

ZXXVI. Fisheries

Professor
 Lecturer

1. General Fisheries. A study of the principal marine and fresh water fishes of economic importance, and of the methods of their management.

2. Physics of Fish Culture. The course deals with the application of physical principles in the propagation of fish and other marine animals in the market.

3. Fish Culture. A study of the natural and artificial methods of increasing the water in connection with the development of aquatic resources.

4. The Chemistry and Bacteriology of Fish Culture. This course covers the most modern changes in fish husbandry, as well as the processes occurring with each of the various methods of propagation.

Summer Session.

Marine Fisheries including a course in General Bacteriology and Fish Pathology. The session will be held at the seaside station about five miles from the University. It is to be attended either between the second and third, or the third and fourth, years of the course, but preferably the former.

The Classes, Fisheries 1, 2, 3 and 4 will be given at the Fisheries Experimental Station (Atlantic) of the Biological Board of Canada, situated in the city about a mile from the University.

1. Commercial Law—1929-30. M. B. and P. at 12 m.
 Reference: Cooke and Hibbert, *Cases on the Common Law*,
 Toronto: Company Law.

2. Foreign Trade—1929-30. T. B. and P. at 2.30 p. m.
 Reference: *International Law*,
 Toronto: Foreign Trade Dept.

CALENDAR

(ABRIDGED)

OF THE

UNIVERSITY

OF

KING'S COLLEGE

(Founded A. D. 1789.)

(in association with Dalhousie University.)

HALIFAX, NOVA SCOTIA

1929-1930.

141ST SESSION

PUBLISHED UNDER THE DIRECTION OF THE

BOARD OF GOVERNORS

HALIFAX, N. S.,
 Monotyped by Wm. Macnab & Son,
 1929.

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UNIVERSITY ALMANAC, 1929-1930.

1929.

- Aug. 19 M. —Last day for receiving applications* for Fall Supplementary Examinations.
- Sept. 3 Tu. —Shop Work and Surveying Camp for students in Engineering begin.
- 10 Tu. —Session begins. Registration (and Payment of Fees) and Supplementary Examinations for students in Law, Medicine, Dentistry.
- 11 W. —Lectures begin, and last regular Registration†† Day for such students.
- 14 S. —12 Noon. Registration for such students ends.
- 23 M. —Registration (and Payment of Fees) begins in Faculty of Arts and Science. The only regular registration day for NEW STUDENTS from Halifax and Dartmouth.
- 24 Tu. —The only regular registration day for other NEW STUDENTS in Faculty of Arts and Science.
- 25 W. —Registration begins for other than new students in Faculty of Arts and Science. Special lectures begin for NEW STUDENTS in Faculty of Arts and Science.
- 24 Tu. —Matriculation (and Scholarship) and Supplementary Arts and Science Examinations† begin.
—9.30—12.30 a. m., Latin; German.**
—2.30—5.30 p. m., English.
- 25 W. —9.30—12.30 a. m., French; Greek.**
—2.30—5.30 p. m., Physics.
- 26 Th. —9.30—12.30 a. m., Geometry.
—2.30—5.30 p. m., Chemistry.
- 27 F. —9.30—12.30 a. m., Algebra.
—2.30—5.30 p. m., Trigonometry; History.**
- 28 S. —12 Noon. Regular Registration ††Period for Students in Arts and Science ends. Halifax Students will not be registered on this day. Results of Matriculation and Supplementary examinations declared.
- 30 M. —9 a. m., Lectures begin in Arts and Science.
- Oct. 1 Tu. —11 a. m., Meeting of Faculty of Arts and Science.
- 5 S. —12 Noon. Registration in Arts and Science ends.
- 9 W. —Intimation as to elective subjects to be made on or before this day in Arts and Science Faculty.
- M. —Thanksgiving Day. No Lectures.
- Nov. 25 M. —Last day for receiving applications* for First Term Supplementary Examinations in Law.
- Dec. 13 F. —Last day of lectures in classes wherein Christmas examinations are held.
- 14 S. —Christmas Examinations† begin.
- 20 F. —Last day of Lectures.
- 21 S. —9 a. m., Christmas vacation begins.

1930.

- Jan. 3 F. —9 a. m., Lectures resumed.
- Mar. 1 S. —Last day for receiving theses for Master's degree.
- 28 F. —Last day for receiving Applications* for Examinations for Master's degree and for Music and Pharmacy.
- Apr. 2 W. —Last day for receiving Applications* for Spring Supplementary Examinations (Law, Medicine, Dentistry).
- 18 F. —Good Friday. No Lectures.
- 21 M. —Last day of Lectures.
- 23 W. —Spring Examinations† begin.
- May 1 Th. —Final Professional Examinations in Medicine and Dentistry begin.
- 7 W. —8 p. m., Meeting of Faculty of Arts and Science.
4 p. m., Meeting of Faculty of Law.
8 p. m., Meeting of Faculty of Dentistry.
- 9 F. —11 a. m., Meeting of Faculty of Arts and Science.
5 p. m., Meeting of Faculty of Medicine.
- 10 S. —11 a. m., Meeting of Senate. Results of Examinations declared.
- 13 Tu. —3 p. m., Convocation. Session ends.

*Fee must accompany application for examination.

**In case of conflict of examinations arrangements will be made for changes suitable to all candidates.

† For time table see Notice Board.

†† Extra fee for late Registration, \$2.00 per day.

Officers of Administration.

UNIVERSITY OF KING'S COLLEGE.

BOARD OF GOVERNORS.

- Most Rev. Clare L. Worrell, Archbishop of Nova Scotia, *Chairman*.
- Rt. Rev. J. A. Richardson, Bishop of Fredericton, *Vice-Chairman*.
- Rev. A. H. Moore, M. A., D. D., D. C. L., *President of the University*.
- R. L. Nixon, M. Sc., *Secretary*.
- F. A. Bowman, M. A., *Treasurer*.

Diocese of Fredericton.

- J. H. A. L. Fairweather, Esq., J. H. F. Teed, Esq., J. J. Fraser Winslow, Esq., Rev. Canon Smithers. (Term expires 1930).
- Rev. T. Parker, C. C. Kirby, Esq., Rev. J. H. A. Holmes, Rev. A. F. Bate, (Term expires 1931).

Diocese of Nova Scotia.

- D. M. Owen, Esq., A. B. Wiswell, Esq., E. Hart Nichols, Esq., Rev. Canon E. A. Harris. (Term expires 1930).
- Rev. A. E. Andrew, Very Rev. J. P. D. Llywd, Rev. N. H. Wilcox, Rev. S. H. Prince. (Term expires 1931).

Alumni Association.

- A. H. Whitman, Esq., Ven. Archdeacon Vroom, Major T. E. MacNutt, H. Whiston, Esq. R. R. Wallace, Esq., (Term expires 1930).
- Rt. Rev. J. MacKenley, W. L. Payzant, Esq., H. M. Bradford, Esq., G. E. E. Nichols, Esq. W. A. Winfield, Esq. (Term expires 1931).

EXECUTIVE COMMITTEE: The Most Rev. the Archbishop of Nova Scotia, the Rt. Rev. the Bishop of Fredericton, the President of the University, the Treasurer, together with A. H. Whitman, Rt. Rev. J. MacKenley, A. B. Wiswell, W. L. Payzant, H. M. Bradford, G. E. E. Nichols, H. Whiston, C. C. Kirby.

Representatives on Dalhousie Board: A. B. Wiswell, Esq., Major J. P. Edwards.

OFFICERS OF ADMINISTRATION.

- The President—Rev. A. H. Moore, M. A., D. D., D. C. L. (Lennox).
- Dean of Divinity Faculty—Ven. F. W. Vroom, M. A., D. D., D. C. L. (Vind.)
- Registrar—Rev. T. H. Hunt, M. A., D. D. (Vind.)
- Bursar and Dean of Residence—R. L. Nixon, M. Sc., (Vind.)
- Dean of Women—Mrs. W. F. McCurdy.
- Purchasing Agent and Steward—W. Lepp, Esq.

ACADEMIC STAFF.

KING'S FACULTY OF ARTS AND SCIENCE, 1928-29

Walter Douglas MacFarlane, M. A. Ph. D. (Gott.), *Professor of English Language and Literature, 314 South St.*

A. Stanley Walker, M. A., (Leeds and Birm.), *Professor of History, 2 Oakland Rd.*

Norman Jelinger Symons, M. A. (Oxon.), *Professor of Psychology, 288 Tower Rd.*

George Hugh Henderson, B. A., B. Sc., M. A. (Dal.), Ph. D. (Cantab.), *Professor of Mathematical Physics, 76 Morris St.*

Arthur Kent Griffin, M. A. (Tor. et Oxon.), *Associate Professor of Classics, 434 Robie St.*

Charles Lindsay Bennet, M. A. (Cantab.), *Associate Professor of English. (On leave).*

William Russell Maxwell, B. A. (Dal.), M. A. (Harv.), *Assistant Professor of Economics, Commodore Apts.*

Samuel Henry Prince, M. A., (Tor.), Ph. D., (Col.), *Assistant Professor of Economics and Sociology, King's College.*

R. Lawrence C. deNeville Ford, M. A. (Col.), *Lecturer Modern Languages.*

J. G. Adshead, B. A., (Cantab.), *Lecturer in Mathematics, 93 Coburg Rd.*

Murdoch Maxwell MacOdrum, B. A. (Dal.), M. A. (McGill), Ph. D. (Glas.), *Interim Lecturer in English, 16½ Vernon St.*

In addition to the classes offered by members of the Faculty of Kings, all classes offered by members of the Faculty of Arts and Science of Dalhousie University are open to all students enrolled at King's.

University of King's College.

(In Association with Dalhousie University).

Historical Sketch.

King's College, established by Act of Legislature, in 1788, was founded at Windsor in 1790, and in 1802 a Royal Charter was granted by King George III in which the College is referred to as "the Mother of an University for the education and instruction of youth and students in Arts and Faculties to continue forever and to be called 'KING'S COLLEGE'." It was the first University established in what is now Canada. The first President of the College, Dr. William Cochran, came from King's College, New York, which afterwards changed its name to Columbia, and two other King's Colleges, one at Fredericton and the other at Toronto, were subsequently founded; but King's College, Nova Scotia, is the only one which has survived. It has passed through many vicissitudes during the 140 years of its existence, and amongst its Alumni are many famous men who have won honourable distinction in Church and State. The burning of the old College residence at Windsor, February 5th, 1920, raised afresh the scheme of University Federation for the Maritime Provinces, which had long found favor among the patrons of higher education; and a generous offer from the Carnegie Corporation to give a sufficient sum to provide for the Arts course, if the College would move to Halifax and erect buildings there, seemed to the Governors an opportunity which they ought not to let pass. A basis of association was agreed upon. The beautiful property on the North West Arm, known as University Hall, was leased from Dalhousie University as a temporary residence for students. A commodious chapel, where services are held every day during the session, was fitted up in the basement underneath the large Dining Hall, and the internal life of the College has gone on, notwithstanding the removal from Windsor, on exactly the same lines as in former years. It is hoped that before the next Calendar is issued the College will have moved into its commodious new buildings which are being rapidly constructed.

The association has been found to work with complete harmony. Students of Dalhousie have the privilege of attending lectures in Arts by the King's professors, and students at King's have the privilege of attending the lectures of the professors of Dalhousie. This means that instead of a staff of ten there is a staff of forty or more to supply the requirements of students in Arts and Science. Those students who enrol at King's enjoy the same facilities as those registered at Dalhousie; while they have at the same time the educative and humanizing influence of a residential College with the traditions of more than a century and a third behind it.

Dalhousie University grants all degrees in Arts and Science, the name of King's College appearing on the diploma where the student has been enrolled in King's.

King's College, in its present situation, is within about five minutes walk of Dalhousie, but the new home of the College will be adjacent to the University. King's students taking the following subjects, Latin 1, French 1, English 1, and History 1, receive their lectures at King's. In the higher years classes are taken at Dalhousie until King's provides proper facilities. All students, King's or Dalhousie, take exactly the same curriculum in their respective courses and years; and must pass exactly the same examinations.

ORGANIZATION OF THE UNIVERSITY.

The Board of Governors is the supreme governing body of the University. As defined by the Acts of 1923, it consists of the Bishops of the Dioceses of Nova Scotia and Fredericton, the President of the University and Treasurer, *ex officio*, together with ten members elected by the Alumni Association and eight by each of the Synods of Nova Scotia and Fredericton. The Governors have the management of the funds and property of the College, the power of appointment of the President, professors and officials, determining their duties and salaries, and the general oversight of the work of the University. It appoints an executive committee.

Convocation consists of the Chancellor, and Masters and Doctors in the various faculties of the University.

The Faculties of the University consist of the members of the teaching staff in Arts and Science, and Theology.

ADMISSION.

The attention of students entering the Faculty of Arts for the first time, whether in the First or Second year, is called to the fact that registration for such students takes place on September 23rd and 24th and that their classes begin on September 25th.

Women are admitted to classes on the same conditions as men.

No person under sixteen years of age is admitted to any class except by special permission.

Students are classified as Undergraduates, Matriculants and Special Students.

Undergraduates are students who have completed Matriculation and are candidates for a Bachelor's degree in Arts or Science or a degree in a professional course.

Matriculants are students looking forward to a degree who have not completed Matriculation, but have sufficient subjects of Matriculation to their credit to enable them to have the classes which they may attend and pass recognized as qualifying for that degree. In the faculty of Arts and Science a Matriculant is one who has passed in English and in at least four other Matriculation subjects.

Special Students are those not included in one of the preceding groups. The classes attended by a Special Student are not recognized as qualifying for a degree.

Persons of good moral character may be admitted to certain classes as Special Students without formal examination, provided they are deemed qualified by the Committee on Admission to profit by the work of the class or classes selected. A person seeking admission as a Special Student, if under nineteen years of age, must submit evidence, such as a certificate from the school last attended, that he has a satisfactory knowledge of English and that his other requirements and habits of study are such as should qualify him to profit by the work of the class or classes he wishes to enter.

The Matriculation examinations will be held at the University, and at such other places as the Senate may appoint, on Sept. 24th to 27th, 1929. For the timetable of the examinations see the University Almanac.

No fee is charged for a matriculation examination in September until after the student's second year of attendance.

Candidates for the Matriculation examinations must make application on a form to be obtained from the University Office.

The last day for receiving applications for the examinations held at the University for the session of 1929-1930 is Saturday, Sept. 21st, 1929. Applications for examination at an outside centre should be made one month earlier.

The Matriculation examinations are held in the following subjects, one paper each;

English	Geometry	French
British History	Trigonometry	German
Ancient History	Latin	Physics
Algebra	Greek	Chemistry

Subjects Required for each degree.

The subjects of matriculation common to all degrees are:

- (1) English.
- (2) History.
- (3) Algebra.
- (4) Geometry.

The remaining subjects are:

For the B. A., and LL. B. degrees.

- (5) Physics or Chemistry, (6) Latin or Greek, (7) another foreign language, (8) an elective.

For the B. Sc. degree

- (5) Physics or Chemistry, (6) and (7) two foreign languages, (8) an elective.

Note:—The University holds matriculation examinations at Rothesay, Netherwood, Edgehill and King's College School, in the month of June of each year.

For the M. D., C. M., D. D. S. degrees,
(5) Physics, (6) Chemistry, (7) Latin, (8) French or German or Greek.

Students looking forward to a degree in Law, Medicine or Dentistry are reminded that there are certain Arts courses to be passed before entering these professional schools and these together with a large number of subjects for the affiliated degrees in Arts may be taken while the student is enrolled as a member of King's College.

Students looking forward to professional degrees and diplomas are advised to consult with the Bursar as to registration and enrolment.

Requirements in each subject.

The requirements in each of the subjects specified above are as follows:

English.—*Language:* Grammar, analysis, parsing. *Composition:* An essay on one of several set subjects to be selected from: Macaulay: *Warren Hastings, Samuel Johnson.* Shakespeare: *Merchant of Venice, Julius Caesar.* Longfellow: *Evangeline.* Scott: *The Lady of the Lake.* Stevenson: *Kidnapped.*

Questions on the interpretation of a passage not specified, to test general intelligence.

Note—The essential part of this examination is the essay. Legible writing, correct spelling and punctuation will be considered indispensable. Skill shown in sentence and paragraph construction will be awarded high marks. Not more than two of the works named need be read. They should be read primarily for the story, and need not be studied minutely, as a choice is allowed among at least six themes selected from the works named.

British History.—General outlines, as in *Ontario High School History of England*; or Tout: *History of England, from the earliest times to the death of Queen Victoria*; or Ransome: *Short History of England.*

Ancient History.—General outlines, as in Webster: *Ancient History*; or Myers: *A short History of Ancient Times.*

Algebra.—Equations of the first and second degrees, indices, ratio and proportion, theory of quadratic equations, factor theorem, surds, as discussed in any high school algebra.

Geometry.—The straight line, triangles, quadrilaterals and pentagons in their relation to circles, the subject matter of the first four books of Euclid, as discussed in any high school geometry.

Trigonometry.—Up to and including formulae relating to the sum and difference of two angles, the solution of equations and of right-angled triangles, as in any elementary trigonometry.

Latin.—The paper will contain, (1) passages for translation from prescribed books with questions arising out of those books; (2) easy passages for translation from books not prescribed; (3) questions on grammar, accidence and elementary syntax; (4) translation of easy sentences from English into Latin.

The books prescribed are: Caesar: *Gallic War*, Book I; and Vergil: *Aeneid*, Book I.

Greek.—As under Latin.

The book prescribed is Xenophon: *Anabasis*, Book I.

French.—*Ontario High School French Grammar*, to the end of Lesson LXXXIII; Manley's: *Eight French Stories*, (Allyn & Bacon). Easy sight translation from French into English and from English into French.

German.—Lang & Needier's *High School German Grammar*, (Ryerson, Toronto) to end of p. 109, with corresponding grammatical explanation. Gluckauf: *German Reader* (Ginn); Bagster Collins: *A First German Reader* (Holt), pp. 1-44; easy sight translation from German into English and from English into German.

Chemistry.—The extent of knowledge expected is such as may be gained from Evans' "*Elementary Chemistry for High Schools*," or other text book of similar grade.

Physics.—Such text-books as *The Ontario High School Physics and Laboratory Manual*, Gage's *Introduction to Physical Science*, and Mann and Twiss' *Physics* will indicate the grade of instruction required.

Instead of the authors and books in languages given above, a candidate, if he so desires, may be examined on others recognized as equivalents but application for this privilege must be made at least two weeks in advance.

Candidates who pass in four or more subjects, but not in all, on any one occasion, will be given credit for such subjects; and may complete their Matriculation by passing the remaining subjects on any subsequent occasions.

Certificates Exempting from Examination.

Candidates who hold one or more of the following diplomas, licenses or certificates will be exempted from the above examinations in such of the above subjects as were included in the examinations by which such diploma, license or certificate was obtained, provided a sufficiently high standard was reached, and provided this standard was reached in four or more of the subjects required for Matriculation.

- (a) Certificates of Matriculation Examinations taken at recognized Universities;
- (b) High School Certificates of Grades XI or XII of Nova Scotia.
- (c) Honour Diplomas, or Certificates entitling to a First Class License, as issued by Prince of Wales College, or a First Class License issued by the Education Department of Prince Edward Island;
- (d) Grammar School, or Superior (except in Latin), or First class Licenses of New Brunswick.
- (e) Equivalent Licenses or Certificates issued by Education Departments of other Provinces.
- (f) Diplomas of the Associate Grade as issued by the Education Department of Newfoundland;
- (g) Certificates similar to the above issued by University or other official examining bodies, when found adequate.

If a candidate gets credit for at least four of the eight subjects of Matriculation, either at the Matriculation examinations or on a single certificate, he may complete Matriculation either by examination, or by certificate, or by both.

Candidates holding certificates which they wish to offer for exemption as above should forward them for appraisal as early as possible to the Bursar, King's College, Halifax, N. S.

Special Matriculation Regulations.

Faculty of Arts and Science.—A certificate of grade XI standard issued by the Education Department of Nova Scotia is treated as follows: Marks obtained in other than Matriculation subjects are not considered. The mark in a Matriculation subject is not considered unless it is at least 50 per cent. Subject to these restrictions the certificate will be accepted for the Matriculation subjects it covers in which the average of the marks obtained is at least 60 per cent.,

provided this average is reached in at least four subjects.

A minimum mark of 40 per cent. in a subject made in an examination for a certificate of grade XII standard will exempt from Matriculation in that subject. When such subject is divided in this certificate examination into two or more parts the average mark for such parts is taken as the mark to be considered.

In order to be admitted to a course in the Faculty of Arts and Science, a candidate must have credit for Matriculation in English and in at least four other subjects.

UNIVERSITY REGULATIONS.

Registration.

All students of the University are required 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 fee and deposits before entering any class or taking any examination. After registration and payment of fees a student is given a certificate, on presentation of which to the professors and lecturers whose classes he is entitled to attend, his name is entered on the class register.

All students entering King's College, besides registering at Dalhousie for the courses they purpose taking, must enrol at King's.

COLLEGE RESIDENCE.

The residential system, which is an important feature of College life, is modelled on that of Oxford, and brings together men of different temperament and training, to their great benefit.

Students are required to reside in the College buildings, but in special circumstances permission may be granted to reside outside. All students are under the immediate charge of the Dean of Residence, but must report to the President at the beginning and end of each term.

Students must provide their own blankets, sheets, pillowslips and towels.

The residence will be open for students from the evening of September 23rd, 1929 until noon of December 21st, 1929; and from noon of January 2nd, 1930 to the evening of May 9th, 1930; (in the case of students expecting to receive their degrees this time will be extended to May 14th, 1930). *Any students permitted to reside in the College at other times must pay at the rate of \$2.00 per day.*

All property belonging to students while in residence is held by them entirely at their own risk.

Hours for Meals.—Every student is expected to be in his room after 11 p. m., and in bed before midnight; also to be in the Hall for breakfast not later than 8.15 a. m. on week days, and not later than 9.15 a. m. on Sundays.

Meals in Rooms.—No student can be furnished with breakfast or any other meal in his rooms, except by permission of the President and in such cases of illness as would render it imprudent that he should be present in the Hall, and no student is allowed to take crockery or cutlery from the dining hall or the pantry.

Intoxicants.—The introduction by or for any student of beer, wine, spirits, or any kind of intoxicating liquor in the College is strictly forbidden.

At gatherings of students, whether held in the College or elsewhere, intoxicating liquors are forbidden.

Chapel.—It is a condition of residence that students attend the daily morning and evening services in the College Chapel. Students belonging to other Communions are permitted to attend their own services on Sunday, but except in such cases all are required to be at the Chapel service at eleven o'clock on Sunday morning unless specially excused by the President.

Doors.—The doors are closed at 10.30 p. m. and all resident undergraduates are required to be in before that hour, but the President may, at his discretion, grant permission to students to be out till midnight. Permission to be out after midnight can only be granted by the College Board.

Guests.—No one who is not a resident student or a member of the staff may be in College after 11 p. m. except by permission of the President. Guests are expected to conform to the rules of the College and students will be held responsible for those whom they entertain.

Gowns.—Students are required to wear academical costume at meetings of Convocation, at all College lectures and examinations, and all students in residence are required to wear gowns in Chapel, at dinner in the Commons Hall, and at other occasions when so ordered. The academical habits shall be such as have been customarily worn in King's College in times past.

Behaviour.—Students are expected to preserve a quiet and orderly behaviour at all times in the halls and corridors of the College, especially during the hours of Lectures.

Hazing.—All forms of procedure, commonly called "hazing" are absolutely forbidden.

Expenses.—The charge to resident students for board and room is from \$260 to \$285, depending on location of room, payable in two instalments, one at the beginning of each term.

No student whose accounts are unpaid after 30 days shall be allowed to remain in College, unless he has the written permission of the President.

Women's Residence.

The residence for women students is conducted under practically the same regulations as the residence for men.

All residents are under the general superintendence of the Dean of Women.

Women students wishing to be out after evening chapel must notify the Dean and state where they are going. Permission must be obtained from the Dean to be out after 10 p. m. and a record will be kept of the hour of return of those who have received such permission.

Thursday evening from 8-10, and Sunday afternoon from 3.30 to 5.30 are the recognized times for receiving visitors.

Discipline.

The Board of Discipline may use all means deemed necessary for maintaining discipline. It is the duty of the Dean of Residence to see that order is maintained within the buildings and on the premises of the College. Every professor or officer of the College is required to report to the President or Dean cases of improper conduct that may come under his notice. Students conducting themselves in an unbecoming manner on or beyond the premises of the College during the session, may be fined, suspended, or expelled from the College.

Irregularity of attendance, except for approved reasons, or neglect of or unsatisfactory progress in studies shall be regarded as sufficient cause for dismissal from one or more classes, or, in extreme cases, from the University.

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

University Library.

The Library is open during the session on every week-day, except Saturday, from 9 a. m. till 5 p. m., and on Saturday till 1 p. m.

Books, other than those on the reserved lists, may be taken out by instructors or students and kept for two weeks. They must then be returned to the library.

Books on the reserved lists may be taken out immediately before the closing of the library on any day, and must be returned when it opens on the following day.

Not more than two books may be borrowed at one time by a student not in an Honour course, or more than four by a student taking Honours.

Students are allowed the privilege of borrowing books from the library for the summer. Students using this privilege are required to make a deposit with the University office. This deposit is returned when the books are replaced in the library.

Caution Deposit.

On enrolment, each resident student is required to make a deposit of ten dollars as caution money to

cover damage done to furniture, etc. This amount, less deductions, will be returned by mail two weeks after the close of the session.

Laboratory Deposit.

A student taking a class involving laboratory work is required to make a deposit of two to five dollars, depending upon the class taken, on entering the class. This amount, or what remains of it after deducting any charges which may have been incurred for breakage or materials used, is returned to the student at the end of the session.

Fee for Support of Student Organization.

At the request of the student body, a fee of \$13.50 is collected on enrolment from each student who takes more than one class. This fee entitles the student to the privileges of the various student organizations and clubs, and to a copy of the King's College Record.

CONFERRING OF DEGREES.

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

By special permission of the Senate 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.

SCHOLARSHIPS AND PRIZES,

(*Matriculation*).

Alumni Scholarship.

1. A scholarship of \$50 is offered by the Alumni Association to the matriculant of King's College School, Rothesay Collegiate School, or Edgehill, who enters with the highest standing and remains in residence one year.

Matriculation Scholarship.

2. A scholarship of \$50 has been offered by the Board of Governors of King's College to the highest matriculant from the Collegiate School, Windsor, Rothesay Collegiate School, Prince of Wales College, Charlottetown, and The Church School for Girls, entering King's College and remaining in the residence one year. This scholarship is to be competed for at the June matriculation and the amount will be deducted from fees of the winner.

The Daniel Hodgson Scholarship.

3. This scholarship, amounting to about \$75 per annum, is given alternately to the Universities of Laval and King's College, and is tenable for four years. Its object is to assist students in entering Holy Orders. Application shall be made and certificate of having passed matriculation shall be filed before July 15th.

Candidates for the scholarship must be under the age of 23 years. They must be natives of Prince Edward Island and residents therein for the space of one year at least before the time of their application for scholarship.

The holder of the scholarship at the end of each half year shall file certificates from the authorities of the College that he is taking a full Arts Course, that his moral conduct has been good and that his attention to his studies and his general conduct have been satisfactory. No portion of the scholarship will be paid without the presentation of said certificate.

(*At end of First Year*).

The Stevenson Scholarships.

Three, of \$80 each.

4. Founded by the **Rev. J. Stevenson, M. A.**, (sometime Professor of Mathematics), tenable for two years, and open to matriculated students in their second year of residence.

(1) The Scholarship shall be open to students who are registered for the second year at the University of King's College and who have passed in at least four subjects in their first year.

(2) The Scholarship shall be awarded on the results of the regular Christmas examinations in five subjects chosen from the following:—

I. English 2 (Compulsory).

II. One at least of: Latin 2, *Greek 2, French 2, *German 2, Spanish 2. *(See footnote).

III. One at least of: Mathematics 2, Physics 1, Chemistry 1, Biology 1.

IV. One at least of: History 1, Philosophy 1, Economics 1, Political Science 1.

V. One other subject from the above list.

*Note.—Under special circumstances the Board may consider applications to have Greek 1 or German 1 accepted in place of Greek 2 or German 2.

(3) The Scholarship shall not be granted to any student whose marks in the five subjects do not constitute 55% of the possible total.

(4) The Scholarship shall be paid in half-yearly instalments, provided always that in the half-yearly examinations the holder shall have maintained a scholastic standing satisfactory to the Board.

The Almon-Welsford Testimonial.

5. **William J. Almon, Esq., M. D.**, endowed King's College with \$400, the interest of which is appropriated as a prize to be competed for by the matriculated students in their first year of residence. The prize shall be presented by the President, in the College Hall, at the beginning of the next Academical year, and the successful candidate shall in a Latin oration, commemorate the gallant and loyal deeds of Major Welsford.

Moody Exhibition.

6. The "Catherine L. Moody" Exhibition of \$50 awarded 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. To be held for two years.

(At the End of Second Year).

Bishop Binney Prize.

(\$20.00).

7. This prize, which was founded by Mrs. Binney in memory of her husband, the late Bishop Binney, is given to the undergraduate who passes the best examination at the end of the second year.

(Third and Fourth Years).

Keating Trust Scholarship.

8. A Scholarship of the value of \$125.00 a year, tenable for two years, from a bequest to the College from the Rev. J. Lloyd Keating, is awarded annually to the student who has completed ten classes of the requirements for a degree. This Scholarship, according to the will of the donor, is to encourage students, and preferably divinity students, in the study of Chemistry and Physics.

The Crockett Greek Prize.

(\$50.00).

9. Founded in memory of the late Rev. Stuart Crockett, D. C. L., by Mrs. Crockett, of New York. Awarded to the student securing first place in Greek of the Third or Fourth years.

The Wallace Greek Testament Prize.

10. 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 1928-29.—The Epistle to the Hebrews and the First Epistle of St. John.

The Harry Crawford Memorial Prize.

11. The Harry Crawford Memorial of \$25.00 annually, is offered by a friend in memory of Harry Crawford, son of Thomas H. and Elizabeth E. Crawford, Hampstead, N. B., and a student of this College, who died true to his King and his Country, April 14th, 1915, while serving in the Canada Motor Cycle Corps.

The prize is awarded by the Faculty to the student taking the third year Arts course, whose character and scholarship average highest in his class. A student intending to pursue the divinity course will be given the preference.

The Henry D. deBlois English Prize.

12. 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.

The interest of this sum is given annually as a prize to the student of the third or fourth year Arts presenting the best English essay during the academical year.

The McCawley Hebrew Prize.

13. £9 Sterling. Open to all members of the University who are below the standing of M. A., and who have not already gained the first premium in Hebrew.

This prize is given out of the interest of a Trust Fund, the gift of the Rev. George McCawley D. D., in the hands of the Society for the Propagation of the Gospel in Foreign Parts.

(General).

The Governor General's Medal.

14. Given to the candidate who obtains the highest standing in the examinations for B. A. Degree.

The McCawley Classical Scholarship.

\$40.

15. Established as a testimonial to the Rev. G. McCawley, D.D. on his retirement from the office of President.

Open to matriculated undergraduates who have completed their first year of residence.

Applications for this Scholarship must be made before Jan. 2, 1930.

The Akins Historical Prize.

16. **T. B. Akins, Esq., D. C. L.**, Barrister-at-Law, and Commissioner of Public Records, vested in the Governors, as Trustees, a sum of money sufficient to found a prize of thirty dollars annually for the best Paper or Essay on the County History of Nova Scotia, embracing matters derived from all local records and traditions relating to the early and progressive history of each county. The Essays must be given in to the Secretary of the Governors, on or before the first day of April.

The Essays, when handed in, are the property of the College.

The subject for 1929-30 will be "Nova Scotian Literature, a summary of the native literature of this Province up to 1900." This prize is not restricted to members of the University.

King's College.**Haliburton Prize.**

17. Given by the Haliburton Club, for the best essay on a selected subject. Essays should reach the President of the Club before Sept. 15th.

The Jackson Exhibition.

\$25.00.

18. 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. Awarded each year by vote of the Faculty.

The Binney Exhibition.

\$50 per Annum.

19. Founded in the year 1858, by Miss Binney, sister of the late Visitor, and daughter of the late Rev. Hibbert Binney, in memory of her father.

The design of this Scholarship is to assist students who may require assistance, and who shall have commended themselves by their exemplary conduct, although their abilities and acquirements may not qualify them to be successful competitors for an open Scholarship.

Khaki Exhibition.

(\$50 per annum).

20. Awarded each year by vote of the Faculty. Preference being given to the sons and daughters of the soldiers of the Great War.

R. V. Harris Prize.

21. Open to students of King's, Bishop's, and Trinity Universities, for the best essay on a subject relating to the history of the Canadian Church. Value \$25.00. Essays to be handed in March 31, 1930. Subject 1929-30: "The Constitutional Development of the Church of England in Canada during the Episcopate of Bishop Charles Inglis."

The Rhodes Scholarship.

22. This scholarship of the annual value of £300 for three years is awarded annually. For circulars and further information, Apply to Secretary Committee of Selection.

Daughters of the Empire Bursary.

23. This bursary of the annual value of \$250.00, is tenable for four years at any university in Nova Scotia and is open to the sons and daughters of deceased or permanently disabled soldiers and sailors. One is available for each Province each year.

Full information can be obtained by writing to the Head Office of the Order for Canada, 238 Bloor Street East, Toronto, Ont.

Prizes and Scholarships.**Daughters of the Empire Post-Graduate Overseas Scholarship.**

24. This scholarship was founded by the Imperial Order, Daughters of the Empire, as part of the war memorial of the Order. Nine are offered annually—one for each Province. They are of the value of \$1,400, are tenable for one year and have been founded "to enable students to carry on studies at any university in the United Kingdom, in British and Imperial history, the economics and government of the Empire and Dominion, or any subject vital to the interests of the Empire." For further information apply to the Head Office of the Order.

(*Divinity Scholarships*).

The Cogswell Scholarships.

25. Two of \$120 per annum each. Open to candidates for Holy Orders under the direction of the Trustees. Regulations relating to these Scholarships may be had on application to the President.

Laurie Memorial Scholarship.

26. Three Scholarships of about \$120 each, founded in memory of Major Gen. Laurie, D. C. L., open to candidates for the Ministry, under the direction of the trustees. Particulars may be had from the President.

Divinity Grants.

27. Grants to aid students in Divinity who require assistance are made by the Archbishop of Nova Scotia, and by the Bishop of Fredericton. The holders of these must fulfil such conditions as the Bishop lays down, and in every case a personal interview must be had. For further particulars apply to the President.

STUDENTS' ORGANIZATIONS.**The Student Body.**

The chief business of the Student Body is transacted by the Executive Council, composed of the Senior, the Treasurer and Secretary and a representative from each of the four classes. This Executive meets weekly and has general supervision over the funds of the students' societies, excepting those of the K. C. A. A.A.

The "King's College Record."

The **Record** (founded 1878) is published by the undergraduates of the College, monthly, during the Academic year.

The associate editors and the business manager of the **Record** are elected at the first meeting of Michaelmas Term.

The Quintilian Society.

This is the College Debating Society and was founded in 1845. Meetings are held every Friday evening during the Academic year at 8 o'clock. There are no fees. All students are expected to join this society. It was owing to the initiative of this society that the Maritime Intercollegiate Debating League was established.

The Haliburton.

This Society was founded and incorporated by Act of Legislature, 1884. Its object is the cultivation of a Canadian Literature and the collecting of Canadian books, manuscripts and of books bearing upon Canadian History and literature. Membership is open to all members of the College and residents in the city of Halifax. Any literary man may be elected an honorary member. Annual fee \$1.00.

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. Membership is open to all members of the College. The annual meeting is held on St. Andrew's Day, or as near to it as possible.

King's College Amateur Athletic Association.

The object of this association is the promotion of amateur sport of all kinds. Gymnasium classes are held regularly under the direction of a competent instructor. The K. C. A. A. A. is affiliated with the Maritime Provinces Amateur Athletic Association, and is governed according to the rules of that association. Membership is open to all members of the College. The Association has formed an Inter-Provincial College Hockey League.

King's College Co-eds' Association.

This club was organized in October 1913. It is open to all women graduates and undergraduates of King's College. The primary object is to extend the interests of King's College among women.

Societies connected with the College.**The Alumni of King's College.**

This is a Society incorporated in 1847 by Act of the Legislature, consisting of graduates and others whose object is the furtherance of the welfare of the University. The annual fee for membership is \$2.00.

The annual meeting of the Society is held the day before Encaenia.

The present officers of the Society are:

Ven. Archdeacon Vroom, D. D., President.

Rev. A. F. Bate, Vice-President.

Rev. Noel Wilcox, M. A., Secretary.

W. L. Payzant, Esq., M. A., LL. B., Treasurer.

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 Alumni, its object to aid the Alumni in raising funds for the College.

King's University League.

A league of laymen open to all interested in the advancement of the interests of King's, the success of the present association with Dalhousie, and the project of higher education in the Maritime Provinces:

President—A. Handfield Whitman.

Vice-President—Major J. P. Edwards.

Treasurer—Geo. E. Mahon.

Secretary—R. L. Nixon.

Several branches have been formed in Nova Scotia and Prince Edward Island. Annual membership \$1.00.

School of Divinity.

FACULTY OF DIVINITY.

Fellow and Dean of Divinity (Dogmatics, Liturgics, Eccl. Polity and Church History).—**Ven. F. W. Vroom, M. A., D. D., (Vind.), D. C. L., (Lennoxville).**

Alexandra Professor of Divinity (Hebrew, Greek Testament, Patristics).—**Rev. T. H. Hunt, M. A., D. D., (Vind.).**

Lecturer in Apologetics and Comparative Religion—**Rev. S. H. Prince, M. A. (Tor.), Ph. D. (Columbia.)**

Owen Lecturer in Pastoral Theology, Homiletics and Liturgics.—**Rev. President Moore, M. A., D. D., D. C. L.**

Lecturer in Church History.—**Rev. A. Stanley Walker, M. A.**

Lecturer in Religious Education.—**Rev. R. A. Hiltz, M. A., D. C. L. (Vind.)**

Such persons as have been accepted by the Bishop of Nova Scotia, or another Bishop, may become students in Divinity under the following conditions.

Undergraduates in Arts who have matriculated in Greek and have taken †Greek I in the Arts Course, may take the Divinity Options as shown in (viii) below, as part of the qualification for a degree. After graduation in Arts, two years is required to complete the Divinity Course.

Course for Bachelor of Arts.

The course of study prescribed for the degree of Bachelor of Arts, using the Divinity Options, consists of the following twenty classes:

- (i) Two classes in Greek.
- (ii) Two classes in one, not already chosen, of the following languages: Latin, French, German, Spanish. (Latin recommended).
- (iii) Two classes in English.
- (iv) History 1, Philosophy 1, Mathematics 1 or 1C.
- (v) One Class in either Physics or Chemistry.
- (vi) One class in Physics or Chemistry or Biology 1 or Geology 1.
- (vii) Latin 3 or Greek 3 or French 3 or German 3 or Economics 1 or Political Science.
- (viii) New Testament Greek and two of the following three classes, Hebrew, Biblical Literature and Ecclesiastical History.

†Two classes in Greek are necessary for an Arts degree.

N. B.—Greek Testament is accepted with Greek I and II to form a three group, but will not be considered as Greek II.

(ix) Five other classes, selected from the following list, such that of the twenty offered for the degree at least four must be taken in one subject and at least three in each of two others.

Latin	Economics	Geology
Greek	Political Science	Biology
Biblical Literature	Philosophy	Physiology
French	Mathematics	Histology
German	Music	Embryology
Spanish	Mechanics	Bacteriology
English	Physics	Biochemistry
Archaeology	Chemistry	Sociology
History		

Degree candidates making use of the Divinity Options are urged to arrange their course in such a way as to provide for one class in Sociology, as one such class is required to complete the Divinity Course. Honor graduates in the Classics may complete their Divinity studies in two years of post graduate work.

Graduates in Arts who have not taken Divinity as a Degree option, are required to take three years of Divinity work.

Candidates not required by their Bishop to take an Arts Course, may, after passing a qualifying examination, take the Divinity Course in four years, filling in the first and second years with selected courses in Arts.

Candidates who pass the first year Arts examinations and complete the Divinity Course may receive the diploma L. S. T.

With the consent of the Bishop concerned, and upon the recommendation of the Faculty of Divinity, the course in Divinity may be shortened by one year.

Unless special instructions to the contrary have been received by the Faculty from the Bishop concerned, all Divinity students are required to attend the prescribed lectures of the Divinity course and such others as may, from time to time, be arranged, and to pass satisfactory examinations in all subjects. A report of each student will be sent to his Bishop at the end of each term, concerning examinations, attendance at Chapel and general conduct.

The course of instruction qualifies candidates for the "Voluntary Preliminary" or First B. D. Examination of the Board of Examiners for Degrees in Divinity appointed under Canon X of the General Synod.

COURSES.

Greek Testament.

Greek Testament I—(Three hours per week). (Arts Option).
Prerequisite—*Greek I.*

Synoptic Gospels, and Introduction to Textual Criticism.

Greek Testament II—(Two hours per week).
St. John, and Acts.

Greek Testament III—(One hour per week).
Romans, and Pastoral Epistles, or an equivalent.

King's College.**English Bible.**

English Bible I—(1930-31)—Two hours per week. *(Arts Option).

General Introduction to Old Testament—Canon—Versions, etc. History of Hebrews to the establishment of the Kingdom. General lines of Criticism. General Introduction to The Gospels, The Synoptic Problem, The Fourth Gospel, New Testament History to the Ascension.

English Bible II—(1929-30)—(Two hours per week). *(Arts Option).

History of Hebrew people from David to end of the Canon. Introduction to Prophetical Books and Hagiographa. New Testament History from beginning of Acts to end of the Canon. Introduction to Epistles and Apocalypse.

English Bible III—(One hour per week.)

History of the Canon of the New Testament.

English Bible IV—(One hour per week.)

Old Testament Prophecy; Introduction to the different Prophetical Books.

Church History.

Church History I—(Two hours per week).

General Church History. The Christian Church of the first six centuries.

Church History II—(Two hours per week). *(Arts Option).

English Church History.

i. (1930-31). The New Learning and the English Reformation; Puritanism and Erastianism; The Evangelical Revival; the Oxford Movement.

ii. (1929-30). The British Church; Celtic and Roman Missions; the Church of England before the Conquest; Growth of the Papal Power.

Church History III—(Two hours per week). *(Arts Option). (See Church History II).

Church History IV—(Two hours a week).

The Church of the Middle Ages; the Continental Reformation.

Hebrew.

Hebrew I—(Three hours per week). (Arts Option).

Grammar and the first few chapters of Genesis.

Hebrew II—(Two hours per week).

Selected prose extracts.

Hebrew III—(Two hours per week).

Selections from Psalms and Prophets.

*There are two courses given in alternate years. One, but not both, may be offered as an elective for a degree in Arts.

School of Divinity.**Dogmatics.**

Dogmatics I—(Two hours per week).

Doctrine of God, the Trinity, the Incarnation, Sin, the Atonement, the Holy Spirit, Inspiration.

Dogmatics II—(Two hours per week).

The Church, the Ministry, the Sacraments, Creeds and Confessions of Faith, Eschatology.

Liturgics.

Liturgics I—(One hour a week).

Early Christian worship; Primitive Liturgics; Later Liturgical Development; the Breviary; Sources of the English Prayer Book.

Liturgics II—(One hour a week).

History of the Book of Common Prayer; the Scottish, American, Irish and Canadian Prayer Books.

These two classes are given in alternate years and must be taken by the Senior Divinity Students.

Apologetics.

Apologetics I—(One hour a week).

Christian Theism; Evidences of Christianity; Anti-Theistic Theories; Butler's "Analogy." Comparative Religions.

Apologetics II—(One hour a week).

(Continuation of Apologetics I).

Homiletics.

Homiletics I—(One hour a week).

Composition of Sermons, Theory and Practice of Preaching.

Homiletics II—(One hour a week).

Continuation of Homiletics I.

Pastoral Theology.

Pastoral Theology I—(One hour a week).

The Pastoral Office and the Cure of Souls; Institutions and Duties of Rectors; Churchwardens and Vestries; Synods; Canonical Obedience; the Parish Priest in his private and public life: his studies, his devotions; Parochial Organization; Sunday School work; Parish Visiting; The Ministration of the Word and Sacraments.

Pastoral Theology II—(One hour a week).

Continuation of Pastoral Theology I.

Patristics.

Patristics I—(One hour a week).

Selected Treatises from Greek and Latin Fathers.

Patristics II—(One hour a week).

Selected Treatises from Greek Fathers.

King's College.**Ecclesiastical Polity.**

Ecclesiastical Polity—(One hour a week).
Hooker's Fifth Book with Sketch of the other Books.

Moral Theology.

(One hour a week). Christian Ethics.

Sociology.

Sociology I. (See course in Arts Calendar).

RELIGIOUS EDUCATION.

Lectures on Religious Education are given every year by the Rev. Dr. Hiltz, General Secretary of the Board of Religious Education, Hon. Lecturer in this subject. The course, which is spread over three years, consists of 36 lectures, and deals with the following subjects.—

(a) Introduction.

The historical development of the Sunday School and of organized Sunday School work in the Church of England in Canada; the place of the Sunday School in the Church's Educational System.

(b) Psychology of childhood and adolescence in relation to Religious Education.

(c) Principles of Teaching.

(d) Organization and Management of Religious Education.

Each student in the Divinity course is required to pass the annual examinations in this subject, as well as to read an approved book on the subject each year and to submit a critical review of the same.

TUITION FEES.

The Tuition for students taking the whole or any part of the Divinity Course will be \$15.00 per year, excepting in the case of Arts subjects.

DEGREES IN DIVINITY.

The University of King's College having entered into an agreement with the other Church Universities and Theological Schools in Canada to adopt a uniform standard for Degrees in Divinity, all such Degrees are conferred now only by the University in accordance with Canon X of the General Synod of Canada. Particular information concerning the regulations for such Degrees may be had upon application to Archdeacon Vroom, Dean of Divinity, or to the President.

Faculty of Arts & Science

(Reprinted from *Dalhousie University Calendar.*)

General University Regulations.†

University regulations applicable to the students of all Faculties and relating to registration, residence, church attendance, discipline, etc., will be found on p. 17, *et seq.*

Academic Year.

The Academic Year consists of one session of about thirty-two weeks' duration. The session of 1929-30 will begin on Monday, September 23rd, 1929, and end on Tuesday, May 13th, 1930.

Degrees and Courses.

Courses are prescribed leading to the degrees of Bachelor of Arts (B. A.), Master of Arts (M. A.), Bachelor of Science (B. Sc.), Master of Science (M. Sc.), Bachelor of Music (B. Mus.) and Bachelor of Commerce (B. Com.) and to the Diploma of Licentiate of Music (L. Mus.). A course in Engineering, extending over two or three years, is prescribed for students who look forward to completing a course in Civil, Mechanical, Electrical or Mining Engineering at the Nova Scotia Technical College, or other technical institution. A diploma is given for successful completion of this course.

A diploma is offered also for the successful completion of a course in Household Science.

The courses for the degrees of Bachelor of Arts and of Science extend over four years. Candidates for these degrees may either follow the corresponding Ordinary course, or, if they have obtained a sufficiently high standing in the work of the first two years, may in their third year enter upon a course leading to the degree of Bachelor of Arts or of Science with Honours.

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

The degree of Bachelor of Arts or of Science with Distinction is awarded to a student who obtains a sufficiently high standing in the classes of the Ordinary course. See page 34.

The degree of Master of Arts or of Science is given for the successful completion of an approved course of graduate work extending over at least one year. See page 42.

The course of study for the Diploma of Licentiate of Music extends over two years, and that for the degree of Bachelor of Music over three years. See page 38.

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 either Latin or Greek.
- (ii) Two classes in one, not already chosen, of the following languages: Latin, Greek, French, German, Spanish.
- (iii) Two classes in English.
- (iv) History 1 or Economics 1, Philosophy 1, Mathematics 1 or 1C.
- (v) One class in either Physics or Chemistry.
- (vi) One class in Physics or Chemistry or Biology 1 or Geology 1.
- (vii) Nine other classes, selected from the following list, such that at least seven are included in not more than three of the departments, I to XX (see p. 57 *et seq.*)

Latin	Economics	Chemistry
Greek	Sociology	Geology
Biblical Literature	Political Science	Biology
French	Philosophy	Physiology
German	Psychology	Histology
Spanish	Mathematics	Embryology
English	Music	Bacteriology
Fine Arts	Mechanics	Biochemistry
History	Physics	

For details of subjects studied in the above classes see Courses of Instruction, p. 57, *et seq.*

Latin 1, Greek 1, French 1, German 1 and Spanish 1, are not recognized as part of a course for a degree unless the corresponding second class is subsequently taken.

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

Lists of the elective classes chosen by students must be submitted for approval not later than Wednesday, October 9th, 1929.

Affiliated Courses.

An undergraduate looking forward to the study of Divinity, Law, Engineering or Commerce may offer one of the following groups in place of three of the nine electives required above:

A. For Divinity.—By an arrangement with the Pine Hill Divinity Hall, of Halifax, the classes in New Testament Greek and Hebrew conducted in that institution can be offered for the three electives referred to above by students intending to go forward to the study of Divinity there.

By an arrangement with King's College, Halifax, the class in New Testament Greek and two of the following three classes, Hebrew, Biblical Literature and Ecclesiastical History, conducted by the Divinity Faculty of that institution, can be offered for the three electives referred to above by students intending to go forward to the study of Divinity there.

B. For Law.—Any four classes of the First year in Law.

C. For Engineering.—Drawing 1, Drawing 2, Mechanics 3, 4.

D. For Commerce.—Accounting 1, Accounting 2 or Commercial Law, Marketing, Business Organization.

Students whose course has included Physics 1, 20, Chemistry 1A, 2A, 4, Biology 1, Zoology 3, Physiology

1, Biochemistry 1, Histology and Embryology and who take Anatomy 1 and Practical Anatomy as extra classes may complete a subsequent course in Medicine at this University in four years

An undergraduate who elects group C, and also includes in his course the other classes common to it and the course in Engineering, and who takes Surveying, Drawing 3 and Mechanics 5 as extra classes, may complete the subsequent work for a degree in Engineering in two years.

Graduates who have passed in the classes of Group D, may complete a subsequent Commerce course in this University in two years.

Order of Classes.

The classes of a course may be taken in any order, subject to the regulations regarding admission to classes (page 45). The following schedule in which the classes are arranged in years shows the order recommended for undergraduates; *but students who intend to take one of the Affiliated Courses, or to enter an Honour Course, or to be eligible for First or Second Year Scholarships, should consult the Registrar early in their course about the right order of classes for the purpose.*

First Year.

1. Latin 1, or Greek 1.
2. One, not already chosen, of Latin 1, Greek 1, French 1, German 1, Spanish 1.
3. English 1.
4. Mathematics 1 or 1C.
5. Chemistry 1, or History 1, or Physics 1 or 2

Second Year.

1. The language chosen as class 1 in the first year.
2. The language chosen as class 2 in the first year.
3. English 2.
4. *Philosophy 1, or History 1.
5. A class in one of the following: Mathematics, Physics, Chemistry, Economics, Political Science.

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

Third and Fourth Years.

The remaining required classes and elective classes from the subjects specified on page 23.

Ordinary Course for 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 Foreign Languages.

(ii) One in each of the following: Mathematics (including Drawing 1B), Physics, Chemistry, Biology or Geology.

(iii) Two classes selected from the departments of Languages, History, Economics, Political Science and Philosophy.

(iv) Ten other classes, such that at least seven are included in not more than three departments.

An advanced or Honour class may be taken as an elective by students who are not in an Honour Course, if approved by the Faculty. Lists of the elective classes chosen by students must be submitted for approval not later than Wednesday, October 9th, 1929.

Affiliated Courses.

An undergraduate looking forward to the study of Engineering may offer the classes of Group A below instead of four of the electives required from Group (iv) above:

A. For Engineering.—Drawing 2 and 3, Surveying 1, 2, Mechanics 3, 4 and 5.

An undergraduate who elects group A and also includes in his Science course the other classes common to it and the course in Engineering, may complete the subsequent work for a degree in Engineering in two years.

Students whose course has included Physics 1, 20, Chemistry 1, 2A, 4, Biology 1, Zoology 3, Physiology 1, Biochemistry 1, Histology and Embryology, and who take Anatomy 1 and Practical Anatomy as extra classes may complete a subsequent course in Medicine at this University in four years.

B. For Pharmacy.—By arrangement with the Maritime College of Pharmacy, classes in Pharmacy, Materia Medica and Dispensing may be offered for three classes in Group (iv) above, by those pursuing the study of Pharmacy.

Such students must include among their electives Biochemistry 1, Physiology 1 and Bacteriology 1; they shall be exempted from the requirement in Drawing.

C. For Fisheries.—By arrangement with the Biological Board of Canada, classes in Fisheries may be offered for three classes in Group (iv) above by those pursuing the study of Fisheries.

Order of Classes.

The classes of a course may be taken in any order, subject to the regulations regarding Admission to Classes (page 45). The following schedule in which the classes are arranged in years shows the order recommended for undergraduates; *but students who intend to take one of the Affiliated Courses, or to enter an Honour Course or for first or second year Scholarships, should consult the Registrar early in their course about the right order of classes for the purpose.*

First Year.

1. A class in foreign languages.
2. An elective.
3. English 1.
4. Mathematics 1 (including Drawing 1B).
5. Physics, or Chemistry 1A or Biology 1.

Second Year.

1. English 2.
2. A class in foreign languages.
- 3, 4, 5. Three Science classes.

Third and Fourth Year.

The remaining required classes and elective classes from the subjects specified.

Admission to Advanced Standing.

Students may enter the University on Advanced Standing, that is, be given credit for certain classes of the first year, and thus have the opportunity of completing a course for a degree in Arts or Science in three years, as follows:

A student entitled to Matriculant or Undergraduate standing in Arts or Science, who presents one of the certificates specified below, will be given credit, after completing a subsequent class in the same subject, or, in the case of Mathematics 1, a Science class, for such classes in the following list, not exceeding five in number, as the certificate warrants:

Latin 1, Greek 1, French 1, German 1, English 1, Mathematics 1.

A candidate will be allowed Supplementary examinations in the subjects required to complete five classes provided the certificate shows a mark of at least 30 per cent. in such subjects and the candidate has credit for the corresponding Matriculation subjects. No credit shall be given for certificates obtained subsequent to registration in the University for the first time. The certificates to which these provisions apply are the following:

- *(a) High School Certificate of Grade XII of Nova Scotia;
- (b) Honour Diploma, as issued by the Prince of Wales College, P. E. I.;
- (c) Grammar School Licence of New Brunswick;
- (d) Diploma of the Senior Associate Grade, as issued by the Education Department of Newfoundland;
- (e) Equivalent Certificates issued by Education Departments of other Provinces.

The above privilege of taking Supplementary examinations on certain subjects of the first year, granted to the holders of specified certificates, may be granted also to other candidates who in the opinion of the Committee on Admission have equivalent qualifications.

Degree of Bachelor with Distinction.

The degree of Bachelor of Arts or of Science with Distinction will be conferred on undergraduates for

*The standard required is 50 per cent. in each subject. For Mathematics an aggregate of 150 is required in the three subjects of Algebra, Geometry and Trigonometry.

special excellence shown in the classes of the Ordinary course. The award of such degree is based upon the Class Distinctions (page 47) gained by candidates; and not only are the number and grade of such Distinctions considered, but also the extent and character of the work by which they have been gained.

The total number of classes in which distinction may be attempted is eight, of which two may be taken in the second year and three in each of the third and fourth years.

Students taking more than 25 hours per week (lectures and laboratory) will not be admitted to read for distinction in any class.

No distinction work will be offered in Latin 1, Greek 1, French 1, German 1, Spanish 1, English 1, Chemistry 1, Physics 1, 2, Mathematics 1, 1C.

Candidates for Distinction are advised to consult the Registrar with respect to the selection of classes.

Degree of Bachelor with Honours.

An undergraduate who has passed in at least *nine* classes of the Ordinary Arts or Science course with sufficient credit is allowed to restrict his attention during his third and fourth years to a more limited range of subjects than that prescribed for the Ordinary course, by entering an Honour course.

A candidate for admission to an Honour Course must obtain the permission of the Faculty, which will in ordinary circumstances be granted only to students who have attained a high standing in the classes preliminary to the Honour course selected (see statement of Honour courses below); *and the candidate should, accordingly, plan his course so as to take these preliminary classes during his first two years.*

Before graduation he must have passed in the following classes: (a) Two in each of two foreign languages, of which, in Arts, Latin or Greek must be one. (b) Two in English. (c) One in Mathematics. (d) One in Physics or Chemistry.

In all cases the number of classes required for the degree shall not be less than twenty.

Honour courses are provided in the following departments: (i) Classics, (ii) Latin and English, (iii) Greek and English, (iv) English and English History, (v) any two of History, Economics and Sociology, Political Science, (vi) Philosophy, (vii) Mathematics, (viii) Physics, (ix) Chemistry, (x) Geology and Geological Chemistry, (xi) Biology. Undergraduates in Arts may enter any of these courses for which they are eligible. Undergraduates in Science may enter any of the last five courses for which they are eligible.

An undergraduate who enters upon an Honour course in any of the above departments must take the advanced classes in the department chosen and certain other classes specified below in the requirements for the individual courses, and is required to make satisfactory progress in these classes. He may select the remaining classes of his course, if he is an undergraduate in Arts, from any of the subjects of the Ordinary course in Arts, and if an undergraduate in Science, from any of the subjects of the Ordinary course in Science, the choice in each case being subject to the approval of the Faculty.

The examinations in the subjects of an Honour course are held at the end of the last year of the course.

A candidate for Honours may defer his examination in the subjects of his course until a year after he has passed the examinations in the Ordinary subjects of the fourth year; in which case, however, such candidate shall not be entitled to his degree until he has passed the examination of such Honour course.

Successful candidates will be declared to have obtained their degrees with Honours, with High Honours, or with High Honours and a Medal.

Honour Courses.

I. Classics.

Preliminary Classes.—Latin 1 and 2, and Greek 1 and 2.

Candidates taking the Honour Course in Classics are required to take Latin 3, 4, 5 and 6 and Greek 3, 4, 5 and 6 in their third and fourth years, and sufficient elective classes to complete the total of twenty classes

required for a degree. The special Honour examinations will be on the following subjects; but the standard of attainment shown in Latin 3 and 4 and Greek 3 and 4 will be considered in the final award.

Latin.

A. Candidates will be required to have a critical knowledge of the following works, in addition to those prescribed in the Ordinary course:—

Plautus: *Captivi, Trinummus*. Terence: *Adelphi, Phormio*. Lucretius: III. Vergil: *Georgics*, I, IV. Horace: *Epistles*, I, II; *Ars Poetica*. Juvenal: *Satires*, I, VII, VIII, XIV. Cicero: *De Oratore*, I; *Philippics*, I, II; *Pro Cluentio*. Livy: XXII. Tacitus: *Annals*, I, II; *Agricola*. Pliny: *Letters*, Bks. I-III.

B. **Composition**.—Translation from English into Latin prose.

C. **Literature**.—A general knowledge of the history of Latin literature with a more minute knowledge of the lives and writings of the authors prescribed. (Mackail: *Latin Literature*. Cruttwell: *History of Roman Literature*).

D. **Translation at Sight**.—Passages from Latin books not prescribed will be set.

Greek.

A. Aeschylus: *Eumenides, Prometheus Vincetus*. Sophocles: *Ajax, Oedipus Rex*. Aristophanes: *Frogs, Knights*. Homer: *Odyssey*, V-VIII. Thucydides, II. Plato: *Republic*, I-IV. Demosthenes: *De Corona*. Aristotle: *Poetics*, and selections from the *Ethics*.

B. **Composition**.—Translation from English into Greek prose.

C. **Literature**.—A general knowledge of the history of Greek literature, with a more minute knowledge of the lives and writings of the authors prescribed. (Jebb: *Primer of Greek Literature, Introduction to Homer*. Jevons: *History of Greek Literature*. Haigh: *Attic Theatre*).

D. **Translation at sight**.—Passages from Greek books not prescribed will be set.

II. Latin and English.

Preliminary Classes.—Latin 1 and 2, and English 1 and 2. Prospective candidates are strongly recommended to take two classes in German.

Candidates taking the Honour Course in Latin and English are required to take Latin 3, 4, 5 and 6 and English 3, 4, 5, 6 and 7 in their third and fourth years, and sufficient elective classes to complete the total of

twenty classes required for a degree. The special Honour examinations will be on the following subjects; but the standard of attainment shown in Latin 3 and 4 and English 3, 4 and 5 will be considered in the final award.

Latin.

The Latin prescribed for the Honour course in classics.

English.

The historical development of the language and literature to the year 1800. Bright: *Anglo-Saxon Reader*. Sievers: *O. E. Grammar* (trans. by Cook), Pt. II. Morris: *Specimens of Early English*, I. Emerson: *History of the English Language*. Sight reading of Old English.

History of the Elizabethan and Early Stuart Literature.—Sidney: *Apologie for Poetrie*. Hooker: *Ecclesiastical Polity*, Book I. Bacon: *Advancement of Learning, Essays*.

Marlowe: *Tamburlaine, Edward II, The Jew of Malta*. Greene: *Friar Bacon and Friar Bungay*. Jonson: *The Alchemist, Every Man in His Humour*. Beaumont and Fletcher: *Philaster, The Knight of the Burning Pestle*. Massinger: *A New Way to Pay Old Debts*. Webster: *The Duchess of Malfi*. Shakespeare: *Titus Andronicus, Romeo and Juliet, Julius Caesar, Hamlet, Othello, Lear, Macbeth, Antony and Cleopatra, Coriolanus, Timon, The Two Noble Kinsmen*.

Books recommended: Sidney, Cook's edition (Ginn & Co.); Hooker, Church (Clarendon Press). Bacon: *Advancement*, Wright (Clarendon Press), *Essays*, Wright, (G. T. Series). History of Literature: Ten Brink, Saintsbury, Brooke (Clarendon Press). Mermaid, Temple Dramatists, Belles Lettres, and Arber editions of Elizabethan works.

III. Greek and English.

For the requirements in this course read "Greek" for "Latin" in the above course.

IV. English and History.

Preliminary Classes.—English 1 and 2 and History 1. Prospective candidates must arrange to take these classes during their first two years if they desire to complete the work for a degree in four years.

Candidates taking the Honour Course in English and History are required to take English 3, 4, 5, 6 and 7, and History 2, 3, 4 and 5 and any special Honour class in History offered, in their third and fourth years, and sufficient elective classes to complete the total of twenty

classes required for a degree. The special Honour examinations will be set on the following subjects; but the standard of attainment shown in English 3, 4 and 5 and History 2, 3, 4 and 5 will be considered in the final award.

English.

The English subjects prescribed for the Honour course in Latin and English.

History.

The History subjects prescribed for the Honour course in History, Economics, Political Science. (See below).

V. History, Economics and Sociology, Political Science.

Candidates desiring to take the Honour course in two of these departments and to complete the work for a degree in four years must take the preliminary classes in each department in their first two years. They are required to take a minimum of four additional courses in each department and any special Honour classes offered, in their third and fourth years; and in addition to the required classes they must have taken during their course sufficient elective classes to complete the total of twenty classes required for a degree. The special Honour examinations will be set on two groups of the following subjects; but the standard of attainment shown in the other classes taken in the two departments will be considered in the final award.

Preliminary Classes.—History 1, 2, Economics 1, Political Science 1.

History.

Four subjects from the following groups, but not more than two from any one group.

- A. 1. A Period in Greek History.
2. A Period in Roman History.
- B. 1. A Period in English History prior to 1603.
2. A Period in English History since 1603.

- C. 1. A Period in Mediaeval European History.
2. A Period in Modern European History.
3. Another Period in Modern European History.
- D. 1. Canadian History to 1763.
2. A Period in Canadian History since 1763.

Economics and Sociology.

Section C is obligatory together with one subject from Section A, and two other subjects chosen, with the consent of the Department, from Section B.

- A. 1. Economic Theory and its History.
2. Sociological Theory and its Development.
- B. 1. International Trade and Tariffs.
2. Money and Banking.
3. Public Finance.
4. Labour Problems.
5. Economic Problems of Canada.
6. Economic History.
7. Programmes of Social Reconstruction.
8. Social and Vital Statistics.
9. Population Problems.
10. Social Legislation in Canada.
- C. A paper on a subject approved by the Department.

Political Science.

Four subjects, one from each of the following groups;

- A. A period in Constitutional History of England. Government of Great Britain. Imperial Relations. Government and constitution of Canada.
- B. International Organization. History of International Relations since 1919. International Law.
- C. History of Political Theory. Contemporary political theories. Representative Government.
- D. A paper on a topic related to one of the fields chosen from the above for examination, or a fourth field chosen in consultation with the Department.

VI. Philosophy.

Preliminary Class.—Philosophy 1.

Candidates taking the Honour course in Philosophy are required to take Philosophy 2, 3, 4, 5, 6, 7 and 8 and

any special Honour classes in Philosophy offered, in their third and fourth years, and sufficient elective classes to complete the total of twenty classes required for a degree. The special Honour examinations will be set on the following subjects; but the standard of attainment shown in Philosophy 2, 3, 4, 5, 6, 7 and 8 will be considered in the final award.

A. **Logic.**—Welton: *Manual of Logic* (2 vols.). Mill: *System of Logic*. Joseph: *Introduction to Logic*. Bradley: *Principles of Logic*.

B. **Psychology.**—Klemm: *A History of Psychology*. Rand: *The Classical Psychologists*. Watson: *Behavior; An Introduction to Comparative Psychology; Psychology from the Standpoint of a Behaviorist*. MacDougall: *Body and Mind*. Ward: *Psychological Principles*.

C. **Metaphysics.**—Taylor: *Elements of Metaphysics*. Bradley: *Appearance and Reality*. Bergson: *Time and Free Will*.

D. **Ethics.**—Mackenzie: *Manual of Ethics*. Moore: *Principia Ethica*. Sidgwick: *Methods of Ethics*, and *History of Ethics*. Green: *Prolegomena to Ethics*. Rashdall: *Theory of Good and Evil*.

E. **History of Modern Philosophy.**—Locke: *Essay on the Human Understanding*, I, II, V. Berkeley: *Principles of Human Knowledge*, *New Theory of Vision*, *Dialogues between Hylas and Philonous*. Hume: *Inquiry into Human Nature*. Kant: *Critique of Pure Reason*, to the end of the Transcendental Dialectic.

F. **History of Greek Philosophy.**—Gomper: *Greek Thinkers*. Adam: *Religious Teachers of Greece*. Plato: *Republic*, I-III, V, VI, VII. Aristotle: *Ethics*, I-III, VII, X.

VII. Mathematics.

Preliminary Classes.—Mathematics 1, 2, 3 and 4, and Physics 1, or 2 and 3.

Undergraduates taking the Honour course in Mathematics are recommended to take German and Physics 1, or 2 and 3 in their first and second years. They are required, if they wish to complete the work for a degree in four years, to take in their third and fourth years four advanced classes in Mathematics, and four classes in Physics or Mathematical Physics approved by the department of Mathematics for that purpose.

The special Honour examinations will be set on the following subjects:

Pure Mathematics.

Any four of the following:

(a) Infinitesimal Calculus; (b) Plane and Solid Analytic Geometry; (c) Differential Equations; (d) Algebra (Determinants, Theory of Equations, Quantics, Invariants, Series, Functions of a real variable); (e) Projective Geometry.

VIII. Physics.

Preliminary Classes.—Mathematics 1, 2, 3 and 4 and Physics 2 and 3.

Undergraduates taking the Honour course in Physics are recommended to take German, Physics 2 and Mathematics 1 and 2 in their first year, and Physics 3, Chemistry 2 and Mathematics 3 and 4 in their second year. They are required, if they wish to complete the work for a degree in four years, to take in their third and fourth years at least eight classes in Physics, Mathematics, Mathematical Physics and Chemistry.

The Special Honour examinations will be set to test (1) the student's general knowledge of the more elementary parts of the subject, (2) his grasp of the more advanced parts of the subject which have been taken up in lectures and (3) his ability to work up some part of the subject without the aid of lectures.

IX. Chemistry.

Preliminary Classes.—Chemistry 1, 2 and 4, Physics 1, Mathematics 1, 2, 3. Two classes in German are recommended.

In order to complete this course in four years, it is necessary to take Mathematics 1, 2, 3, Physics 1, Chemistry 1, 2 and 4 in the first and second years; and Physics 4, and 6, Chemistry 5, 6, 7, 8 and 9 or 10 in the third and fourth years.

Candidates for High Honours will be expected either to prepare a thesis embodying the results of a short original investigation, or to show exceptional skill in some special branch of laboratory work. The standard of attainment shown in Physics 4 and 6 (Distinction courses), and Chemistry 5, 6, 7, 8 and 9 or 10, will be considered in the final award.

The special Honour examinations will be set on the following subjects:

A. **Inorganic and Physical Chemistry.**—Mellor: *Modern Inorganic Chemistry*. Ostwald: *Principles of Inorganic Chemistry*. Walker: *Introduction to Physical Chemistry*. Washburn: *Physical Chemistry*. Selected portions of LeBlanc's *Text-book of Electro-Chemistry* and of *Text-books of Physical Chemistry*, edited by Sir William Ramsay. The requirements in Physical Chemistry are in large part covered by the class-work of Chemistry 6 and 8.

B. **Organic Chemistry.**—Holleman: *Organic Chemistry*. Cohen: *Organic Chemistry* (selected chapters). Porter: *The Carbon Compounds*.

C. **History of Chemical Theory.**—The development of chemical theory as treated in Chemistry 5 with the prescribed supplementary reading. Candidates are required to have a thorough knowledge of the following memoirs: Graham: *Researches on the Arsenates, Phosphates and Modifications of Phosphoric Acid* (Alembic Club Reprints, No. 10). Liebig and Woehler: *Ueber das Radikal der Benzoesäure* (Ostwald's *Klassiker*, No. 22). Liebig: *Ueber die Constitution der organischen Säuren* (Ostwald's *Klassiker*, No. 26).

D. **Laboratory Methods.**—The principles and methods of analysis and of the preparation of inorganic and organic substances, as in Chemistry 7, 9 and 10, including Distinction work.

X. Geology and Geological Chemistry.

Preliminary Classes.—Geology 1, Physics 1, Chemistry 1 and 2, and Biology 2 and 3, or 1A.

Prospective candidates are recommended to take German.

The special Honour examinations will be set on the following subjects:

- (a) General Geology; (b) Mineralogy; (c) Petrography; (d) Economic Geology; (e) Geological Chemistry.

XI. Biology.

Preliminary Classes.—Chemistry 1 and Biology

1.

Candidates taking the Honour Course in Biology are required to take Chemistry 2, 4, Physics 1, Zoology 3 and the following Honour Classes: one of Zoology 4, 5, 6; one of Botany 2, 3, 4, 5, 6; Biochemistry 1; Zoology 7 or Botany 8; three advanced classes in Biology to be approved by the Department.

Course for Bachelor of Commerce.

The course of study prescribed for the degree of Bachelor of Commerce may be completed in four years, and consists of the following classes:

First Year.—French 1 or German 1 or Spanish 1, English 1, Mathematics 1C, Economics 1, Economic Geography, Accounting 1.

Second Year.—French 2 or German 2 or Spanish 2, English 2, History 1 or Political Science 1, Accounting 2, Biology 1 or Chemistry 1 or Physics 1, Marketing and Distribution.

Third and Fourth Years.—Philosophy 1, French 10 or German 10 or Spanish 10, Business Organization, Economics 2, Commercial Law, Business Correspondence, Money and Banking, Labor and Trust Problems, Corporation Finance and Investment, three other classes in Commerce or Economics; thesis or supervised work at the discretion of the Department, requiring six hours a week.

Degree of Bachelor of Music.

The course for the degree of Bachelor of Music may be completed in three years. Candidates for the degree may be students of the pianoforte, or organ, or violin, or voice. Candidates are required to pass the examinations in the subjects of the course, to submit the prescribed compositions, and to satisfy the examiners of their proficiency as musical performers by passing the prescribed practical tests. In addition, before proceeding to the examinations of the final year they must have completed Matriculation and must have satisfied the department of Modern Languages that they have a knowledge of French and German equivalent to French 1 and German 1.

The examinations in theory are the same for candidates in all branches of music.

Examinations.

The examinations are arranged in three groups or years. The examinations in any one group may be taken in a single year, and a candidate must have passed in all the subjects of a given group or year before proceeding to the examinations of the following one.

The papers shall be set in accordance with the following schedule:

First Year.

1. Harmony in not more than four parts.
2. Analysis of Harmony.
3. Strict Counterpoint in two and three parts.
4. History of Music from the beginning of the Christian era down to 1750.
5. English 1.

Second Year.

1. Harmony in not more than five parts.
2. Strict Counterpoint in three and four parts.
3. Double Counterpoint in the octave and two parts.
4. Canon and Imitation in two parts
5. Fugue as far as subject and answer.
6. History of music since 1750.
7. English 2.

Third Year.

1. Strict and Free Counterpoint in not more than five parts.
2. All forms of Double, Triple and Quadruple Counterpoint; Canon and Imitation in two, three and four parts.
3. Strict and Free Fugue in not more than five parts.
4. Analysis of Form.
5. Acoustics, in its relation to the Theory of Music.
6. Orchestration.
7. Analysis of a Full Orchestral Score.

The University provides instruction in English, Acoustics, French and German. Instruction in the professional subjects may be obtained at the Halifax Conservatory of Music, or other institution recognized for this purpose by the Senate.

Candidates for examination must make application in accordance with the Regulations for Courses in Music. (See below).

Practical Tests.

The Practical Tests are held only at the time of the corresponding examinations, and an application for examinations is considered as an application for the practical tests also. The practical tests of each of the three years are those given in detail in the calendar of the Halifax Conservatory of Music. A certificate of having passed the practical tests of the first year in an approved institution may be accepted, but those of the second and third years must be taken at this University.

Compositions.

Candidates shall compose the following exercises, which are to be submitted at or before the final examinations for the degree:

- (a) A solo song with pianoforte accompaniment.
- (b) A four-part vocal composition.
- (c) An instrumental composition (other than a dance) for pianoforte, organ, or other stringed or wind instruments, with pianoforte accompaniment.

Diploma of Licentiate of Music.

The Diploma of Licentiate of Music in Pianoforte, or Organ, or Violin, or Voice, will be granted candidates who complete two years of the course for the degree of Bachelor of Music by passing the examinations and practical tests of the first and second years.

General Regulations for Courses in Music.

Candidates for any examination must have passed Matriculation in English (see p. 12).

Candidates who present certificates from a recognized institution of having attended approved courses of instruction in the subjects of the first year, and of having passed examinations on them accepted as equivalent to those of this University and of having satisfied the corresponding practical tests set by that institution may be exempted from the examinations and practical tests in the subjects of the first year. The examinations and practical tests of the second and third years must be taken at this University.

Candidates who hold the Diploma of Licentiate of Music of this University are exempted from the examinations and practical tests of the first and second years of the course for the degree of Bachelor of Music.

The regular examinations are held in April. Supplementary and Special examinations are held in September only. (See University Almanac).

Candidates for any examination must make application to the Secretary of the Faculty of Arts and Science not later than March 28th, the application being accompanied by the proper fee (see p. 56) and by certificates of having attended approved courses of in-

struction in the professional subjects of the examinations and of having satisfactorily completed the work of such courses.

COURSE IN PHARMACY.

Degree Course.

Students of Pharmacy may obtain the degree of B. Sc. (Pharmacy) by taking certain classes in the Faculty of Arts and Science in addition to the classes in the purely Professional subjects. See page 27.

Other Pharmacy Courses.

The Maritime College of Pharmacy, with the cooperation of some members of the staff of the University offers two other courses in Pharmacy, a Short Course for Pharmacy Clerks, and a Qualifying Course required of those who desire to become Registered Pharmacists in Nova Scotia, and a special course for those who desire to become Registered Pharmacists in New Brunswick. These courses are carried on in the University buildings, and the students are subject to University regulations and discipline.

The Short Course for Pharmacy Clerks is intended to prepare the student for the Certified Clerks Examination of the Nova Scotia Pharmaceutical Society. It is expected that students will have a general education at least equal to that of Grade IX. Attendance on this course is prerequisite to the Qualifying Course.

The Qualifying Course begins on Saturday, Sept. 28th, 1929, and ends with the University session. The course which covers two years and includes Chemistry, Botany and Microscopy, Materia Medica, Pharmacy, Prescriptions and Dispensing and Economics, is designed to prepare the student to pass the final licensing examinations of the N. S. Pharmaceutical Society. It is necessary that students shall meet the University matriculation requirements prescribed for a degree in Medicine.

The Special course, suitable for New Brunswick students, covers one year and includes the subjects required for the Final Pharmacy Examinations of that Province. Students must have passed the "General Subjects" Examination of the N. B. Board of Pharmacy Examiners. This course begins Aug. 29th, 1929.

For the calendar of the Maritime College of Pharmacy, and for all information, address Dean G. A. Burbidge, Medical Science Building, Halifax, N. S.

COURSE IN FISHERIES.

The following is the curriculum of the Course leading to the degree of B. Sc. (Fisheries).

First Year.—French 1 or German 1, Mathematics 1, Biology 1, Physics 1, English 20.

Second Year.—A second class in a foreign language, English 2, Economics 1, Chemistry 1A, Zoology 3, Drawing 1B.

Third Year.—A third class in English, Chemistry 4, Histology, Fisheries 1, 2.

Fourth Year.—Biochemistry 1, Physiology 1, Pathology and Bacteriology, Fisheries 3, 4.

Summer Session.—Marine Zoology.

Master of Arts and Master of Science.

A candidate for the degree of Master of Arts or Master of Science must hold the corresponding Bachelor's degree from a College or University recognized by the Senate for the purpose, and have held it for at least one year, and be of good character and standing. The course of study for the degree shall be confined to one subject or two closely related subjects, and must be submitted by the candidate in writing, and receive in advance the approval of the Faculty of Arts and Science. The course shall consist of work in advance of that given in the ordinary undergraduate classes; but some of the more advanced undergraduate classes may be a part of it, provided these have not been part of the work of the candidate for the Bachelor's degree. At least three undergraduate classes must already have been taken in the main subject offered and distinction must have been obtained in the last two classes so taken. The course shall comprise work amounting to not less than that of five classes, and be designed to occupy the candidate's time for not less than forty hours per week for a session, class attendance and time spent on preparation being included. The work may be done wholly or in part by private reading by graduates of Dalhousie University, for whom attendance at the University is not necessary; all other

candidates must be in residence. When work done extra-murally is offered for the degree two years must have elapsed, after approval of the candidate's application, before the examinations for the Master's degree can be taken. In announcing the award it shall be stated whether the course was taken in residence or extra-murally.

The course of study for the Master's degree shall be arranged for each candidate by the department chiefly concerned, due consideration being taken of the candidate's preparation, needs and aims. In case of deficient preparation for what the department regards as proper graduate work, prerequisite undergraduate classes may be prescribed, but such classes shall not count as part of the work for the degree.

An essay or thesis may be required of the candidate. When required, it shall be regarded as forming one-fifth of the full course of study and should occupy one-fifth of the candidate's time for the session. This restriction, however, shall not apply to the departments of Physical Science. Theses must be sent to the Secretary of the Faculty on or before the first of March.

An undergraduate who, at the beginning of a session, has fewer than five classes to complete in order to obtain the Bachelor's degree, may be permitted, with the approval of the Faculty, to take not more than two advanced classes with a view to including such class or classes in a subsequent course for the Master's degree.

A candidate for a Master's degree must complete the entire work of his course before being admitted to any examinations for the degree, and the time over which such examinations may extend shall not exceed a fortnight. A student failing in any one of the examinations is required to repeat all examinations. The pass mark shall be fifty per cent. in each subject. Examinations shall be held ordinarily at the time of the Spring examinations; but in special circumstances they may be held in the Autumn. **Candidates must give one month's notice to the Secretary of the Faculty of their intention to appear for examination, and the fee must accompany the notice.**

Uniform Course for all Branches of Engineering.

This course is intended for students who look forward to taking a degree in Civil, Electrical, Mechanical or Mining Engineering. It covers the requirements prescribed for admission to the courses for a degree in Engineering in the Nova Scotia Technical College, or to entrance into the third year of other engineering institutions. A Diploma is given for successful completion of the course.

For admission the student must have ordinary Arts matriculation in English, History, Algebra, Geometry, Physics or Chemistry, a foreign language, and one other matriculation subject, preferably Trigonometry; for those so entering the course is one requiring three years, namely:

First Year.—English 20, Mathematics 1, Chemistry 1A, Drawing 1, French 1 or German 1 or Latin 1, Surveying 1, Shopwork.

Second Year.—English 21, Mathematics 2, 4, Physics 2, Drawing 2, Surveying 2, Economics 1.

Third Year.—Mathematics 3, Physics 3, Mechanics 2, 3, 4, 5, Drawing 3.

The course in Shopwork, of about three weeks duration immediately preceding the regular session, is given by the Nova Scotia Technical College in its own work shop. In lieu of this requirement, practical experience in industry is accepted if it is closely related to the branch of engineering to be followed.

The Surveying Camp conducted under the auspices of the Nova Scotia Technical College on the grounds of the Agricultural College, Truro, must be attended by all students taking the class in Surveying.

If the degree sought is in Mining Engineering, Geology 1 should be added to the course prescribed above in the third year.

Engineering students may obtain the degree of B. Sc. by taking certain Arts classes in addition to those specified above, see page 26.

Household Science Diploma.

This diploma will be granted to candidates who have completed a course of four years including the work in Household Science conducted at the Halifax

Ladies College covering a period of two years and the following ten classes in the Faculty of Arts and Science: English 1, 2; French 1, 2 or German 1, 2; Chemistry 1; Biology 1; Economics 4; History 1; Sociology 1 and Fine Arts.

Teacher's Licence.

Students who have included in their course for the B. A. or B. Sc. degree Education 1 and two of the classes Sociology 1, Economics 1 and Political Science 1, and who have taken in addition Education 2 and Physical Training will be recommended to the Nova Scotia Department of Education for a licence of the First Class or Superior First Class.

General Faculty Regulations.

Admission to Classes.

1. Candidates for a degree must pass the Matriculation examinations (pp. 11-14). Only those classes which a student attends as an Undergraduate or Matriculant are recognized as qualifying for a degree in Arts or Science. In order to be a Matriculant in this Faculty the student must have passed Matriculation in English and at least four other subjects of Matriculation.

2. A Matriculant pursuing a course for a degree in Arts or Science and wishing to finish this course in four years should complete his Matriculation before entering the classes proper to the *second year of his course. Thereafter until Matriculation is completed such student shall not be permitted to attend more than four classes in any one year.

3. A Matriculant deficient in more than one subject of Matriculation shall not be admitted to more than four classes of a course for a degree.

4. A Matriculant deficient in one of the required foreign languages, whose preparation in this language has not covered any considerable part of the work prescribed for Matriculation, shall not be admitted to more than three undergraduate classes; and if deficient to a similar extent in the two required foreign languages,

*For the purpose of this regulation five classes shall be regarded as constituting a year.

he shall not be admitted to more than two undergraduate classes. The Committee on Admission may, however, at their discretion, waive this regulation in the case of a student whose standing in the other subjects of Matriculation is high.

5. Classes are to be taken in the order of their advancement; and the class or classes specified under Courses of Instruction (p. 57 *et seq.*) as preliminary or prerequisite to a given class must be taken before such class. No undergraduate or matriculant shall be admitted to a class until he has passed the preliminary class or classes or other preliminary qualifications required.

6. Five classes shall be regarded as constituting a normal year's work for a student in good standing. Students seeking admission to six classes must make written application to the Committee on Studies, furnishing reasons in support of their application. No student who has failed in any class of his course in the preceding year of his attendance shall be admitted to more than five classes.

7. Students shall not be permitted to continue during the second term in more than two of the classes in which they have failed at the preceding Christmas examinations, and if they have failed in more than two-thirds of their classes their work during the Session shall not be recognized as qualifying for a degree and they shall be advised and, in extreme cases, may be required to discontinue attendance at the University for the remainder of the Session.

Class Work and Attendance.

In order that their class work may be recognized as qualifying for a degree or diploma, candidates must conform to the following requirements:

1. All students are required to attend the classes of their prescribed course regularly and punctually.

2. They must appear at all examinations, prepare such essays, exercises, reports, etc., as may be prescribed and, in case of a class involving field or laboratory work, complete such work satisfactorily.

3. They must secure positions on the Pass List. In determining this list both the standing attained in

prescribed class exercises and in field or laboratory work and that in the various examinations are taken into consideration. A candidate who fails to obtain a mark of at least 20 per cent. on the work of the session in any class shall lose credit for attendance in such class.

4. When the work of a student becomes unsatisfactory or his attendance irregular he will be reported to the Committee on Studies who may require him to discontinue attendance in the class or classes concerned and to be excluded from the examinations.

5. A candidate taking an affiliated course must, in the case of classes taken in another Faculty, conform to the regulations of such Faculty and must secure a position on the pass list in accordance with such regulations.

Examinations.

Sessional and Class Examinations.

In all classes other than purely laboratory classes, two examinations, at least, are held, the Christmas examinations, immediately before the Christmas vacation, and the Spring examinations, 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 at least 25 per cent. of the questions shall be set on the ground covered before Christmas.

Ordinary and Distinction Class Lists.

The names of candidates successful in the ordinary examinations are arranged in the published lists in order of merit in each class. In some classes (see page 28) additional work consisting of private reading, essays, reports, field or laboratory work, is prescribed for students who aim at Class Distinction. In such classes extra examinations are held in this additional work at the end of the session, and the award of Distinction is based upon the ordinary and the additional work of the class.

Class Distinctions are of two grades, First and Second Class; but candidates who attain a standing considerably above that required for First Class will be indicated as having obtained a High First Class.

Names are arranged in the lists in order of merit in each grade.

Supplementary and Special Examinations.

A student who fails to secure a position on the Pass List in a class, but who has otherwise fulfilled the requirements in class work stated on page 46, may be allowed the Supplementary examination in such class at the beginning of the next session of his attendance, on the day appointed in the University Almanac. A student who fails to appear at or to pass the Supplementary examination can only get credit for that class by passing a *Special examination therein.

Supplementary or Special examinations in any class shall in all cases cover the whole work of the session in that class, and not merely the work of the first or second term.

Supplementary and Special Examinations are held in September only.

No award of Class Distinction is made on the results of a Supplementary or Special examination.

A student wishing to appear as a candidate at a Supplementary or Special examination, shall be required to give notice of his intention to the Secretary of the Committee on Studies and Attendance on or before August 20th, the fee (see p. 56) to be remitted with the notice.

Aid Funds.

The Elizabeth McKenna Scholarship Fund.— This Fund was instituted in 1928 by Mr. James D. McKenna, of Sussex, N. B., to commemorate the seventieth anniversary of the marriage of his parents, Peter and Elizabeth McKenna, of Dartmouth, N. S. For the present one Scholarship of the value of \$100.00 will be open to award. It is tenable for one year by a student intending to enter the Faculty of Arts and Science. Applicants must be bona fide residents of one of the Maritime Provinces and in need of financial

*Students who have failed to pass in any class should carefully note that any examination taken subsequent to the Supplementary examination held in September of the next session of their attendance is a Special examination. The standard required to pass a Special Examination is considerably higher than that required for other examinations.

assistance. Applications, accompanied by certificates showing worthiness, financial circumstances and academic qualifications, must be submitted before September 1, 1929.

University Aid Fund.—This Fund has been established to provide assistance toward the payment of tuition fees by those desiring a university education and in need of financial assistance for that purpose. Applications accompanied by certificates showing worthiness, financial circumstances, and academic qualifications must be submitted before September 1, 1929.

The Leonard Foundation, created by Lieut.-Col. and Mrs. R. W. Leonard, of St. Catharines, Ont., has established a number of Scholarships, tenable at certain specified colleges, of which Dalhousie is one, for selected students of certain defined classes. For detailed information address the President.

Prizes and Scholarships.

The Senate reserves to itself the right of withholding Medals, Prizes and Scholarships, in cases in which sufficient merit is not shown.

The annual payment of any Scholarship or Bursary is made in two instalments, on October 15th and February 1st, the latter payment being conditional on the holder having made satisfactory progress in his classes.

(OPEN TO STUDENTS IN ARTS AND SCIENCE).

Halifax City Free Scholarships.

The University offers each year to the Halifax Academy, to Bloomfield High School and to St. Patrick's High School for Girls, a scholarship exempting the holder from tuition fees to a maximum amount of \$110 per year. These scholarships are tenable for four years, conditional upon the scholar pursuing a course in Arts or Science leading to a degree and reaching the grade of Distinction in at least two classes in each year. They are not payable during the year in which the holder is in receipt of another scholarship.

Candidates must have completed Matriculation, and reached a grade of scholarship represented by an average of 65 with no mark less than 50 on papers written in Grade XI examinations on Matriculation subjects, or the mark of Distinction on papers written in the Matriculation examinations, and must satisfy the Committee of Selection that they are deserving of financial assistance.

The University has the following funds available for scholarships to be awarded to candidates standing highest in the Matriculation and First Year Sessional Examinations:

The Sir William Young Fund.—This fund was left by Sir William Young for the purpose of endowing scholarships, and amounts to \$4,000.

The Mackenzie Bursary Fund.—Mrs. Harriet Mackenzie Morrison, of Stornoway, Scotland, daughter of Rev. Kenneth Mackenzie, of Pictou Co., bequeathed £1,000 to the University in 1887 to be used as a Bursary Fund.

The University or Professors' Scholarships Fund.—The University has set aside funds sufficient to produce an income of \$400 per year for scholarships to take the place of those offered in the earlier days by individual professors who received their class fees as part of their salaries.

The George H. Campbell Memorial Scholarships Fund.—In 1917 Mr. and Mrs. George S. Campbell gave the University the sum of \$25,000 to commemorate their only son, George Henderson Campbell, B. A. '15, who enlisted for overseas service during his senior year, and was killed while on duty at the front.

The Robert Bruce Fund.—The University receives one-seventh of the income received from a bequest of \$57,500 by Robert Bruce, of Quebec, to be used for bursaries and scholarships.

The income from these funds is applied as follows:—

Entrance Scholarships.

A. Awarded on the results of the Dalhousie Matriculation Examinations.

These Scholarships are nine in number, as follows:

1st George H. Campbell Memorial Scholarship, of.....	\$300
2nd " " " " " " " " " " " " " "	250
3rd " " " " " " " " " " " " " "	200
*1 Mackenzie Scholarship, of.....	150
2 Sir Wm. Young Scholarships, of.....	100 each
2 University Scholarships, of.....	100 each
†1 Bruce Scholarship, of.....	100

* (In the awarding of this Scholarship, candidates of the name of Mackenzie, MacLean or Fraser will be given the preference).

† (In the awarding of this Scholarship, candidates of Scottish extraction will be given the preference).

In order to be eligible a candidate must reach the grade of Distinction (55%) in the examinations named below, and otherwise satisfy all matriculation requirements, and must not have attended as a Matriculant or Undergraduate a recognized degree-granting College or University, and must intend to enter the Arts and Science Faculty of Dalhousie University, and must not have been a candidate more than once before. In the award of the Scholarships, subject to the above conditions, one shall be assigned, each, to

- Halifax County,
- Cape Breton Island,
- Prince Edward Island,
- New Brunswick,

but not more than one shall be awarded to Halifax City and vicinity when other candidates are eligible.

The locality from which a candidate shall be considered as coming will be determined by the locality of the last High or Preparatory School attended; or, in the event of his having been educated beyond grade X by private tuition, by his usual place of residence.

The next award of these Scholarships will be made on the marks received in the following five subjects of the regular matriculation examinations held at Dalhousie University on September 24th to September 27th, 1929,

1. English. 2. Algebra. 3. Geometry. 4 and 5. Two of Latin, Greek, French, German. For the requirements in each subject, see p. 12. Application to take the examinations must be made on forms to be obtained from the University Office.

These Scholarships are tenable for one year in the Arts and Science Faculty, and payable in two equal instalments, on October 15th and February 1st, the latter payment being conditional on the Scholar having made satisfactory progress in his classes.

The successful candidate for any one of these Scholarships may enter on Advanced Standing the classes of the second year (see p. 16), but he will not then be eligible for the First Year Scholarships described below.

B. Awarded on the results of other examinations.

Pictou Academy Scholarship.—In recognition of the common origin and close relation existing between Dalhousie University and Pictou Academy, the University in 1917 on the occasion of the hundredth anniversary of the Academy, established a Scholarship of the value of \$100.00 to be held during his first year of attendance at this University by the winner of an Academy Scholarship recommended by the Academy for this purpose. If such person stands also highest among the Academy students in the Grade XII examinations, the scholarship will be increased to \$200.00

Prince of Wales College Scholarship.—A scholarship of \$200.00 annually has been established to be given to the student who stands highest in the third year examinations of Prince of Wales College, Charlottetown, and who enters the Faculty of Arts and Science of this University.

Memorial University College Scholarship.—A scholarship of \$200.00 annually has been established to be given to the student who stands highest in the second year Examinations of the Memorial University College, Newfoundland, and who enters the Faculty of Arts and Science of this University.

First Year Scholarships.

These Scholarships are seven in number as follows:

3 George H. Campbell Memorial Scholarships, of.....	\$200 each
2 University Scholarships, of.....	100 each
*1 Mackenzie Scholarship, of.....	100
†1 Bruce Scholarship of \$85.00 tenable for three years..	255

*(In the awarding of this Scholarship, candidates of the name of Mackenzie, MacLean or Fraser will be given the preference).

†Preference will be given to students of Scottish extraction.

They are open only to Undergraduates who are just completing the first year of the course in Arts or Science, and are tenable for one year (except the Bruce Scholarship) and payable in two equal instalments, on October 15th and February 1st, the latter payment being conditional on the Scholar having made satisfactory progress in his classes.

They are awarded on the results of the Sessional Examination returns in the following classes: English 1, Mathematics 1 or 1C, Chemistry 1 or 1A or Physics 1 or 2, and any two of the four classes, Latin 1, Greek 1, French 1, German 1.

Second Year Scholarships.

The Allan Pollok Scholarship.—This scholarship has been instituted by the North British Society of Halifax, in memory of the Rev. Dr. Allan Pollok. It is of the value of \$200 and will be awarded annually without restriction as to sex, age or nationality to the student attaining the highest standing in the five classes which may be considered as constituting a normal second year course in Arts, namely, (a) English 2, (b) Latin 2 or Greek 2, (c) a class in Mathematics or Science, (d) a class in History, Economics, Philosophy or a foreign language, (e) another class. The scholarship can not be held along with the N. B. Centennial Bursary, or the Jotham Blanchard Bursary. It will be tenable in the third year of the Arts course.

The North British Society Centennial Bursary.—A Bursary, of the annual value of \$100, founded by the North British Society of Halifax, will be awarded biennially. Candidates must be undergraduates in a course in Arts or Science who are just completing *two years of residence, and must satisfy the test of racial eligibility for membership in the North British Society. The Bursary will be awarded to the candidate standing highest in the examinations in any five classes selected by himself from the following: (a) English 2; (b) two from Latin 2, Greek 2, French 2, German 2, (c) two other classes. It is tenable for two years, namely, during the third and fourth years of residence. The next award will be made in May, 1930.

The Jotham Blanchard Bursary.—This Bursary, of the annual value of \$55, being the interest of an endowment of \$1000, founded by the New Glasgow Literary and Historical Society in memory of Jotham Blanchard, an honoured name in the annals of Pictou County, will be awarded biennially on the same academic conditions as the North British Society Centennial Bursary. It is tenable during two years, namely during the third and fourth years of residence. The next award will be made in May, 1931.

Commercial Club Scholarships.—The Commercial Club of Halifax has offered two scholarships of \$100 each to the students of the second and third years of the course in Commerce who have attained the highest standing in their respective classes.

The Bruce Bursary.—A bursary of \$100 tenable during the third year of the Arts and Science course will be awarded to a student "of promising abilities but of straitened circumstances."

*For students who have been admitted by certificate to the second year read "one" for "two."

(Other Undergraduate Prizes).

The Waverley Prize.—This prize, of the value of \$55, being the interest of an endowment for the purpose, will be awarded annually to the student standing highest in Mathematics 3, his standing in Mathematical classes previously taken in the University being taken into consideration.

The Studley Quoit Club Prize.—This prize, of the value of \$50, is offered by the Studley Quoit Club for the encouragement of the study of Greek and Latin. It will be awarded annually to the student making the highest aggregate in Greek 2 and Latin 2, provided first class distinction is obtained in each class.

The Khaki University Scholarships.—From the Khaki University and Young Men's Christian Association Scholarship Fund, amounting to \$6,500 which was received from the trustees of the Khaki University, Scholarships of the value of \$100 each, two in number, will be awarded to third year students in Arts and Science to be held during their fourth year. The award is based on scholastic attainments but preference is given to men or women who have served overseas, or to their children.

The Katherine Buttenshaw Prize.—This prize, being the interest of an endowment of \$1000 for that purpose, will be awarded annually to the student standing highest in Mathematics 5 or 7.

Graduation Prizes.

To be eligible for a medal a candidate must attain a standard considerably above that required for high honours.

The Governor-General's Gold Medal, offered by His Excellency the Governor-General of the Dominion of Canada, will be awarded to the student who stands first among those taking High Honours in the department of Classics. In the event of its not being awarded in this department, it may be awarded in the department of Latin and English, or in that of Greek and English, or in some other department.

The Sir William Young Gold Medal, founded by bequest of the late Sir William Young, will be awarded on graduation to the student who stands first among those taking High Honours in Mathematics.

The Eric Dennis Gold Medal, founded by Senator William Dennis and Mrs. Dennis, will be awarded on graduation to the student who stands first among those taking High Honours in Government and Political Science.

University Medals of bronze will be awarded on graduation to students who take High Honours in departments in which a gold medal is not available.

The Avery Prize.—This prize, of the value of \$25, being the interest of a sum of money bequeathed for this purpose by J. F. Avery, M. D., will be awarded on graduation to the student standing highest among those graduating with Distinction.

The Eric Dennis Foreign Scholarship, of a value not less than \$250, founded by Senator William Dennis and Mrs. Dennis, may be awarded on graduation to the student standing highest in the

department of Government and Political Science, provided he attains a sufficiently high standard and obligates himself to pursue at least one year of post-graduate study in the same department of another University approved by the Senate.

(OPEN TO ALL STUDENTS).

The Halifax Overseas Club Essay Prize.—This prize, of the value of \$55, being the interest of a fund of \$1,000 given by the Halifax Overseas Club, will be awarded annually. It will be offered for the best essay on some question, historical or critical, relating to the place of the Overseas Dominions in the British Commonwealth. For further particulars address the President.

The W. H. Dennis English Prizes: The Joseph Howe Prizes for Poetry and the James DeMille Prizes for Prose.—These prizes, established by W. H. Dennis, Esq., of the value of \$200 each for a first prize and \$100 each for a second prize, will be offered annually. For the regulations address the President.

The Rhodes Scholarship.

This scholarship of the annual value of £400 for three years is awarded annually. For circulars and further information apply to Secretary, Committee of Selection, Dalhousie University.

1851 Exhibition Science Research Scholarships.

These scholarships, of the value of £250 sterling a year, are tenable for two, or, in rare instances, three years. They are open to students of not less than three years standing who have shown evidence of capacity for original research, and are tenable at any university or other institution approved by the Commissioners. For particulars address the President.

Daughters of the Empire Bursary.

This bursary of the annual value of \$300, is tenable for four years at any university in Nova Scotia and is open to the sons and daughters of deceased or totally disabled soldiers and sailors. One is available for each Province each year.

Full information can be obtained by writing to the Head Office of the Order for Canada, 238 Bloor Street East, Toronto, Ont.

(The holder of this bursary is granted exemption from class fees to the extent of \$25).

(OPEN TO GRADUATES).

The James Gordon MacGregor Memorial Fellowship in Physics.

This Fellowship of the value of \$800 is awarded annually to a graduate of this or other University. The holder of the Fellowship is required to give twelve hours per week to teaching work in the department of Physics.

Daughters of the Empire Post-Graduate Overseas Scholarship.

This scholarship was founded by the Imperial Order, Daughters of the Empire, as part of the war memorial of the Order. Nine are offered annually—one for each Province. They are of the value of

\$1,400, and have been founded "to enable students to carry on studies at any university in the United Kingdom, in British and Imperial history, the economics and government of the Empire and Dominion, or any subject vital to the interests of the Empire." For further information apply to the Head Office of the Order.

Fees.

All Fees and Deposits are payable in advance, and until these are paid the student will not receive credit for attendance upon any class, nor be admitted to any examination.

For Registration.†

Payable by students taking only one class in the University..	\$3.00
Payable by students taking more than one class.....	5.00
Additional, payable by all students registering after 12, noon, on last regular registration day, for each day....	2.00

For Tuition.

For each class not involving work in laboratory or draughting-room.....	\$ 22.50
**For each class involving work in laboratory or draughting room.....	30.00
For students taking one of the regular engineering courses the maximum annual tuition fee will be.....	150.00
For course for M. A. or M. Sc. degree not involving laboratory work.....	75.00
Ditto, involving laboratory work.....	100.00
For changing course of study after October 10th, charge for adding or substituting a class.....	1.00

These charges are the same whether the class is attended for all or part of the year.

A class taken a second time is charged for as if taken for the first time, except as stated below.

Up to and including October 9th, a student may retire from a class for which he has paid, and his class fee will be refunded: but if he retire after that date, his fee will not be refunded, except as stated below.

If a student is compelled to withdraw from college before December 1st through illness or for some other equally valid reason, one-half of his tuition fees will be refunded. If for like reasons he is compelled to withdraw between that date and February 1st, he will be allowed to take his classes a second time at half rates.

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

†Students who register only for the purpose of taking examinations are exempt from the payment of this fee.

**See Laboratory Deposit, p. 20.

For Examinations.

An application for Examination must be accompanied by the proper fee.

Matriculation examination at an outside centre.....	\$ 5.00
Each Matriculation examination after second year of attendance.....	5.00
Each Supplementary examination in Arts or Science....	3.00
Each Special Examination in Arts or Science.....	5.00
Examination for the Degree of B. Mus., First Year....	10.00
" " " Second Year....	15.00
" " " Third Year....	20.00
" " " Diploma of L. Mus., First Year.....	10.00
" " " Second Year.....	15.00
Each Supplementary examination in Music.....	5.00
Examination for the degree of M. A. or M. Sc.....	10.00
Ditto, at an outside centre.....	30.00

For Certificates and Diplomas.

An application for a Certificate or Diploma must be accompanied by the proper fee.

Certificate under the University seal.....	\$ 1.00
‡B. A. or B. Sc., or B. Com. or L. Mus. or Engineering, diploma.....	5.00
‡B. Mus. diploma.....	10.00
‡M. A. or M. Sc., diploma.....	20.00
Ad eundem gradum diploma.....	10.00
Additional fee for any degree conferred <i>in absentia</i>	5.00

See Page 20 for

**Fee for Support of Student Organizations.
Caution Deposit.
Laboratory Deposits.**

†Payable before the final examinations, and returnable in case of failure.

COURSES OF INSTRUCTION.

I. Classics.

Professors. Howard Murray (Head of Dept.), E. W. Nichols.
Associate Professor. A. K. Griffin.
Lecturers. J. W. Falconer, J. W. Logan.

Latin.

Elementary Latin.—*Tu., Th. and S. at 11 a. m., and another hour to be determined after the class is formed.*

This class is intended for beginners in the language, and for those whose work has been insufficient to qualify them for admission to Latin 1. Students whose work throughout the session has been satisfactory will be admitted to a Matriculation examination in Latin, held in April.

As it will not be possible to cover in class all of the reading required for Matriculation, students intending to qualify for the above examination must do a considerable part of the reading by private work, and must be prepared to devote much more time to the subject outside of class hours than is required in the ordinary undergraduate class.

The first book to be used will be Collar & Daniell's *First Year Latin*, (Ginn & Co., Boston). Other books will be announced at the beginning of the session.

1. *Tu. Th. and S., at 10 a. m., or M. W. and F. at 12 m.*

Pre-requisite.—Matriculation Latin.

Cicero: *Pro Archia Poeta*; and *Pro Marcello*. Vergil: *Aeneid*, Book V. Latin Grammar. Latin Prose Composition. Exercises in Sight Translation.

Books Recommended: Cicero: *Selected Oration and Letters*, (Kelsey's, Allyn & Bacon, Boston). Vergil: *Aeneid*, Book V. (Freeman's, Oxford Univ. Press, Toronto). North & Hillard's *Latin Prose Composition*, (Rivington, London), Allen & Greenough's *New Latin Grammar*, (Ginn & Co., Boston).

2. *M., W. and F., at 10 or 11 a. m., or Tu. Th. and S. at 11 a. m.*

Pre-requisite.—Latin 1.

Livy, Book XXI. Horace, *Selected Odes*. *Vergil: *Aeneid*, Book V. Latin Grammar. Latin Prose Composition. Exercises in Sight Translation.

Books Recommended: Livy, Book XXI, (Tatham's, Oxford University Press, Toronto). Horace: *Odes and Epodes*, (C. L. Smith's, Ginn & Co., Boston). Vergil: *Aeneid*, Book V. (Calvert's, Macmillan Co., Toronto). Allen & Greenough's *New Latin Grammar*. North & Hillard's *Latin Prose Composition*, (Rivington, London).

3. (1930-31). *Tu. and Th. at 11 a. m.*

Pre-requisite.—Latin 2.

Tacitus: *Histories*, Book 1. Horace: *Selected Satires*. *Tacitus: *Histories*, Book II, Chapters 1-70. Latin Prose Composition. Exercises in Sight Translation.

Books Recommended: Tacitus: *Histories*, Books I and II, (Moore's, Macmillan, Toronto). Horace: *Satires and Epistles*, (Rolfe's, Allyn & Bacon, Boston).

4. (1929-30). *Tu. and Th. at 11 a. m.*

Pre-requisite.—Latin 2.

*For private reading by students seeking First or Second Class Distinction.

Tacitus: *Germania*. Horace: *Epodes*. Juvenal: *Satires*, III, IV, V, X. *Tacitus: *Annals*, Book IV.

Books Recommended: Tacitus: *Germania*, (Stuart's, Macmillan Co., Toronto). Juvenal: *Satires*, (Hardy's, Macmillan Co., Toronto). Tacitus: *Annals*, Book I-IV, (Furneau's, Oxford Univ. Press).

5. (1930-31). *W. at 11 a. m., and S. at 10 and 11 a. m.* Plautus: *Captivi*. Terence: *Phormio*. Horace: *Epistles*, I, II, *Ars Poetica*. Juvenal: *Satires*, I, VII, VIII, XIV. Cicero: *Philippics*, I, II, *Pro Cluentio*. Livy: XXII.

6. (1929-30). *W., at 11 a. m., and S. at 10 and at 11 a. m.* Plautus: *Trinummus*. Terence: *Adelphi*. Lucretius: III. Vergil: *Georgics*, I, IV. Cicero: *De Oratore* I. Tacitus: *Annals*, I, II, *Agricola*. Pliny: *Letters*, Books I-III.

A portion only of the work prescribed for Latin 5 and for Latin 6 will be read in class.

In all Latin examinations one or more passages from books not prescribed will be set for translation at sight.

Greek.

Elementary Greek.—*M. and F. at 10 a. m., and Tu. and Th. at 2.30 p. m.*

This class is intended for beginners in the language, and also for those who have come to college without sufficient preparation to qualify them for entering Greek 1. The first book used will be White's *First Greek Book*, (Ginn & Co., Boston). Other books will be announced at the beginning of the session.

Students whose work throughout the session has been found satisfactory will be admitted to a Matriculation examination in Greek, held in April. Those intending to qualify for this examination should read the statement made under Elementary Latin which is applicable here also, regarding the additional work required outside of class hours.

1. *Tu. Th. and S. at 10 a. m.*

Pre-requisite.—Matriculation Greek.

Xenophon: *Hellenica*, Book II. Plato: *Euthyphro*. Greek Grammar. Greek Prose Composition. Exercises in Sight Translation.

Books Recommended: Xenophon: *Hellenica*, Books I, II, (Underhill's, Oxford University Press, Toronto). Plato: *Euthyphro and Menexenus*, (edited by C. E. Graves, Macmillan Co., Toronto). North & Hillard's *Greek Prose Composition*, (Rivington, London). Goodwin's *Greek Grammar*, (Ginn & Co., Boston).

2. *M. and W. at 9 a. m.*

Pre-requisite.—Greek 1.

Lucian: *Selected Dialogues*. Homer: *Odyssey*, Book IX and selections from Book XI. *Lucian: *Somnium*. *Homer: *Odyssey*, Book XII. Greek Grammar. Greek Prose Composition. Exercises in Sight Translation.

Books Recommended: Lucian: *Somnium, Charon, etc.*, (Heitland's, Cambridge University Press). Homer: *Odyssey*, Books VII-XII, (Merry's, Oxford University Press, Toronto). North & Hillard's *Greek Prose Composition*, (Rivington, London).

3. (1930-31). *M. and W. at 12 m.*

Pre-requisite.—Greek 2.

*For private reading by students seeking First or Second Class Distinction.

Courses of Instruction.

Demosthenes: *Philippics* I, II, III. Euripides: *Medea*. *Demosthenes: *Olympiads* I, II. *Homer: *Odyssey*, Book I.
Books recommended: Demosthenes: *Philippics*, (Abbott and Matheson's, Oxford University Press, Toronto). *Olympiads*, (Glover's, Cambridge University Press). Euripides: *Medea*, (Bayfield's, Macmillan Co., Toronto). Homer: *Odyssey*, Book I, (Marchant's, George Bell & Sons, London).

4. (1929-30). *M. and W. at 12 m.*

Pre-requisite.—Greek 2.

Plato: *Apology*. Aristophanes: *Clouds*. *Plato: *Crito*. *Homer: *Iliad*, Book VI. Greek Prose Composition. Exercises in Sight Translation.

Books Recommended: Plato: *Apology*, (Williamson's, Macmillan Co., Toronto); *Crito*, (Keene's, Macmillan Co., Toronto). Aristophanes: *The Clouds*, (Merry's, Oxford University Press, Toronto). Homer: *Iliad*, Book VI, (Leaf and Bayfield's, Macmillan Co., Toronto).

5. (1930-31). *M. at 11 a. m., Tu. and Th. at 4.30 p. m.* Aeschylus: *Eumenides*, *Prometheus Vincetus*. Sophocles: *Ajax*, *Oedipus Rex*. Demosthenes: *De Corona*. Plato: *Republic* I-IV.

6. (1929-30) *M. at 11 a. m., Tu. and Th. at 4.30 p. m.* Homer: *Odyssey*, V-VIII. Aristophanes: *Frogs and Knights*. Thucydides: II. Aristotle: *Poetics*, and selections from the *Ethics*.

A portion only of the work prescribed for Greek 5 and for Greek 6 will be read in class.

In all Greek examinations one or more passages from books not prescribed will be set for translation at sight.

Introduction to Philology.

Two hours per week. Hours to be assigned.

Pre-requisite.—Two years of Latin or Greek, and at least one year of another foreign language.

This course, conducted by Dr. E. W. Nichols, aims to furnish (1) an outline picture of the history of scholarship; (2) an elementary knowledge of the methods, problems and results of philological investigation. The course is conducted by means of lectures and assigned readings. Reading for Distinction will be assigned early in the session.

II. New Testament Greek.

Pre-requisite.—Greek 1.

The class and examination in New Testament Greek conducted by Professor J. W. Falconer, in the Pine Hill Divinity Hall of Halifax, and those conducted by Professor T. H. Hunt in the Faculty of Divinity, King's College, are recognized as qualifying for a degree for those taking the affiliated course for Divinity. Similar classes in other theological colleges approved by the Faculty are also recognized for the same purpose.

III. Hebrew.

The class and examination in Hebrew, conducted by Professor W. G. Watson in the Pine Hill Divinity Hall, of Halifax, and those conducted by Professor T. H. Hunt in the Faculty of Divinity, King's College, are recognized as qualifying for a degree for

*For private reading by students seeking First or Second Class Distinction.

those taking the affiliated course for Divinity. Similar classes in other theological colleges approved by the Faculty are also recognized for the same purpose.

IV. Modern Languages.

Professor.....René Gautheron.
Associate Professor.....C. H. Mercer.
Lecturer.....

French.*

1. *Tu., Th. and S.*, Section I, at 9 a. m., Section II, at 10 a. m. Pre-requisite.—Matriculation French.

Buffum: *Contes français* (Henry Holt and Co.). Madame de Girardin: *La joie fait peur*. Edmond Rostand: *Cyrano de Bergerac*. Kastner and Marks: *A new course of French Composition*. Book I (Dent and Sons). History of French literature: *Les grands écrivains français*, by Ch. M. des Granges. (Hatier, Paris). D. C. Pargment: *Le français oral*. (Heath and Co.).

2. *Tu., Th. and S.*, Section I, at 9 a. m., Section II, at 10 a. m., Section III, *M., W. and F.* at 9 a. m.

Fraser and Squair: *Complete French Grammar*. Kastner and Marks: *A new course of French composition*. Book II. (Dent and Sons). Ch. M. des Granges: *Histoire de la littérature française*. Molière: *L'Avare* and *Les Femmes Savantes*. (Pellisson's edition, Delagrave, Paris, or any correct text). La Fontaine: *Fables* (Clement's edition, Armand Colin, Paris). Racine: *Les Plaideurs*. La Bruyère: *Les Caractères*.

Additional for distinction: Scarron: *Le Roman comique*. (Selected). Boileau: *Satires*. Regnard: *Le Joueur*. Victor Hugo: *Les Pauvres gens*. A. Daudet: *Contes du lundi*.

3. (1930-31). *Tu. and Th. at 3.30 p. m.*

History of the French literature with special reference to the 19th and 20th centuries. Ch. M. des Granges: *Pages de littérature française*, 1800-1920. Alfred de Musset: *Fantasio*. Balzac: *Le Colonel Chabert*. Alfred de Vigny: *La Veillée de Vincennes*. Lamartine: *Chefs d'oeuvre poétiques*. Alexandre Dumas fils: *La Question d'argent*. Kastner and Marks: *A new course of French composition*. Book III. (Dent and Sons).

Additional for distinction: Chateaubriand: *Mémoires d'outre-tombe*. Mérimée: *Colomba*. Victor Hugo: *Evradnus*. (Cambridge University Press). Alphonse Daudet: *Tartarin de Tarascon*. Jules Lemaitre: *Racine*.

4. (1929-30). *Tu. and Th. at 3.30 p. m.*

History of the French literature with special reference to the 18th and 19th centuries. Voltaire, by L. Flandrin. (Collection d'auteurs français d'après la méthode historique, Hatier, Paris). Montesquieu: *Lettres persanes*. (Selected). Le Sage: *Gil Blas*. J. J. Rousseau: *Emile* (livre II). André Chénier: *Poésies choisies*. Alfred de Vigny: *Stello*. Alfred de Musset: *Carmosine*.

*The University provides no instruction for beginners in French, but extramural classes will be formed if a sufficient number of students apply, to provide instruction in French for matriculation.

Additional for distinction: Rivarol: *Discours sur l'universalité de la langue française*. Beaumarchais: *Le Barbier de Séville*. Alfred de Musset: *Lettres de Dupuis et Colonet*. Victor Hugo: *Poésies*. (The best French poetry. Dent and Sons). Emile Faguet: *Dix-huitième siècle*.

5. (1929-30). Tu. and Th. at 4.30 p. m.

A general survey of French literature from the sixteenth century to the present day—Selected authors. French essays.

Additional for distinction:

A special study of contemporary literary movements; history, poetry, the novel, the theatre, criticism. The two following books are recommended: Daniel Mornet: *Histoire de la littérature et de la pensée française contemporaines*. (Larousse, Paris). Marcel Braunschvig: *La littérature française contemporaine étudiée dans les textes*. (Colin, Paris).

10. Commercial French.—M. and F. at 10 a. m.

For students looking forward to the degree of Bachelor of Commerce. It cannot be offered as an elective for Arts or Science degrees.

German.

Elementary German.—Tu., Th., and S. at 9 a. m.

Lang & Needler: *German Grammar* (Ryerson Press, Toronto) Bagster-Collins: *First German Reader* (Holt). Storm: *Immensee* (Holt).

This class, which prepares for the matriculation examination held in April, will not count for a degree.

1. Tu. Th. and S. at 10 a. m.

Pre-requisite: *Matriculation German*.

Betz: *Modern German Reader* (Heath). Freytag: *Die Journalisten*. Grillparzer: *Des Meeres und der Liebe Wellen* (Holt). Collmann: *Easy German Poetry* (Ginn). Lang & Needler: *German Grammar* (will be used for exercises in composition)

2. M. W. and F. at 2.30 p. m.

Pre-requisite: *German 1*.

Pope: *Writing and Speaking German*, New Series (Holt). Fulda: *Der Talisman* (Ginn). Schiller: *Die Jungfrau von Orleans* (Holt). Goethe: *Hermann und Dorothea* (Ginn). Bruns: *German Lyrics* (Heath). Storm: *Auf der Unwirschaft* (Holt).

Additional for distinction: *Faust*, Part 1; or, *Wallenstein and Maria Stuart*.

3. Tu. and Th. at 2.30 p. m.

Pre-requisite: *German 2*.

A. German composition.

B. Outline of German Literature. Stroebe & Whitney: *Geschichte der deutschen Literatur* (Holt).

C. Special study of the modern period with reading of significant works including the following which are available in annotated editions as indicated: Hebbel: *Agnes Bernauer* (Heath) and *Herodes und Mariamne* (Holt); Otto Ludwig; *Der Erbfoerster* (Holt), and *Zwischen Himmel und Erde* (Heath).

Freytag: *Soll und Haben* (Ginn). Wilbrandt: *Der Meister von Palmyra* (American Book Company). Wagner: *Die Meistersinger* (American Book Company). Raabe: *Eulenspiegel* (Heath). Sudermann: *Heimat* (Heath). Katzensteg (Heath). Johannes (Heath), and *Frau Sorge* (Holt, Heath).

Additional for distinction: the work of Heine or of Thomas Mann.

3A. Scientific German.—Two hours by arrangement.

Pre-requisite: *German 2*.

A. & B., as in German 3. Instead of C, Scholtz: *Scientific German* (Macmillan) will be studied.

4. Pro-seminar: 1929-30.

Pre-requisite: *German 3*.

The romantic period with special attention to Goethe's work.

10. Commercial German.—Two hours per week.

For students looking forward to the degree of Bachelor of Commerce. It cannot be offered as an elective for the Arts or Science degrees.

Spanish.

1. M., Tu., W., Th., and F. at 2.30 p. m.

Hills and Ford: *First Spanish Course*, (Heath). Wilkins; *Beginners' Spanish Reader* (Holt). Marmol: *Amalia* (Heath). Camba: *La Rana Viajera*.

This class, covering Matriculation Spanish and a year of College work, will count towards a degree.

2. M., W., and F. at 3.30 p. m.

Wilkins: *Second Spanish Book* (Holt). Luria: *Correspondencia Comercial* (Silver, Burdett). Morley: *Spanish Humor* (Ginn). Echegaray: *O locura o santidad* (Heath).

10. Tu., and Th. at 4.30 p. m.

Luria: *Correspondencia Comercial* (Silver, Burdett). Cervantes: *Don Quixote* (Heath). Wilkins: *Antología de Cuentos Americanos* (Heath). Crawford: *Temas Españoles* (Holt).

For students looking forward to the degree of Bachelor of Commerce.

V. Biblical Literature.

Lecturer.....W. G. Watson.

There are two university classes in the literature of the Old and New Testaments. Either one of these classes may be offered as an elective for a degree in Arts, except by a student who is offering a class in Biblical Literature as a part of an affiliated group. The class and examination in Biblical Literature conducted by the Faculty of Divinity, King's College, are recognized as qualifying for a degree for those taking the affiliated course for Divinity.

1. (1930-31). Tu. and Th. at 4.30 p. m.

Old Testament. The Hexateuch and Historical Books of the Old Testament and the pre-exilic Prophets. Lectures are given

VII. History.

Professors. . . . G. E. Wilson (*Head of Dept.*), A. Stanley Walker.

1. History of Europe Since the Fall of the Roman Empire.—

M., W. and F. at 9 a. m. or 10 a. m.

Pre-requisite:—Matriculation History.

Given annually. Required of all students taking the ordinary Arts course.

Text Books: Robinson: *History of Western Europe*. Assigned readings. Suggested Reading: Munro and Sellery: *Medieval Civilization*. Emerton: *Introduction to the Middle Ages, Medieval Europe*. Bryce: *Holy Roman Empire*. Day: *History of Commerce*. Abbott: *The Expansion of Europe*. Hazen: *Modern European History*.

2. Ancient History.—(1929-30, and in alternate years).—

M. W. and F. at 10 a. m.

Pre-requisite:—History 1.

Text Books: Plutarch: *Selected Lives*. Dickinson: *The Greek View of Life*. Pelham: *Outlines of Roman History*. Suggested Reading: Bury: *History of Greece*. Zimmern: *Greek Commonwealth*. Herodotus: *Thucydides*. Mommsen: *History of Rome*. Heitland: *History of the Roman Republic*. Abbott: *Roman Political Institutions*. Greenidge: *Roman Public Life*. Dill: *Roman Society from Nero to Marcus Aurelius*. Mackail: *Latin Literature*.

3. Modern England.—(1930-31, and in alternate years).—

M., W. and F. at 10 a. m.

Pre-requisite:—History 1.

Text Books: Cross: *History of England*. Mowat: *History of England*. Assigned readings. Suggested Readings: Fisher: *England under the Tudors*. Trevelyan: *England under the Stuarts*. Firth: *Oliver Cromwell*. Macaulay: *History of England*. Lecky: *History of England in the Eighteenth Century*. Walpole: *England since 1815*. Seeley: *The Expansion of England*.

4. History of Europe since 1815.—(1930-31, and in alternate years).—*Tu. and Th. at 9 a. m.*

Pre-requisite:—Two classes in History.

This class will be conducted partly by the seminar method, no text book being set, but readings will be assigned on various topics. Some knowledge of the bibliography of the period will be required.

Suggested Reading: Hazen: *Modern European History*. Hayes: *Political and Social History of Modern Europe*. Thayer: *The Life and Times of Cavour*. Trevelyan: *Garibaldi and the Thousand*. Garibaldi and the Making of Italy. Fisher: *Bonapartism*. Headlam: *Bismarck*. Dawson: *The Evolution of Modern Germany*. Seymour: *Diplomatic Background of the War*.

5. History of Europe, 1715-1815. (1929-30, and in alternate years).—*Tu. and Th. at 9 a. m.*

Pre-requisite:—Two classes in History.

This class will be conducted like History 4, readings being assigned on selected topics. The chief subjects for study will be the French Revolution and the career of Napoleon.

Suggested Reading: Macaulay: *Essay on Frederick the Great*. Mahan: *The Influence of Sea Power upon History*. Lowell: *The Eve of the French Revolution*. Morley: *Voltaire*. Tocqueville: *The Old Regime*. Taine: *The French Revolution*. Carlyle: *The French Revolution*. Aulard: *The French Revolution*. Rose: *The French Revolution*. Rosebery: *The Last Phase*.

6. England under the Tudors. (1929-30, and in alternate years). *M. and W. at 2.30 p. m.*

Pre-requisite:—Two classes in History.

7. The Fourteenth Century.—(1930-31, and in alternate years).—*M. and W. at 2.30 p. m.*

Pre-requisite:—Two classes in History.

Suggested Reading: Poole and Hunt: *Political History of England, Vols. III and IV*. Lodge: *Close of the Middle Ages*. Jusserand: *English Wayfaring Life in the Middle Ages*. Cunningham: *Growth of English Industry and Commerce, Vol. I*. Traill: *Social England, Vol. II*. Froissart's *Chronicle*.

8. History of Canada to 1837.—(1929-30, and in alternate years).—*Tu. and Th. at 10 a. m.*

Pre-requisite:—History 1.

Suggested Reading: Parkman: *Works*. Munro: *The Seigniorial System in Canada*. Garneau: *Histoire du Canada*. Durham: *Report. Canada and its Provinces*.

9. History of Canada since 1837.—(1930-31, and in alternate years).—*Tu. and Th. at 10 a. m.*

Pre-requisite:—History 1.

Suggested Reading: Dent: *Canada since the Union of 1841*. Turcotte: *Le Canada Sous L'Union*. Bryce: *Remarkable History of the Hudson Bay Co.* Skelton: *Life and Times of A. T. Galt, Life and Letters of Sir Wilfrid Laurier*. Pope: *Sir John Macdonald*. Preston: *Life and Times of Lord Strathcona*. Cartwright: *Reminiscences*. Siegfried: *The Race Question in Canada*. Moore: *The Clash. Canada and its Provinces*.

10. Seminar Course on Canadian History with Special Reference to Nova Scotia.

For M. A. and Honour students. All others must obtain the consent of the instructor.

Pre-requisite:—History 8 or 9.

20. For pre-medical and pre-dental students—*M. W. and F. at 11 a. m.*

A lecture course, with collateral reading and exercises, on the history of thought and the influence of Science on Civilization.

VIII. Church History.

The class and examination in Church History conducted in the Faculty of Divinity, King's College, are recognized as qualifying for a degree for those taking the affiliated course for Divinity.

IX. Economics and Sociology.

Economics.

Assistant Professor. W. Russell Maxwell.

1. Principles of Economics.—*M. W. and F. at 10 a. m. or 11 a. m.*

Text Book: Ely: *Outlines of Economics*.

Books Recommended: Marshall: *Principles of Economics*. Taussig: *Principles of Economics*. Carver: *The Distribution of Wealth*. Clay: *Economics for the General Reader*.

2. **Modern Economic History.**—(1930-31). *Tu. and Th. at 3.30 p. m.*

Pre-requisite:—Economics 1.
Text Books: Ogg: *Economic Development of Modern Europe*. Bogart: *Economic History of the United States*.
Books Recommended: Cunningham: *Growth of English Industry and Commerce*. Canada and its Provinces. Selected Portions. Toyne: *Industrial Revolution*.

3. **Money and Banking.**—(1930-31), *Tu. and Th. at 2.30 p. m.*

Pre-requisite:—Economics 1.
Text Books: Foster and Catchings: *Money*. Dunbar: *The Theory and History of Banking*.
Books Recommended: Fisher: *The Purchasing Power of Money*. Bagehot: *Lombard Street*. Johnson: *Canadian Banking System*. Phillips: *Readings in Money and Banking*. Cassel: *Money and Foreign Exchange after 1914*. Furniss: *Foreign Exchange*.

4. **Labor Problems and Trusts.**—(1929-30). *T. and Th. at 3.30 p. m.*

Text Books: Fitch: *The Causes of Industrial Unrest*. Douglas, Hitchcock and Atkins: *The Worker in Modern Economic Society*. Jenks and Clark: *The Trust*.
Books Recommended: Cole: *The World of Labour*. Webb: *History of Trade Unionism*. Cole: *Self Government in Industry*. MacGregor: *Industrial Combination*.

5. **Public Finance.**—(1929-30). *Tu. and Th. at 11 a. m.*

Pre-requisite:—Economics 1.
Books Recommended: Bastable: *Public Finance*. Seligman: *Essays in Taxation*. Plehn: *Introduction to Public Finance*. Stamp: *The Principles of Taxation*. Bullock: *Selected Readings in Public Finance*.

6. **Statistics.**—(1929-30). *Tu. and Th. at 2.30 p. m.*

Pre-requisite:—Economics 1, Matriculation Mathematics.
Text Book: Day: *Statistical Analysis*.
Books Recommended: Jerome: *Statistical Method*. W. I. King: *Elements of Statistical Method*. Yule: *Introduction to the Theory of Statistics*. Bowley: *Elements of Statistics*. Secrist: *Introduction to Statistical Methods*. Fisher: *Index Numbers*. Mitchell: *Index Numbers of Wholesale Prices in the United States and Foreign Countries*. Chaddock: *Principles and Methods of Statistics*.

7. **History of Economics.**

This course will only be given to advanced students who apply for it in sufficient numbers. It aims to trace the development of economic doctrine from the earliest times up to the present.
Books Recommended: Gide and Rist: *History of Economic Doctrines*. Ingram: *History of Political Economy*.

8. **International Trade and Tariff Problems.**—(1930-31)
Tu. and Th. at 11 a. m.

Pre-requisite:—Economics 1.
Text Book: F. W. Taussig: *Selected Readings in International Trade and Tariff Problems*.
Books Recommended: Furniss: *Foreign Exchange*. Bastable: *The Theory of International Trade*. Taussig: *Some Aspects of the Tariff Question*. *Tariff History of the United States*. Porritt: *Sixty Years of Protection in Canada*. Taussig: *International Trade*.

9. **Economic Problems of Canada.**—Two hours per week.

Pre-requisite:—Economics 1.
The purpose of this course will be to discuss in the light of economic principles the history and present problems of Canada. It will require considerable reading of source material and some research, and will be given only if a sufficient number of qualified students apply for it.

Sociology.

Assistant Professor.....S. H. Prince.

1. **Principles of Sociology.**—*M. W. and F. at 2.30 p. m.*

Text Books: Lumley: *Principles of Sociology*. Park and Burgess: *Introduction to the Science of Sociology*. Giddings: *Scientific Study of Society*.
Special reading list with assignments from works of Cooley, Ellwood, Sumner, Ross, Bogardus, Ogburn, Lumley and others.

2. **Applied Sociology.**—(1930-31). *M. and W. at 3.30 p. m.*

Pre-requisite:—Sociology 1. (or Economics 1).
Text Books: Beach: *Introduction to Sociology and Social Problems*. Wright: *Population*. Queen and Mann: *Social Pathology*. Towne: *Social Problems*.
Also topical bibliography supplied in class.

3. **Social Legislation.**—(1929-30). *M. and W. at 3.30 p. m.*

Pre-requisite.—Sociology 1 (or Economics 1).
(i) Philanthropy and social politics (ii) special legislative studies (iii) social legislation in Canada.
Text Books: Jenks: *Governmental Action for Social Welfare*. Kelso: *Science of Public Welfare*.
Reference Books: Ilbert: *Mechanics of Law-making, Revised Statutes of Canada*. Seager: *Social Insurance*. Lippman: *Public Opinion*. Stewart: *Canadian Labour Laws*.

4. **Anthropology.**—(1929-30). *Tu and Th. at 2.30 p. m.*

Pre-requisites.—Sociology 1 (or Economics 1).
Text Books: Kroeber: *Anthropology*. Wallis: *Introduction to Anthropology*.
Reference Books: Lowie: *Primitive Society*. Tozzer: *Social Origins*. Goldenweiser: *Early Civilization*.

5. **Social Theory.**—(1930-31). *Tu. and Th. at 2.30 p. m.*

Pre-requisite:—Sociology 1.
Text Books: Lichtenberger: *Development of Social Theory*. Additional readings prescribed from Giddings, Bristol, Bogardus, Barnes and other writers on historical sociology.

8. **Social and Vital Statistics.**

Social Work.—Economics 1 and Sociology 1 together with three other classes in Sociology are pre-requisite to professional training in Social Work. Students may complete the requirements for a diploma in this field by one additional year of field work and study.

X. Political Science.

Professor.....R. A. MacKay.

1. **Government of the British Commonwealth.**—*M. W. and F. at 3.30 p. m.*

Books Recommended: No text will be prescribed but readings will be assigned from time to time from the following: Lowell: *Government of England*. Low: *Governance of England*. Anson: *Law and Custom of the Constitution*. Dicey: *Law of the Constitution*. Marriott: *Mechanism of the Modern State*. Munro: *Governments of Europe*. Keith: *Constitution, Administration and Laws of the Empire, Dominion Home Rule in Practice*. Hall: *British Commonwealth of Nations*. Kennedy: *Constitution of Canada*. Corbett and Smith: *Canada and World Politics*.

2. **International Relations and Problems.**—*Tu. 7.30-9.30 p. m. One hour lecture followed by one hour discussion weekly.*

Books: Buell: *International Relations, Europe, A History of Ten years*. Bowman *The New World*. Moon: *Imperialism and World Politics*; Baker: *The League of Nations at Work*, Rappard: *International Relations as Viewed from Geneva*.

3. Comparative Government.—(1929-30). *M. and W. at 12 m.*

Pre-requisite:—Political Science 1.
Bryce: *Modern Democracies* or equivalent. Headlam-Morely: *New Constitutions of Europe*. Mill: *Representative Government*. Lowell: *Public Opinion and Popular Government*. Wallas: *Human Nature and Politics*.

4. History of Political Theory.—(1930-31). *M. and W. at 12 m.*

Pre-requisite:—Political Science 1.

5. Imperial Relations and Problems.—(1930-31). *M. W. at 2.30 p. m.*

Pre-requisite:—Political Science 1 and the consent of the instructor.

6. Government of Canada—(to be given if sufficient demand; time to be arranged).

Pre-requisite: Political Science 1, and 3 or 4.
Seminar course for M. A. and Honour students. All others must obtain the consent of the instructor.

7. International Organization.—(1929-30). *M. and W. at 9 a. m.*

Books: Considerable use will be made of cases and documentary materials; recommended also: Brierly, *Law of Nations*. Potter, *Introduction to International Organization*; de Bustamante, *The World Court*, or equivalent. Howard-Ellis, *League of Nations*.

In special cases students who are candidates for the M. A. degree or who are taking an Honours Course in Political Science may be permitted to take one or more of the following classes given by the Faculty of Law.

History of English Law.

Constitutional Law.

International Law.

XI. Law.

Certain classes conducted by the Faculty of Law in the first year of the curriculum, and the examinations conducted in these subjects by that Faculty, are recognized as qualifying for a degree in Arts when offered by a student taking the affiliated course in Law.

XII. Philosophy.

Professor..... H. L. Stewart,
Associate Professor.....

1. Logic and Psychology.—*Tu. Th. and S. at 9 a. m.*
Text Books: Logic: Creighton: *Introductory Logic*. Psychology: Pillsbury: *Essentials of Psychology*.

2. History of Greek Philosophy.—(1929-30). *W. and F. at 3.30 p. m.*

Pre-requisite:—Philosophy 1.
Text Books: Plato: *Republic, Phaedo, Apology, Theaetetus*. Rogers: *Student's History of Philosophy*. Taylor: *Aristotle on his Predecessors*.

3. Ethics.—(1929-30). *Tu. and Th. at 11 a. m.*

Pre-requisite:—Philosophy 1.
Text Books: Plato: *Republic*, I-IV. Butler: *Sermons*. Mackenzie: *Manual of Ethics*. Mill: *Utilitarianism*. Sidgwick: *History of Ethics*. Reference will also be made to Rashdall: *The Theory of Good and Evil*, and to Moore: *Principia Ethica*.

4. History of Moral Ideas.—(1930-31) *Tu. and Th. at 11 a. m.*

Pre-requisite:—Philosophy 1.
Text Book: Lecky: *History of European Morals*. Reference will frequently be made to Westermarck: *Origin and Development of the Moral Ideas*.

5. Metaphysics.—(1930-31). *Th. and S. at 10 a. m.*

Pre-requisite:—Philosophy 1.
Text Book: Taylor: *Elements of Metaphysics*.

6. History of Philosophy from Bacon.—(1930-31). *W. and F. at 3.30 p. m.*

Pre-requisite:—Philosophy 1
Text Books: Bacon: *Novum Organum*. Locke: *Essay on the Human Understanding*. Berkeley: *Dialogues*. Höffding: *History of Philosophy*.

7. British Philosophy in the Nineteenth Century.—(1929-30). *Th. and S. at 10 a. m.*

Pre-requisite:—Philosophy 1.

8. Philosophic Ideas in Literature.—(1929-30). *W. and F. at 2.30 p. m.*

Pre-requisite:—Philosophy 1.
The course will include a study of philosophic ideas in Tolstoy, Hardy, Anatole France, H. G. Wells, Ibsen, Morley, Frederic Harrison, Mrs. Humphry Ward, Rabindranath Tagore, Wilfrid Ward, George Meredith, G. Bernard Shaw.

Psychology.

Professor.....

1. Experimental Psychology.—(1930-31). *M. and W. at 9 a. m.*

Pre-requisite:—Philosophy 1.
Text Book: Langfeld and Allport: *Elementary Laboratory Course in Psychology*.

2. Social Psychology.—(1929-30). *M. and W. at 9 a. m.*

Pre-requisite:—Philosophy 1.
Text Book: Allport: *Social Psychology*.

3. Child Psychology.—(1929-30). *Tu. and Th. at 2.30 p. m.*

Pre-requisite:—Philosophy 1.
Books Recommended: Watson: *Psychological Care of Infant and Child*. Wickes: *The Inner World of Childhood*. Thom: *Everyday Problems of the Everyday Child*.

4. History of Psychology.—(1930-31). *Tu. and Th. at 2.30 p. m.*

Pre-requisite:—Philosophy 1.
A review of the more important psychological theories from Plato down to modern times.
Text Book: Rand: *The Classical Psychologists*. Frequent references will also be made to Brett: *A History of Psychology*.

Education.

Professor C. Wilson Smith.

Candidates for the degree of B. A. may, on graduation, obtain a recommendation for a school teacher's license by satisfying the examination requirements in certain stated courses (See p. 45 of this calendar). Education 1 and 2 are two of these required classes. Students expecting to apply for Nova Scotia teacher licenses are urged to consult the Professor of Education as early in their university career as possible. All students must see him before registering for Education 2.

1. Educational Psychology and History of Education.

M. W. and F. at 9 a. m.

Pre-requisite.—Philosophy 1.

Text Books: Sandiford: *Educational Psychology*. Cubberley: *History of Education and Readings in the History of Education*. Readings in other books and periodicals will be assigned.

2. Theory and Practice of Teaching.—*Tu. and Th. at 4.30 p. m.*

For Seniors and Graduates only. This class cannot be offered for the B. A. or B. Sc. degree.

Pre-requisites.—Philosophy 1, Education 1.

Practical experience in the Halifax public schools is given during the latter part of the session. A minimum of 21 hours of observation and practice teaching will be required of each student in the course. Before making out schedules, all students must consult the professor of Education.

In the work of this class, the department is assisted by Sister Maria Berchmans, H. H. Blois, M. Eileen Burns, Sister Marie Clotilde Martha H. Fleming, Beatrice E. Fry, Agnes O. Harlow, Lillian E. Marshall, R. E. Marshall, D. J. Matheson, S. A. Morton and Irene E. Warner.

3. Educational Tests and Measures.—*Hours by arrangement; conducted as a seminar.*

XIII. Mathematics.

Professor Murray Macneill.

Lecturer J. G. Adshead.

1. Elementary Mathematical Analysis.—*M. W. and F. at 10 a. m. or 11 a. m. or Tu. Th. and S. at 11 a. m.*

Pre-requisite.—Matriculation Algebra and Geometry.

1C. Methods of Calculation.—*M. W. and F. at 10 a. m.*

Pre-requisite.—Matriculation Algebra and Geometry.

Formulas and the principles on which they are based. Logarithms. The Compound Interest Law. Progressions, Annuities, Amortization of Bonds, Indeterminate Equations, Permutations and Combinations, Probability, Approximations and Percentages of Error, Infinite Series, Graphical Representation of Statistics.

The class is primarily intended for Commerce students, but may be taken as the required class in Mathematics by those who do not intend to take Mathematics 2.

2. Analytic Geometry.—*Tu. and Th. at 11 a. m.*

Pre-requisite.—Mathematics 1, which may, however, be taken at the same time by those who have matriculated in trigonometry.

Text Book: Smith and Gale: *New Analytic Geometry*.

3. Infinitesimal Calculus.—*M. W. and F. at 11 a. m.*

Pre-requisite.—Mathematics 1 and 2.

Text Book: Granville: *Differential and Integral Calculus*.

4. Solid Geometry and Spherical Trigonometry. Analytic Geometry of three dimensions.—*Tu. and Th. at 10 a. m.*

Pre-requisite.—Mathematics 1 and 2. The latter may be taken at the same time.

Advanced Classes.

The courses in these classes are intended for those who wish to take mathematical work in the third or the fourth year in the ordinary course in Arts or Science. They are also intended to serve as courses introductory to the study of higher mathematics for those who may afterwards attend the graduate schools in the larger universities. Candidates for Honours in Mathematics are required to take four of these courses in class. Each class meets weekly throughout the year. Mathematics 3 and 4 are pre-requisite.

5. Advanced Calculus.—Topics in the treatises of Todhunter, Williamson, Harnack, Lamb and Gibson.

6. Plane and Solid Analytical Geometry.—Based on the treatises of Salmon and C. Smith.

7. Differential Equations.—Murray's *Differential Equations*, with supplementary lectures.

8. Algebra.—Topics in Determinants, Theory of Equations, Quantics, Invariants, with lectures on Series and Functions of a real variable.

9. Projective Geometry.

XIV. Physics.

Professors.....H. L. Bronson, (*Head of Dept.*), J. H. L. Johnstone.

Demonstrators.....H. M. Chisholm, H. A. Weir, Elizabeth L. Torrey, A. F. Chisholm.

MacGregor Fellow.....

1. General Physics.—*Lect.: M. W. and F. at 11 a. m. Lab.: Two hours per week.*

Pre-requisite.—Matriculation Mathematics and Physics.

Text Book: Stewart: *Physics*.

20. Light, Sound, X-Radiation and Radio-Activity.—*Tu. and Th. 9-12.*

Pre-requisite.—Physics 1 or 2.

This course is primarily intended for pre-medical students and special attention will be given to those parts of the subject of interest to them. It may be elected by any students who are properly qualified.

Books Recommended: Valasek: *Elements of Optics*; Chadwick: *Radio Activity*.

2. **Mechanics, Hydrostatics, Heat, Light and Sound.**—
Lect.: M. W. and F. at 10 a. m. *Lab.:* W. at 2.30 p. m., but other hours may be arranged.

Pre-requisite:—Mathematics 1; but it may, however, be taken at the same time.

Text Book: Duncan and Starling: *Text Book of Physics*.

3. **Electricity and Magnetism.**—*Lect.:* Tu. and Th. at 9 a. m.
Lab.: M. at 2.30 p. m.

Pre-requisite:—Physics 1 or 2 and Mathematics 1.

Physics 2 and 3 are intended primarily for Engineering students, and for students desiring to take Honours in Mathematics or Physics. They are also recommended for students in Arts and Science who are interested in the subject and desire a more thorough grasp of it than can be obtained from Physics 1.

Text Book: Spinney: *A Text Book of Physics*. Timbie: *Elements of Electricity*.

4. **Thermodynamics.**—(1929-30). *Lect.:* W. and F. at 12 m.
Lab.: Tu. at 2.30 p. m.

Pre-requisite:—Mathematics 3, Physics 1 or 2.

Books Recommended: Lewis and Randall: *Thermodynamics*. Birtwistle: *Principles of Thermodynamics*.

5. **Light.**—(1930-31) *Lect.:* W. and F. at 12. m. *Lab.:* Th. at 9 a. m.

Pre-requisite:—Mathematics 3, Physics 1 or 2.

Books Recommended: Schuster: *Theory of Optics*. Wood: *Physical Optics*.

6. **Electricity and Magnetism.**—*Lect.:* M. and W. at 9 a. m.
Lab.: F. at 2.30 p. m.

Pre-requisite:—Mathematics 3, Physics 1 or 3.

Books Recommended: Starling: *Electricity and Magnetism for advanced Students*. Franklin and Williamson: *Alternating Currents*.

10. **Elementary Practical.**—*Six hours per week.*

Pre-requisite:—Physics 1, or its equivalent.

This course is a continuation of the experimental work of Physics 1, but is somewhat more difficult and in it more attention is paid to experimental methods. It is intended for advanced students in Chemistry and for those who desire a larger acquaintance with the experimental side of Physics than is to be obtained in Physics 1.

11. **Advanced Practical.**—*Six hours per week.*

Pre-requisite:—Physics 2 and 3.

The work of this class consists of the investigation of physical laws of a more complex kind than in Physics 2 and 3, and a greater degree of precision will be expected in the determinations made.

12. **Research Course.**—*At least ten hours per week.*

The work will consist of new investigations conducted by students who show sufficient ability and are otherwise qualified to undertake it.

Physics Seminar and Journal Club.—*Tu. at 5 p. m.*

Lectures on recent developments in Physics; presentation of papers by senior students; reviews of current journals. All Honour and Graduate students are required to attend.

Mathematical Physics.

Professor.....G. H. Henderson.

13. **Modern Physics.**—2 hours lectures and one laboratory period.

Pre-requisite:—Two courses in Physics.

An introductory course, treating from the experimental side such topics as electrons, radioactivity, X-rays and the structure of matter.

Books Recommended: Crowther: *Ions, Electrons, etc.* Collateral reading.

14. **Mechanics.**

Pre-requisite:—Mathematics 3 and Physics 2.

A general course in statics and dynamics applied to particles and rigid bodies, conducted chiefly by problem work.

Books Recommended: Lamb: *Statics*. Lamb: *Dynamics*.

15. **Advanced Mechanics.**

Pre-requisite:—Physics 14 and Mathematics 7.

A continuation of the previous course.

16. **Introduction to Mathematical Physics.**

Pre-requisite:—Mathematics 3 and Physics 6.

Vector analysis with application to physical problems; Fourier analysis and heat conduction; Theory of Errors; Dimensional analysis.

Books Recommended: Coffin: *Vector Analysis*. Byerly: *Fourier's Series*. Houstoun: *Introduction to Mathematical Physics*.

18. **Quantum Theory and Relativity.**

Pre-requisite:—Mathematics 7, Physics 4 and 14.

19. **Advanced Electricity and Magnetism.**

Pre-requisite:—Mathematics 7 and Physics 16.

Book Recommended: Jeans: *Electricity and Magnetism*.

XV. Chemistry.

Research Professor (Head of Dept.).....D. McIntosh.

Professor.....C. B. Nickerson.

Assistant Professor.....H. S. King.

Instructor.....E. W. Todd.

1. **General Chemistry.**—*Lect.:* M. W. and F. at 9 a. m. *Lab.:* M. at 2.30 p. m.

Pre-requisite:—Matriculation Algebra, Chemistry or Physics.

- 1A. **General Chemistry.**—*Lect.:* M. W. and F. at 9 a. m.
Lab.: M. and W. or Tu. and Th. at 2.30 p. m.

Pre-requisite:—Matriculation Algebra, Chemistry or Physics.

The Laboratory work of this course is that of Chemistry 1 with two and one-half additional hours per week, part of which is spent in a preliminary course in qualitative analysis.

Books Recommended: McPherson and Henderson: *A Course in General Chemistry, Second Edition*. Smith and Kendall: *College Chemistry*. For occasional reading, Lassar-Cohn: *Chemistry in Daily Life*. Alembic Club Reprints. Bird: *Modern Science Reader*.

2. **Advanced Inorganic Chemistry and Qualitative Analysis.**—Lect.: *M. W. and F. at 10 a. m.* Fall Term. Lab.: *M. W. and F. at 2.30 p. m.* Fall Term.
Pre-requisite:—Chemistry 1 or 1A.
- 2A. This Class consists of the lectures of Chemistry 2, without laboratory. It cannot be offered for the B. A. or B. Sc. degree.
Pre-requisite.—Chemistry 1A.
Books Recommended: McPherson and Henderson: *A Course in General Chemistry*. Smith and Kendall: *Inorganic Chemistry*. Talbot and Blanchard: *Electrolytic Dissociation Theory*. Noyes: *Qualitative Chemical Analysis*.
4. **Organic Chemistry.**—Lect.: *M. W. and F. at 10 a. m.* Winter Term. Lab.: *Six hours per week.* Winter Term.
Pre-requisite:—Chemistry 1 or 1A.
Books Recommended: Remsen and Orndorff: *Organic Chemistry*. Perkin and Kipping: *Organic Chemistry*.

Advanced Classes.

These classes are especially intended for candidates for Honours in Chemistry; but any student who has passed in Chemistry 2 and 4 with Distinction may be admitted. Of these classes, Chemistry 5 and Chemistry 8 are given in alternate years.

5. **History of Chemical Theory.**—(1929-30). *Twice a week.*
The development of chemical theory from the time of Boyle.
Books Recommended: Armitage: *History of Chemistry*. Roscoe: *Dalton and the Rise of Modern Chemistry*. Shenstone: *Justus von Liebig*. Thorpe: *Essays on Historical Chemistry*. Schorlemmer: *Rise and Progress of Organic Chemistry*. Stewart: *Recent Advances in Organic Chemistry*. Lachman: *Spirit of Organic Chemistry*. *Selected Memoirs from the Alembic Club Reprints* and *Ostwald's Klassiker*. For Reference: Von Meyer: *History of Chemistry*.
6. **Physical Chemistry.**—Lect.: *Tu. and Th. at 9 a. m.* Lab.: *S. at 9 a. m. and three additional hours.*
Pre-requisite:—Chemistry 2.
Books Recommended: Walker: *An Introduction to Physical Chemistry*. Findlay: *Practical Physical Chemistry*. Ostwald: *Principles of Inorganic Chemistry and Outlines of General Chemistry*. Washburn: *Physical Chemistry*.
7. **Quantitative Analysis.**—Lect.: *W. at 9 a. m.*
Pre-requisite:—Chemistry 2.
Lectures on the general principles of quantitative analysis, and nine hours of laboratory work each week.
Text Book: Talbot: *Elementary Quantitative Analysis*.
8. **Modern Theories of Chemistry.—Electrochemistry.**—(1930-31). *Two lectures a week.*
Pre-requisite:—Chemistry 2 and 4.
Books Recommended: Lewis: *Valency*. Thompson: *The Electron in Chemistry*. Aston: *Isotopes*. Bragg: *X-Ray Spectroscopy*. LeBlanc: *Electrochemistry*. Creighton and Fink: *Electrochemistry*. Thomson: *Applied Electrochemistry*. Stansfield: *The Electric Furnace*.
9. **Advanced Quantitative Analysis.**—*One lecture and nine hours laboratory work per week.*
Pre-requisite:—Chemistry 4 and 7.
Books Recommended: Fay: *An Advanced Course in Quantitative Analysis*. Blair: *The Chemical Analysis of Iron and Steel*. Ibbotson: *Steel Works Material*. Demorest: *Quantitative Analysis*. Washington: *The Analysis of Silicate Rocks*. Woodman: *Food Analysis*. *Bulletins of the U. S. Department of Agriculture*.

10. **Advanced Organic Chemistry.**—*One lecture and nine hours laboratory per week.*
Pre-requisite:—Chemistry 4.
Books Recommended: Holleman: *Organic Chemistry*. Cohen: *Organic Chemistry*.
11. **Research.**—The work of this class will consist of original investigation conducted by students who have shown themselves qualified.

Journal Club.—Meetings are held weekly in the Physics Lecture Room. Advanced Students must attend and take part in the presentation of papers.

XVI. Geology and Mineralogy.

Assistant Professor.....D. S. McIntosh.

1. **General Geology.**—Lect.: *M. W. and F. at 10 a. m.* *Excursions and Lab.: Tu. and F. afternoons.* (One afternoon a week is the full requirement).
Pre-requisite:—Matriculation Chemistry.
Text Books: Pirsson and Schuchert: *Introductory Geology*.
Reference Books: Chamberlain and Salisbury: *Geology*. Geikie: *Geology*. Pirsson and Schuchert: *Text Book of Geology*. Young: *Geology and Economic Minerals of Canada*.
2. **Canadian Geology.**—Lect.: *Tu. and Th. at 10 a. m.* Lab.: *Three hours per week.*
Pre-requisite:—Geology 1.
Reference Books: Coleman and Parks: *Elementary Geology*. Young: *Geology and Economic Minerals of Canada*. C. G. S. Reports.
3. **Mineralogy and Petrography.**—(1930-31). Lect.: *Two hours per week.* Lab.: *Chiefly microscopical. One afternoon per week.*
Pre-requisite:—Chemistry 1 and Geology 1 (the latter, however, may be taken in the same year).
Reference Books: W. S. Bayley: *Elementary Crystallography*. Pirsson: *Rocks and Rock Minerals*. Harker: *Petrology for Students*.
4. **Mineralogy and Economic Geology.**—(1929-30). Lect.: *Two hours per week.* Lab.: *Three hours per week.*
Pre-requisites.—As in Geology 3.
Reference Books: Dana: *A Text Book of Mineralogy*. Moses and Parsons: *Mineralogy, Crystallography, and Blowpipe Analysis*. Lindgren: *Mineral Deposits*. Kemp: *Ore Deposits of the United States and Canada*.
10. **Economic Geography.**—*Tu. Th. and S. at 11 a. m.*
This class cannot be offered as one of the imperative Science classes for the Arts degree.
Text Books: T. C. Hopkins: *Elements of Physical Geography*. Whitbeck and Finch: *Economic Geography*.
Reference Book: Gregory, Kellar and Bishop: *Physical and Commercial Geography*. J. Russell Smith: *Commerce and Industry*.

Advanced Courses.

One at least of these courses will be given each year, if there is sufficient demand.

5. **Palaeontology.**—*Class and laboratory work one afternoon per week.*
Pre-requisite:—Geology 1; Biology 2 and 3.
Reference Book: Zittel: *Text Book of Palaeontology.*
6. **Practical Geology.**—*One lecture per week, with field work during the open season.*
Pre-requisite:—Geology 1.
7. **Geological Chemistry.**—*Lect., one hour per week. Lab.: six hours per week.*
Pre-requisite:—Geology 3 and 4, Chemistry 7.

XVII. Biology.

Biology 1.—Section A. *Lect.: Tu. and Th. at 2.30 p. m. Lab.: Tu. and Th. at 3.30 p. m.* Section B. *Lect.: Tu. and Th. at 9 a. m. Lab.: Tu. and Th. at 10 a. m.*
Pre-requisite:—Matriculation Physics or Chemistry.
Text Books: Curtis and Guthrie: *Text Book of General Zoology.* Holmes: *Biology of the Frog.* Curtis and Guthrie: *Laboratory Directions in General Zoology.*

Zoology.

Associate Professor.....James Nelson Gowanloch.
Demonstrator in Zoology.....

Zoology 2. Invertebrate Zoology.—(1929-30). *Lect.: Two hours per week. Lab.: Four hours per week.*
Pre-requisite:—Biology 1.

Books Recommended: Parker and Haswell: *Text Book of Zoology*, vol. 1.
Pratt: *Manual of Common Invertebrate Animals.* Drew: *Invertebrate Zoology.*
All three of these books are required.

Zoology 3. Comparative Vertebrate Anatomy.—(1929-30).
Lect.: S. at 9 a. m. Lab.: S., 10 a. m. to 1 p. m.

Pre-requisite:—Biology 1, which may be taken concurrently.
Books Recommended: Hyman: *Laboratory Manual for Comparative Vertebrate Zoology.* Reighard and Jennings: *Anatomy of the Cat.* Davison and Stromsen: *Mammalian Anatomy with Especial Reference to the Cat.*

Zoology 4. Variation, Evolution and Genetics.—(1930-31).
Lect.: Two hours per week. Lab.: Four hours per week.

Zoology 5. Marine Zoology.—(1930-31) *Lect.: Two hours per week. Lab.: Four hours per week, together with field trips.*

Zoology 6. Zoological Seminar.—(1929-30) *Lect.: Two hours per week. Special meetings by arrangement.*

The seminar for this year (1929-30) will treat of the field of heredity, genetics and eugenics.

Zoology 7. Research Course. *At least ten hours per week.*

Original zoological investigations carried out by students properly prepared to pursue research constitute the work of this class.

It is often desirable that a part of such research be conducted during the summer months at the Eastern Passage Marine Biological Station, Halifax, at the Atlantic Biological Station, St.

Andrews, N. B., or the Marine Biological Laboratory, Woods Hole, Mass.

NOTE.

The special course in Marine Zoology given during the summer months at the Eastern Passage Marine Biological Laboratory, Halifax, is required for students proceeding to the degree of Bachelor of Science in Fisheries and is likewise available for other students of the University.

Students who complete creditably any of the courses on the curriculum of the Marine Biological Laboratory, Woods Hole, Mass., may on the recommendation of the Department of Zoology present these courses for credit toward a degree.

Botany.

Associate Professor.....H. P. Bell.
Demonstrator in Botany.....Margaret R. Butler.

2. **Cryptogamic Botany.**—*Lect.: M. and W. at 2.30 p. m. Lab.: M. and W. at 3.30 p. m.*
Pre-requisite:—Biology 1.

3. **Phanerogamic Botany.**—(1930-31) *Lect.: M. and W. at 2.30 p. m. Lab.: M. and W. at 3.30 p. m.*
Pre-requisite:—Biology 1.

4. **Mycology.**—*Lect.: Two hours per week. Lab.: Four hours per week.*
Pre-requisite:—Biology 1.

5. **Algology.**—*Lect.: Two hours per week. Lab.: Four hours per week.*
Pre-requisite:—Biology 1.

Special attention is given to the marine forms found in the vicinity of Halifax. Before credit will be given for this course the student must present an original collection of at least twenty-five species properly identified and mounted.

6. **Biological Laboratory Technique.**—*Lect.: One hour per week. Lab.: Ten hours per week.*
Pre-requisite:—Biology 1.

Text Book: Chamberlain: *Methods in Plant Histology*, or Guyer: *Animal Micrology.*
Reference: Lee: *The Microtome's Vade-Mecum.*

7. **Botanical Seminar.**—(For advanced students only). *Lect.: At least two hours per week.*

8. **Research Course.**—(For advanced students only). *At least ten hours per week.*

Histology and Embryology.

The classes in Histology and Embryology given in the Medical Faculty may be selected as electives for the Arts or Science degrees by those who offer a group in Biology, and for that purpose they are regarded as classes in Biology.

XVIII. Physiology, Biochemistry and Bacteriology.

The classes in Physiology, Biochemistry and Bacteriology given in the Medical Faculty may in special cases be selected as electives for the Arts and Science degrees.

XIX. Fine Arts.

M. and W. at 3.30 p. m.

This course, conducted by Professor J. W. Falconer, consisting of about fifty lectures accompanied with illustrations, will give an outline of the history of sculpture, painting, architecture, and the minor arts. The introductory lectures will be devoted to Egyptian and Assyrian Archaeology, fuller consideration will be given to Greek and Roman antiquities, while the latter part of the term will include the study of the architecture and painting of the Christian Age. A well-equipped library and many valuable photographs have been presented by the Carnegie Foundation for the use of members of this class.

Text Books: Fiske Kemball: *A History of Architecture*. George Henry Chase: *A History of Sculpture*. Arthur Pope: *A History of Painting*.

XX. Music.

Lecturer.....H. Dean.

Music 1.—Harmony and Counterpoint.—(1930-31).

Music 2.—History of Music, Appreciation of Music and Analysis of Musical Form.—(1929-30).—Hours will be arranged to suit the classes.

In addition to the above electives for the Arts degree the classes in the Theory of Music and History of Music conducted in the Halifax Conservatory of Music are recognized as qualifying for the degree of Bachelor of Music. In the Theory, the course extends over three years; in the History, over two. Information as to details of subjects studied in the classes, fees, text-books, etc., may be obtained on application to the Director of the Conservatory, Mr. Harry Dean.

ENGINEERING COURSES.

Professor.....W. P. Copp.
Associate Professor.....H. R. Theakston.

XXI. Mechanics.

2. **Advanced.**—*M. and F. at 9 a. m.*

Pre-requisite:—Physics 2; Mathematics 1, 2 and 3 (the latter however, may be taken simultaneously).

This course is intended for Engineering students, but can be offered for a degree in Arts and Science.

Text Books: Poorman: *Applied Mechanics*.

3. **Graphical Statics.**—*Lect.: W. at 9 a. m. Lab. W., 2.30 to 5.30 p. m.*

Pre-requisite:—Drawing 1 and Physics 2.

Text Book: Malcolm: *Graphical Statics*.

4. **Mechanics of Machines.**—*Lect.: Tu. at 11 a. m.; Lab.: M. W. and F. at 12 m.*

Pre-requisite:—Drawing 1, Physics 2, Mathematics 1, 2 and 3 (the latter, however, may be taken simultaneously).

Text Book: Angus: *Theory of Machines*.

5. **Materials of Construction.**—*Th. at 11 a. m.*

Text Book: Moore: *Materials of Engineering*.

XXII. Surveying.

1. **Elementary.**—*M. at 10 a. m. One lecture per week to first year students in preparation for the Surveying Camp.*

2.—*Tu. and Th., 2.30 to 5.30 p. m.*

Pre-requisite:—Drawing 1 and Mathematics 1 and 2 (the latter however, may be taken simultaneously).

Text Book: Breed & Hosmer: *Plane Surveying*.

(a) *Surveying Field Work.* About three weeks immediately preceding the opening of the sessional lectures. This part of the course is carried on in a united Surveying Camp, conducted under the auspices of the Nova Scotia Technical College in the grounds of the Agricultural College, Truro.

(b) *Lectures and Mapping.*

XXIII. Drawing.

1. **Engineering Drawing.**—*Lect.: Tu. and Th. at 9 a. m.: Lab.: M. and F. 2.30 to 5.30 p. m.*

Text Book: French: *Engineering Drawing*.

1B. **Engineering Drawing.**—*Lect.: Tu. and Th., at 9 a. m. Lab.: M., 2.30 to 5.30 p. m.*

This course or Drawing 1 is required of all students proceeding to the Degree of B. Sc. It is a modification of Drawing 1 and in addition deals with perspective. Special emphasis is given to free hand sketching.

Text Book: French: *Engineering Drawing*.

2. **Descriptive Geometry.**—*S., 9 a. m. to 1 p. m.*

Text Book:

3. **Advanced Engineering Drawing.**—*S., 10 a. m. to 1 p. m.*

Pre-requisite:—Drawing 1 and 2.

Reference Books: French: *Engineering Drawing*. Smith: *Practical Descriptive Geometry*. Cutter: *Descriptive Geometry*. Bishop: *Structural Drafting*. Carnegie Pocket Companion.

XXIV. Shop Work.

A course of about three weeks duration immediately preceding the regular sessional lectures, is given by the Nova Scotia Technical College in its own workshops. This course is not compulsory but the student is advised to take it. It will be accepted by the N. S. T. C. in lieu of three to six months suitable work in industry.

XXV. Commerce.

Professor.....
 Lecturers in Commercial Law.....
 Lecturer in Accounting.....E. Kaulbach.

1. **Elementary Accounting.**—*M. W. and F. at 3.30 p. m.*
 Text Book: Kester: *Accounting Theory and Practice*, Vol. 1, 2nd Edition and Practice Data.
2. **Intermediate Accounting.**—*M. W. and F. at 11 a. m.*
 Pre-requisite:—Commerce 1.
 Text Book: Kester: *Accounting Theory and Practice*, Vol. II and Practice Data.
 Reference will be had to Bennett: *Corporation Accounting*. Hatfield: *Accounting*. Dickinson: *Accounting Practice and Procedure*. Spicer and Pegler: *Auditing*.
3. **Advanced Accounting Problems.**—(1930-31). *Three hours per week.*
 Pre-requisite:—Commerce 2.
 Reference Books: Spicer and Pegler: *Auditing*. Hoskins: *Joint Stock Companies*. Dickinson: *Accounting Practice and Procedure*. Montgomery: *Auditing, Theory and Practice*.
4. **Marketing and Distribution.**—*Tu. and Th. at 9 a. m.*
 Pre-requisite:—Economics 1.
 Text Books: Macklin: *Efficient Marketing for Agriculture*. Clark: *Principles of Marketing*. Copeland: *Marketing Problems*. *Principles of Merchandising*.
 Readings from Cherington: *Advertising as a Business Force*. Nystrom: *Economics of Retailing*. Marshall: *Industry and Trade*. Shaw: *An Approach to Business Problems*.
5. **Business Correspondence.**—(1929-30) *S. at 10 a. m.*
 Pre-requisite:—English 2.
 Text Book: Gardner: *Effective Business Letters*.
6. **Business Organization and Management.**—(1929-30).
Tu. and Th. at 10 a. m.
 Pre-requisite:—Economics 1 and Commerce 1.
 Text Books: Marshall: *Business Administration*. Reference to Jones: *Administration of Industrial Enterprises*. Taylor: *Principles of Scientific Management*. Shaw: *An Approach to Business Problems*. Schell: *Technique of Executive Control*. Marshall: *Industry and Trade*. Clark: *Social Control of Business*.
7. **Corporation Finance and Investments.**—(1930-31). *Tu. Th. and S. at 10 a. m.*
 Pre-requisite:—Economics I, Commerce 2.
 Text Books: Reed: *Corporation Finance*. Dewing: *Problems in Finance*. Lagerquist: *Investment Analysis*.
 Reference will be had to: Dewing: *Financial Policy of Corporations*. Gerstenberg: *Financial Organization*.
8. **Commercial Law.**—(1930-31). *M. W. and F. at 12 m.*
 Reference: Cockle and Hibbert: *Cases on the Common Law*. Topham: *Company Law*.
9. **Foreign Trade.**—(1929-30) *M. and W. at 12 m.*
 Pre-requisite:—Economics 1; Commerce 4.
 Text Books: Furniss: *Foreign Exchange*. Wyman: *Export Merchandising*. Tosdal: *Problems of Export Sales Management*. DeHaas: *Foreign Trade Organization*.
10. **Railroad Transportation.**
 Jackman: *"Economics of Transportation."*

XXVI. Fisheries.

Lecturer in Fish Culture.....A. H. Leim.
 Lecturer in Biochemistry.....S. A. Beatty.
 Lecturer in Bacteriology.....J. R. Sanborn.
 Lecturer in Chemistry.....J. H. Mennie.

1. **General Fisheries.** A study of the principal marine and fresh water forms of economic importance, and of the methods of their utilization.
2. **Physics of Fish Curing.** This course deals with the application of Physical principles in the preparation of fish and other marine forms for market.
3. **Fish Culture.** A study of the method and problems of controlling life in the water, in connection with the development of aquatic resources.
4. **The Chemistry and Bacteriology of Fish Curing.** This course covers the post mortem changes in fish flesh, as well as the processes occurring with each of the various methods of preparation.

Summer Session.

Marine Zoology, including a course in General Embryology and Fish Embryology. This session will be held at the Seaside Station, about five miles from the University. It is to be attended either between the second and third, or the third and fourth, years of the course, but preferably the former.

The Classes, Fisheries 1, 2, 3 and 4 will be given at the Fisheries Experimental Station (Atlantic) of the Biological Board of Canada, situated in the city about a mile from the University.