 1968-69)

Lect.: 2 hrs.

Prerequisite: Mathematics 200 and 306. First part of class considers steady state inventory systems: deterministic inventory systems, stochastic periodic review systems, and stochatic continuous review systems. Second half of course involves dynamic inventory models. The Arrow-

Harris-Marschak model. Models with varying stochastic demands. Models with time lags. Markov sequential decision processes are also discussed. Other approaches to dynamic inventory problems are included: Use of linear decision rules and linear programming methods. Applications will be stressed, particularly in relation to the theory of production. *Recommended Books*: Naddor, *Inventory Systems;* Hadley and Whiting, *Analysis of Inventory Systems.*

435. Calculus and Variations and the Theory of Optimal Control.

P. Kall

Lect.: 2 hours.

Prerequisite: Work in Analysis and Differential Regulations. Classical theory of the calculus of variations. Theory of fields. Hamilton-Jacobi theory, Generalizations of the fundamental problem to include variations of multiple integrals, the isoperimetric problem, the Lagrange problem. Direct methods are discussed in detail. The maximum principle of the theory of optimal control. Recent developments in control theory. Relations between the Euler equation and the maximum principle, and relations between the maximum principle and the principle of optimality are discussed. Applications of both the calculus of variations and control theory to physical systems and economic systems will be stressed.

Graduate Studies

Students who wish to work towards a Master's degree in Mathematics may do so in Arts and in Science, it being usually necessary to spend two full years after obtaining a B.A. or B.Sc. degree or one year after an Honour Degree. For details of such courses, see *Faculty of Graduate Studies in Dalhousie calendar.*

Key to Class Numbers: Mathematics

New	Old	New	Old	New	Old
001	100	227	—	320	420
100	200	228	328	328	—
106	—	235	—	330	—
118	218	240	—	401	—
200	300	300	—	402	—
203	303	301	401	403	503
204	350	302	402	406	—
205	305	303	403	408	—
206	306	304	—	414	514
208	308	305	405	418	418
220	320	306	406	420	518
		312	412	421	421
		315	450	425	425
				430	—
				435	—

MUSIC

Associate Professor.....D. F. Wilson
Assistant Professor.....V. A. Ellis
Instructor in Voice, Director of the Opera Workshop.....H. B. May
Instructors in Piano, Organ, all orchestral instruments..to be appointed

Special note regarding application, acceptability and auditions: Students contemplating entry to the Bachelor of Music Education course or either of the Bachelor of Arts courses described below must not only be academically admissable, but must also demonstrate having attained sufficient competence in voice, or on instrument, to undertake the instruction offered. When making their original application for admission, such students should request the special, supplementary tpplication form for Music students. This form must be completed and submitted to the Admission Office before the application can be processed. Arrangements for an audition will then be made.

COURSE FOR BACHELOR OF MUSIC EDUCATION

The content of the course for the Bachelor of Music Education degree is set forth on page 58.

Recommended Programme for General B.A.

YEAR I — Music 100; Music 140; Language 100; English 100; a class from the Social Sciences.

YEAR II — Music 210; Music 240; a class from the Humanities; a second class in the Social Sciences; a class in the Natural Sciences (if not required, an elective or a class toward the minor).

YEAR III — Music 310; two classes in Music beyond the 100 level, to be chosen in consultation with the Department; two other classes beyond the 100 level.

Participation in instrumental and choral ensembles will be required of all students.

Honour Programme

YEAR I — Music 100; Music 140; Language 100; English 100; a class from Social Sciences.

YEAR II — Music 200; Music 210; Music 240; History 100; a class in the Natural Sciences (if not required, a second class in the language chosen in Year I).

YEAR III — Music 310; Music 340; a second class in the Social Sciences; a class in a second language or a Humanities; a second class in the language chosen in Year I (if already taken, a class in a language or a Humanities).

YEAR IV Music 410; three other classes in Music at the 400 level; a class chosen from Drama, an additional language or a class beyond the 100 level in the Humanities, to conform with the general regulations of the Honour Programme.

Participation in instrumental and choral ensembles will be required of all students.

Classes Offered

100. History of Music Survey.

Lect.: 3 hrs. Seminar: 1 hr.

An introductory class in the history of music. The styles, musical forms, and composers of each period of musical history are introduced through guided listening to recorded and live performance of music. The development of music is related to concurrent events in political history and the fine arts.

101. History and Appreciation of Music.

Lect.: 3hrs.

Intended primarily for students who have not studied music. The class provides an outline of the whole history of music and a more detailed study of the principal composers and their works from palestrina to Brahms. *Texts*: Miller, *History of Music; Wardian, The Language of Music.*

102. Music in the Twentieth Century.

Lect.: 3 hrs.

Intended primarily for students who have not studied music. This class traces the development of music from the late nineteenth century to the present, with a study of the leading composers of the twentieth century. *Text*: Machlis, *Introduction to Contemporary Music.*

140. Instruments and /or Voice.

200. History of Music.

Lect.: 3 hrs.

Prerequisite: Music 100. A detailed study of the history of music including the study and analysis of works of all periods.

210. Theory of Music.

Lect.: 5 hrs.

The study of harmony, counterpoint, and ear training in an integrated programme. Elementary conducting techniques will be introduced in relationship to rhythmic training, and ear training will include a study of tonic sol-fa. No prerequisite.

240. Major Instrument or Voice.

Prerequisite: Music 140.

245. Secondary Instrument and Voice or Instrument Class.

Prerequisite: Music 140.

310. Theory of Music.

Lect.: 5 hrs.

Prerequisite: Music 210.

330. Elementary and Secondary Music Methods. (1969-70)

Lect.: 3 hrs.

Classroom techniques and materials for the teaching of elementary school music and secondary vocal music.
Open only to students in Music Education.

335. Practise Teaching. (1969-70)

340. Major Instrument. (1969-70)

Prerequisite: Music 240.

345. Second Instrument and String Class. (1969-70)

Prerequisite: Music 245.

410. Theory of Music. (1969-70)

Lect.: 5 hrs.

Prerequisite: Music 310.

420. Orchestration and Conducting. (1970-71)

Lect.: 3 hrs.

The study of the properties of the individual instruments of the orchestra and methods of combining instruments in small combinations and full orchestra, combined with a study of orchestral and choral conducting.
Prerequisite: Music 210.

430. Instrumental Methods and Ensemble. (1970-71)

Lect.: 4 hrs.

Consideration of the problems of teaching instrumental music, band and orchestra administration, rehearsal and conducting techniques, library management, program building, class lessons, marching band. Actual class instruction in the playing of wind and percussion instruments. The students will be expected to compose and arrange music for an elementary instrumental ensemble.
Open only to students in Music Education.

435. Practise Teaching. (1970-71)

440. Major Instrument or Voice. (1970-71)
Prerequisite: Music 340.

445. Secondary Instrument and String Class. (1970-71)
Prerequisite: Music 345.

450. Analysis of Music.

Lect.: 3 hrs.
The study and analysis of representative examples of music of the Baroque, Classical, Romantic, and Modern periods with regard to both form and harmonic and contrapuntal styles. Students will be required to write sample compositions in each of the styles studied.

OCEANOGRAPHY

Although the programme of the Institute of Oceanography is essentially for Graduate Studies, some classes in the field of Oceanography may be taken by senior undergraduates. These classes are listed amongst the offerings by the Biology, Chemistry and Geology departments. Interested students must obtain the permission of the department heads concerned to register for these classes.

PHILOSOPHY

Professors.....F. H. Page (Head of Dept.), D. Braybrooke
Associate Professors.....R. H. Vingoe, I. A. MacLennan
Lecturer.....B. J. Aston
Special Lecturers.....J. A. Doull, R. D. Crouse

The General Course with a Major in Philosophy

There are no special departmental stipulations. It should be noted, however, that for admission to graduate study the minimum requirement is four classes in Philosophy beyond Philosophy 100, including Philosophy 200 and Philosophy 230. All students proposing to take the General Course with a Major in Philosophy should consult Professor I. A. MacLennan.

The Honour Course in Philosophy

Students intending to specialize in Philosophy should take the Honour course. It is the normal preparation for graduate study.

The prerequisite class, Philosophy 100, should be taken in the first year, together with a language (French or German or Latin or Greek), a social science and, unless exempted, English and a class in science or mathematics. If exemptions are permitted Philosophy 200 may be

taken in the first year, in addition to Philosophy 100, and another class in Philosophy substituted in the second year. While normally begun in the second year, the Honour course may be entered in the third year, with the permission of the Department, if a satisfactory grouping of the classes can be arranged. Beyond the work of the first year, the Honour course generally consists of nine classes in Philosophy, two classes in a minor subject approved by the Department, and four elective classes in at least two subjects other than Philosophy. **A suggested order of classes is as follows:**

Year	Philosophy Classes	Ancillary Classes
I	Philosophy 100	four other first-year classes as stated above
II	Philosophy 200; Philosophy 205 or 210; Philosophy 230	minor; elective
III	Philosophy 210 or 205; Philosophy 320*; one other class in Philosophy	minor; elective
IV	Three classes in Philosophy including Philosophy 320* if not already taken.	two electives

NOTE: The effect of the general regulations for the degree of B.A. with Honours is to require the inclusion among the ancillary classes of Classics 100 or History 100, and a class in a second subject in Social Science.

There will be a comprehensive examination at the end of the final year.

Each student's Honour programme will be arranged individually in consultation with the Department and in relation to the student's special interests.

All students wishing to take Honours should consult Professor I. A. MacLennan.

*Philosophy 320 is offered in alternate years. If offered in a student's third year it must be taken then; if not, it is to be deferred until the fourth year, and another class in Philosophy taken in its place in the third year.

Philosophy and Economics Combined Honour Programme

Year	Philosophy	Economics	Other Classes
I	Philosophy 100	Economics 100	a modern language; Political Science 100 or Sociology 100; Mathematics 100
II	Philosophy 200; Philosophy 210	Economics 200; Economics 202	English 100
III & IV	two classes in Philosophy including one of Philosophy 205, 230, 320	three classes in Economics including Economics 300	History 100; two electives
	Philosophy 340 (same class as Economics 407); an advanced class in either Philosophy or Economics		

Philosophy and English Combined Honour Programme

Year	Philosophy	English	Other Classes
I	Philosophy 100	English 100	French or German or Latin or Greek; a social science; a science or Mathematics (or, if exempted, History 100 or Classics 100)
11	Philosophy 200 or 205 or 210	English 252; English 251 or 352	a second subject in social science; a second language class (in the same language as chosen in Year I)
III	a second choice from Philosophy 200, 205, 210; Philosophy 230	English 353; English 251 or 452	History 211 or 204, if History 100 taken in Year I; if not, then History 100
IV	Philosophy 235 or 240; one of Philosophy 315, 320, 325, 330; one other class in Philosophy	one of English 453, 209, 208	One elective chosen from History, Classics, Modern Languages, Art History, Music

Philosophy and Political Science Combined Honour Programme

YEAR I — Philosophy 100; Political Science 100; English; a foreign language; a class in Science or Mathematics.

YEAR II, III and IV — There are two options. In option A, the student takes four or five classes in Philosophy and seven or six in Political Science. In option B, the proportions are reversed.

Option A:

Three classes from Philosophy 200, 205, 210, 230, 320, of which at least one is to be taken in each of Years II and III; and one or two other classes in Philosophy.

Two classes from Political Science 240, 242, 244, 246, 340*; two classes in Political Science not in this group; and two or three classes in Political Science freely chosen.

Option B:

Four classes from Philosophy 200, 205, 210, 230, 320, of which one at least is to be taken in each of Years II and III and three before Year IV; and two or three other classes in Philosophy.

One class from Political Science 240, 242, 244, 246, 340*; two classes in Political Science not in this group; and one or two classes in Political Science freely chosen.

In addition students electing either Option will in the second year take a second subject in the Social Sciences and a second subject in the Humanities; and in each of the third and fourth years, an elective.

*** Philosophy 340, the Seminar in Philosophy, Politics and Economics, is the same as Political Science 349. It may be counted either among the Philosophy classes making up the combined programme, or among the Political Science classes, but not both.**

Philosophy and Psychology Combined Honour Programme

Year	Philosophy	Psychology	Other Classes
I	Philosophy 100	Psychology 100	a foreign language; English 100; a class in Science or Mathematics
II	Philosophy 200; one of Philosophy 205, 210, 230	Psychology 200; Psychology 201	Classics 100 or History 100; OR Economics 100 or Political Science 100 or Sociology 100
III	two of Philosophy 205*, 210*, 230*, 320**; or, if Philosophy 320 is chosen and deferred to Year IV, one of Philosophy 205*, 210*, 230*, and one other class in Philosophy	Psychology 357 one of Psychology 304, 305, 306, 308, 309, 310, 312	Classics 100 or History 100, if not taken in Year II; or Economics 100 or Political Science 100 or Sociology 100, if not taken in Year II
IV	one class in Philosophy which may be Philosophy 320, if Philosophy 320 was not taken in Year III	Psychology 470	two electives
	one other class in Philosophy or Psychology 465		

*If not taken in Year II.
**Philosophy 320 is offered in alternate years.

Philosophy and Sociology Combined Honour Programme

Year	Philosophy	Sociology	Other Classes
I	Philosophy 100	Sociology/Anthropology 100	Foreign Language; History; a class in Science or Mathematics
II	Philosophy 200 Philosophy 230	Sociology 202	English; elective
III	two of Philosophy 205, 210, 230	Sociology 301; Sociology 305	Elective
IV	two classes in Philosophy	two classes of Year III or IV Sociology	Elective

Classes Offered[1]

100. An Introduction to Philosophy — I. A. MacLennan, B. J. Aston

Lect.: 3 hrs. (at least 2 sections)

An introduction to the nature of philosophical problems in general and method in philosophy. The class will provide a short introduction to logic, and a critical examination of the views of Plato on such topics as the nature of the soul; the nature of justice; and the nature and possibility of human knowledge. Time will also be devoted to such questions as the nature of factual knowledge; the possibility of knowledge in general; the nature of scientific or natural law; the nature of truth. The class is not a survey of the history of philosophy.

Texts: Plato, *Republic* (ed. Cornford); Russell, *The Problems of Philosophy*; Russell, *A History of Western Philosophy*.

200. Logic — D.Braybrooke

Lect.: 3 hrs.

This class will be concerned with the formal analysis of deductive reasoning as employed in science, scholarship, law, and everyday life. Argument-forms depending solely on connections between unanalyzed sentences will be studied first; then the class will move on to consider argument-forms that draw as well on the logical force of "all", "some", identity, and definite descriptions. There will be a great deal of practice translating arguments from ordinary language into the symbolism of modern logic and in evaluating by modern techniques the arguments once translated. Enough attention will be given Aristotelian logic to demonstrate the enormously greater range and power of modern logic.

Texts: Kalish and Montague, *Logic: Techniques of Formal Reasoning*, or a comparable book, Bird, *Syllogistic and Its Extensions*.

205. Epistemology — B. J. Aston

Two lectures and a seminar each week.

Prerequisite: Philosophy 100. An investigation of the main problems encountered in analysing human knowledge, and an examination of traditional and contemporary approaches to these problems. *Texts*: Hume, *A Treatise of Human Nature*, Book I; Lewis, *Mind and the World Order;* Strawson, *Individuals*.

210. Ethics — I. A. MacLennan

Lect.: 3 hrs.

Prerequisite: Philosophy 100. The seminar will discuss a number of major works in ethics (listed below). An attempt will be made to

1. Additions or changes may be announced at the beginning of the Session.

expound and relate different, and sometimes conflicting, ethical theories in Western Philosophy. Finally, there will be a brief survey of ethnics since 1900. *Texts*: Aristotle, *Nichomachean Ethics* (tr. Ross); Kant, *Moral Law* (tr. Paton); Mill, *Utilitarianism;* Moore, *Principia Ethica*, Warnock, *Ethics since* 1900.

215. Philosophy and Science.
(1968-69 and alternate years) R. H. Vingoe

Lect.: 2 hrs.

Prerequisite: Philosophy 100 or first-year Science complete. Others may be admitted with the permission of the instructor.
The purpose of this course is to introduce students to philosophy in two ways: primarily, through an examination of scientific method; secondarily, through an account of the influence of various interpretations of scientific method upon the philosophy of religion. *Texts*: Madden, *The Structure of Scientific Thought;* Burtt, *Types of Religious Philosophy*.

220. Philosophy of Religion I.
(1968-69 and alternate years) F. H. Page

Lect.: 2 hrs.

Prerequisite: Philosophy 100. An introduction to the philosophy of religion. The identification and clarification of religious concepts, and the uses of religious language, are first discussed. The theistic arguments and counter-arguments are examined and the epistemological status of divine revelation, religious experience, and religious faith investigated. Other topics include the problem of evil, immortality, the relation of science to religion, and the religious alternatives to theism. *Texts*: Alston, *Religious Belief and Philosophical Thought;* Pike (ed.) *God and Evil;* Hick, *The Philosophy of Religion.*

225. Philosophy of Religion II.
(1969-70 and alternate years) F. H. Page

Lect.: 2 hrs.

Prerequisite: Philosophy 100 or Psychology 100. An introduction to the contemporary psychology of religion. The class begins with an examination of psychological accounts of religion, particularly the Freudian. The psychology of the moral conscience and development of religious forms of behaviour through the life-history of the individual are discussed. Conversion, prayer, ritual, worship and mystical experiences are considered in the light of current theories of learning, motivation and personality. *Texts*: Clark, *The Psychology of Religion;* Freud, *The Future of an Illusion;* Philp, *Freud and Religious Belief;* Allport, *The Individual and his Religion;* Argyle, *Religious Behaviour;* Thouless, *An Introduction to the Psychology of Religion;* James, *The Varieties of Religious Experience.*

230. General History of Philosophy R. H. Vingoe

Lect.: 3 hrs.

Prerequisite: Philosophy 100. The purpose of this class is to help students discover those philosophic traditions which have entered into the moulding of western civilization and still persist in the contemporary world. Since the field of study is large, an attempt will be made to concentrate upon some of the greatest and most influential of western philosophers. *Text*: Jones, *A History of Western Philosophy.*

235. Greek Philosophy from Thales to Aristotle.
R. H. Vingoe

Lect.: 2 hrs.

Prerequisite: Philosophy 100. A selection of texts fundamental to an understanding of the subsequent history of philosophy will be read and discussed. These will include readings from the early Greek philosophers and from Plato and Aristotle. *Texts*: Kirk and Raven, *The Presocratic Philosophers;* Kaufmann, *Philosophic Classics*, vol. I; G. F. Parker, *A Short Account of Greek Philosophy.*

236. Ancient Philosophy from Aristotle to St. Augustine.
R. D. Crouse

Lect.: 2 hrs.

Prerequisite: Philosophy 100. A study of the development of Classical and Patristic thought from Aristotle to St. Augustine, with concern to explore the manner in which the philosophical achievement of ancient Greece came to form,in the thought of the Church Fathers, the intellectual foundation of European culture. Works most closely considered will be Plato's *Timaeus*, parts of Aristotle's*Metaphysics*, parts of Plotinus' *Enneads*, and St. Augustine's *City of God* and *De Trinitate.*

240. History of Medieval Philosophy R. D. Crouse

Lect.: 2 hrs.

Prerequisite: Philosophy 100. A study of the development of philosophy in the formative age of European civilization, with attention to related political, institutional, literary and theological concern. The authors studied most closely will be Boethius, Anselm of Canterbury, Thomas Aquinas, some thirteenth century Augustinians and Averroists, Ockham, and one or more of the Late Medieval Mystics. The class will be conducted partly as a seminar, partly as a course of lectures.

315. Rationalism and Empiricism. R. H. Vingoe
(1967-68 and alternate years)

Lect.: 2 hrs.

Prerequisite: Philosophy 100. The purpose of this class is to acquaint students with some of the dominant themes of early modern western

philosophy. Particular attention will be paid to Locke, Berkeley, Hume, Descartes, Spinoza, and Leibniz. *Texts*: Smith and Grene, *Philosophers Speak for Themselves* (two volumes: *Descartes to Locke* and *Berkeley, Hume, and Kant*).

320. The Philosophy of Kant. I. A. MacLennan
(1968-69 and alternate years)

Seminar: 2 hrs.

Prerequisite: Philosophy 100. A seminar devoted to an intensive study of the *Critique of Pure Reason*. However, other aspects of Kant's philosophy will also be treated, and an attempt will be made to relate his philosophy as a whole to that of his predecessors and contemporaries. Finally, his influence on later philosophers will be considered. *Texts*: Kant, *Critique of Pure Reason* (tr. Norman)Kemp Smith), Strawson, *The Bounds of Sense.*

325. Contemporary Continental Philosophy.
(1969-70 and alternate years) I. A. MacLennan

Seminar: 2 hrs.

Prerequisite: Philosophy 100. This class will begin with a study of works by Kierkegaard and Nietzsche. The development of existentialist philosophy will then be traced to the present day and contrasted with other philosophical traditions. Particular reference will be made to works of Heidegger, Jasper, Sartre, Marcel and Buber.
Texts: Reinhardt, *The Existentialist Revolt;* Nietzsche. *The Birth of Tragedy* and *The Genealogy of Morals;* Kierkegaard, *Fear and Trembling* and *The Sickness unto Death;* Jaspers, *Reason and Existenz;* Sartre,*Existentialism and Humanism* and *The Transcendence of the Ego;* Marcel, *The Philosophy of Existentialism;* Buber, *Eclipse of God;* Urmson, *Philosophical Analysis.*

330. Twentieth Century British Philosophy.
(1969-70 and alternate years) B. J. Aston

Two lectures and a seminar each week.

Prerequisite: Philosophy 100. A survey of the development of British Philosophy from Bradley's idealism to contemporary conceptual analysis. *Texts*: Warnock, *English Philosophy Since* 1900; Urmson, *Philosophical Analysis*; Bradley, *Appearance and Reality*; Russell, *Logic and Knowledge (ed. Marsh)*; Ammerman (ed.) *Classics of Analytic Philosophy*; Wittgenstein, *Tractatus Logico-Philosophicus*; *and Philosophical Investigations*; Austin, *Philosophical Papers.*

335. Philosophical Analysis.
(1968-69 and alternate years) B. J. Aston

Two lectures and a seminar each week.

Prerequisite: Philosophy 100. A large part of the first term will be devoted to an examination of the nature of analysis as a philosophical method. The remainder of the class will be spent studying how this method can be applied to specific philosophical problems chosen from the fields of epistemology and the philosophy of the mind. *Texts*: Flew, *Logic and Language* (first and second series); Ryle: *The Concept of Mind*; Austin, *Philosophical Papers*; Wittgenstein, *Philosophical Investigations*; Feigl and Sellars, *Readings in Philosophical Analysis.*

340. Philosophy, Politics, and Economics D. Braybrooke

Seminar : 2 hrs.

Prerequisite: Philosophy 100. Various topics on which the subjects of philosophy, political science, and economics converge will be investigated, among them: standards for evaluating governments such as natural rights, welfare, majority rule, and efficiency; the concept of rational action; the relationship between action explanations and behaviour explanations in social science; and the uses of social science in making decisions and choosing policies. Readings in such authors as Aristotle, Butler; Hicks, Little, Boulding; Marx, Weber; Herring, Downs, Arrow, Schelling; Popper, Dahl and Lindblom, and Simon.

350. Philosophy of Language. (1968-69)

Seminar: 2 hrs. D. Braybrooke

Prerequisite: Philosophy 100. After considering the difference between animal signal-systems and genuine languages, with their implications as to human rationality, the class will inquire into Wittgenstein's arguments against the possibility of there being a genuine private language. Then the class will move on to study some of the most thorough going of current efforts at producing systematic philosophical accounts of linguistic meaning. Readings will include passages in Lorenz's *King Solomon's Ring;*. Bennett, *Rationality;* passages in Wittgenstein's *Philosophical Investigations;* Ziff, *Semantic Analysis;* Fodor and Katz, *The Philosophy of Language.*

460/560. Contemporary Philosophy of Religion.
F. H. Page

Seminar: 2 hrs.

Graduate Studies

The Department of Philosophy provides opportunities for graduate study leading to the degree of Master of Arts in the History of Philosophy, Metaphysics, Epistemology, the Philosophy of the Mind, Ethics, Semantics and Logic, Philosophical Analysis, existential Philosophy, Political Philosophy, and the Philosophy of Religion. For details see the *Faculty of Graduate Studies* in Dalhousie Calendar.

Key to Class Numbers: Philosophy

New	Old	New	Old	New	Old
100	1	225	22	325	10
200	2	230	—	330	19
205	18	235	5+24	335	—
210	3	236	24	340	17
215	4	240	25	345	15
220	20	315	7+8	350	—
		320	13	460/560	

PHYSICS

Professors.....E. W. Guptill (Head of Dept.), W. J. Archibald, C. K. Hoyt
Associate Professors.....M. G. Calkin, M. H. Jericho, G. F. O. Langstroth, G. T. Meaden
Associate Professors (Oceanography).....M. J. Keen, C. R. Mann
Assistant Professors.....D. J. W. Geldhart, D. Kiang, C.S. Lai, R. H. March, R. Ravindra, B. L. Blackford, A. M. Simpson, C. G. White
Assistant Professor (Oceanography).....R. D. Hyndman
Senior Killam Fellow.....R. Sugano
Post-Doctoral Fellow.....P. S. Naidu
MacGregor Teaching Fellows.....H. M. B. Bird, C. H. Chiu, R. K. Mohn

The following table shows the classes normally taken by an Honour student in Physics. All students who intend to take the Honour course are encouraged to discuss their programme with staff members of the Department and to consult with the Head of the Department at the beginning of the second year.

A combined Honour programme may be very appropriate for many students contemplating a combined Honour course in Physics and another subject. They should, however, bear in mind that the work in either subject would probably be insufficient for admission to a regular graduate programme. A qualifying year would usually be necessary.

<table>
<tr><th>Year</th><th>Arts</th><th>Science</th><th>Mathematics</th><th>Physics</th></tr>
<tr><td>I</td><td>English 100
Language 100</td><td>Chem. 100</td><td>Math. 100</td><td>Phys. 110</td></tr>
<tr><td>II</td><td></td><td>Elective</td><td>2 Math classes</td><td>Phys. 211, 231</td></tr>
<tr><td>III</td><td colspan="2">Elective</td><td>Math class</td><td>Phys. 300 and two other classes</td></tr>
<tr><td>IV</td><td colspan="2">Elective</td><td></td><td>Phys. 400 and three other 400 classes</td></tr>
</table>

Students assisting in the undergraduate laboratories are required to be present for the two weeks preceding the beginning of classes.

Classes Offered

A class whose number is suffixed by one of the letters A, B or C is a half-credit class. See comments on these classes under the heading "Numbering of Classes."

100. General Physics C. G. White

Lect.: 3 hrs.; Lab. 3 hrs.

This is a survey class requiring no previous preparation in physics, and offered primarily for students in Arts, Pre-medicine, Pre-dentistry, and Pharmacy. It will not normally be accepted as a prerequisite to advanced classes in Physics unless exceptional circumstances arise. Topics will include mechanics, heat, light, sound and electricity. *Text*: K. R. Atkins, *Physics*.

110. General Physics. E. W. Guptill

Lect.: 3 hrs. (2 sections); Lab.: 3 hrs.

This is a prerequisite to all subsequent Physics classes. Previous knowledge of Physics is an asset, but is not essential. A class in calculus must be taken concurrently if the student has not previously studied calculus.

211. Mechanics. W. J. Archibald

Lect.: 3 hrs.; Lab.: 3 hrs.

Prerequisite: Physics 110 and Mathematics 100. This is a class in Mechanics from the Berkeley Physics programme. *Text*: Berkeley, *Physics*, Volume 1.

221. Waves and Modern Physics. C. K. Hoyt

Lect.; 3 hrs. Lab. 3 hrs.

Prerequisite: Physics 110, Mathematics 100. A continuation of Physics 100 for other than Honour Physics students.

230. Electric Circuits.

(See Engineering 230 Dalhousie Calendar)

231. Electricity. W. J. Archibald

Lect.; 3 hrs. Lab. 3 hrs.

Prerequisites: Physics 110, 211 and Mathematics 100. This is a class in electricity from the Berkeley Physics programme. It must be taken concurrently with Physics 211. *Text*: Berkeley, *Physics*, Volume 2.

300. Intermediate Physics Laboratory. R. H. March

Lab.: 6 hrs.

Prerequisite: Physics 231 and two additional classes in Physics (which may be taken at the same time). ***Students' attention is drawn to the fact that Physics*** 300 ***and*** 400 ***are laboratory classes which must be taken in conjunction with advanced undergraduate classes in Physics.***

315. Modern Physics. M. H. Jericho

Lect.: 3 hrs.

Selected topics in modern physics such as: relativity;theory of the atom; wave mechanics; nuclear physics; elementary particles; and some topics in solid state physics. *Text*: Livesey, *Atomic and Nuclear Physics.*

320. Thermodynamics.

Lect.: 3 hrs.

Principles of statistical and thermal physics and their application to an ideal gas and solids. *Text*: Reif, *Principles of Statistical and Thermal Physics.*

325. Interpretation of Physics.
(not offered in 1968-69) R. Ravindra

Lect.: 2 hrs.

Prerequisite: Two Physics classes. Such fundamental concepts of Physics as space-time, mass-energy, wave-particle, will be discussed in their historical and contemporary context. Assumptions and limitations of the scientific method will be examined in order to appreciate their contribution in the formation of the modern world-view.

330. Electromagnetic Theory. M. G. Calkin

Lect.: 3 hrs.

Prerequisite: Engineering 230 or Physics 231. Maxwell's equations are derived from the experimental laws of electricity and magnetism. Boundary value problem in static and time-dependent fields are solved. Physical optics is developed from electromagnetic theory. *Texts*: Reitz and Milford, *Foundations of Electro-magnetic Theory.*

335. Electronics. A. Levin

Lect.: 3 hrs.

Prerequisite: Engineering 230 or Physics 231, Mathematics 220 or 228 to be taken concurrently. Non-linear systems. Modulation and demodulation, rectification. Electromechanical analogues. Analogue computation. Servo systems, stability and control criteria. Solid state devices, characteristics, application and computations. Noise and information concepts. Elements of information theory. Filters and transmission lines. Radiation and propagation.

400. Advanced Physics Laboratory. A. Levin, J. Burgess

Lab.: 6 hrs.

Prerequisite: Physics 300.

410. Introduction to Mathematical Physics.

Lect.: 3 hrs.

This class will include topics in special relativity such as: the Lorentz transformation; transformation of Maxwell's equations; relativistic composition of velocities; time dilation; equivalence of mass and energy etc., and in advanced mechanics such topics as: variational principles; Hamilton's principle; the Hamilton equation of motion; canonical transformations; Hamilton-Jacobi's equations etc. *Text*: H. Goldstein, *Classical Mechanics.*

411A. Special Relativity. M. G. Calkin

Lect.: 3 hrs.

Topics discussed include: experimental basis of the Lorentz transformations; relativistic kinematics; space-time; introduction to tensor calculus; relativistic dynamics; relativistic electrodynamics. *Text*: Rindler, *Special Relativity.*

411B. Statistical Mechanics.

Lect.: 3 hrs.

The class covers statistical thermodynamics, basic methods and applications of statistical mechanics, and elementary kinetic theory of transport processes.

415/515. Quantum Physics. C. K. Hoyt

Lect.: 2 hrs.

This class uses Leighton, *Principles of Modern Physics,* as a text. Topics include quantum mechanics; atomic and molecular systems; quantum statistics and the band theory of solids.

422A. Nuclear Physics. D. Kiang

Lect.: 3 hrs.

Prerequisite: Physics 315, and permission from the instructor.
This is an introductory class in Nuclear Physics. Topics discussed include: nucleon-nucleon interactions, nuclear structure, gamma transitions, alpha decay, beta decay, nuclear reactions and elementary particles. *Text*: Enge, *Introduction to Nuclear Physics.*

422B. Introduction to Solid State Physics.

Lect.: 3 hrs. G. F. O. Langstroth

This class is provided to introduce the student to basic ideas relating to the periodic structure of crystalline solids. Topics will include crystal structure and diffraction, phonons and latice vibrations, the free electron Fermi gas and energy bands. Time remaining, if any, will be devoted to selected topics of a more specialized nature. *Text*: Kittell, *Introduction to Solid State Physics,* (3rd ed., John Wiley and Sons, 1966).

433A. Semiconductors. J. Burgess

Lect.: 3 hrs.

A review of the properties and models of electrons and holes. The structure and properties of semiconductor materials, and a comparison with insulators and conductors. A detailed study of the processes of drift, diffusion, generation, and recombination in relation to conductivity and the effects of temperature, and electric and magnetic fields. Doped semiconductors. The properties of PN junction diodes and the effects of an applied voltage. The behaviour and operation of junction transistors. A look at transient behaviour, and its representation by models, in semiconductor diodes and transistors. *Text*: James F. Gibbons, *Semiconductor Electronics.*

433B. Optics. C. K. Hoyt

Lect.: 3 hrs.

Based on Maxwell's equations, theories will be developed, along with their range of applicability, for geometrical optics and for phenomena involving interference, diffraction, polarization, coherence.
Text: Stone, *Radiation and Optics.*

440/540. Waves in Layered Media. R. Ravindra

Lect.: 2 hrs.

Prerequisites: Physics 211, 231 and Mathematics 220. Topics will include propagation of plane and spherical waves in homogeneous and inhomogeneous media, reflections from plane boundries and transition layers, surface waves, and related subjects. *Text*: L. M. Brekhovskikh, *Waves in Layered Media.*

445/545.—Geophysics. M. J. Keen

Lect.: 2 hrs.

Prerequisite: A seminar class concerned with topics of special importance in a study of the earth. These may include among others; earth tides, measurement of gravity at sea, satelites and the earth's gravity field the thermal state of the earth, studies of the upper mantle by surface wave studies, Mid Ocean Ridges and continental drift, detectors in arrays, applications of time series analysis.

Graduate Studies

Courses leading to the advanced degrees of M.Sc. and Ph.D. are also offered by the Department of Physics. For details see *Faculty of Graduate Studies* see Dalhousie Calendar.

Key to class Numbers: Physics

New	Old	New	Old	New	Old
100	10	310	39	415/515	54
		315	—		
		320	—		
110	11	325	—	420/520	47
211	—	330	36	422	—
				422A+B	—
				432A+B	—
220	22	335	38	435/535	48
230	26	340/540	33	440/450	33
231	—	400	40	440/541	43
300	30	410	52	445/545	49
		411A	—		
		411B	—		

POLITICAL SCIENCE

Professors.....J. H. Aitchison (Head of Dept.)
K. A. Heard, J. M. Beck, D. Braybrooke
Associate Professor.....K. A. Heard
Assistant Professors.....D. W. Stairs, A. P. Pross
R. G. Beehler

Students majoring in the general course or taking a major or a combined Honour programme are advised to concentrate in one of the three principal areas of the subject in accordance with the scheme given below. To avoid undue specialization, however, students majoring in the General course are advised to take at least one class outside their principal area. They should also take at least one class at the 300 level.

Students taking a major or combined Honour programme are required to obtain the approval of the Head of the Department or his deputy for their programmes. Those taking a combined Honour programme must take at least one class outside their principal area and at least one class at the 300 level. Those taking a major Honour programme must take at least three classes outside their principal area, two of them in one of the other principal areas and one of them in the second, and must take at least two classes at the 300 level.

With the permission of the professor concerned, classes in political philosophy and international politics may be taken by students who have not taken Political Science 100.

Principal Areas

Political Philosophy	240, 242, 344, 345
Political Institutions and Behaviour	200, 202, 205, 210, 217, 235, 311, 315, 316, 318, 321, 324, 330, 349
International Politics	223, 225, 320, 321, 322, 323, 324

Recommended Programme for General B.A. with Major in Political Science

Year	Political Science	Other Classes
I	100	History 100 or Philosophy 100; English 100; a foreign language; a science or Mathematics.[1]
II	Two classes at the 200 level	Philosophy 100 or History 100; Economics 100 or Sociology 100; an elective
III	three classes at the 200 or 300 level	A class above the 200 level in History, Philosophy, Economics or Sociology, elective

Political Science
Major Honour Programme

Year	Political Science	Other Classes
I	100	Sociology 100 or Economics 100; History 100 or Philosophy 100; a class in science or Mathematics[2]; a foreign language.
II	Two classes at the 200 level	Philosophy 100 or History 100; Economics 100 or Sociology 100 or a class beyond the 100 level in Philosophy, History, Economics or Sociology, English 100.
III	Three classes at the 200 or 300 level	A class in History, or Philosophy or Sociology or Economics; an elective
IV	Four classes at the 200 or 300 level	An elective

1. If required. If not required, another 100 class in Philosophy, Economics or History. In this case another elective may be taken in a later year.
2. If required. If not required, another 100 class in Philosophy, History, Economics or Sociology which would otherwise be taken in a later year. In this case another elective may be taken in a later year.

Political Science and Philosophy—Combined Honour Programme
(with six or seven classes in Political Science)

Year	Political Science	Philosophy	Other Classes
I	100	100	English 100; a foreign language; a class in science or Mathematics[1]
II & III & IV	Two classes from 240, 242, 344, 345 349[2]; two classes not in this group and two or three classes freely chosen	three classes from 200, 205, 210, 320 of which at least one is to be taken in each of Years II and III; one or two other classes	History 100; three electives

See the Philosophy Section for the combined programme with six or seven classes in Philosophy.

Political Science and History—Combined Honour Programme
Such a programme may be arranged on cousultation with the departments.

Political Science and Economics—Combined Honour Programme
(with major concentration in Political Science)

Year	Political Science	Economics	Other Classes
I	100	100	A foreign language; History 100 or Philosophy 100; a class in science or Mathematics[3].
II	Two classes at the 200 or 300 levels	200 and 201	English 100
III & IV	Four classes at the 200 or 300 levels	Two classes at the 300 or 400 levels	One other class from either Political Science or Economics; Philosophy 100 or History 100; two electives.

See the Economics Section for the combined programme with concentration in Economics.

1. If required. If not required, Economics 100 or Sociology 100.
2. Political Science 349, the Seminar in Philosophy, Political and Economics, is the same class as Philosophy 340. It may be counted either among the Philosophy classes making up the combined programme, or among the Political Science classes, but not both.
3. If required. If not required, another 100 class in Philosophy, History, Economics or Sociology which would otherwise be taken in a later year. In this case another elective may be taken in a later year.

Political Science and Sociology Combined Honour Programme

(with major concentration in Political Science)

Year	Political Science	Sociology	Other Classes
I	100	100	A foreign language; History 100 or Philosophy 100; a class in science or Mathematics*
II	Two classes at the 200 level	202 and one other class at the 200 level	English 100
III & IV	Four classes at the 200 or 300 levels	301 and 305 and one other class at the 300 or 400 level	Philosophy 100 or History 100; two electives

See the Sociology Section for the combined programme with concentration in Sociology.

Classes Offered

100. Democratic Government and Politics. (1968-69)

Lec.; 3 hrs. J. M. Beck

The first part of the class examines liberal democratic, fascist, and communist ideals. This is followed by a comparative study of the governmental institutions of Britain, Canada, and the United States under such headings as the evolution of positive government; constitutions and their amendment; and the working of the executive, legislative, and judicial branches; political parties; representation; pressure groups; public opinion; and fundamental civil liberties.

200. Great Britain and the Commonwealth. (1968-69)

Lect.: 3 hrs. K. A. Heard

This class includes: a study of the major factors and stages in the development of the modern Commonwealth with special reference to such questions as the changing role of the Crown, the doctrine of automatic belligerency, the right of secession and the admission of republics as members: a more advanced study of the theory and practice of the British Constitution with special reference to the problem of Cabinet responsibility; an examination of the transferability of the "Westminster model" and a study of the conduct of politics in other countries of the Commonwealth including those of Asia and Africa.

* If required. If not required, another 100 class in Philisophy or History, Economics or Sociology which would otherwise be taken in a later year may be substituted, in which case another elective may be taken in a later year.

202. Canadian Government. (1968-69) A. P. Pross

Lect.: 3 hrs.

A lecture class that will examine the structure and function of Canada's governmental and political institutions in the light of their place in the national power structure. Current policies, relationships and institutions will be discussed in terms of the historical and contemporary pressures that have combined to create them.

205. Theory and Practice of Government in the United States. (1968-69) Instructor to be announced

Lect.: 2 or 3 hrs.

This class considers American Government not only for its own sake, as the government of a great power, but also as the most intensively studied illustration of democratic government. After tracing the political philosophy of the American Revolution and the United States Constitution through the modifications of constitutional development, the class measures that philosophy against the realities of contemporary American politics, where the rivalry of parties and interest groups and the increasing power of the Presidency vis-a-vis Congress seem to signify great departures from the original intentions of the Republic.

210. Comparative Government: The Study of the Governments of the Great Powers including U.S.S.R., France, and Germany. (1968-69) Instructor to be announced

Lect.: 2 or 3 hrs.

Lectures will deal first with some of the general difficulties involved in comparing political systems, and will then go on to discuss the more important political institutions and processes of the U.S.S.R., France and Germany. While the emphasis will be on contemporary conditions, some historical background will be necessary, and an attempt will be made to compare the "totalitarianism" of Nazi Germany with that of the Soviet Union. A text will be assigned but students will be expected to supplement it with outside reading.

217. The Government and Politics of Africa (1968-69)

Lect.: 2 hrs. K. A. Heard

The contemporary significance of politics in Africa; problems of government and politics in a selected number of African states (to be taken from: Nigeria, Ghana, Kenya, Malawi, Zambia, Rhodesia, and the Republic of South Africa, and the Congo); African Socialism; Pan-Americanism, and regional and Pan-African organizations.

223. Techniques of Statecraft and Problems of Order in International Politics. D. W. Stairs
(1968-69)

Lectures will analyze the techniques available to decision-makers in the formulation and execution of foreign policy and will consider some of the moral, political, economic and other limitations upon their use. The difficulties of moderating inter-state conflict will be discussed with special reference to the problems of arms control, collective security, alliance systems, power balancing, and the like. There will be no single text, and students will be expected to read widely from a number of sources.

225. The Current International Milieu. (1968-69)

Lect.: 3 hrs. J. H. Aitchison

Among the topics discussed in this class are: the general structure of power in the world today; the problems of deterrence, of limited war and flexible response; the loosening of both the Soviet and the Western blocs; the Sino-Soviet split; peaceful co-existence between communist and non-communist states; the German problems; integration of Europe; the influence of the Triple-A (Asian, African and Arab) states; international and regional organizations.

One weekly hour out of three is set aside as "Topical Hour" for the discussion of current trends and events. Any student in the University may attend Topical Hour.

235/535. Public Opinion, Group Processes, and Policy Formaction (1969-70). D. Braybrooke

Lect.: 2 hrs.

One branch of this subject, as studied in this class, concerns the leading findings of public opinion research to date and deals with various attempts to construct adequate theories about origins of opinions in group membership and the influence of group opinions in the political process. Another branch involves practical work, in which the class conducts its own surveys of public opinion on various issues. In this work members of the class participate in constructing questionnaires, choosing statistically adequate samples, and calculating the statistical results.

240/540. Political Philosophy from the Greeks to the end of Middle Ages. (1968-69) J. H. Aitchison

Lect.: 2 or 3 hrs.

In the first half of this class the political works of Plato and Aristotle are examined; in the second half special attention is given to the Stoics, Roman Lawyers, Augustine, the Papalists, Dante, the Conciliarists, Aquinas, Occam, and Marsilius.

242/542. Political Philosophy of the Sixteenth, Seventeenth, and Eighteenth Centuries (1967-68)

Lect.: 2 or 3 hrs. J. H. Aitchison

In this course special attention is given to the political thought of Machiavelli, More, Calvin, les Politiques, Bodin, Hooker, the Puritans, Hobbes, Harrington, Locke, Montesquieu, Rousseau, Hume, and Burke.

311/511. Public Administration. (1968-69) A. P. Pross

Lect.: 2 or 3 hrs.

This is an introductory class in problems of public administration. It will commence with a general review of the development of the Canadian public service and will then proceed to a discussion of competing theories of administration. Students will be expected to have some knowledge of Canadian federal and provincial governments.

315/515. The Constitution and Government of Canada. (1968-69) J. M. Beck

Seminar: 2 hrs.

A seminar class in which papers on contemporary problems in Canadian government are prepared and discussed by members of the class. Among the topics to be considered are: the adequacy of the Fulton-Favreau formula for "repatriating" the B.N.A. Act; the retention of the federal power to disallow provincial legislation; the right of the Governor-General to refuse dissolution; the need for a Canadian ombudsman; the adequacy of the Diefenbaker bill of rights; and the approach adopted by the Supreme Court of Canada in its interpretation of the B.N.A. Act since 1949.

Mainly for graduate students; senior undergraduate students with the permission of the professor.

316/516. Politics in Nova Scotia since Confederation (1968-69) (same as History 473/573) J. M. Beck

Seminar: 2 hrs.

A seminar conducted in conjunction with the Department of History. The topic to be discussed will deal with the evolution of Nova Scotian governmental and political institutions, and with the current state of Nova Scotian politics. Permission of the instructors will be required for this class.

Mainly for graduate students; senior undergraduates with the permission of the instructor.

318/518. The Politics of Southern Africa. (1969-70)

Seminar: 2 hrs. K. A. Heard

This class will be primarily directed to the study of policies in the Repubic of South Africa, with comparative references being made to

the situation in Rhodesia and Mozambique respectively. It will include detailed studies of the following general topics: the socio-economic structure of South Africa, the changing pattern of race relations, the structure of government, political parties and political movements with special references to their responses to shifts in the situation, the international involvements in Southern Africa, with reference to Pan-African organizations, the Commonwealth, and the United Nations.

Mainly for graduate students; senior undergraduates with the permission of the instructor.

320/520. The Theory of International Politics. (1969-70)

J. H. Aitchison

Lect.: 2 or 3 hrs.

This class seeks to provide perspectives for viewing the world of international politics that will be as useful twenty years from now as they are today. Unless facts are firmly grasped in a theoretical and conceptual framework, they cannot be understood. The main emphasis is on theories, concepts, approaches, though these are related to the world today.

321/521. The Politics and Administration of International Organizations (1968-69).

D. W. Stairs and A. P. Pross

Lect.: 2 or 3 hrs.

This class is divided into two parts. The first is devoted to a study of the institutions and politics of selected international organizations, including, for example, the United Nations, the E.E.C., the O.A.S. and N.A.T.O. In the second part the United Nations will be examined as an administrative-political structure and the fields of comparative and developmental administration will be discussed.

322/522. History of Canadian External Relations (1968-69) D. W. Stairs

(same as History 422/522)

Seminar: 2 hrs.

A seminar class on the development of Canadian foreign and defence policy designed primarily for graduate students in history and political science. Participants will be expected to prepare research papers based for the most part upon documentary and other primary sources, and particular emphasis will be placed on the years since 1939.

Senior undergraduates with the permission of the instructor.

323/523. Seminar on International Politics. (1969-70)

Seminar: 2 hrs. D. W. Stairs

The topics covered in this seminar will be broadly the same as those covered in Political Science 223.

Mainly for graduate students; senior undergraduates with the permission of the instructor. Undergraduate credit may be obtained for 223 or 323, but not for both.

324/524. The Politics of Development. (1968-69)

D. W. Stairs and K. A. Heard

Lecture and seminar: 2 hrs.

The first part of this class deals with the internal problems and theories of development. It will cover such topics as: concepts of development and underdevelopment; culture patterns in the developing nations; the impact of colonial regimes on political and economic development; industrialization, urbanization and socialization; communication, ideology and national-building; economic problems and policies; the role of the military; stability and instability of political systems.

The second part of the class will be devoted to aspects of the politics of foreign aid. Among the topics to be discussed are: varieties and categories of aid; motivations of donors and recipients; application and utility of "strings"; methods and patterns of distribution. Foreign aid programmes of the U.S.A., the U.K., France, Canada and the U.S.S.R. will be discussed in detail, and a number of case studies will be examined.

330/530. Political Parties. (1969-70) J. M. Beck

Lect.: 2 or 3 hrs.

The first part of this class examines the nature of political parties and the roles which they play in liberal democratic and totalitarian governments. This examination is followed by a study of political parties in Britain, Soviet Russia, the United States, and Canada, with particular emphasis on their evolution, structure and role in the political process.

344/544. Social and Political Theories of the 19th Century (1968-69).

Lect.: 2 hrs. R. G. Beehler

An examination of the writings of certain of the 19th Century philosophers; most especially Bentham and Mill, Saint-Simon, Hegel, Marx, Nietzsche, Comte, Green, and Durkheim. The investigation will be not so much historical as analytical; the aim will be to get clear about the questions with which these theorists were seized, and to see what was adequate in their answers.

345/545. Five Philosophers and Freedom. (1968-69)

Seminar: 2 hrs. R. G. Beehler

What do you want when you want 'freedom'? When is a person 'not free'; and how, where persons are not, is this freedom to be achieved? In the hope of coming nearer an answer to these, and other questions, the seminar will examine closely the writings of Montesquieu, Rous-

seau, Burke, Hegel, and Marx. This must mean to elucidate (and try to suggest what is acceptable in) their theories of human nature, society, moral behaviour, political obligation, justice, economic wants, and social change. Investigations touching the problem of freedom by some contemporary philosophers will be examined.

Mainly for graduates. Senior undergraduates with the permission of the professor.

349/549. Philosophy, Politics, and Economics.
(same as Philosophy 340 and Economics 407)

Seminar: 2 hrs. D. Braybrooke

Various topics on which the subjects of philosophy, political science, and economic coverage will be investigated, among them: standards for evaluating governments such as natural rights, welfare, majority rule, and efficiency; the concept of rational action; the relationship between action explanations and behaviour explanations in social science; and the uses of social science in making decisions and choosing policies. Readings in such authors as Aristotle, Butler; Hicks; Little, Boulding; Marx, Webber; Herring, Downs, Arrow, Schelling; Popper, Dahl and Lindblom, and Simon.

Mainly for graduate students; senior undergraduates with the permission of the instructor.

Graduate Studies

The Department offers a graduate programme leading to the M.A. degree and expects to initiate a Ph.D. Programme in the near future. Details of the M.A. programme are given under *Faculty of Graduate Studies* in the Dalhousie Calendar.

Key to Class Numbers: Political Science

New	Old	New	Old	New	Old
100	1	**223**	—	**318/518**	—
200	2	**225**	9	**320/520**	8
202	—	**230/530**	—	**321/521**	—
205	3	**235/535**	15	**322/522**	—
		240/540	4	**324/524**	—
210	—	**242/542**	5	**330/530**	14
211/511	—	**311/511**	12	**344/544**	11
217	10	**315/515**	7	**345/545**	—
220/520	—	**316/516**	—	**349/549**	17

PSYCHOLOGY

Professors.....P. H. R. James (Head of Dept.), H. D. Beach
Isaak Walton Killaf Research Professor.....N. J. Mackintosh
Associate Professors.....C. J. Brimer, W. K. Caird, J. W. Clark, W. K. Honig, J. A. McNulty, S. Nakajima, R. Ovet

Assistant Professors.....B. S. Clark, P. J. Dunham, B. Earhard, M. Earhard, M. Fearon, H. Hughes, R. Kanungo, B. R. Moore, R. Rudolph, M. G. Strobel, W. T. Woodard
Research Associates.....A. Cameron, D. N. W. Doig, D. Goldstein, R. D. Rudolph

The programme in Experimental Psychology is designed to provide both B.A. and B.Sc. students with a sound knowledge of the scientific aspects of the subject. For this purpose, the Department maintains a well-equipped undergraduate laboratory, with facilities for experimental work with animals, children and adults. The more advanced classes in the programme will, in general, be conducted as seminars, and the prerequisites have been assigned in such a way as to ensure that the student will be able to obtain the maximum advantage from the material presented. It is realized, however, that such rules cannot fit every case, and the Department will be glad to make exceptions for those students who have shown unusual ability in other disciplines.

In general, students who intend either to take Honours or to major in Psychology should follow the programmes outlined below. These programmes have been planned to ensure that all the requirements for the degree will be fulfilled. For various reasons, it may not be possible to take all of the classes listed for a particular year. In such cases, the programme should be arranged to include these classes in other years. Those students entering the university with exemption from Year I English, Mathematics, or Science are advised to take Biology 101 or another class in Mathematics. All students who plan to take Honours or to major in Psychology should consult Dr. Dunham regarding their course of study.

A number of Junior Research Assistants will be available, during both the academic term and the summer vacation, to students who are taking an Honour degree in Psychology. Details of these assistantships, and of the stipends attached to them, may be obtained from Dr. B. Earhard.

Requirements for General Degree

Students enrolled in the General degree programme must take a minimum of *six* classes beyond the introductory level in *both* their major and minor areas. In addition to meeting the university requirements for the general B.A. or B.Sc., students wishing to major in Psychology must take at least the *four* classes beyond Psychology 100 that are listed below.

YEAR I	Psychology 100.
YEAR II	Psychology 200; Psychology 201.
YEAR III	Psychology 304, 305, or 307, Psychology 308, 309, or 312.

Requirements for Honour Degree

B.A. with Honours in Psychology
Major Programme

YEAR I — Psychology 100; English 100; one foreign language; one class in Biology, Chemistry, Geology, Mathematics, or Physics; one class *either in* Classics, History, or Philosophy, *or* one class in Sociology, Economics, or Political Science.

YEAR II — Psychology 304; Psychology 305; Psychology 357; one class in Classics, History, or Philosophy in a subject not taken in Year I; one class in Sociology, Economics, or Political Science if this was not taken in Year I; if a class in Sociology, Economics, or Political Science was taken in Year I, one elective or minor may be chosen.

YEAR III — Psychology 307; *two* of Psychology 308, 309, 312, 356, and 358; if a class in Classics, History, or Philosophy was not taken in Year I, one class is to be chosen in a subject not taken in Year II; if classes in two of Classics, History, or Philosophy have already been taken, one elective or minor may be chosen.

YEAR IV — Psychology 465; Psychology 470; one of Psychology 308, 309, 312, 356, 358, 463, or 464 not already taken; two electives or minors.

B.Sc. with Honours in Psychology
Major Programme

YEAR I — Psychology 100; Biology 101; one foreign language; English 100; Mathematics 100.

YEAR II — Psychology 304; Psychology 305; Psychology 357; one class in Biology beyond the 100 level; one class in Chemistry, Geology, Mathematics, or Physics.

YEAR III — Psychology 307; two of Psychology 308, 309, 312, 356, and 358; two electives or minors.

YEAR IV — Psychology 465; Psychology 470; one of Psychology 308, 309, 312, 356, 358, 463, or 464 not already taken; two electives or minors.

B.A. Psychology-Sociology
Combined Honour Programme

YEAR I — Psychology 100; Sociology 100; one foreign language; English 100; one class in Biology, Chemistry, Geology, Mathematics, or Physics.

YEAR II — Psychology 304; Psychology 305; Sociology 202; Sociology 203 or 204; one class in Classics, History, or Philosophy; one elective.

YEAR III — Psychology 357; Psychology 308; Sociology 305; one class in Classics, History, or Philosophy in a subject not taken in Year II; one elective.

YEAR IV — Psychology 465; Psychology 470; Sociology 450; Sociology 307, 402, 407 or 452; one elective.

B.A. Psychology-Philosophy
Combined Honour Programme

YEAR I — Psychology 100; Philosophy 100; one foreign language; English 100; one class in Biology, Geology, Mathematics, or Physics.

YEAR II — Psychology 304; Psychology 305; Philosophy 200; Philosophy 205 or 210 or 230; one class *either* in Classics or History, *or* one class in Sociology, Economics, or Political Science.

YEAR III — Psychology 357; one of Psychology 308, 309, 310, or 312; two of Philosophy 205, 210, 230, or 320, not already taken in Year II; one class in Classics or History if not taken in Year II, *or* one class in Sociology, Economics or Political Science if not taken in Year II.

Note: If Philosophy 320 is chosen, but must be deferred to Year IV, the student must take one of Philosophy 205, 210, 230, plus one other class in Philosophy.

YEAR IV — Psychology 465; Psychology 470; one advanced Philosophy class; two electives.

B.Sc. Psychology-Biology
Combined Honour Programme

YEAR I — Psychology 100;Biology 101; Mathematics 100 or Chemistry 100; English 100; Language (French or German).

YEAR II — Biology 201; Psychology 304; Biology 202 or Psychology 305; Mathematics 100 or Chemistry 100 (whichever not taken in Year I); one of Classics 100, History 100, *or* second language, *or* second class in language of Year I.

YEAR III — Psychology 305 or Biology 201 (whichever not taken in Year II); Psychology 357; one of Biology 301, 302, 304, or 305; Psychology 307; second class in Chemistry or Mathematics.

YEAR IV Psychology 464; Psychology 465 or 470; Biology 480 or 490; elective (in the Humanities); one of Biology 324, 325, 326, or 421.

Note: If Psychology 465 is chosen, Biology 480 is to be taken. If Psychology 470 is taken, Biology 490 should be chosen.

Other Combined Honour programmes can be arranged. Interested students should consult the two Departments concerned regarding their course of study.

Classes Offered

100. Introduction to Psychology — J. W. Clark

Lect.: 3 hrs.

An introduction to psychology as an experimental science. Psychology is the study of how the environment and the brain control behaviour. Experimental research in the subject is directed towards the measurement of the behavior of animals and men and the analysis of the ways in which controlled changes in their past and present environment affect this behavior. The introductory class will provide the student with an understanding of what is now known about such things as instinctive behavior, the psychophysiology of perception and motivation, and the nature of learning and thinking in both animals and men, as well as a grasp of the methods which are now being used to analyse unsolved problems in these areas. In the latter part of the class, an account will be given of the ways in which this basic knowledge is applied to the study of problems in child, social and abnormal behavior.

200. Problems in Experimental Psychology.

W. T. Woodard, J. W. Clark, P. Dunham, M. Earhard, B. Moore, S. Goldstein

Lect.: 2 hrs.; Lab.: 2 hrs.

This class is meant to acquaint the student with three of the primary areas of modern psychology—learning, perception, and motivation. Emphasis in the class will be upon contemporary theoretical problems in these areas and upon the experimental techniques which have been used to solve such problems.

Prerequisite: Psychology 100 or Biology 101.

201. Applied Psychology. — W. J. Caird, B. S. Clark, J. A. McNulty

Lect.: 3 hrs.

The application of psychological principles and techniques to the solution of human problems is the concern of this class. There are many applied fields in modern psychology and three of the most important have been selected for discussion. In one part of the class, the modern techniques used for the modification and treatment of the behavior disorders will be examined and contrasted with some of the more traditional methods. Another part of the class will be concerned with the application of psychological principles to the education and training of children. The third part of the class will deal with how psychological principles are applied to the solution of many different kinds of industrial problems, from the design of machinery to the organization of efficient industrial systems.

Prerequisite: Psychology 100 or Biology 101.

304. Learning and Motivation. — W. K. Honig, C. J. Brimer

Lect.: 2 hrs.; Lab.: 2 hrs.

The class attempts to deal with some of the basic issues in the areas of learning and motivation.

Learning is a process and the two essential forms of the learning process which psychologists have identified are instrumental and classical conditioning. Working within this conditioning framework offers the substantial advantage of being able to employ lower mammals to experimentally investigate the effect of different variables on the learning process. Some of the basic questions which are asked are the following: What is the effect of delay of reward, schedule of reward, magnitude of reward? Is learning a one step all-or-none process or is it gradual and incremental? How does one learn to avoid a noxious stimulus? How does one unlearn a habit once it has been learned? After learning specific response in a specific stimulus situation, what factors control the generation of the response to similar stimulus situations? How is fear conditioning different from reward conditioning The studies which have attempted to answer these and similar questions are examined in detail.

In the area of motivation, one studies the impetus for learning. Here emphasis is upon the mechanisms responsible for initiating and maintaining behavior. Some of the physiological mechanisms controlling behavior are examined and the implications of this work for the understanding of hunger, thirst, fear, aggression, and sexual behavior is discussed.

Prerequisite: Psychology 100 (Honour students) Psychology 200 (general students).

305. Sensation and Perception. — M. Fearon

Lect.: 2 hrs.; Lab.: 3 hrs.

A study of the variables which determine what is seen and heard. The class stresses the methods which reveal these variables, measure

their effects and show how they interact. Among the variables considered are sensory input, attention and past experience.

Prerequisite: Psychology 100 (honour students), Psychology 200 (general students).

307. Physiological Psychology. S. Nakajima

Lect. 2 hrs.; Lab.: 3 hrs.

The class provides an analysis of physiological, anatomical, and biochemical mechanisms underlying psychological processes.

Prerequisite: Psychology 200 (General students), Psychology 304 or 305 (Honour students).

308. Social Psychology. R. Kanungo

Lect.: 2 hrs.; Lab.: 2 hrs.

A study of the individual in various social and cultural habitats. Topics include: group dynamics, game theory, attitude formation and change, and cognitive theory.

Prerequisite: Psychology 200 (general students), Psychology 304 or 305 (Honour students).

309. Developmental Psychology Barbara Clark

Lect.: 2 hrs.; Lab.: 2 hrs.

A study of the acquisition, extension and maintenance of behaviour in the developing human organism. The class will compare various theories of personality development and evaluate research methods employed in studying child behaviour.

Prerequisite: Psychology 200 (general students) Psychology 304 or 305 (Honour Students).

Other students may be admitted with the consent of the instructor.

310. Theories of Personality. Heidi Hughes

312. Experimental Analysis of Behavior Disorders

Lect.: 2 hrs.; Lab.: 2 hrs. W. K. Caird

A critical examination of some current views of abnormal behaviour, with an emphasis on the experimental approach to both understanding and modifying such behavior.

Prerequisite: Psychology 200 (general students), Psychology 304 or 305 (Honour students).

356. Advanced Motivation. P. J. Dunham

Lect.: 2 hrs.; Lab.: 2 hrs.

A study of the factors controlling the arousal and direction of behavior and of the mechanisms of primary and secondary drives.

Prerequisite: Psychology 304 or 305. Restricted to Honour and qualifying year students, although other students may be admitted with the consent of the instructor.

357. Statistical Methods in Psychology. Marcia Earhard

Lect.: 2 hrs.; Lab.: 1½ hrs.

The logic of statistical analysis with reference to the design and evaluation of experiments in Psychology. Both descriptive and inferential statistics will be covered with special emphasis on parametric and non-parametric tests of significance.

Prerequisite: Restricted to honour and qualifying year students, although others may be admitted with the consent of the instructor.

358. History of Psychology. J. W. Clark

Lect.: 3 hrs.

A systematic examination of the historical development of modern psychology.

Prerequisite: Psychology 304 and 305. Restricted to Honour and qualifying year students, although others may be admitted with the consent of the instructor.

463. Cognitive Processes R. D. Rudolph

Lect.: 2 hrs.; Lab.: 2 hrs.

The class will cover the phenomena included under the topic headings of problem solving, creativity, concept formation and rule learning, with an emphasis on their phylogenetic and ontogenetic development.

Prerequisite: Restricted to final year honour students and qualifying year students, although others may be admitted with the consent of the instructor.

464. Ethology. (Not offered in 1968-69)

Lect.: 2 hrs.

The class deals with the theory and practice of the study of animal behaviour under natural conditions.

Prerequisite: Restricted to final year Honour students and qualifying year students, although others may be admitted with the consent of the instructor.

465. Honour Thesis and Tutorial. The Department

The student is assigned to a member of the staff with whom he discusses current experimental problems of common interest, and under whose direction he designs and performs an original experimental investigation.

Prerequisite: Restricted to final year Honour students.

470/570. Animal and Human Learning — B. Moore

Lect.: 2 hrs.

The class in Animal and Human Learning is a seminar class in which the most important theoretical and experimental problems in these areas will be discussed. The format of the seminar is informal and the active participation of all students is encouraged. General background reading is assigned weekly. In addition, each student is required to prepare and lead the discussion in some of the seminars, usually on topics of his choice.

Prerequisite: Restricted to final year Honour students and qualifying year students.

500. Research Assignment. — The Department

The student is assigned to an on-going research project and works under the direction of a staff member. The student is required to submit a report, written in thesis form, of the work completed during the year.

Prerequisite: Restricted to qualifying year students.

Graduate Studies

Courses leading to the M.A. and Ph.D. degrees in Psychology are offered. Further details on graduate courses and general requirements for admission to graduate study may be found in the Faculty of Graduate Studeies, Dalhousie Calendar.

Key to Class Numbers: Psychology

New	Old	New	Old	New	Old
100	1	308	8	463	13
200	2	309	9	464	14
201	3	310	10	465	15
304	4	312	12	470/570	17
305	5	356	—	500	16
306	6	357	7		
		358	—		
307	—	461	11		

RELIGIOUS STUDIES

100. The English Bible — J. B. Corston

Lect.: 2 hrs.

This class attempts to acquaint the student with the whole field of Biblical literature. The rise and development of the literature of the Old Testament is studied against its historical background. The New Testament writings are considered in relation to the life of the early Christian community, with particular reference to their chief literary characteristics and their historical and religious significance.

Reference texts: William Neil, *The Rediscovery of the Bible;* B. W. Anderson, *Understanding the Old Testament;* T. Henshaw, *New Testament Literature.*

A number of other classes relating to religious studies will be found among the offerings of several departments. Classes in the Philosophy, Psychology, and Sociology of Religion, for example, are offered by the departments of Philosophy and Sociology, while classes bearing on the historical development of religious thought are offered in the departments of History, Classics, and English.

Interested students may consult Professor Page, Department of Philosophy.

ROMANCE LANGUAGES

FRENCH

Professor.....Paul Chavy, (Head of Dept.)
Associate Professors....Harry F. Aikens, L. Clert-Rolland, Claude Treil
Assistant Professors.....Lucienne Beschet, Edmund Boyd, Marcelle Cendres, Suzanne Chavy, Etienne Duval, Michel Malherbe, Claude J. Simon
Lecturers.....Jacqueline Geldart, Edward Gesner, Charles Strong

HONOURS

	Major Programme			Combined Programmes		
Year	French Classes	Minor Classes	Other Classes	French Classes	Minor Classes	Other Classes
I	102 120	1 Class	2 Classes	102 120	1 Class	2 Classes
II	202 230 231	1 Class	1 Class	202 230 231	1 Class	1 Class
III	2 Classes	1 Class	2 Classes	1 or 2 Classes	1or 2 Classes	2 Classes
IV	4 Classes incl. 456		1 Class	2 Classes incl. 456	2 Classes	1 Class

To fulfill overall requirements, "minor" and "other" classes must include:

(a) a science class (if not passed in Senior Matriculation)
(b) English 100, in Year I or II
(c) two classes from the Humanities group, other than English
(d) two classes from the Social Science group

Whenever possible, Latin 100 is strongly recommended.

Classes Offered

A class whose number is suffixed by one of the letters A, B or C is a half-credit classes. See comments on these classes under the heading "Numbering of Classes".

The Language Laboratory offers students a wide choice of times at which they may complete their oral assignments.

French Conversation with native assistants is given, on a voluntary non-credit basis, at the introductory and intermediate levels.

Preparatory Classes
(Non-Credit)

001. Fundamentals of French I.

A non-credit evening class for beginners (*"Voix et Images de France"*)

002. Fundamentals of French II.

A non-credit evening class for further language practice (*"Voix et Images de France"*).

003. Preparation for University French.

Prerequisite: Two years of high school French or French 001.

A non-credit class for students who have a certain knowledge of French, but have not reached the Senior Matriculation level.

For students working under the old regulations, this class carries a credit equivalent to former French I.

Introductory Classes

Not more than two classes may be taken for credit at this level..Placement is based on a pre-registration questionnaire and a personal interview during the registration period.

Prerequisite: Senior Matriculation French or French 003.

For Honours in French, a student must take 102 and 120.

A student majoring in French is urged to take both French 102 and 120 concurrently, if at all possible.

A Minor in French requires French 102 or French 120: French 102 if interested mainly in the language, French 120 if interested mainly in French civilization and literature. Both classes may be taken for credit.

One year of French only French 105 or French 106. These classes are designed for students not intending to continue studies in this subject. French 105 is oriented towards the spoken language, and 106 towards a reading knowledge. Students who have a good background in French may be admitted to French 120, which will entitle them to continue, should they desire to do so.

102. Intensive Language Training I.

Lect.: 3 hrs.; Lab.: 5-10 hrs.

For students wishing to specialize in French. Concentrated study of basic structures, spoken and written, with particular emphasis on oral aspects.

105. Conversational French.

Lect.: 3 hrs.

For students who do not intend to carry on French studies, but wish to acquire a certain degree of fluency for practical purposes.

106. Reading Knowledge of French.

Lect.: 3 hrs.

For students who do not intend to carry on French studies but are interested in the written form of the language. This class will provide the minimum language knowledge usually demanded of Graduate students preparing for the Ph.D.

120. Introduction to French Culture.

Lect.: 3 hrs.

This class is designed as either (a) a cultural complement to French 102; *(b) a basic class for students wishing to minor in French literature; (c) a terminal class for good non-continuing students.*
Study of French civilization; readings and discussions leading to appreciation of literary texts.

Intermediate Classes

202. Intensive Language Training.

Lect.: 3 hrs.; Lab.: 4-8 hrs.

Prerequisite: French 102; however, students who have taken French 120 only, or other students whose language training has been insufficient, and who desire to enroll in French 202, are required to take concurrently a supplementary class of two lecture-hours per week plus laboratory work. Continuation of work done in French 102. Systematic building of vocabulary through study of French civilization.

230. French Literature I.

Lect.: 1 hr.; Seminar: 2 hrs.

Prerequisite: French 102 or 120. From the origins to the French Revolution.

231. French Literature II.

Lect.: 1 hr.; Seminar 2 hrs.

Prerequisite: French 102 or 120. From the French Revolution to our time.

Advanced Classes

Prerequisite: Any intermediate class. Lectures 2 hrs. in all classes. except French 456.

300. Stylistics.

Oral and written exercises directed towards the development of accuracy and elegance of self-expression.

301. Phonetics.

Systematic analysis of the sounds of the language, with particular reference to French and English. Frequent exercises; term paper required.

320/520. XXth Century French Novel.

321/521. French-Canadian Novel.

322/522. French Literature of the XVIIth and the XVIIIth Centuries.

The two centuries are studied in alternate years.

323/523. French Literature of the XIXth Century.

330/530A. XXth Century French Drama.

330/530B. XXth Century French Poetry.

331/531A. French-Canadian Poetry.

331/531B. French-Canadian Drama.

350/550. History of the French Language.

450/650. French Literature of the Middle Ages and the Renaissance.

452/652. Translation.

Seminar on the techniques of translation from French to English and from English to French. Frequent exercises; term paper required.

456. Honour Essay.

A tutorial class for Honour students.

Graduate Studies

Requirements for a Master of Arts degree in French are given in the Dalhousie Calendar under Graduate Studies.

SPANISH

Assistant Professors ..... *Vincente Romono*, Guilleromo Rey

Modern Languages
Combined Honour Programme

Spanish may be taken in a Modern Languages combined programme with French or German the first language: see French or German. With Spanish the first language, the second modern language (ML2) may be French or German.

YEAR I — Spanish 101 or 102; one class in ML2; English 100; one class in social sciences; one class in science or Mathematics (if not passed in Senior Matriculation; otherwise one of Classics 100, History 100 or Philosophy 100).

YEAR II — Spanish 202; Spanish 303; one class in ML2; one class in humanities and one class in social sciences not taken during first year.

YEAR III — Spanish 302 and 352; two classes in ML2; one class in humanities.

YEAR IV — Two Honour classes in Spanish (452 and 455); one advanced class in ML2; The Honour Seminar in Spanish (453) or another advanced class in ML2; one free elective.

Spanish and English
Combined Honour Programme

Especially designed to suit the needs of English or Spanish speaking students looking forward to teaching the other language; it is arranged so that by choice of a seventh class in Year II, the emphasis is placed on either one of the Honour subjects.

YEAR I — Spanish 102; English 100; one class in social sciences; one of Classics 100, History 100, Philosophy 100; one class in Science or Mathematics (if not passed in Senior Matriculation ;otherwise a second subject from Classics 100, History 100, Philosophy 100).

Year II — Spanish 202; Spanish 303 or one of English 209 or 251; English 252; a second subject in social sciences; a second subject from classics 100, History 100, Philosophy 100 (if not already taken; otherwise English-American or Hispano-American or English or Spanish History).

YEAR III — Spanish 302 and 352; English 451 or 452; English 201 or 206; (or Spanish 303 if not taken in Year II); one elective.

YEAR IV — Spanish 451; Spanish 452 or 453; two of English 209, 251, 352, 353, 453 not previously taken; one elective.

Classes Offered

The Language Laboratory is open more than 50 hours a week (including four evenings), and students have a wide choice of times at which they may complete their oral assignments.

102. Oral Spanish, Basic Class.

Lect.: 3 hrs. (2-3 sections). Lab.: 2-4 hrs.

Concentrated study of basic structures with particular emphasis on *oral aspects.*

Texts: A-L-M Spanish Level One (Textbook, records and student test answer forms).

202. Oral Spanish (2nd year).

Lect.: 3 hrs. (1-2 sections). Lab.: 2-4 hrs.

Prerequisite: Spanish 102 or a matriculation credit in Spanish. Continuation of work begun in Spanish 102 with particular emphasis on reading with understanding without translating. Systematic building of vocabulary through study of Spanish Civilization. *Texts*: A-L-M-Spanish Level Two (Textbook, records and student test answer forms). *Reader*: To be announced.

302. Oral Spanish (3rd year).

Lect.: 3 hrs.; Lab.: 2-4 hrs.

Prerequisite: Spanish 202 or with the consent of the instructor.
Completion of the Audio Lingual Programme. Particular emphasis is placed on writing using a style and vocabulary appropriate to the material or the occasion. Building of vocabulary through study of cultural materials and especially the anthropological concept of culture. *Texts*: A-L-M Spanish Level Three (Textbook, records and student test answer forms). *Reader*: To be announced.

303. Spanish and Hispano-American Civilization.

Lect.: 3 hrs.

Prerequisite: Spanish 202 (which may be taken concurrently by Honour students).
A study of the main historical, sociological and cultural characteristics of the Spanish-speaking countries.

304. Introduction to Spanish-American Literature.

Lect.: 3 hrs.

Prerequiste: Spanish 202 (which may be taken concurrently by Honour Students.
A general study of the greatest writers and the most significant masterpieces of Spanish-American Literature, from its beginning to our time.

Honour Classes

352. Introduction to Spanish Literature.

Prerequisite: Spanish 302 (which may be taken concurrently by Honour students).
A general study of the greatest writers and the most significant masterpieces of Spanish Literature, from its beginning to our time.

353. Contemporary Spanish-American Novel. (1969-70)

Lect.: 3 hrs.

A study of the most significant Hispano-American novelists and their works. (M. A. Asturias, M. Azuela, A. Carpentier, Vargas L. Losa, C. Fuentes . . .)

451. Cervantes y su tiempo. (1969-70)

Lect.: 2 Hrs.

Prerequisite: Spanish 302 or with the consent of the instructor. A special study of his works, in particular *Don Quijote,* taking into consideration the environment of that historic period.

452. Spanish Renaissance.

Lect.: 2 hrs.

Prerequisite: Spanish 302 or with the consent of the instructor.
A study of the peculiarities of the Spanish Renaissance through its most representative authors.

454. The Generation of 1898. (1969-70)

Lect.: 2 hrs.

Prerequisite: Spanish 302 or with the consent of the instructor.
A survey of the main Spanish authors of this period and their literary and sociological implications.

455. Contemporary Spanish Literature.

Lect.: 2 hrs.

Prerequisite: Spanish 302 or with the consent of the instructor.
Readings and commentaries on the most significant works of contemporary Spanish Literature.

453. Advanced Seminar.

One or several seminars on particular subjects will be offered if sufficient student interest is shown. Honour students are invited to submit suggestions early to the Department. Summer reading may be prescribed.

FRENCH

Key to Class Numbers: Romance Languages

New	Old	New	Old	New	Old
001/002	non-credit	231	34+	452/652	52
003/004	1	300	35	453	47+48
100	2	301	51	456	—
101	3	310	—		
102	10	311	—		
105	—	320/520	45		
106	—	321/521	46		
120	—	322/522	41(42-44)		
200	—	323/523	—		
201	—	330/530A	—		
202	30	330/530B	—		
210	32	331/531A 1	46		
211	31	331/531B 1			
220	34	350/550	—		
221	33	450/652	40		
230	34+	451	50		

SPANISH

New	Old	New	Old	New	Old
101	A+	301	—	450*	6
102	A+	350	4	451	3
202	1	351	5	452	—
300	2	352	—	453	—
302	—	353	—	454	—
303	—			455	—

*Not offered before 1970-1971

RUSSIAN

Associate Professor ..... Irene Coffin
Lecturer ..... Nathan Nevo

Modern Languages

Combined Honour Programme

Russian may be taken in a Modern Languages combined programme with French, German or Spanish the first language.

The Language Laboratory is open more than 50 hours a week (including four evenings), and students have a wide choice of times at which they may complete their oral assignments.

Classes Offered

100. Elementary Russian. (3 sections) Irene Coffin, Natan Nevo

Lect.: 3 hrs.

This class is intended for those beginning the study of the language.

200. Second-year Russian. Natan Nevo

Lect.: 3 hrs.

Prerequisite: Russian 100 or Matriculation credit in Russian. Study of the language and grammar continued; reading of literary texts.

201. Scientific Russian. Natan Nevo

Lect. 3 hrs.

Prerequisite: as for Russian 200.

Study of grammar reading of scientific texts. This class enables the students to translate scientific articles with the aid of a dictionary.

300. Area Studies Irene Coffin

Lect.: 3 hrs.
Prerequisite: 200 or 201.
A study of geography and history of Russia.

301. Conversational and Literary Russian.

Lect.: 2 hrs. Irene Coffin
Prerequisite: Russian 200 or 201.

302. Survey of Russian Literature to Gogol. (1969-70)

Lect.: 2 hrs. Natan Nevo
Prerequisite: Russian 200 or 201.

303. Survey of Russian Literature. Gogol to Mayakovski. (1968-69)

Prerequisite: Russian 200 or 201.

Key to Class Numbers: Russian

New	Old	New	Old	New	Old
100	1A	201	1S	301	3
200	1	300	2	302	—
				303	

SOCIOLOGY AND ANTHROPOLOGY

Professor.....R. K. N. Crook (Head of Dept.)
Associate Professor.....H. Gamberg
Assistant Professors.....G. Chasin, J. G. Morgan, I. Okraku D. Stevenson
Lecturers.....H. D'Alessio, D. Goddard

General B.A. Degree

Notes:

1. Sociology or Anthropology may be offered as fields for major or minor concentration.
2. Students majoring in Sociology may minor in Anthropology. Students majoring in Anthropology may minor in Sociology.
3. Students considering majoring in Sociology or Anthropology should should consult the Department in designing their programmes.

Recommended Programmes for General B.A.

Sociology:

YEAR I — Sociology/Anthropology 100; Language 100; History 100; Mathematics 100 (or Science, to be decided in consultation with the Department); Psychology 100 *or* Philosophy 100.

YEAR II — Two classes in Sociology at the 200 level; Psychology 100 *or* Philosophy 100 (if not taken in Year I); English 100; elective.

YEAR III — Three classes in Sociology at the 300 or 400 level; one advanced class in a Social Science other than Sociology; elective.

Anthropology:

YEAR I — Sociology/Anthropology 100; Language 100; History 100; Mathematics 100, *or* Science; Philosophy 100 *or* Psychology 100.

YEAR II — Anthropology 202; Anthropology 210; Psychology 100 *or* Philosophy 100 (if not taken in Year I); English 100; elective.

YEAR III — Three classes in Anthropology at the 300 or 400 level; one advanced class in a Social Science other than Anthropology, *or* Philosophy 200; elective.

Honour B.A.

Notes:

1. Honours may be taken in Sociology or in Anthropology.
2. Students honouring in Sociology may take Anthropology as the minor field. Students honouring in Anthropology may take Sociology as the minor field.
3. Students considering taking Honours in Sociology or Anthropology should consult the Department in designing their programmes.

Recommended Programmes for Honour B.A.

Sociology:

YEAR I — Sociology/Anthropology 100; Language 100; History 100; Mathematics 100 (or Science, to be decided in consultation with the Department); Psychology 100 *or* Philosophy 100.

YEAR II — Two classes in Sociology at the 200 level; Psychology 100 *or* Philosophy 100 (if not taken in YearI); English 100; elective.

YEAR III & YEAR IV — Sociology 301; Sociology 310; Sociology 405; Sociology 450; three classes in Sociology at the 300 or 400 level; one class at advanced level in a Social Science other than Sociology, *or* Philosophy 200; two electives.

Anthropology:

YEAR I — Sociology/Anthropology 100; Language 100; History 100; Mathematics 100 or Science; Philosophy 100 or Psychology 100.

YEAR II — Anthropology 202; Anthropology 210; Psychology 100 *or* Philosophy 100 (if not taken in Year I); English 100; elective.

YEAR III & YEAR IV — Sociology 301; Sociology 310; Anthropology 302; Anthropology 306; Anthropology 451; two classes in Anthropology at the 300 or 400 level; one class at advanced level in a Social Science other than Anthropology, *or* Philosophy 200; two electives.

Combined Honour Programmes where Sociology is the Major Field

Students wishing to take Sociology as the minor field of a combined Honour programme should consult the options listed under the Department in which major concentration is intended.

Sociology and Economics Combined Honour Programme

YEAR 1 Sociology/Anthropology 100; Economics 100; Mathematics 100 (or a Science, to be decided in consultation with the Department); History 100; Language 100.

YEAR II Two classes in Sociology at the 200 level; Economics 200; Economics 202; English 100.

YEAR III Sociology 301; Sociology 310; Economics 300; Economics 304; Philosophy 100.

YEAR IV Sociology 405; Sociology 450; one class in Economics at the 300 or 400 level; two electives.

Sociology and Political Science Combined Honour Programme

YEAR I Sociology/Anthropology 100;Political Science 100; Mathematics 100 or a Science; History 100 *or* Philosophy 100, Language 100.

YEAR II Two classes in Sociology at the 200 level; two classes in Political Science at the 200 level; English 100.

YEAR III Sociology 301; Sociology 310; two classes in Political Science at the 200 or 300 level; Philosophy 100 *or* History 100.

YEAR IV Sociology 405; Sociology 450; one advanced class in Political Science; two electives.

Sociology and Psychology Combined Honour Programme

YEAR I Sociology/Anthropology 100; Psychology 100; Mathematics 100 or a Science; Philosophy 100 *or* History 100; Language 100.

YEAR II Two classes in Sociology at the 200 level; Psychology 200; Psychology 201; English 100.

YEAR III Sociology 301; Sociology 310; Psychology 308; History 100 *or* Philosophy 100; elective.

YEAR IV Sociology 405; Sociology 450; one class in Sociology chosen from 307, 402, 407; Psychology 470; one elective.

Sociology and Philosophy Combined Honour Programme

YEAR I Sociology/Anthropology 100; Philosophy 100; Mathematics 100 or a Science; History 100; Language100.

YEAR II Two classes in Sociology at the 200 level; Philosophy 200; English 100; elective.

YEAR III Sociology 301; Sociology 310; two classes in advanced Philosophy selected from 205, 210, 230, 320; elective.

YEAR IV Sociology 405; Sociology 450; two classes in advanced Philosophy; elective.

Classes Offered in Sociology

A class whose number is suffixed by one of the letters A, B or C is a half-credit class. See comments on these classes under the heading "Numbering of Classes".

100. Sociology/Anthropology.

Lect.: 2 hrs. Tutorial: 1 hr.

Sociology and Social Anthropology have their roots in the truism that man is a social creature. We are all born, live and die as members of, and contributors to, common social traditions. Sociologists and anthropologists study the similarities and differences between highly industrealized and relatively simple societies, as well as undertaking the investigation of many social segments and their inter-relationships, in single societies. In addition to their general contribution to a liberal education, sociology and social anthropology in their systematic analysis of the real world are firmly committed to the spirit of modern science. The social world is observed by the most reliable methods available, these observations being rigorously classified and explained by logically consistent propositions which are carefully tested. Wherever possible, laboratory research is carried out. The student is introduced to the analysis of kinship systems, the organization of economic and political activities, population distribution and trends, the sociology of religion, crime and many other social processes.

202. Comparative Analysis of Social Systems.

Lect.: 3 hrs.

Examines approaches to a comparative analysis of social systems. Frameworks for classification and problems of comparison will be examined and related to substantive social systems and sub-systems, e.g.: societies, families, kinship systems. Emphasis is placed upon major similarities and differences between industrial and non-industrial societies.

203. The Structure of Social Control.

Lect.: 3 hrs.

The problem of social order is discussed in sociological terms. Mechanisms of social control are considered in relation to conformity and deviance. Specific social problems like crime, delinquency, divorce, and drug addiction are discussed in this context.

204. Social Stratification.

Lect.: 3 hrs.

Analysis of differential allocation of rank, power, and prestige in industrial and pre-industrial societies. Major historical forms of stratification: slavery, caste, estate, and race. Consideration of theoretical models of stratification developed by Marx, Weber, Davis and Moore, Parsons, and their relation to contemporary research. Comparative analysis of systems of stratification in Canada, Britain, United States and Soviet Union.

205. Canadian Society.

Lect.: 3 hrs.

An examination of the institutional framework of Canadian society. Population and ethnic composition, native peoples, industrialization, and recruitment of elites will be among topics discussed.

301. Social Statistics.

Lect.: 3 hrs.

The basic topics of elementary statistics are considered: correlation, regression, analysis of variance, analysis of covariance. An introduction to factor analysis is presented. Major attention is given to techniques for analysing attribute and rank order data. Chi square, measures of association for contingency tables, and standardization procedures are covered. The logic of non-parametric statistics and basic non-parametric techniques are considered. The emphasis is upon a non-mathematical understanding of statistical models and their correct use in behavioral science research.

303. Social Change and Moderization.

Lect.: 3 hrs.

Comparative analysis of social change with particular emphasis on the processes associated with industrialization, and their impact on social structure. Problems of internal and external obstacles to modernization, the relation of different social groups to economic development, the structure of innovation and the role of elites, political unification, nationalism and ideology.

304. Sociology of Religion.

Lect.: 3 hrs.

The analysis of the relationships between religious beliefs, social action and social structure. Approximately one half of the class is concerned with religion in primitive societies, the other half dealing with religion in the context of modern western societies. Some typical topics of the class are: witchcraft, magic, shamanism, toteism, myth, modification

of religious beliefs and practices as a result of modernization and culture contact, secularization, the structure of religious organizations, religion and social class.

305A. Social Theory in Historical Perspective.

Seminar: 3 hrs.

The relation of scientific sociological theory to major trends in the history of social thought since the French Revolution.

307A. Socialization.

Lect.: 3 hrs.

Theory and research on society and personality, and the relation of social structure to role acquisition and performance. Emphasis is placed on problems of child development and personality integration in a variety of cultural contexts.

308B. Sociology of Science and Ideas.

Lect.: 3 hrs.

The institutional basis of idea systems with particular reference to the development of modern science. The organization of scientific research in contemporary society.

309A. Population and Society.

Lect.: 3 hrs.

A general analysis of the interdependence of population processes and social phenomena. The class examines changes in the size, structure and distribution of world population in terms of the three major components of demographic change: fertility, mortality, and migration, with great emphasis on their social, economic and political causes and consequences. In particular, special attention is given to the 'population problem' as analysed by Malthus and Marx, and as it exists in different parts of the world today. Relevant data on population processes in western and non-western societies, including Canada, and in particular the U.S.A., England, India, Japan, Puerto Rico, Soviet Union are discussed.

310. Research Methods.

Lect.: 3 hrs.

A detailed survey of the basic methods and techniques employed at various stages in social research. The topics discussed in the class include the formulation of a research problem, research designs, measurement, methods of data collection, and analysis. Special attention is given to the sample survey as the technique for social science research. Practical experience in survey methods is provided through a class project.

401. Analysis of Social Structure.

Lect.: 3 hrs.

An advanced introduction to comparative sociology for seniors or graduate students in other disciplines. Does not constitute an advanced class for major or Honour students in Sociology or Anthropology. Without prerequisites.

402C. Research Seminar.

Seminar: 3 hrs.

Selected research problems in sociology and social anthropology; student research projects will be undertaken.

403B. Organization Theory and Bureaucracy.

Lect.: 3 hrs.

A critical discussion of theoretical models for the analysis of complex organizations. The comparative approach to organizational study is emphasised. Examples of organizations discussed with this perspective include hospitals, schools, business and manufacturing firms, military establishments, prisons and religious institutions.

405. Theoretical Sociology and Social Anthropology.

Seminar: 3 hrs.

The class is concerned with the logic of theory construction and the development and testing of propositions. With the focus on the relation to empirical research, a wide range of problems are examined including such questions as equilibrium and conflict models, comparison and experiment, values and power, objectivity, phenomenology, and naturalism. The work of classical theorists will be referred to only inasmuch as current analystic issues are clarified by so doing. The nature of the research process will be examined in relation to the requirements of theory construction.

407. Experimental Analysis of Social Behavior.

Lect.: 3 hrs.

The laboratory situation as a focus for sociological analysis is considered. Methods of small groups research are covered, and theories of social behaviour bearing upon the study of laboratory groups are discussed. Empirical findings derived from the laboratory manipulation of groups and from other sources are taken up in detail. Some of the topics reviewed are competition-co-operation, interpersonal attraction, status congruency and mechanisms of group tension management. Generalization from laboratory findings are compared with behavior under natural social conditions.

450. Honour Seminar in Sociology.

Seminar: 3 hrs.

452C. Readings in Sociology (Staff).

(Restricted to Honour students). The student is assigned to a member of staff for regular meetings to discuss readings in a selected area. Papers and research projects will be expected.

Classes Offered in Anthropology

100. Sociology/Anthropology.

(Same as offered in Sociology).

210. Introduction of General Anthropology.

Lect.: 3 hrs.

A general survey of anthropology as a natural and a social science. The introductory class will provide the student with an understanding of the complex nature of human behavior including the analysis of the physical structure and nature of man — human biology, the works and activities of man, social, artistic and technological — social science, and the study of specific fields of creativity, language and the arts— a branch of the humanities. Emphasis will be placed upon contemporary theoretical and technical problems.

302. Kinship Systems.

Lect.: 3 hrs.

Analysis and classification of kinship systems. Descent and marriage alliance. Kinship roles, behavior and terminology. The family and other domestic groups. Kinship systems and modernization.

303. Social Change and Modernization.

(Same as Sociology 303).

304. Sociology of Religion.

(Same as Sociology 304).

306. The Social Organization of Pre-Literate Societies.

Lect.: 3 hrs.

A systematic detailed description and analysis of the social organization of non-industrial societies. The emphasis will be on societies whose subsistence activities are predominantly one of the following: gathering, hunting herding, or agricultural, and whose economic structures differ from the industrial 'market' types.

307. Socialization.

(Same as Sociology 307).

405. Theoretical Sociology and Social Anthropology.
(Same as Sociology 405).

406. Area Ethnography.
Seminar: 3 hrs.
An advanced analysis of one or more ethnographic areas.

451. Honour Seminar in Social Anthropology.
Seminar: 3 hrs.

453. Readings in Anthropology (Staff).
Restricted to Honour students. The student is assigned to a member of staff for regular meetings to discuss readings in a selected area. Papers and research projects will be expected.

Graduate Studies

An M.A. programme in Sociology is offered; see *Faculty of Graduate Studies* in Dalhousie Calendar.

No key to class numbers can be given, since none of the above is equivalent to any of the "old" classes.

Faculty of Divinity

Requirements for Entrance to the Divinity School

The regular Divinity course is normally a post-graduate programme. Students may take Divinity classes without being committed to ordination.

Students who have university matriculation may, on the recommendation of a Bishop, be admitted to the Divinity School. Before embarking on the Divinity course they will be required to complete a probationary programme of one or two years depending on their standard of matriculation, provided always that five university credits or their equivalents be completed. On satisfactory completion of the basic programme in Divinity they will be granted the Licentiate in Theology (L.Th.). This provision is intended for older men. Only in exceptional circumstances will it be allowed to enrol under the age of twenty-five.

Bachelor of Sacred Letters (B.S. Litt.)

Prerequisites for this degree are two courses in Classical Greek in their prior undergraduate degree. Three classes in Greek Bible and two in Hebrew must be taken as part of the complete Divinity Course. In addition the candidate must earn two hours' credit beyond the requirements of the basic Divinity Course. An annual average of at least 65% must be maintained.

Bachelor of Sacred Theology (B.S.T.)

This degree is awarded to those who already hold a bachelor's degree on entering the Divinity School. The course consists of the basic programme of the Divinity School, the choice of electives being approved by the Divinity Faculty, passed with an overall average of at least 65%, which must be maintained each year.

The Licentiate in Theology (L.Th.)

The completion of the basic Divinity programme with pass marks of not less than 50% entitles the student to the diploma.

The Testamur

A student who has passed not fewer than two-thirds of the required courses of the basic programme may be awarded the Testamur.

Bachelor of Divinity

Students who have received the B.S. Litt. or B.S.T., and graduate students who have qualified for the L.Th. may proceed to the final examination for the extramural degree of B.D. under the General Synod Board of Examiners.

Medical Examination

For all candidates for ordination a medical examination by the General Synod physician is required during their first year in Divinity. It is the responsibility of the student to make the necessary arrangements with the Diocesan Office.

Supplemental Examinations

No student may write more than three supplemental examinations, the recorded pass mark for which is 50%.

THE DIVINITY CURRICULUM

The curriculum of the Divinity School is carefully designed to cover the essential tenets of the Christian Faith, its origins and history, and its application in the life of the twentieth-century.

The course is arranged so that 25% of the basic material is assigned to Biblical Studies; 25% to Doctrine, Liturgics and Church History and 25% to Pastoralia and allied subjects. The remaining 25% of the course is chosen by the candidate himself, in consultation with the Divinity Faculty, from a number of available elective courses, thus enabling him to further his studies in areas which are of particular interest to him.

While it is impossible, and perhaps unwise, to state too precisely the number of hours a week which a student should give to his studies, the curriculum has been based on the assumption of a normal 40-hour week, of which no more than 16 hours should be "tied up" in the Divinity School Time-Table. Of these 16 assigned hours, no more than 12 will normally be assigned to class-room work in any one week, the remaining 4 being set aside for Professional Development sessions and Supervised Pastoral Education assignments.

It is, of course, always assumed that students will be prepared to put the claims of academic excellence, and their service to the Church in the University and in the wider local community, before their personal preferences. Students voluntarily engaged in more advanced courses will naturally expect to spend more time in private study, as in classroom work. However, it is felt that the minimum of 24 hours of unassigned time per week will enable each divinity student to attain maximum academic achievement, while finding adequate time to participate fully in the whole life of the university.

First Year

Old Testament 501
New Testament 501
Greek New Testament 501
Dogmatics 501
Pastoralia 511
Pastoralia 522
Pastoralia 506
Pastoralia 509
2 elective hours

Second Year

Old Testament 602
Greek New Testament 602
Church History 602
Dogmatics 602
Liturgics 602
Pastoralia 603
Pastoralia 607
Pastoralia 609
2 elective hours

Third Year

Dogmatics 703
Church History 703
Pastoralia 700
Pastoralia 706
Pastoralia 709
5 elective hours

RELIGOUS KNOWLEDGE

This course is designed to help the first and second year student meet some of the problems involved in reconciling the old Faith with the new learning. It is to be taken by all students looking forward to Divinity, in their first and second years. Other students, men and women, will be welcomed, and will not be required to write examinations. There is no fee.

Religious Knowledge 101—1 hour a week (1969-70).
Discussions on Church History and Doctrine.

Religious Knowledge 202—One hour a week (1968-69).
Discussions on Worship and Religion.

BIBLICAL STUDIES

The courses offered endeavor to provide an intensive examination of the literary, historical and theological developments within and between the Old and New Testaments, with particular attention to the relevance and authority of the Bible for Christian faith.

(A) OLD TESTAMENT

Old Testament 501—Two hours a week (1968-69).
The history and literature of Israel from earliest times to the exile, including its religious, political and cultural development. Tests on the contents of the relevant English text of the Bible will be given in this and the following English Bible courses.

Old Testament 602—One hour a week (1969-70).
The exile and its effects, and the religious concepts and practice of Judaism in the post-exilic period.

Old Testament 703—One hour a week (1969-70). Elective.
Between the Testaments. A survey of the relevant intertestamental literature with an introduction to New Testament times.

Hebrew 501—Three hours a week (1968-69). Elective. Pine Hill.
Grammar and Translation: Ruth.

Hebrew 602—Two hours a week (1968-69). Elective. Pine Hill
Selected prose extracts.

Hebrew 703—Two hours a week (1968-69). Elective. Pine Hill.
Selections from Prophets and Psalms.

(B) NEW TESTAMENT

New Testament 501—One hour a week (1968-69).
The Birth of the Christian Faith. The emergency, composition, text and canon of the New Testament with special attention to the material not covered in the required Greek New Testament courses.

Greek New Testament 500A—Two hours a week. (Not required of those who have taken Greek for their B.A.).
An Introduction to New Testament Greek.

Greek New Testament 501—Two hours a week (1969-70).
Synoptic Gospels and Introduction to Textual Criticism.

Greek New Testament 602—One hour a week (1969-70).
The Fourth Gospel.

Greek New Testament 703—One hour a week (1968-69). Elective.
Romans.

Greek New Testament 704—One hour a week (1968-69). Elective.
Revelation.

CHURCH HISTORY

The Courses listed assist the student to fill in for himself the general outlines of Church History. They concentrate on a number of themes which run throughout the centuries: the Church and its Mission, its Structure and Resources in Worship and Devotion; the Church and Society, the State and Reform; the Church and its Intellectual Development.

REQUIRED COURSES

Church History 502—One hour a week (1969-70).
English Church History from its beginning to the present day.

Church History 603—One hour a week (1968-69).
The Modern Church. A general survey from and including the Reformation. Canadian Church History.

ELECTIVE COURSES

Church History 604—One hour a week.
Development of the Roman Primacy; and General Church History 451-1500. (An outline of General Church History to 451 is contained in Dogmatics 501).

Church History 705—One hour a week.
Continental Reformation and Counter-Reformation.

CHRISTIAN DOCTRINE

The two basic courses together (Doctrine 501 and 602) provide an introduction to the five major departments of systematic Christian thought, viz., Theology, Christology, Pneumatology, Ecclesiology and Eschatology. Patristic, Medieval and Reformation periods is outlined, leading to an assessment of its place in Christian thought today. The doctrines of the Church, the Ministry and the Sacraments are dealt with in the first year to help candidates for Holy Orders towards a better understanding of their vocation from the beginning of their course in the Faculty of Divinity.

The three elective courses, of which all students are required to take at least one, provide an opportunity to study in depth those specific areas of Christian Doctrine which are central to contemporary theological thought.

Doctrine 501—Two hours a week.
The Church, the Ministry and the Sacraments; Man, Sin and Grace; Eschatology.

Doctrine 602—Two hours a week.
The doctrines of God, Christ and the Holy Spirit; the Trinity in Unity; doctrine of the Atonement.

Doctrine 503— One hour a week Elective. (1968-69).
The Church in the Present Age. The Theology of the Church Today; problems of Ecumenical co-operation and union; the Mission of the Church in a Secularized Culture.

Doctrine 604—One hour a week. Elective. (1969-70).
Theology in the Present Age. Contemporary theologians, with special reference to the influence of Karl Barth and Paul Tillich; a critique of Conservative and Existentialist Theology, and the Radical School.

Doctrine 705—One hour a week. Elective. (1970-71).
Anglican Theology in the Twentieth Century. A survey of Anglican thought, with special reference to Christology, from Gore, Thronton, Temple and Mascall to W. R. Matthews, Bishops Robinson and Pike.

LITURGICAL THEOLOGY

The aim of Liturgical Theology is to develop an appreciation and understanding of public worship, especially as shown by the Early Church, and Western Christendom. The interplay of Faith, Doctrine, and Devotion is studied by examining the various service forms, as these exhibit continuous development from the Early and Mediaeval Church, through the Reform, into the present,—and especially, for us, in the Book of Common Prayer. It is of concern that the student get to know the how and why of public worship, and so be able to bring the people committed to his leadership into a deeper awareness, and more devout and knowledgeable participation.

REQUIRED COURSES

Liturgical Theology 501—Two hours a week. (1968-69).
(1st term: A rapid survey of Worship, from the early Christian period, to 1544.
2nd Term: Worship in English. The History and analysis of English rites from the mid-Sixteenth Century to the present.
(See also Pastoralia 603. One hour a week. "The Prayer Book in the Parish". 1969-70).

ELECTIVE COURSES

Liturgical Theology 602—One hour a week.
The history and analysis of Christian Worship from the earliest days, through the mediaeval period, to the earliest Lutheran and Reformed rites.

Liturgical Theology 703—One hour a week.
Theology of Worship, and a survey of various rites existing in the ecumenical scene of today.

Liturgical Theology 704—One hour a week.
Seminar: an in depth discussion on a topic to be chosen in consultation with Professor Stone.

PHILOSOPHY OF RELIGION

Philosophy of Religion 501—(Philosophy 220)
1968-69. Two hours a week. An introduction to the philosophy of religion. Prerequsite or Elective.

Philosophy of Religion 502— (Philosophy 225) 1969-70. Two hours a week. An introduction to the contemporary psychology of religion. Prerequisite or Elective.

Philosophy of Religion 603—One hour a week. 1969-70.
Comparative Religion and Modern religious cults. Pine Hill. Elective. Strongly recommended.

PASTORALIA

Pastoralia is concerned with all matters affecting the relationship between pastor and people, and questions involved in relating the eternal gospel to contemporary human needs. Pastoralia courses complement essential theological learning with instruction and experience in communicating this learning. They also seek to assist the intending pastor to work co-operatively with his peers and with colleagues in other helping professions.

In addition to classroom work each year, much use is made of the methodology known as Supervised Pastoral Education, courses in which are offered in a variety of settings. Every student preparing for the ordained ministry of the Church is required to take all of the following basic program:

FIRST YEAR

Pastoralia 511—One hour a week one term. Speech Training: the reading of services and lessons.

(At the discretion of the Divinity Faculty, a student may be required to take this course more than once.)

Pastoralia 522—One hour a week one term. Church Music.

Pastoralia 506—One hour a week. Homiletics.

Pastoralia 509—One afternoon a week. Supervised Pastoral Education.

SECOND YEAR

Pastoralia 603—One hour a week. Conduct of the Services of the Church and use of the Prayer Book in the Parish.

Pastoralia 607—One hour a week. Ethics and Moral Theology.

Pastoralia 609—One afternoon a week. Supervised Pastoral Education.

THIRD YEAR

Pastoralia 700—One hour a week. Individually prescribed by Professor.

Pastoralia 706—One hour a week. Homiletics.

Pastoralia 709—One afternoon a week. Supervised Pastoral Education.

The student will normally do Pastoralia 509 in a general hospital setting, 609 in a parish setting, and 709 in either a mental hospital, community project, or other approved milieu. These courses include a variety of concerns such as pastoral relationships, parish administration, psychological insights, professional development, and pastoral counselling.

With the approval of the Professor, a student may attend a summer course of not less than six weeks duration in Clinical Pastoral Education **either** instead of one of the above courses of Supervised Pastoral Education, **or** in addition thereto as an elective in Pastoralia. Attention is drawn to the courses listed below which are offered in conjunction with the Institute of Pastoral Training and which carry credit towards advanced work in Clinical Pastoral Education for graduate students proceeding to a Master's degree (see page 190) and for certification by the national accrediting bodies.

SUMMER COURSES

Pastoralia 809a—Seven hours a day five days a week for six weeks. Introductory course in Clinical Pastoral Education in an institutional setting. Participants function as student chaplains under a professionally certified supervisor.

Pastoralia 809b—Seven hours a day five days a week for six weeks, usually following Pastoralia 809a, which is normally a prerequisite. This course carries the student to a more advanced level of Clinical Pastoral Education involving specialization in a field chosen in consultation with his supervisor.

ELECTIVES IN PASTORALIA

Each academic year, a number of courses (some extramural) are offered or approved as electives in Pastoralia. Amongst them may be such topics as Christian Education, Social Work and Welfare Services, Development of Personality, Community Organization, Special Ministries, etc. Interested students should consult the Professor of Pastoralia preferably before the end of the preceding academic year.

PARISH TRAINING

All students who are candidates for ordination are expected to undertake some Sunday responsibilities, and may participate in the annual "Parish Training School" arranged by the Pastoral Committee of the Diocese of Nova Scotia as a help for students going to summer work in rural or mission parishes. The Professor of Pastoralia shares in the overall direction of this Parish Training Program which is graded to the student's capabilities and is not onerous.

OTHER DIVINITY SCHOOL ELECTIVES

The Divinity School recognizes annually as electives a number of courses offered in neighbouring institutions with which it has academic relations. These include Dalhousie University, Pine Hill Divinity Hall, Holy Heart Seminary, The Maritime School of Social Work and Acadia Divinity College.

Degree of Master of Sacred Theology

In conjunction with the Institute of Pastoral Training, the University of King's College now offers the degree of Master of Sacred Theology in the field of pastoral care. Particulars concerning regulations for this degree may be obtained from the Executive Director of the Institute of Pastoral Training at the University of King's College.

Degree of Bachelor of Divinity

By agreement among all Anglican Theological Colleges in Canada, the Degree of Bachelor of Divinity is now awarded only by examination by the Board of Examiners of General Synod. Particulars concerning regulations for this Degree may be had upon application to the Registrar.

Diploma of Associate of King's College (Nova Scotia)

The University of King's College has established the diploma of Associate of King's College (Nova Scotia), A.K.C., (N. S.), to encourage further study for those persons who are not eligible for the B.D. It combines extramural and intramural work, and now includes Pastoralia. Particulars concerning regulations for this Diploma may be had upon application to the Registrar.

Associate in Theology

By arrangement among all Anglican Theological Colleges in Canada, the Title of Associate in Theology is now awarded only by examination by the Board of Examiners of General Synod. Particulars concerning regulations for this Title may be had upon application to the Registrar.

The Maritime School of Social Work

L. T. Hancock, M.A. (Acadia), B.S.W. (McGill), A.M. (School of Social Service Admin., University of Chicago)

Carol Ann Probert, B.A. (Mount St. Vincent), M.S.W. (Maritime School of Social Work and Saint Mary's); Registrar.

The Maritime School of Social Work is affiliated with the University of King's College. The School provides a two-year graduate program leading to the Master's Degree in Social Work. It was started in 1941 by a group of visionaries led by the late Dr. S. H. Prince, for many years a Professor of Sociology at King's. Seeing the rapid growth of Social Service Agencies throughout the Atlantic Region, this group recognized the need for a Centre where individuals could receive the education necessary for a career in the profession of social work.

The School began in a very modest way with four students and a faculty of volunteers. Today, it owns a large property in Halifax on Coburg Road at Oxford Street where a well-qualified faculty provides modern professional education to over forty students.

In early days the School had no permanent home and classes were held wherever suitable space could be found. In 1952 a home was made for the School at the University of King's College, and for five years it was housed in the Administration Building of the University. In 1957 the School purchased the property it now occupies.

Designed to serve the Atlantic Region, the School has placed emphasis on individual attention and highly qualified instructors. In 1950 Mount Allison University, St. Francis Xavier University, and Acadia University recognized the School and through an affiliation agreement awarded Master of Social Work Degrees to its graduates. In 1952 the University of King's College and St. Mary's University joined in the affiliation. Thus, a graduate of the School now receives his Master's Degree in Social Work from one of these five Universities.

Students interested in learning more about the program are referred to the current Calendar. The program, like that of other Canadian Schools of Social Work, is both practical and theoretical. The classroom courses are divided into three different groups, those concerned with the social work methods, those concerned with the social services, and those concerned with understanding human behaviour and social environment. In addition, students are required to participate in a Research program and write a thesis before they can qualify for graduation. The practical part of the program takes students into nearby agencies for two and one half days a week where they practice social work under the direction of a specially qualified Field Instructor.

The demand for professional social workers at home and abroad is enormous, and opportunities are varied and challenging. Persons planning a career in the Social Welfare field should first obtain a baccalaureate degree, with special emphasis on the Social Sciences, before applying to the Maritime School of Social Work for admission. Courses in Sociology, Psychology and Political Science are particularly important. In addition, personal qualifications such as patience, understanding, tact, good judgment, emotional stability, and tolerance of religious backgrounds and beliefs that are different from one's own, are essential.

The University of King's College is proud of its long and close association with the Maritime School of Social Work. The University is pleased to offer residence and dining room facilities to students of the School. Students of the University interested in learning more about careers in Social Work are advised to seek an interview with the Registrar of the School by phoning Halifax 423-8162.

SPEECH ARTS

Lecturer:

Stella Kryszek, L.G.S.M., Gold Medalist, L.A.M.D.A., S.R.N.

Voice Production, Drama. Prose. Poetry. Choral Verse Speaking. Public Speaking. Parliamentary Procedure. Correction of Speech Defects.

There are two terms of four months each. Sixteen lessons are given each term. First Term begins September, 1968; Second Term begins January, 1969.

TUITION FEES

Private lessons (one hour lesson) ..... $80.00 per term

SYLLABUS

BREATHING:

Relaxation — development of intercostal diaphragmatic controlled breathing.

VOICE:

Development of good vocal quality. Projection of the voice. Elimination of nasal, throaty, guttural or thin tone, and voice strain.

Articulation, Enunciation and Pronounciation.

VOCAL EXPRESSIVENESS:

Training in correct use of phrasing, emphasis, pause and modulation.

LANGUAGE:

Study of the fitness of words, and smoothness of transition.

RHETORIC:

The construction and presentation of an address.

MICROPHONE TECHNIQUE

Atlantic Summer School of Advanced Business Administration

June 16th—July 20th, 1968

The Maritime Universities have for several years jointly sponsored a Summer School in Advanced Business Administration whose home is at the University of King's College. In 1968 the School will be held from June 16th to July 20th.

The purpose of the School is to provide further training at an advanced level for those who are already engaged in work in the business world. Instruction is offered, under the tutelage of a staff drawn from the Harvard School of Business Administration, in Human Relations, Business Policy, Financial Analysis and Control, Labour Problems, Marketing Problems, and Government Policy and The Canadian Economy.

Admission to the School is by recommendation from the firm which employs the student and participation is invited from all sizes and types of companies. There are no formal educational requirements, but it is expected that sponsors will recommend only those who, by virtue of experience, intelligence, industry, and interest in their jobs, will profit from the instruction offered.

Members of the School will live in single rooms in Alexandra Hall and eat in Prince Memorial Hall. The cost of tuition, books, board and room amounts to $1,000.00 for the five weeks. Further details will be sent to applicants shortly before the opening of term in June.

Additional information as to the details of syllabus, etc., and application forms for admission are available from Dean H. E. Dysart, Director, Atlantic Summer School of Advanced Business Administration, University of King's College, Halifax. Applications should be completed by June 1st.

Institute of Pastoral Training

University of King's College

Pine Hill Divinity Hall

Divinity School of Acadia University

Presbyterian College, Montreal

Medical Faculty of Dalhousie University

The organization of the Institute in collaboration with Pine Hill Divinity Hall, the Divinity School of Acadia University, Presbyterian College, Montreal, Medical Faculty of Dalhousie University, pioneered this modern development in Theological education on the Canadian scene. It is the objective of the Institute to bring pastors and theological students face to face with human misery as it exists both in and out of institutions, through courses in Clinical Pastoral Education in both general and mental hospitals, reformatories and juvenile courts, homes for the aged, alcoholism treatment centers, and other social agencies. In this connection, the Institute now sponsors six-week courses in Clinical Pastoral Education, usually commencing mid May, at the Nova Scotia Hospital, Dartmouth (mental), the Nova Scotia Sanatorium, Kentville, the Victoria General Hospital, Halifax, and the New Brunswick Provincial Hospital in Lancaster.

While the above mentioned courses aim primarily at increasing the pastoral competence of the parish minister or church worker, students of particular aptitude and interest can be guided in further theological training to become qualified teachers of these subjects in theological courses, directors of Clinical Training Courses, and institutional chaplains; also, in certain cases, to become experts in particular specified fields, such as ministering to the mentally ill or alcoholics, where the church may have a significant role to play in partnership with other helping professions.

Other goals of the Institute include the production of teaching materials, the promotion of workshops, and the establishment of a first class library and reference center at the Institute office.

A number of one-day and four-day workshops have already been held in various localities in the Maritimes, and information as to what is involved in setting one of these up may be obtained from the Secretary of the Institute.

All enquiries concerning courses offered should be addressed direct to the Secretary of the Institute, the Reverend Howard H. Taylor, University of King's College, Halifax, N. S. Board and lodging can usually be arranged, and some bursary assistance is forthcoming. Academic credit is given by certain Canadian and American universities for satisfactory completion of any of the courses offered. Applications to attend the courses from bona fide enquirers belonging to other professions are welcomed, and receive equal consideration.

A recent development in this field was the formal constitution in December 1965 of "The Canadian Council for Supervised Pastoral Education", which seeks to co-operate training across Canada, establishing and maintaining high standards, accrediting training courses, and certifying supervisors. The Institute of Pastoral Training has links with the Council one of its executive members currently serving as President of the Council and as a member of its Board of Directors and its Committee on Accreditation and Certification. Professor R. J. R. Stokoe of King's, who has directed the six-week course at the Nova Scotia Hospital, Dartmouth, and now directs courses at the V.G. Hospital, has been accredited as a Chaplain Supervisor, by the Canadian Council and also by the Association for Clinical Pastoral Education in the United States.

Scholarships and Prizes

All Scholarships and Prizes except awards to Graduating Students will be credited to the students' account and not paid in cash.

Application should be made to the Registrar before May 15.

In order to retain scholarships tenable for more than one year, an average of 65% must be made each year, with no failing mark in any subject.

Any scholarship winner who can afford to do so is invited to give up all or part of the money awarded. He will still be styled the winner of the Scholarship during its tenure. This agreement increases the value of the Scholarships Funds, as it enables other students of scholarly attainments to attend the University.

ARTS AND SCIENCE

A. ENTRANCE SCHOLARSHIPS

Dr. W. Bruce Almon Scholarship—$1500 a year.

Established by the will of Susanna Weston Arrow Almon, this scholarship is open to a student entering the University of King's College and proceeding to the degree of Doctor of Medicine at Dalhousie University. It is renewable yearly provided that the student maintains a first class average, and lives in residence each year until the regulations of Dalhousie Medical School require otherwise.

By the terms of the will preference is given to a descendant of Dr. William Johnstone Almon.

Susanna Almon Scholarship—$750 a year.

Established by the University from the legacy of Susanna Weston Arrow Almon, these scholarships are tenable for four years from Grade XII.

Chancellors' Scholarships—$500 a year.

Established originally through the generosity of the Hon. Ray Lawson, O.B.E., LL.D., D.C.L., former Chancellor of the University, and continued by succeeding Chancellors, these scholarships are open to students of the Atlantic Provinces, and are tenable for four years from Grade XII. The holders of Chancellors' Scholarships must live in residence.

King's Foundation Scholarships—$350 a year.

Established by the Board of Governors, these scholarships are tenable for four years from Grade XII.

Halifax-Dartmouth Scholarships—$300 a year.

An entrance scholarship for students entering the University from the Halifax-Dartmouth area.

King's College Bursaries—$100

The University offers a limited number of bursaries of $100 to entering students of satisfactory academic standing and in need of financial assistance.

Alumni Living Endowment Scholarships—$600

Established by the Alumni Association, these scholarships are intended for entering students, but consideration will be given to applications from students who are already members of the College and who are in good academic standing. The holders of Living Endowment Scholarships must live in residence.

Margaret and Wallace Towers Bursary—$600 a Year.

Established by Dr. Donald R. Towers, of the Cheshire Academy, Connecticut, an alumnus of King's, in memory of his mother and father, this bursary, tenable for four years from Grade XII is open to a student of high academic standing entering the University of King's College, Halifax, Nova Scotia, to study Arts or Science, who is a resident, or a descendant of residents of Charlotte County, New Brunswick, or of Washington County, Maine. Failing any qualified applicants from these counties in any one year, the bursary for that year only will become available to a student resident anywhere outside the Maritime Provinces of Canada.

The Prince Scholarship—$1000

Made available by a former graduate of the University in recognition of the pre-eminence in the spheres of education and community leadership of the late Dr. S. H. Prince, long associated with the University, this scholarship is open to any student of African extraction, a native of Nova Scotia.

Winfield Memorial Entrance Scholarship—$200

Established by Mrs. W. A. Winfield in memory of her husband.

The Alumni Scholarships—$300.

The Alumni Association has established two scholarships of $300 each: one restricted to students of King's College School, Rothesay Collegiate, Edgehill, Netherwood or Halifax Ladies College; and one unrestricted.

Keating Trust Scholarships—$125

Awarded from a bequest to the College from the Rev. J. Lloyd Keating to students entering College with outstanding marks in Science, these scholarships, according to the will of the donor, are intended to encourage students, and preferably Divinity students, in the study of chemistry and physics, and scholars will be required to take at least one class in physics or chemistry during the year in which they hold the scholarship.

Nova Scotia Light & Power Co. Ltd. Scholarship—$300 a year.

The Nova Scotia Light & Power Co. Ltd. offers an entrance scholarship of $300.00 a year, tenable for three or four years, providing the student maintains an average of 65% and has no failure in any subject.

The Halifax Rifles Centenary Scholarship—$200

Established by the Halifax Rifles as an entrance scholarship. For particulars apply to the Registrar.

King's College Naval Bursary—$300 a year

In order to commemorate the unique and valuable relationship between the University of King's College and the Royal Canadian Navy during the Second World War, ships and establishments of the Atlantic Command have set up a Bursary to enable a student to attend King's.

Applicants must be children of officers and men either serving in the Royal Canadian Navy or retired from the R.C.N. on pension. Academic achievement and promise will be the first consideration in selecting a candidate. Purpose, industry and character are to be carefully weighed, together with the likelihood that the candidate will make good use of higher education to benefit not only himself but also his country.

The Bursary is awarded annually but it is intended to be tenable by the same student to the completion of his course at King's College provided that he makes acceptable progress. The Bursary will be withdrawn in the event of academic failure or withdrawal from King's College for any reason.

Deihl Bridgewater Bursary—$250

To assist needy students of suitable standing, resident in the town of Bridgewater, or within six miles of the town. Bequeathed by the late Lena Ruth Deihl.

Walter Lawson Muir Bursary—$175

To be awarded at the discretion of the Scholarship Committee either to a student entering college for the first time or to a student returning to college who won high scholastic standing in the previous year. Endowed by Mrs. W. L. Muir.

The United States Scholarship—$500

Awarded annually by Friends of New York State Corporation, to a student resident in the United States who in the judgement of the Directors of the Corporation best exemplifies an appreciation of the importance of good relationships between the people of the United States and Canada.

In any year the scholarship may be divided among two or more students.

Imperial Oil Higher Education Award

Imperial Oil Limited offers annually free tuition and other compulsory fees to all children or wards of employees and annuitants who proceed to higher education courses. The award is tenable for four years from Grade XII. For particulars apply to the Registrar.

Redpath Sugar Scholarship—$1000 for two years

Establishment of a Redpath Sugar Scholarship for a son or daughter of a Maritime miner to study at a Maritime University was announced January 28th, 1959, by W. J. McGregor, President of the Redpath Sugar Refinery, in memory of men lost at Springhill. For particulars apply to the Registrar.

The Imperial Order Daughters of the Empire Bursary—$400 a Year

As part of a War Memorial the I.O.D.E. offers annually in each Province of Canada one bursary for four years' study in Canadian Universities, to the sons and daughters of deceased or permanently disabled men and women of the service (Army, Navy, Air Force.) For particulars apply to the Registrar.

I.O.D.E. Bursaries—$100 to $200

The Provincial Chapter of Nova Scotia, I.O.D.E., will award a limited number of bursaries of from $100 to $200 to university students of satisfactory academic standing in need of financial assistance. First-year students will be given preference. For particulars apply to the Registrar.

B. SCHOLARSHIPS, BURSARIES AND PRIZES AWARDED IN COURSE

The President's Scholarship—$250

Three scholarships of $250 will be awarded to the students who make the highest average at the end of the first, second and third year examinations and hold no other scholarship.

The Stevenson Scholarship—$120

Founded by the Rev. J. Stevenson, M.A., (sometime Professor of Mathematics), of the value of $120 a year tenable for two years, this scholarship will be awarded to a student in the Second Year, who makes the highest aggregate in the Christmas examinations.

The Scholarship will be credited in half-yearly instalments, provided always that the scholastic standard is maintained.

Alexandra Society Scholarship—$200

An annual award offered by the Alexandra Society of King's College to a woman student who, having taken at least five subjects in her third year, has obtained the highest average (minimum 65%) with not less than 50% in any one subject; provided that she spend her final year in residence in Alexandra Hall and also provided that if the student obtaining the highest average is otherwise ineligible, the award shall be left to the discretion of the Scholarship Committee of the College.

April Fund Scholarship—$600

A scholarship of $600.00 has been established by the Trustees of the April Fund to be awarded to a student of outstanding academic distinction entering his or her graduating year. Any student may apply for this scholarship whether or not he has previously studied at the University of King's College.

The scholarship holder will be required to live in residence.

Applications must reach the Registrar not later than May 15th and must be accompanied by a transcript of marks obtained in the applicant's Junior year, and the names of two professors to whom the applicant is known, and to whom reference can be made.

Saint John University Women's Club Scholarship—$100 (Undergraduate)

The Saint John University Women's Club awards a scholarship of $100 each year to a woman student entering her senior year in a Maritime University. The award is to be made to a student from the City or County of Saint John, with consideration being given to both academic attainment and financial need. For particulars apply to the Registrar, before March 1.

The Lawson Prize—$100

Established by The Hon. Ray Lawson, former Chancellor of the University, for the student who shows the greatest progress between the first and second year.

Dr. M. A. B. Smith Prize—$25

Established by a bequest of $500 from the late Dr. M. A. B. Smith. Awarded to the student with the highest marks at the end of his second year with ten classes. In case of a tie preference will be given to a Divinity student.

Bishop Binney Prize—$20

This prize, which was founded by Mrs. Binney in memory of her husband, the late Bishop Binney, is given to the undergraduate with the best examination results at the end of the second year with ten classes.

The Akins Historical Prize—$100

Founded by T. B. Akins, Esq., D.C.L., Barrister-at Law and Commissioner of Public Records.

The award is made for the best original study in Canadian History submitted in competition.

Essays must be handed in, under a nom de plume, with the writer's name in an attached envelope, on or before the 1st day of April of the year concerned. Essays become the property of King's College.

The Beatrice E. Fry Memorial—$50

Established by the Diocesan Board of the W.A. of the Diocese of Nova Scotia, in memory of Miss Beatrice E. Fry. To be awarded to the woman student (Anglican) of the College obtaining the highest mark of the year in English 2, provided that mark exceeds 65%.

The Henry deBlois English Prize—$15

The late Rev. Henry D. deBlois, D.C.L., a graduate of King's College, left the sum of $200 to the Governors of the College to establish a prize in English. Awarded to the student of the 3rd or 4th year in Arts or Science who submits the best essay on some subject relating to English Literature.

For conditions, apply to the Registrar. All essays must be in the hands of the Registrar of King's College by February 15.

The Almon-Welsford Testimonial—$30

The Honourable William J. Almon, Esq., M.D. (1816-1901) and his family endowed a prize to commemorate the gallant and loyal deeds of Major Augustus Frederick Welsford who died in the Crimean War (1855) and to encourage the study of Latin. The prize is awarded annually to the student in his first year who makes the highest mark in either Latin 1 or Latin 2, provided the mark is not less than 65%.

The McCawley Classical Prize—$35

Established as a testimonial to the Rev. G. McCawley, D.D., on his retirement from the office of President.

Open to students who have completed their first year.

The Zaidee Horsfall Prize in Mathematics—$10

Established as a memorial to the late Zaidee Horsfall, M.A., D.C.L. Awarded to the student who makes the highest mark in first year Mathematics.

Khaki Bursary—$60

Awarded to the sons and daughters of the soldiers of the Great Wars. Written application must be made to the Registrar showing claim for consideration.

The Binney Bursary—$50

Founded in the year 1858, by Miss Binney, sister of the late Bishop Binney, and daughter of the late Rev. Hibbert Binney, in memory of her father.

This scholarship is intended to aid students who may require assistance, and who shall have commended themselves by their exemplary conduct, although their abilities and achievements may not qualify them to be successful competitors for an open Scholarship.

Charles Cogswell Bursary—$20

Charles Cogswell, Esq., M.D., made a donation of $400 to the Governors of King's College, the object of the donation being "to promote the health of the students and encourage them in the prosecution of their studies".

The Harry Crawford Memorial Prize—$40

Offered annually by a friend in memory of Harry Crawford, son of Thomas H. and Elizabeth A. Crawford, Gagetown, N. B.; a student of this College, who died true to his King and his Country, April 14, 1915, while serving in the Canadian Motor Cycle Corps.

The prize is awarded to the student completing the third year Arts course, of good character and academic standing, who in the opinion of the Faculty deserves it most.

The Jackson Bursary—$25

Founded by the Rev. G. O. Cheese, M.A. (Oxon.), in memory of his former tutor, the late T. W. Jackson, M.A., of Worcester College, Oxford.

C. GRADUATE SCHOLARSHIPS, MEDALS AND PRIZES

The Governor General's Medal

Awarded to the candidate who obtains the highest standing in the examination for B.A. or B.Sc. Degree. Preference will be given to an Honours Student.

The Rev. S. H. Prince Prize in Sociology

This prize was made available by a $1,000 bequest under the will of the late Dr. S. H. Prince for annual award to both Dalhousie and King's Students.

Burns Martin Memorial Prize

Established in 1962 by a graduate of the University in memory of Dr. Burns Martin, for many years Professor of English and College Librarian, to be awarded at Encaenia.

The Rhodes Scholarship

This scholarship is of the annual value of 750 pounds sterling. Before applying to the Secretary (Dr. C. B. Fergusson, 6 Jennings St., Halifax) of the Committee of selection for the Province (which application must be made by November 1), consult the Registrar, King's College.

Rhodes Scholars who have attended the University of King's College

1909	Medley Kingdom Parlee, B.A., '08
1910	Robert Holland Tait, B.C.L., '14
1913	Arthur Leigh Collett, B.A., '13
1916	The Rev. Douglas Morgan Wiswell, B.A., '14 M.A., '16
1916	The Rev. Cuthbert Aikman Simpson, B.A., '15 M.A., '16
1919	William Gordon Ernst, B.A., '17
1924	The Rev. Gerald White, B.A., '23, M.A., '24
1925	M. Teed, B.A. '25
1936	Allan Charles Findlay, B.A., '34
1938	John Roderick Ennes Smith, B.Sc., '38
1946	Nordau Roslyn Goodman, B.Sc., '40, M.Sc., '46
1949	Peter Hanington, B.A., '48
1950	Ian Henderson, B.Sc., '49
1950	Eric David Morgan, B.Sc., '50
1955	Leslie William Caines, B.A., '55
1962	Roland Arnold Grenville Lines, B.Sc., '61
1963	Peter Hardress Lavallin Puxley, B.A., '63

University Women's Club Scholarship—$500

The University Women's Club of Halifax offers a scholarship of the value of $500 every second year, 1964, 1966, etc., to a woman graduate of Dalhousie University or King's College, to assist her in obtaining her M.A. or M.Sc. degree at any recognized graduate school. For particulars apply to the Registrar.

The Canadian Federation of University Women Fellowships —$1500 to $2500

For information apply to the Registrar.

The Imperial Order Daughters of the Empire Post-Graduate Overseas Scholarship—$2000.

For information apply to the Registrar.

Imperial Oil Graduate Research Fellowship $3000 for three years

For information apply to the Registrar.

Commonwealth Scholarships

Under a Plan drawn up at a conference held in Oxford in 1959, each participating country of the Commonwealth offers a number of scholarships to students of other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travelling, tuition fees, other university fees, and living allowance. For details of the awards offered by the various countries consult the Registrar's office or write to the Canadian Universities Foundation 77 Metcalfe Street, Ottawa.

Rotary Foundation Fellowship

Open to graduate students for advanced study abroad. Available every second academic year, 1963, 1965, etc. Applications must be considered before August 1st of previous year. Information may be obtained from Rotary Clubs or the Registrar.

DIVINITY

Owen Family Memorial Scholarships—Two of $250

Established by Mr. and Mrs. D. M. Owen, in memory of the Owen Family, tenable for one year, but renewable, and open to applicants who are Nova Scotia born, and resident therein, and are or are about to become theological students at King's College, preference being given (1) to native residents of the town of Lunenburg, and (2) to native residents of the County of Lunenburg.

Canon W. S. H. Morris Scholarship—$1,500

This Scholarship has been founded by Robert H. Morris, M.D., of Boston in memory of his father, the Reverend Canon W. S. H. Morris, M.A., D.D., Kingsman, Scholar and Parish Priest in the Diocese of Nova Scotia for forty years.

The Scholarship may be awarded annually by the President and Divinity Faculty to the most deserving member of the present or recent graduating class of the Divinity School, who has been at King's at least two years, and who, in the opinion of the Faculty, would benefit from travel and/or study in Britain, the U.S.A. or some other area outside the Atlantic Provinces of Canada, provided he reaches a satisfactory standard. Applications, stating the use which the applicant expects to make of the Scholarship, must be submitted to the Dean of Divinity on or before January 8 of the applicant's graduating year. The recipient will be required to serve in the Atlantic Provinces for a minimum of three years after his return from abroad.

William Cogswell Scholarships

Open to students intending to work in the Diocese of Nova Scotia. Scholarship (A): Under the direction of the Trustees of the William Cogswell Scholarship to be awarded to the student who passes a satisfactory examination and who takes his Divinity course at any recognized Divinity College of the Church of England in Canada best fitted, in the opinion

of the Trustees, to serve the terms of the Trust, giving when possible preference to King's College.

Scholarship (B): Under the direction of the Faculty of Divinity of the University of King's College, Halifax, Nova Scotia, an entrance scholarship of $200 or $300 depending on quality of work submitted, will be awarded to the properly accredited student entering the Divinity School for the first time in September, 1968, who stands highest in a special examination to be held on September 19, 1968, provided he reaches a satisfactory standard. The recipient will be required to sign a statement promising to serve in the Diocese of Nova Scotia for a period at least as long as the period during which he holds the scholarship.

This examination will consist of two papers:

a. A paper on the content of the Old and New Testaments, and
b. A paper on A. H. McNeile's Introduction to the New Testament (revised edition by C. S. C. Williams) Oxford, 1953.

Awards will not be made every year.

The Daniel Hodgson Scholarship—$240

Founded in 1883 by Edward J. Hodgson and the Reverend G. W. Hodgson in memory of their father Daniel Hodgson, who died about that time. This Scholarship of an annual value of $60, tenable for four years, is for the purpose of encouraging students to take an Arts Degree before entering upon the study prescribed for Holy Orders. Candidates, who must be residents of Prince Edward Island, shall file their applications and certificates of having passed the full Arts matriculation requirements before August 15th, and must not be over 24 years of age at that time. They must also satisfy the Diocesan Committee for Holy Orders as to their aptitude for the Ministry of the Church. At the end of each academic year the Scholar shall file with the Trustees a certificate from the President or Secretary of the University "that during the past year he has resided in College (or has been excused from such residence) and has attended the full Arts course in the

College", together with a certificate that his moral conduct, his attention to his studies and his general conduct have been satisfactory to the Board of Governors.

Scholars who fail to comply with the foregoing conditions automatically forfeit the Scholarship, but in special cases the Bishop, on the representations of the Trustees, may restore a terminated Scholarship in whole or in part.

The Bishop Waterman Bursary (Parish of Clements)—$150

The Parish of Clements, Nova Scotia, wishing to give tangible expression to its appreciation to the Rt. Rev. R. H. Waterman, D.D., for his services to the Parish immediately following upon the death of their Rector (Rev. W. H. Logan, December 19, 1964), has set up a Bursary Fund, to be known as the Bishop Waterman Bursary Fund, to help young men entering King's to undergo training for the Ministry. An amount not less than $150 is to be forwarded by the Treasurer of the Parish to the Bursar at King's on September 1st of each year. This money is to be used at the discretion of the Dean of Divinity in consultation with the Bishop of the Diocese for the assistance of any candidate for Holy Orders needing it from any Parish of the Diocese of Nova Scotia enrolled at King's for training for work in the Diocese of Nova Scotia or any Missionary Diocese. If any young man from the Parish of Clements offers himself for such training, he shall be given first consideration in the awarding of the Bursary.

The Mabel Rudolf Messias Divinity Bursary—$120

The interest on an endowment of $2,000.00, the gift of Mrs. M. R. Messias of Wolfville, Nova Scotia, is to be used to provide an annual Bursary for a needy and deserving Divinity student studying at the University of King's College, on the nomination of the Dean and the Faculty of Divinity.

Order of The Eastern Star—$260

Four scholarships are to be awarded, primarily on the basis of financial need, to 2nd or 3rd year Arts students, or to older men with their Arts degree, in their 2nd or 3rd year of Theology.

John Clark Wilson Memorial Bursaries—$100 each

Established in 1947 by Miss Catherine R. Kaiser, in memory of John Clark Wilson. Two bursaries of $100 each, tenable for one year. Awarded to Divinity students deemed worthy of financial help.

Organ Fellowship—$200

Awarded to a student qualified and willing to play the organ in the College Chapel (Casavant-2 manual pipe organ) at services throughout the year.

Glebe Scholarship

A scholarship of approximately $250 is offered annually to students from Prince Edward Island, preference being given to Divinity students.

Application, accompanied by a certificate of character from the applicant's Rector, must be sent to The Eastern Trust Company, Charlottetown, P.E.I. on or before May 31st.

Moody Exhibition—$100

The "Catherine L. Moody" Exhibition of $50 a year for two years is awarded every two years to the student entering the second year preparing for Holy Orders, whose scholarship and exemplary conduct shall, in the opinion of the Faculty, merit it. (Next award 1969).

The George Sherman Richards Proficiency Prize—$120
In Memory of the Reverend Robert Norwood, D.D.

The income from a fund of $2,000 to be awarded annually to the Divinity student who gains the highest aggregate of marks at the end of his penultimate year, provided that in that year he takes the regular full course in Theology.

The Countess de Catanzaro Exhibition—$100

The income from a fund of $2,000 to be awarded by the Faculty to a Divinity student during his second year in college. The award will be made on the basis of character and need.

The McCawley Hebrew Prize—$25

Open to all members of the University who are below the standing of M.A.

This prize is given out of the interest of a Trust Fund, the gift of the Reverend George McCawley, D.D., in the hands of the Society for the Propagation of the Gospel in Foreign Parts.

This prize will be awarded to the student who leads the class in Hebrew 2 and receives a recommendation from the professor of Hebrew.

Junior McCawley Hebrew Prize—$25

With the accumulated unexpended income from the McCawley Hebrew Prize a fund has been set up establishing a second prize, to be awarded to the student standing highest in first year Hebrew.

Archdeacon Forsyth Prize—$50

The Ven. Archdeacon D. Forsyth, D.C.L., of Chatham, N. B. who died in 1933, left to King's College $1,000 to provide an annual prize or scholarship, to be awarded to a Divinity student for proficiency in the study and knowledge of the original Greek Scripture. To be awarded on the combined results of Greek Testament 1 and 2.

Shatford Pastoral Theology Prize—$40

Established by an anonymous donor, in memory of the late Rev. Canon Allan P. Shatford, C.B.E., D.C.L. Awarded annually for Pastoral Theology. The winner must receive a recommendation from the Professor of Pastoralia.

Laurie Memorial Scholarship

One or more scholarships of about $250 each, founded in memory of Lieut.-Gen. Laurie, C.B., D.C.L., open to candidates for the Ministry, under the direction of the Trustees. Particulars may be had from the Registrar.

The Wiswell Trust Divinity Studentship—$120

A. B. Wiswell, D.C.L., Hon. Fell. (Vind.) of Halifax, N. S., in order to perpetuate the memory of the Wiswell Family, augmented a bequest from members of the family, thus providing a capital sum of $2,500, the income of which is to assist Divinity students at King's College, who were born in Nova Scotia and who propose entering the ministry of the Anglican Church in Canada.

Prince Prize in Apologetics—$60

Established by a bequest of the late Dr. S. H. Prince. Awarded every alternate year, at the discretion of the Faculty. (Next award 1969-70).

Wiswell Missionary Bursary—$200

Founded by Dr. A. B. Wiswell for help to a Divinity student who believes he has a call to the Mission Field either Overseas or in the Canadian West.

Preference will be given to a student who has given promise of the needed qualities and has taken his degree or is within a year of completing his Arts Course. If there is no student meeting the above requirements the award will be left to the discretion of the Divinity Faculty.

Clara E. Hyson Prize—$5.00

Founded by Miss Clara E. Hyson and awarded each year on vote of the Faculty.

A. Stanley Walker Bursary—$100

Awarded by the Alexandra Society of King's College. To be given annually to a Divinity student.

Johnson Family Memorial Bursary—$60

Founded by the Misses Helen and Marguerite Johnson in memory of their parents, this bursary is to be awarded annually at the discretion of the President and Divinity Faculty to the Divinity student considered most worthy on grounds not only of scholarship, but also, of financial need and of devotion to his vocation. Preference will be given to a student from the parish of St. Mark's, Halifax.

Divinity Grants

Grants to aid students in Divinity who require assistance are made by the Bishop of Nova Scotia, and by the Archbishop of Fredericton. The holders of these must fulfill such conditions as the Bishops lay down and in every case attend a personal interview. For further particulars apply to the Dean of Divinity.

The King's Divinity Scholarship—$150

The Women's Auxiliary of the Anglican Church of Canada in the Diocese of Nova Scotia makes an annual grant of $150 towards the expenses of Divinity students who agree to work in the Diocese of Nova Scotia after ordination.

Archbishop Kingston Memorial—$100

Awarded annually by the Nova Scotia Diocesan W. A. on recommendation of the Divinity Faculty, to a needy Divinity Student.

The Wallace Greek Testament Prize—$50

A Book Prize established by the late Canon C. H. Wallace of Bristol, England, in memory of his father, Charles Hill Wallace, barrister, of Lincoln's Inn, who graduated at King's College in 1823, and died in England in 1845. Subject: Epistle to the Hebrews. Application to be made to the Registrar by March 1st.

Agnes W. Randall Bursary

Two bursaries of $8.00 each will be given each year to the students in Theology who show the greatest diligence in their studies. An award will not be made twice to the same student.

Bennett-Cliff Memorial Prize

A prize of $10.00 each year. Award to be at the discretion of the President.

Kenelm Eaton Memorial Scholarship—$60

This scholarship is provided by the Synod of Nova Scotia as a memorial to The Hon. Captain Kenelm Edwin Eaton, B.Sc., L.Th., who made the supreme sacrifice while serving as a Chaplain in Italy, August 31, 1944. For particulars apply to Registrar.

Dr. C. Pennyman Worsley Prize—$100

A memorial to the late Dr. Worsley. To be used in alternate years for a prize in Church History. Next award 1969-70.

Fenwick Vroom Exhibition—$40

To be awarded to a Divinity Student at the discretion of the Faculty.

The Church Boy's League Bursary Fund

Students eligible for assistance from this Fund are those who have, at one time, been full-pledged members of any Parochial C. B. L. branch in Canada. Particulars are available from the Registrar.

The Reverend Canon R. A. Hiltz Memorial Bursaries

To be awarded to present or former members of the A.Y. P.A. who are in full course of Theology and in need of financial assistance.

Bursaries up to a total of $300 each year.

Archbishop Owen Memorial Scholarships

A number of scholarships of $300 each are awarded each year by the General Synod Committee concerned to students in their final year in Theology, who are ready to take up missionary work, either in Canada or overseas. Academic standing and financial need are taken into account in making the award.

Application should be made to the Dean of Divinity by November 1st of each year.

The Florence Hickson Forrester Memorial Prize—$100

The prize, presented in memory of the late Mrs. Forrester, by her husband, is to be awarded on Encaenia Day to the Divinity Student in his penultimate or final year who passes the best examination on the exegesis of the Greek text of St. Matthew, Chapter V-VII provided always that the standard be sufficiently high.

Bibliography:

T. W. Manson: The Sayings of Jesus, (SCM)
J. Jeremias, The Sermon of the Mount, (Athlone Press)
F. W. Beare: The Earliest Records of Jesus, (Blackwell) pp. 52-69 and 95-98.
H. K. MacArthur: Understanding the Sermon on the Mount (Epworth).

The Bullock Bursary—$225

Established by C. A. B. Bullock of Halifax for the purpose of defraying the cost of maintenance and education of divinity students enrolled at King's College who were, before being enrolled, residents of Halifax, and members of a Parish Church there, and who are unable to pay the cost of such maintenance and education.

The Harris Brothers Memorial—$100

To be awarded at the beginning of each college year as a bursary to a student of Divinity at the University of King's College. The student shall be selected annually by the Divinity Faculty, preference being given to a needy student from Prince Edward Island, failing that, a needy student from the Parish of Parrsboro, and failing that to any deserving student of Divinity at the said University.

The Carter Bursaries—$160

Two bursaries of a value of $160 each, established under the will of Beatrice B. Carter of Amherst, Nova Scotia, to be used to assist young men studying for the Ministry.

Royal Canadian Air Force Protestant Chapel Bursary—$120

This Bursary, established in 1959 by endowment from collections taken in R.C.A.F. chapels, is awarded annually at the direction of the Divinity Faculty to a bona fide ordinand, preference where possible being given to (a) ex-R.C.A.F. personnel, (b) children of R.C.A.F. or ex-R.C.A.F. personnel

The Ott Reading Prize—$25

Established by Dr. T. Gordon Ott. Awarded annually to a student of Divinity for the best reading of the Bible and the Services of the Church.

The Ott Preaching Prize—$25

Established by Dr. T. Gordon Ott. Awarded annually to a student of Divinity for the best extempore sermon of an expository nature.

William A. and Kathleen Hubley Memorial Bursary—$175

This bursary is designed to assist students from St. Mark's Parish, Halifax, and failing a suitable candidate then from any parish in the Diocese of Nova Scotia, who are studying for the Sacred Ministry at any recognized College in the Anglican Communion, preference being given to students studying at the University of King's College. The award is made on the basis of need and may be renewed provided a certain acceptable standard is attained. The recommendations of the Rector of St. Mark's and the Dean and Divinity Faculty are necessary conditions. The bursary must be applied for annually.

The Reverend James R. McMahon Memorial Bursary

A bursary of $100.00 each year will be granted by an anonymous friend to the Divinity Student who best personifies the qualities of the late Reverend James R. McMahon, alumnus and former Registrar. Financial need will be taken into consideration, as well as kindliness, understanding and the readiness to give a helping hand.

The Archdeacon Harrison Memorial Bursary—$20

Established by Miss Elaine Harrison in memory of her father. To be awarded to a deserving and needy Divinity student, at the discretion of the Faculty.

St. Paul's Garrison Chapel Memorial Prize—$20

To be awarded to the Divinity student chosen by the Faculty to attend a Christmas Conference.

The Clarke Exhibition

An endowment was established by the late Reverend Canon W. J. Clarke of Kingston, New Brunswick, the first charge upon which shall be the provision of copies of "The Imitation of Christ" to members of each year's graduating Class in Divinity. The balance of the income each year is to be awarded by decision of the Divinity Faculty to a deserving Divinity Student for the coming year.

LECTURESHIPS

The Archbishop Hackenley Rural Lectureship

(A Diocesan Synod of Nova Scotia Foundation, with a supervisor appointed by the Synod and the Divinity Faculty and acting under the guidance of the Dean of Divinity).

This course is available to all students and priests and will consist of lectures on the Church's relation to the Rural Community, and seminars and conferences on the rural pastoral ministry, and the supervision of students working in rural parishes. This course will be integrated with the Diocesan Rural Training School.

Student Organizations

THE UNIVERSITY OF KING'S COLLEGE STUDENT UNION

The University of King's College Student Union is the organization in which the students enjoy their right of self government. The constitution, revised in 1964, provides for a democratic government in which the participation of every student is expected. The students endeavour to play a determining role in every aspect of university life. The Union is a member of the Canadian Union of Students. The Union's main organs are the Student Assembly, the Executive of the Student Union, the Student Council. The power of self discipline is exercised through the Union's Male and Female Residence Councils and the Campus Police.

The Union operates through a number of permanent committees, e.g: the Academic Committee, the Social Committee, the Saturday Dance Committee; committees on the constitution, elections, finances, Dalhousie relations, awards, etc.

THE KING'S COLLEGE AMATEUR ATHLETIC ASSOCIATION

The object of this association is the promotion of amateur sports of all kinds. The K.C.A.A.A. is affiliated with the Maritime Intercollegiate Athletic Union and is governed according to the rules of that association. The K.C.A.A.A. enters teams in several intercollegiate competitions including soccer, basketball, curling, and tennis. There are also interbay competitions in softball, hockey, volleyball, badminton, ping-pong, and basketball.

KING'S COLLEGE GIRLS' AMATEUR ATHLETIC ASSOCIATION

The object of this organization is the promotion of amateur sports of all kinds. The K.C.G.A.A.A. is affiliated with the Maritime Provinces Amateur Athletic Association, and is governed according to the rules of that association. The K.C.G.A.A.A. sponsors intercollegiate teams in basketball, volleyball and ground hockey, and in addition organizes and arranges co-ed badminton and volleyball matches in the King's College Gymnasium.

KING'S COLLEGE DRAMATIC AND CHORAL SOCIETY

This society was founded in 1931 to further interest in dramatic and choral work. The society presents an evening of one-act plays during the first term, and a three-act play. In addition, the society sponsors an inter-bay play evening and enters a play in the Connolly Shield Competition.

The Dalhousie Drama Workshop, a branch of the Department of English, offers training in voice production, acting, dance, movement, make-up, costume, set design and construciton, and lighting under the direction of experienced instructors. King's students are invited to participate in the activities and productions of the Workshop on the same basis as Dalhousie students.

THE KING'S COLLEGE RECORD

The Record (founded 1878) is published by the undergraduates of the College during the academic year. It contains a summation of the year's activities and awards.

THE QUINTILIAN DEBATING SOCIETY

This society was founded in 1845 and it was largely owing to the initiative of this Society that the Atlantic Intercollegiate Debating League was established. Quintilian sponsors interbay debates during the first and second terms. In addition the men participate in three Intercollegiate debates each year, and the co-eds in two debates.

THE HALIBURTON

The Haliburton was founded and incorporated by Act of Legislature in 1884, and is the oldest literary society on a college campus in North America. Its object is the cultivation of a Canadian Literature and the collecting of Canadian books, manuscripts, as well as books bearing on Canadian History and Literature. College students and interested students of the City of Halifax meet to listen to papers which are given by literary figures and by the students.

THE ANCIENT COMMONER

The "Ancient Commoner" is the College newspaper. It is published weekly

THE STUDENTS' MISSIONARY SOCIETY

This society was founded in 1890. Its object is to promote interest in missionary work and to further the missionary work of the Church, especially in the Maritime Provinces. The annual meeting is held on Saint Andrew's Day, or as near to it as possible. Through the efforts of this organization, divinity students are provided with summer charges and foreign students have been afforded the opportunity of studying Theology at King's.

AWARDS

The Student Bodies of the University of King's College combine to award an overall "K" to participants in King's Activities. Under this system, begun during the 1956-1957 term, a student may receive a silver "K" upon amassing 160 points and a gold "K" upon amassing 250 points.

In addition several awards are presented to students for outstanding achievements in extra-curricular activities.

Bob Walter Award

Awarded to the graduating male student who best exemplifies the qualities of manhood, gentlemanliness, and learning.

Warrena Power Award

Awarded annually to the graduating female student who best exemplifies the qualities of womanhood, gentleness, and learning.

The R. L. Nixon Award

This award is given annually to the resident male student who, in the opinion of his fellows, contributes most to residence life in King's.

The Prince Prize

This prize is designed for the encouragement of effective public speaking. The recipient is chosen by adjudicators in an annual competition.

The Bissett Award

This award is given annually to the College's best all-round male athlete.

The Arthur L. Chase Memorial Trophy

This is presented annually to the student who has contributed most to debating in the College.

The H. L. Puxley Award

Awarded annually to the College's best all-round woman athlete.

LOAN FUNDS

Arthur L. Chase Memorial Students Loan Fund

Established by Mr. and Mrs. H. M. Chase as a memorial to their only child, who died while an undergraduate at King's College. Available to male students entering upon their third or fourth year. Application to be made in writing to the Registrar.

Edith Mabel Mason Memorial Students Loan Fund

Established by Alumni and friends as a memorial to the late Miss Edith Mabel Mason, M.A., a former Dean of Women and Professor of Modern Languages. Available to women students entering upon their third or fourth year. Application to be made in writing to the Registrar.

SOCIETIES CONNECTED WITH THE COLLEGE

Alumni Association of King's College

This Association, incorporated in 1847 by Act of the Legislature, consists of graduates and others whose object is the furtherance of the welfare of the University. The annual fee for membership is $4.00.

The Association maintains annual scholarships.

The annual meeting of the Association is held the day before Encaenia.

The officers of the Association in 1968-69.

President: The Rev. Walter Harris, 6155 Chebucto Rd., Halifax, N. S.

Vice-President: The Rev. Robert D. Crouse, 5885 Spring Garden Rd., Halifax, N. S.

Vice-President: (Outside) Dr. Garth B. Christie, 225 Main St., Nashwaaksis, N. B.

Treasurer: Dr. Henry Muggah, Q.C., 6033 Belmont Rd., Halifax, N. S.

Executive Secretary: Mrs. J. Desrosiers, University of King's College, Halifax, N. S.

The Alexandra Society of King's College

This Society, which has branches all over the Maritime Provinces, was formed in Halifax in 1902 as the Women's Auxiliary to the College. It maintains an annual scholarship and bursary and has instituted a fund to support the Alexandra Chair of Divinity.

Officers 1968-69

Patron ..... Mrs. A. H. O'Neil
Hon. Life Member ..... H. R. H. Princess Alice
Hon. Life President ..... Mrs. G. M. Ambrose
Hon. President ..... Mrs. H. D. Smith
Hon. Vice-President ..... Mrs. G. F. Arnold

Immediate Past President	Mrs. V. McSweeney
President	Mrs. A. G. MacIntosh 705 Pearson Drive, Halifax, N. S.
Vice-Presidents	Mrs. A. MacKeigan 35 Reserve St., Glace Bay, N. S.
	Mrs. J. E. Lane 357 Brunswick St., Fredericton, N. B.
	Miss M. Morris Victoria Hall Halifax, N. S.
	Mrs. G. Sitland 2150 Harvard St., Halifax, N. S.
Recording Secretary	Mrs. J. C. Erving 2231 Quinn St., Halifax, N. S.
Corresponding Secretary	Mrs. R. B. Hobson 125 Crichton Ave., Dartmouth, N. S.
Treasurer	Mrs. F. R. Peveril 11 Edgewood Manor 6779 Bayers Rd., Halifax, N. S.
Friends of King's	Mrs. H. D. Smith 6360 Coburg Rd., Halifax, N.S.
Calendar Secretary	Mrs. P. N. McIvor 8 Lakeview Point, Dartmouth, N.S.

CONVOCATION, MAY 17, 1967

DEGREES CONFERRED

DOCTOR OF CIVIL LAW (*honoris causa*)

Mary Helen Creighton
Clarence Joseph Morrow

DOCTOR OF DIVINITY (*honoris causa*)

The Reverend Canon George Stavert Tanton
His Excellency The Most Reverend James Martin Hayes

BACHELOR OF SACRED THEOLOGY

McMillan, The Reverend Caldwell Allison Roe ..... Newport, N. S.

MASTER OF SOCIAL WORK

*Aggas, Roberta Georgina ..... Dartmouth, N. S.
*Bernard, Diana Alice ..... Dalhousie, N. B.
Enzinas, Ernest Algirdas ..... Weyburn, Sask.
*Guerette, Alice ..... Edmundston, N. B.
*Kedy, Carolyn Lucille ..... Mahone Bay, N. S.
Morse, Jean Macdonald ..... Halifax, N. S.
Pelletier, Judy Grace ..... Dartmouth, N. S.
*Robins, Harle Duncan ..... Winnipeg, Man.
*Simpson, Sandra Ann ..... Halifax, N. S.
Stoker, Wendy Ann ..... Halifax, N. S.
Thompson, Diana Elizabeth ..... Halifax, N. S.

BACHELOR OR ARTS

**Abramson, Susan May (Bell) ..... Calgary, Alberta
**Adelaar, Jack Alexander ..... Weymouth, N. S.
Barker, Mary Linda ..... Falmouth, N. S.
Bryant, William Faulkner Amsden .... Providence, R. I.
Christie, Clare Willis (Honours English) .. Amherst, N. S.
Cleveland, Gordon Harrison (Honours Economics) ..... Lagos, Nigeria
Cook, Stephen Paul (Honours History) .. Devonshire, Bermuda
Creelman, John Russell ..... Little Bass River, N. S.
Cummings, Glenda Elizabeth ..... Westmount, N. S.
Fenton, Sheila Arlene ..... Upper Rawdon, N. S.
Guildford, Janet Vey ..... Halifax, N. S.
Holmes, Susan Mary ..... Bedford, N. S.
Howe, Bruce Herbert Warren ..... Halifax, N. S.
**Johnston, William Jeffery ..... Kensington, Md.

*In Absentia
**Conferred during the session

BACHELOR OF ARTS (Continued)

Jones, Frederick David Caverhill (Honours Pol. Science)	Ville de Lery, P.Q.
MacLean, Charlotte Grace	Hubbards, N. S.
MacLean, Marsha Elizabeth	Hubbards, N. S.
MacLeod, Joanne	Liverpool, N. S.
**Martin, Dennis Gilmour	St. Catherines, Ont.
**Nicholl, Jacqueline Lee	Halifax, N. S.
Peglar, Ann Marie	Fergus, Ont.
Ross, Ellen Louise	Sydney, N. S.
**Schnare, Carolyn Elaine	Berwick, N. S.
Tassinari, Jr., Frederic Leonard	Fairview, N. S.
Wallace, Janette Dunlop	Dartmouth, N. S.
Walsh, Dennis Edwin	Saint John, N. B.

BACHELOR OF SCIENCE

Abraham, Ira David (Honours Chemistry)	Yarmouth, N. S.
Bahadoorsingh, Urmilla	Trinidad, W. I.
**Buckley, Ronald Ernest	Bridgetown, N. S.
Crosthwait, Hugh Cameron	Ottawa, Ont.
Flecknell, Robert Thomas	Dartmouth, N. S.
Hazen, Douglas Creaghan	Rothesay, N. B.
Lightfoot, John Perry	Bedford, N. S.
Parker, Elizabeth Marie	Halifax, N. S.
VanBuskirk, Joseph William	Brooklyn, N. S.

LIFE OFFICERS GRADUATING CLASS

Honorary Life President	Professor the Reverend R. E. Reeve
Life President	George Keirstead
Life Vice-President	Sheila A. Fenton
Life Secretary	Charlotte G. MacLean
Life Treasurer	Ira D. Abraham

DIPLOMAS GRANTED

TESTAMUR

Mowry, The Reverend Richard Stanley	New Ross, N. S.

LICENTIATE IN THEOLOGY

Boston, The Reverend David Mack	Halifax, N. S.
Kerr, The Reverend Thomas Aulay Morrison	Cheshire, England
Turnbull, The Reverend Arthur Donald	Armdale, N. S.

**Conferred during the session

ENCAENIA AWARDS

May, 1967

ARTS AND SCIENCE

The Governor General's Medal	Clare Willis Christie
April Fund Scholarship	Margaret Jennie Bailey
President's Centennial Scholarship (Third year)	Cynthia Joy Pilichos
President's Centennial Scholarship (Second Year)	Jonathan George Halse
President's Centennial Scholarship (First Year)	Bruce Parkinson Archibald
Alexandra Society Scholarship	Anne Elizabeth Wainwright
The Stevenson Scholarship	Jonathan George Halse
Dr. M. A. B. Smith Prize	Jonathan George Halse
Bishop Binney Prize	Jonathan George Halse
The Beatrice E. Fry Memorial Prize	Janet Eileen Mitchell
The Zaidee Horsfall Prize in Mathematics	Janet Eileen Mitchell
The Almon-Welsford Testimonial Prize	Robert Buchanan Hyslop
The McCawley Classical Prize	Jonathan George Halse
The Binney Bursary	Peter Wright Harris
Charles Cogswell Bursary	C. Edward Pickett
The Harry Crawford Memorial Prize	Brenda Jean Pierce
The Jackson Bursary	Peter Wright Harris

DIVINITY AWARDS

Canon W. S. H. Morris Scholarship	The Rev. Arthur D. Turnbull
The Ott Reading Prize	C. Edward Pickett
The Ott Preaching Prize	David C. Reid
The McCawley Junior Hebrew Prize	David C. Reid
The George Sherman Richards Proficiency Prize	The Rev. F. Gordon Granchelli
Shatford Pastoral Theology Prize	The Rev. F. Gordon Granchelli
Moody Exhibition	David C. Reid
Canadian Bible Society Book Prize for the reading of Holy Scripture	C. Edward Pickett
Kenelm Eaton Memorial Scholarship	Frederic L. Tassinari, Jr.

ENTRANCE SCHOLARSHIPS AWARDED
May, 1967

Alumni New Living Endowment Scholarship	John Fredric Archibald Robin Ann MacInnis
Chancellor's Scholarship	Patricia Ann Teasdale
King's Foundation Scholarship	Linda Jean Bevans David Burton Harding
Halifax-Dartmouth Entrance Scholarship	Donald Ewen Banks Carol Ann Blake Joan Diane Evans Linda Margaret Fiske Glenn Edward Taylor Douglas John Wenaus
Keating Trust Scholarship	Jane Elinor Burgoyne Phillip Charles Sorge
Walter Lawson Muir Bursary	Judith Weir Fearn
Nova Scotia Light and Power Scholarship	Susan Rosemary Haughn
Alumni Scholarship	Victoria Andrew

of the Dalhousie campus in Halifax, Nova Scotia, to enter into partnership with that larger university. Since that date, the two universities have operated a joint Faculty of Arts and Science, so that the education of a student of that Faculty is identical whether he or she is registered at King's or at Dalhousie; students of the two universities attend the same lectures, and mix indistinguishably in classroom, laboratory and library, at King's and at Dalhousie. This is obviously of great advantage to both institutions.

In addition, however, students of King's enjoy the inestimable benefits of a small residential college. The residence houses 110 men and 30 girls, and there is a large number of day students also. This makes the College an ideal size: the community is small enough for everyone to know everyone, and for each individual to signify in his or her own way; at the same time it is large enough to carry on an amazingly varied corporate life.

Athletics play a prominent part in the life of King's, which fields respectable teams in soccer, basketball and hockey. The girls also have teams of their own. Apart from intercollegiate teams, there are also intramural competitions between the four "bays" into which the residence is divided. There is a small gymnasium in the residence itself where badminton, volleyball and basketball can be played, so that even a student of no particular prowess can play the game of his choice and not feel outclassed.

Apart from athletics, King's has a vigorous Debating Society (the Quinctilian), a Glee and Dramatic Society, and the oldest university literary club in Canada (the Haliburton). Services are held twice daily throughout the academic year in the very beautiful Chapel, which stands at the centre of the life of the College. Attendance at these services is voluntary. Although the College is an Anglican foundation, and incorporates a Divinity School for the training of Anglican clergy, about one-third of the students are members of other denominations.

Thus life at King's combines the finest academic education in the Maritimes with a rich extracurricular life designed to educate "the whole man". Accommodation in the residence is perhaps as good as anywhere in Canada: senior students occupy single rooms on the top floor; the remainder are housed in pairs in two-roomed suites. Charges are $550 a year for room and board. There are several entrance scholarships each year ranging up to $400 a year for the entire duration of a student's course, while other prizes and bursaries are awarded each year to students who have proved themselves valuable members of the College. Waiting at tables in the College Dining Hall or helping in the Library also provide opportunities for students to earn part of their costs.

Further information may be obtained from:

The Registrar
University of King's College
Halifax, Nova Scotia

to whom applications for admission should also be addressed. As accommodation for the ensuing year is usually fully booked some months ahead, it is advisable to file applications as early in the spring as possible.

LIFE AT KING'S

King's College is the oldest University in the British Overseas Commonwealth, having been founded in Windsor, Nova Scotia, in 1789 by Bishop Inglis, six years after he had been ousted from Trinity Church, New York, because he refused to stop praying for the King!

In 1930 King's moved into its present buildings on the corner of the Dalhousie campus in Halifax, Nova Scotia, to enter into partnership with that larger university. Since that date, the two universities have operated a joint Faculty of Arts and Science, so that the education of a student of that Faculty is identical whether he or she is registered at King's or at Dalhousie; students of the two universities attend the same lectures, and mix indistinguishably in classroom, laboratory and library, at King's and at Dalhousie. This is obviously of great advantage to both institutions.

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