

# CALENDAR

## DALHOUSIE UNIVERSITY

HALIFAX

NOVA SCOTIA

1909-10.



HALIFAX:

PRINTED FOR THE UNIVERSITY BY McALPIN PUBLISHING CO., LTD.  
1909.

# CALENDAR

OF

## DALHOUSIE UNIVERSITY

HALIFAX

NOVA SCOTIA

1909-10.

### \*TIME TABLE—FACULTY OF LAW

Hours	Morning	Afternoon	Wednesday	Thursday	Friday
9 to 10.....	Shipping.....	Court History.....	Customs Law.....	Commercial Law.....	Domestic Law.....
10 to 11.....	Torts.....	Contract Law.....	.....	.....	International Law.....
11 to 12.....	.....	.....	.....	.....	Equity.....
12 to 1.....	.....	.....	.....	.....	.....
2.30 to 4.30.....	.....	.....	.....	.....	.....
4.30 to 6.30.....	Real Property.....	Corporation.....	Procedure.....	Procedure.....	Procedure.....
8 to 9.....	.....	.....	.....	.....	.....
			Subject to alteration.		



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## TIME TABLE—ARTS, SCIENCE AND ENGINEERING.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9-10	Chem. 1, 1 A. Math. 4 English 3 French 3	Chem. 2, 3, 4 Math. 2 Greek 2 French 2	Chem. 2, 1 A. Math. 2 Greek 2 French 2	Chem. 2, 3, 4 Math. 4 English 5 German 2	Chem. 2, 1 A. Math. 4 English 5 German 2
	Math. 1 Latin 2 History 1 Phiz. 3 Geog. 1	Math. 2 Greek 1 History 2 Phiz. 3 Drawing 1, 2	Math. 1 Latin 2 History 2 Phiz. 3 Surveying	Math. 1 Latin 2 History 2 Phiz. 3 Surveying	Math. 1 Latin 2 History 2 Phiz. 3 Surveying
10-11	Latin 1 Greek 1 History 1 Phiz. 3 Geog. 1	Latin 2 Greek 2 History 2 French 1 Drawing 1, 2	Latin 1 Greek 2 Phiz. 3 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 3 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 3 Physics 2, 3 Drawing 1
	Latin 1 Greek 1 Phiz. 1 Physics 1 Drawing 1	Latin 2 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1
11-12	Latin 1 Greek 1 Phiz. 1 Physics 1 Drawing 1	Latin 2 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1	Latin 1 Greek 2 Phiz. 1 Physics 2, 3 Drawing 1
	Latin 1 English 2 Geog. 1	Latin 2 English 1 Geog. 1	Latin 1 English 2 Geog. 1	Latin 1 English 2 Geog. 1	Latin 1 English 2 Geog. 1
12-13	German 1 Physics 6	French 1 Physics 6	French 1 Physics 6	French 1 Physics 6	German 1 Physics 6
	Chem. 1 A, 1b Physics 6	Chem. 2 A, 1b Physics 6, 7, 8	Chem. 2, 4, 1b Physics 6, 7, 8	Surveying Chem. 2, 4, 1b	Chem. 1 A, 1b Physics 6, 7, 8
1-2	Kin. German Chem. 1 A, 1b Physics 6 Mineralogy	Chem. 2 A, 1b Physics 6, 7, 8 Chem. 2, 4, 1b	Chem. 2 A, 1b Physics 6, 7, 8 Chem. 2, 4, 1b	Chem. 2 A, 1b Physics 6, 7, 8 Chem. 2, 4, 1b	Kin. German Chem. 1 A, 1b Physics 6, 7, 8 Chem. 2 A, 1b Physics 6, 7, 8 Chem. 2, 4, 1b
	Chem. 1 A, 1b Physics 6 Mineralogy	English 3 Physics 6 Chem. 2 A, 1b	Chem. 2 A Physics 6 Chem. 2, 4, 1b	English 3 Physics 6 Chem. 2, 4, 1b	Chem. 1 A, 1b Physics 6 Mineralogy
4-5	Saturdays: Chemistry 3, Math. 2, 9-10 A. M., Biology 11 A. M. to 1 P. M., Geology 1.—Field Work and Library through the day.				

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## UNIVERSITY ALMANAC, 1909-10.

1909.

- Aug. 12. Th.—Last day for receiving applications for Autumn Preliminary Examination (Provincial Medical Board).  
Last day for receiving notices of Supplementary Examinations (Medical Faculty).
18. W.—Last day for receiving applications for Autumn Professional Examinations (Provincial Medical Board).
24. Tu.—Last day for receiving notices of Supplementary Examinations (Law Faculty).
26. Th.—Session begins (Med. Fac.) Preliminary Examination (Prov. Med. Board) begins at 9 a. m., at Dalhousie College.
29. M.—Supplementary Examinations begin (Medical Faculty). Results Preliminary Examination (Prov. Med. Board) declared, and certificates issued, 10 a. m.  
Registration and Payment of Class Fees (Medical Faculty) 11 a. m.
31. Tu.—Session begins (Law Faculty).  
Lectures begin at Halifax Medical College.  
10 a. m., Registration and Payment of Class Fees (Law Faculty).  
Last day for receiving notices of Matriculation, Supplementary and Special Examinations (Arts, Science and Engineering Faculties.)
- 3 p. m., Supplementary Examinations (Law Faculty).  
Lectures begin (Law Faculty).
- Sept. 1. W.—Registration of Candidates for Matriculation and Scholarship Examination (Arts, Science and Engineering Faculties).
7. Tu.—Examination for Junior and Senior Matriculation, and for Entrance Scholarships (Arts, Science and Engineering Faculties).  
9 a. m., Latin.  
3 p. m., Greek.
9. Th.—9 a. m., Geometry.  
11 a. m., Trigonometry.  
3 p. m., Arithmetic and Algebra.
10. F.—9 a. m., History and Geography.  
3 p. m., English.
11. S.—9 a. m., French.  
3 p. m., German.
12. M.—9 a. m., Chemistry.
- 9 a. m., Supplementary Examinations begin (Arts, Science and Engineering Faculties).
15. W.—9 a. m., Meeting of Faculties of Arts, Science and Engineering.  
3 p. m., Registration and payment of class fees.
17. Th.—Lectures begin (Arts, Science, Engineering and Medical Faculties.)
- Oct. 1. F.—Intimation as to elective subjects to be made by undergraduates.

- Oct. 15. F.—Returns as to residence and church attendance to be made on or before this day.  
M.—Thanksgiving Day. No lectures.  
Tu.—Masses Day. No lectures.  
Dec. 10. F.—Last day of Lectures (Faculty of Arts, Science, Engineering and Medicine.)  
11. Sa.—Last day for receiving notices of Special Examinations, Christmas Examinations (Arts, Science and Engineering Faculties) begin.  
9 a. m.—Chemistry 1; Mathematics 4; English 6; German 2.  
2.30 p. m.—Eloc. German; German 1.  
13. M.—9 a. m., Mathematics 1; Latin 2; History 1; Philosophy 2; Surveying.  
2.30 p. m., Latin 3; English 2; Drawing 1.  
14. Tu.—9 a. m., Chemistry 2, 4; Mathematics 2; French 2.  
2.30 p. m., Greek 2; Geology 1; English 1.  
15. W.—9 a. m., Greek 1; History 2; French 1; Mathematics 2.  
2.30 p. m., Biology; Eloc. French; Philosophy 8.  
16. Th.—9 a. m., Greek 2; Philosophy 7; Economy 1; Physics 2; Mechanics.  
2.30 p. m., English 5.  
17. F.—9 a. m., Latin 1; Philosophy 1; Physics 1.  
2.30 p. m., Education; Mineralogy.  
18. Sa.—Christmas vacation begins.

1909.

- Jan. 4. Tu.—Lectures resumed (Arts, Science, Engineering, Law and Medical Faculties.)
- Feb. 9. W.—1st Wednesday. No lectures.
16. W.—Last day of lectures (Law Faculty).
17. Th.—Sessional Examinations begin (Law Faculty).  
10 a. m., Equity.  
3 p. m., Torts.  
18. F.—10 a. m., Companies.  
3 p. m., Crimes.  
19. Sa.—10 a. m., Constitutional History, International Law.  
21. M.—10 p. m., Constitutional Law.  
22. Tu.—10 a. m., Shipping.  
23. W.—10 a. m., Real Property.  
24. Th.—10 a. m., Sales.  
25. F.—10 a. m., Contracts; Conflict of Laws.
- Mar. 1. Tu.—Law Convocation. Last day for receiving M. A., M. Sc. Theses.
25. F.—Good Friday. No lectures.
30. W.—Last day for receiving applications for Primary and Final M. D. C. M. Examinations and for Spring Professional Examinations (F. M. Board).
- Apr. 4. M.—Last day of Lectures (Faculties of Arts, Science, Engineering and Medicine).
5. Tu.—Spring Examination (Faculties of Arts, Science, Engineering and Medicine) begin.  
9 a. m., Practical Chemistry (Laboratory, 1st division).  
2.30 p. m., Practical Chemistry (Laboratory, 2nd division).  
6. W.—9 a. m., Latin 2; Mathematics 1; History 1; Philosophy 2; Surveying.  
3 p. m., German 1; Elementary German.

- Apr. 7. Th.—9 a. m., Greek 1; Mathematics 2; History 2; Drawing 2.  
 3 p. m., Philosophy 8; Elementary French.  
 8. F.—9 a. m., Latin 1; Philosophy 1; Physics 1.  
 3 p. m., Latin 3; English 2.  
 9.—8 a. m., Greek 2; English 1; Geology 1.  
 3 p. m., English 5; Physics 6, 7, 8.  
 Certificates of Class attendance Med. Fac. Dalhousie, issued on presentation of Class Fee Receipts.  
 11. M.—Certificates of Class attendance Halifax Medical College, issued on presentation of Class Fee Receipts.  
 9 a. m., Greek 2; Philosophy 7; Physics 2; Economy 1; Mechanics; Mineralogy.  
 3 p. m., Chemistry 1; Mathematics 4; English 6; German 2.  
 12. Tu.—9 a. m., Education; Addit. Mathematics.  
 3 p. m., French 1; Zoology.  
 13. W.—9 a. m., Chemistry 2, 3, 4; Mathematics 2; French 2  
 3 p. m., Addit. Physics; Medical Jurisprudence and Hygiene.  
 14. Th.—9 a. m., Addit. Latin; Junior Anatomy.  
 3 p. m., Addit. German; Obstetrics and Diseases of Women and Children; Physiology.  
 15. F.—9 a. m., Addit. English; Histology.  
 3 p. m., Addit. Anatomy; Senior Anatomy; Medicine.  
 16. Sa.—9 a. m., Addit. History; Oral Exams.; Chemistry, Anatomy, Physiology and Histology.  
 3 p. m., Botany; Addit. Greek; Surgery.  
 18. M.—9 a. m., Addit. Geology; Medical Physics; Clinical Medicine at V. G. H.  
 3 p. m., Addit. Philosophy; Pathology and Bacteriology.  
 19. Tu.—9 a. m., Addit. French; Clinical Surgery at V. G. H.  
 3 p. m., Materia Medica and Therapeutics.  
 20. W.—2 p. m., Oral Exams.; Materia Medica and Therapeutics; Pathology and Bacteriology.  
 21. Th.—2 p. m., Oral Exams.; Surgery, Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene.  
 22. F.—Results of P. M. B. Professional Examinations declared.  
 25. M.—9 a. m., Meeting of Faculty of Arts and Science.  
 26. Tu.—4 p. m., Meeting of Faculty of Medicine.  
 9 a. m., Meeting of Senate.  
 27. W.—11 a. m., Results of Examinations (Faculties of Arts, Science and Medicine) declared.  
 8 p. m., Annual Meeting of Alumni Association.
28. Th.—3 p. m., Convocation.
- May 5. Th.—9 a. m., Spring Preliminary Examinations (Presidential Medical Board) begin.  
 10. Tu.—4 p. m., Annual Meeting Medical Faculty.

# Dalhousie University.

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Professor Mackay, Secretary.  
Professor Macmillan.  
Professor Magill.

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Professor James.  
Professor Murray.

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Professor Horne.

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### ATHLETICS.

President Forrest, Chairman.  
Dean Weldon.  
Dean Murray.  
Professor MacKenzie.

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### ARTS LIBRARY.

Professor MacMechan, Chairman.  
Professor MacKenzie.  
Professor Magill.

## INTRODUCTION

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### Historical Sketch

DALHOUSIE COLLEGE was founded in 1818 by the Right Honourable George Ramsay, Ninth Earl of Dalhousie, "for the education of youth in the higher branches of science and literature."

The original endowment was derived from funds collected at the port of Castine, Maine, during its occupation in 1814 by Sir John Sherbrooke, then Lieutenant-Governor of Nova Scotia. In a letter to Lord Bathurst, dated December 14th, 1817, Lord Dalhousie, with the unanimous consent of the Council, proposed that £9,750 of these funds be devoted to the "founding of a College or Academy on the same plan and principle as that in Edinburgh," "open to all occupations and sects of religion, restricted to such branches only as are applicable to our present state, and having the power to expand with the growth and improvement of our society," and that this College be established in Halifax, "the seat of the legislature, of the courts of justice, of the military and the mercantile society." On the 6th of February, 1818, Lord Bathurst wrote expressing the Prince Regent's "entire approval of the application of the funds in question in the foundation of a Seminary in Halifax for the higher classes of learning." The building was begun in 1819, and on the 22nd of May, in the year of 1820, the corner stone was laid by the Earl of Dalhousie. On the 13th of January, 1821, an "Act to incorporate the Governors of Dalhousie College at Halifax" became law. The original Board consisted of the Governor-General of British North America, the Lieutenant-Governor of Nova Scotia, the Bishop, the Chief Justice, the President of the Council, the Treasurer of the Province, the Speaker of the House of Assembly, and the President of the College.

After unsuccessful efforts in 1822-4 and 1829-36 on the part of both the British Government and the Board of Governors to effect a union with King's College, at

that time the only other existing in the Province, Dalhousie College went into operation in 1838, with the Rev. Thomas McCulloch, D. D., as President.

In 1841 an Act was passed conferring university powers upon the College, and vesting the appointment of the Governors in the Governor and Council. Two years later President McCulloch died, and in 1845 the College was closed, the Governors considering it "advisable to allow the funds of the institution to accumulate." From 1849 to 1859 the College funds were employed to support a High School. Toward the end of this period, in 1856, the Arts department of Gorham College, Liverpool, supported by the Congregationalists, was transferred to Dalhousie, "with a view to the furtherance of the establishment of a Provincial University"; and for a short time an attempt was made to conduct the institution as a University under the Act of 1841.

The history of Dalhousie College as an institution realizing the purpose of its Founder may be dated from 1863. In that year the College was reorganized under an Act which empowered the Board of Governors to grant to any body of Christians, or any individual, or number of individuals, the privilege of nominating a representative to the Board, and a Professor, for every chair in the College supported by them to the extent of twelve hundred dollars a year. In consequence of this provision, the Presbyterian Church of Nova Scotia closed its academies at Truro and Halifax, and undertook the support of two chairs; and the Church of Scotland in Nova Scotia, having no institution of its own, endowed one chair—the Chair of Mathematics. Thus strengthened, the College opened in the Autumn of 1863 with a staff of six professors, the Rev. James Ross, D. D., being Principal. At the death of the incumbents of the two chairs supported by it, the Presbyterian Church withdrew its support.

In 1879 Mr. George Munro, of New York, endowed the Chair of Physics, and in rapid succession Chairs of History and Political Economy, English Literature, Law, and Metaphysics. He also supported tutorships in Classics and Mathematics, and for ten years provided liberal exhibitions and bursaries. His munificent gifts were at that time unparalleled in Canada.

In 1882 Mr. Alexander McLeod, of Halifax, left the residue of his estate to endow the three chairs now known as the McLeod Chairs of Classics, of Modern Languages, and of Chemistry.

The purchase of the old College building by the City and the generous gift of \$20,000 by Sir William Young, for over forty years Chairman of the Board of Governors, led to the erection of a new building, the corner stone of which was laid by Sir William on the 27th of April, 1887. The gifts of Sir William Young to the College subsequent to its reorganization exceeded \$68,000.

In 1890, Mr. John P. Mott, of Halifax, left a bequest of \$10,000 to the College.

In 1902 the School of Mines was established, and in the same year the Alumni began a movement to erect a Library in memory of the late Professor Macdonald. For these two purposes subscriptions to the amount of about \$80,000 were obtained.

The Faculty of Medicine was organized in 1868; merged into the Halifax Medical College in 1875; and re-organized in 1885.

The Faculty of Science was organized in 1877, and re-organized in 1891. In 1906 the Faculty was divided, the department of Pure Science uniting with the Faculty of Arts to form the Faculty of Arts and Science, and the department of Applied Science constituting the Faculty of Engineering.

The Faculty of Law was established in 1883.

### Constitution

THE BOARD OF GOVERNORS is the supreme governing body of the University. Appointments to it are made by the Governor-in-Council on the nomination of the Board, or on the nomination, with the approval of the Board, of any body of Christians, or of any individual, or number of individuals, supporting a chair in the College. Any such body or individual is entitled to one representative Governor for each chair so supported. The Governors have the management of the funds and property of the College; the power of appointing the President, Professors, and other officials, and of determining their duties and salaries; and the general oversight of the work of the University.

THE SENATE consists of the President and Professors. To this body are intrusted, by statute, the internal regulations of the University, subject to the approval of the Governors. All degrees are conferred by the Senate.

THE FACULTIES are committees to which are intrusted by the Senate, subject to its approval, the supervision of the teaching of the University, the preparation of regulations governing the courses of study, and the recommendation of suitable candidates for prizes, scholarships, diplomas, and degrees. The University contains a Faculty of Arts and Science, and Faculties of Law, Medicine, and Dentistry.

### Degrees and Courses

The Senate confers the degrees of Bachelor and Master of Arts, Bachelor and Master of Science, Bachelor of Music, Bachelor of Laws, Doctor of Medicine and Master of Surgery, and Doctor of Dental Surgery. A candidate qualified for a degree must have conformed to the regulations of the Faculty in which he has been studying, and must be recommended by that Faculty for the degree.

The degree of Doctor of Laws may be conferred *honoris causa* *laetum* in recognition of eminent literary, scientific, professional, or public services.

The various Faculties of the University provide the instruction required in the courses leading to the above degrees, except in Music, in Medicine, and in Dentistry. In Music instruction is provided in the literary and scientific subjects required, and the University recognizes as qualifying for a degree the instruction in professional subjects given by the Halifax Conservatory of Music and other approved institutions. In Medicine and Dentistry, the University provides instruction in pure science, and recognizes the teaching in professional subjects of the Halifax Medical College, the Maritime Dental College, and other approved Schools of Medicine or Dentistry.

**ENGINEERING COURSES.**—Preliminary courses in Engineering are offered in the Faculty of Arts and Science. These courses extend over two years and correspond to the work prescribed by the Nova Scotia Technical College for the first two years of courses in Civil, Mechanical, Electrical, and Mining Engineering.

**AFFILIATED COURSES.**—By a proper selection of elective subjects in his course, a candidate may reduce by one year the time required for the degree of Bachelor of Arts, and a professional degree in Law, Medicine, or Dentistry. Similarly a Bachelor of Science may reduce by

two years the time required for the combined degrees in Science and Medicine.

A candidate for the degree of Bachelor of Arts may shorten by one year, and a candidate for the degree of Bachelor of Science, by two years, a subsequent course for a degree in Engineering.

**PRIVILEGES.**—The usual privileges of exemption from the Preliminary examination granted to graduates of recognized universities by the learned professions in Canada and Great Britain are extended to this University.

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

Of the seven courses required by the University of Edinburgh for the degree of B. Sc. in Pure Science three may be taken in this University; and of the seven courses required for the B. Sc. in Engineering, two may be taken in this University, subject to certain conditions.

The University of London exempts Bachelors of Laws of this University from the Preliminary Examination leading to the Lt. B. of that University. Graduates in law of this University are admitted to the Bar of Nova Scotia without further examination, provided they have passed in Procedure.

The degree in Medicine from this University is recognized as entitling to the privileges usually granted to graduates in Medicine of Canadian Universities. Graduates of this University in Medicine and Surgery who hold the License of the Provincial Medical Board may, on application, be placed on the Colonial List of the British Medical Register.

### Equipment

#### LIBRARIES.

The University possesses a University Library, open to all registered students, and a Law Library for the exclusive use of the students and instructors in the Faculty of Law.

The University Library was instituted in 1867, as the result of an appeal made by the Rev. George M. Grant, at Convocation. Until 1888 the number of volumes did not exceed 3,000; to-day there are about 14,500 volumes and 3,700 pamphlets, selected primarily to meet the needs of students in the Faculty of Arts and Science.

When the Law Faculty was organized in 1883, the Dean received a number of very generous contributions for a Library. A useful collection of Law books was secured, partly through the exertions of the late J. T. Bulmer. To-day the Law Library contains more than 7,750 volumes, including all the law reports which a student will find it necessary to consult.

The University Library contains the MACKENZIE COLLECTION of works on Mathematical and Physical Science, which was presented to the College by the relatives of the late Professor J. J. MacKenzie; the ROBERT MORROW COLLECTION of works on Northern Antiquities and Languages, presented by Mrs. Robert Morrow; the SETH COLLECTION of Philosophical works, purchased with the proceeds of a course of public lectures on Psychology given by Professor James Seth; the DEMILLE MEMORIAL, presented by Professor MacMechan from the proceeds of two courses of Lectures on Shakespeare; the LAWSON LIBRARY, presented by the daughters of the late Professor George Lawson, LL. D.; the McCULLOCH COLLECTION, from the Library of the late Rev. W. McCulloch, D. D.; the EDWIN P. ROBINS MEMORIAL COLLECTION of Philosophical books; the MACDONALD COLLECTION, presented by the son of the late Professor Charles Macdonald, M. A.; the DEMILLE COLLECTION, presented by Mrs. J. DeMille; the HARRINGTON COLLECTION, presented by the family of the late Emily Harrington, M. A.; also the CLARK MEMORIAL COLLECTIONS, presented by the graduating classes of 1894 and subsequent years.

Besides the libraries in the University, students may use, subject to certain conditions, the following libraries:—The Science Library, the Library of the Mining Society of Nova Scotia, the Legislative Library, the Citizens' Free Library, and the Library of the Presbyterian Theological College. The Cogswell Medical Library in the Halifax Medical College is open to students of Medicine.

The University Library is in charge of a library committee appointed by the Senate, and a librarian. The Law Library is in charge of the Dean of the Law Faculty, assisted by a librarian.

#### EQUIPMENT.

#### THE MUSEUM.

The Museum consists chiefly of the THOMAS McCULLOCH, the PATTERSON and the HONEYMAN COLLECTIONS.

THE THOMAS McCULLOCH COLLECTION, presented by the late Rev. William McCulloch, D. D., of Truro, contains a large and valuable collection of birds, especially native species of the Maritime Provinces, besides many mineral, rock and fossil specimens, shells of recent mollusca, Indian implements, etc. The fossil specimens include a collection of European cretaceous fossils and of carboniferous fossils, chiefly Nova Scotian. The collection of birds is supplemented by the valuable collection made by Col. T. J. Egan, of Halifax, containing thirty cases of native birds.

THE PATTERSON COLLECTION of Indian antiquities was made by the late Rev. George Patterson, D. D., LL. D., F. R. S. C., and presented by him to the University. It contains 230 specimens, catalogued and conveniently arranged for reference, including about 250 specimens relating to the aborigines of Nova Scotia.

THE HONEYMAN COLLECTION consists of the extensive geological collection made by the Rev. David Honeyman, D. C. L., F. S. A., for some years Professor of Geology in Dalhousie College, and was presented by Dr. Honeyman's relatives.

The Honeyman collection and the portion of the McCulloch collection illustrating Geology and Mineralogy, are placed in the Geological Laboratory.

The Zoological section of the Museum was catalogued by the late Dr. Andrew Halliday, Lecturer in Zoology from 1899 to 1903.

The collections of the Provincial Museum, illustrating the Geology, Mineralogy and Zoology of the Province, may be conveniently used by students.

#### LABORATORIES.

The University is equipped with laboratories in the departments of Physics, Chemistry, Biology, Geology and Mineralogy, Assaying and Mining, and Civil Engineering. Facilities for research are provided for a limited number of students in Physics, Chemistry, Geology and Metallurgy. Reports of the researches carried out by students appear from time to time in the Transactions of the Nova Scotian Institute of Science and other scientific publications.

**THE PHYSICAL LABORATORY** comprises a general laboratory affording accommodation for 16 students working simultaneously, a room for electrical work, and a number of smaller adjoining rooms for research work and storage.

**THE CHEMICAL LABORATORY** includes a general laboratory fitted with lockers for 85 students, and a quantitative laboratory accommodating 16 students, with additional rooms for weighing and for storing apparatus and reagents.

**THE GEOLOGICAL LABORATORY** occupies a large general laboratory and two small adjacent rooms, one of which is fitted for photographic work. The laboratory contains good collections, constantly being added to, of typical rock and mineral specimens, as well as collections of crystals, crystal models, geological maps, etc., for class instruction.

**THE BIOLOGICAL LABORATORY** accommodates about 25 students doing simultaneous microscopic work. Microscopes, reagents and material are provided for students.

**THE ASSAYING LABORATORY** contains a coke muffle furnace and three pot furnaces with their accessories, and separate working desks for 12 students.

**THE MINING LABORATORY** occupies large, well-lighted basement rooms. Its equipment includes the following:—Blake breaker, Gates crusher, Gates fine grinder, pair of 9"x12" crushing rolls, Collets jiz, Rand compressor, reverberatory roasting furnace, gold clean-up barrel, Wilfley concentrating table, Bartlett concentrating table, settling tanks, and a five-stamp mill of the most modern pattern, especially designed for this laboratory. Power is furnished by a 10-H. P. three-phase motor. The stamp mill is run by a separate 5-H. P. induction motor.

**THE ENGINEERING TESTING LABORATORY** is equipped with a Fairbanks cement testing machine of 2,000 lbs. capacity and all necessary apparatus for making complete tests of the hydraulic cements used in engineering work. Tests of the cements used by the Department of Public Works of Nova Scotia are made in this laboratory.

## ADMISSION

### Classification of Students

Students are classified as Graduate Students, Undergraduates, Matriculants and Special Students.

**GRADUATE STUDENTS** are students who hold a Bachelor's degree in Arts or Science and are pursuing a course of study for a Master's degree.

**UNDERGRADUATES** are students who have passed the Matriculation and are candidates for a Bachelor's degree in Arts or Science or a degree in a professional course.

**MATRICULANTS** are students who have partially passed but have not completed the Matriculation and are pursuing a course of study for a degree.

**SPECIAL STUDENTS** are all not included in one of the preceding groups.

### Admission of Students

No person under sixteen years of age is admitted to any class.

Persons of either sex, 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.

No class which a person attends as a Special student is recognized as qualifying for a degree.

Students entering as Matriculants are admitted to such classes of a course for a degree as the standing they have attained in Matriculation warrants. A Matriculant who has passed in all but one subject of Matriculation may, at the discretion of the Committee on Admission, be admitted to all classes of the first year of a course in Arts, Science or Engineering. Such Matriculant is also admitted to all classes of the first year in Medicine, provided he has obtained a mark of at least 25 per cent. in

the subject in which he has failed. A Matriculant who has failed in more than one subject of Matriculation is not admitted to all classes of the first year in Engineering or to more than four classes of a course in Arts or Science.

Students entering as Undergraduates are admitted to all classes of the first year of any course in any Faculty.

### MATRICULATION

A student in order to become a candidate for a degree must satisfy the requirements for Matriculation, either by passing an examination or by presenting a certificate which will be accepted as an equivalent. There are two standards of Matriculation, known respectively as the Junior and the Senior Matriculation. Candidates who satisfy the requirements of the Junior Matriculation may enter the first year of any course in any Faculty of the University. Candidates who pass the Senior Matriculation may enter the second year of an Arts or Science course, and may be exempted from certain classes in the courses in Engineering, Medicine, and Dentistry. The exemptions allowed are specified below, in the regulations under Senior Matriculation.

#### I. JUNIOR MATRICULATION

*The requirements for Junior Matriculation for students entering the University in and after September, 1910, may be increased so as to represent one year of high school work in addition to that now prescribed for Grade XI of the High School Course of Nova Scotia in each of the subjects at present required for Junior Matriculation.*

The Junior Matriculation Examination will be held at the College, and at such other places as the Senate may appoint, on September 15th to 18th, 1910.

#### MATRICULATION IN ALL EXCEPT ENGINEERING COURSES.

Candidates for a degree in Arts, Science, Music, Law, Medicine, or Dentistry are required to pass in each of the following subjects:

- 1 and 2. Two of the following languages: Latin, Greek, French or German.
3. English.
4. History and Geography.
5. Arithmetic and Algebra.
6. Geometry.

#### MATRICULATION.

The choice of foreign languages is subject to the following restrictions: candidates for a degree in Arts must select either Latin or Greek; candidates in Law, Medicine, or Dentistry must select Latin; candidates in Science, either French or German; and candidates in Music, both French and German.

#### MATRICULATION IN ENGINEERING COURSES.

Candidates for Matriculation in Engineering are required to pass in each of the following subjects:

1. Either French or German.
2. English.
3. History and Geography.
4. Arithmetic and Algebra.
5. Geometry and Trigonometry.
6. One of the following:
  - (a) Latin.
  - (b) Greek.
  - (c) Additional work in the language selected as subject 1.
  - (d) Mechanical Drawing.

#### REQUIREMENTS IN EACH SUBJECT.

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

**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 for 1909 are—Caesar: *Gallie War*, Books II and III; and Vergil: *Aeneid*, Book III.

**GREEK.**—The paper will contain (1) passages for translation from a prescribed book with questions arising out of that book; (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 Greek.

The book prescribed for 1910 is Xenophon: *Anabasis*, Book III.

**FRENCH.**—Enault, *Le Chies du Capitalis*; Berthon, *Specimens of Modern French Prose*. Grammar questions limited to accidence and easy rules of syntax.

**ADDITIONAL FRENCH.**—The work specified in French for the Senior Matriculation Examination (see below) may be offered as subject 6 (c) for Matriculation in Engineering.

**GERMAN.**—*Buchheim, Modern German Reader Part I; Von Hillern, Huetter als die Kirche.* Grammar questions limited to accidents and easy rules of syntax.

**ADDITIONAL GERMAN.**—The work specified in German for the Senior Matriculation Examination (see below) may be offered as subject 8 (e) for Matriculation in Engineering.

**ENGLISH.—English:** Grammar, Analysis, Parsing, Composition: An essay on one of several set subjects to be drawn from:—Macaulay, Warren Hastings; Shakespeare, Merchant of Venice; Longfellow, Evangeline; Scott, The Lady of the Lake.

Questions on the interpretation of a passage not specified 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 one of the works named need be read. It should be read primarily for the story, and need not be studied minutely, as a choice is allowed among at least four themes drawn from the works named.

**HISTORY AND GEOGRAPHY.**—Outlines of English and Canadian History and General Geography.

**ARITHMETIC AND ALGEBRA.**—Arithmetic. Algebra: As in Hall and Knight's Elementary Algebra, or Todhunter and Loney's Algebra for Beginners, or Wentworth's Algebra.

**GEOMETRY.**—Euclid, Books I, II, III, IV. Definitions of Book V, Book VI, first 19 propositions, or their equivalents.

Candidates in Engineering must offer also the remaining propositions of Book VI, or their equivalents.

**TRIGONOMETRY.**—As in Murray's *Pure Trigonometry*, Chapters I to VIII, or Murray's *Practical Mathematics*, or an equivalent.

**MECHANICAL DRAWING.**—Projection of points, lines, plane figures and simple solids; dimension sketches of parts of simple machines; lettering and dimensioning or drawing neatly and accurately done.

Candidates who pass in three or more subjects, but fail to pass the examination as a whole, will be exempted from such subjects, should they appear as candidates on any subsequent occasion.

Candidates reaching a certain standard will be declared to have passed with Distinction, and will be eligible for the Mackenzie Bursary.

#### CERTIFICATES EXEMPTING FROM EXAMINATION.

Candidates in Arts, Science, Engineering or Law who hold the following diplomas, licenses or certificates are exempted from the above examination in subjects which were included in the examination by which such diploma,

license or certificate was obtained, and in which a sufficiently high standard was reached, provided this standard was reached in three or more of the subjects required for Matriculation.

- (a) Certificates of Matriculation into recognized Universities.
- (b) High School Certificates of Grades XII or XI of Nova Scotia (except Grade XI in Geometry.)
- (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 Office 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) Certificates from the Principals of High Schools or Academies, approved for this purpose by the Senate, stating that the holder has satisfactorily completed the work prescribed for the Junior Matriculation examination, and passed satisfactory examinations therein.

The Faculty of Law, in addition to the foregoing certificates, etc., will accept as the equivalent of the Junior Matriculation examination, a certificate stating that the candidate has passed the Preliminary Law examination in any of the Provinces of Canada, or in Newfoundland, or in any of the British West India Islands.

The Faculty of Medicine will accept only those certificates which are recognized by the Provincial Medical Board as equivalent to their Preliminary examination.<sup>1</sup>

#### II. SENIOR MATRICULATION

The Senior Matriculation Examination will be held at the College, and at such other places as the Senate may appoint, on September 15th to 20th, 1909.

Candidates are required to pass in each of the following subjects:—

<sup>1</sup>The standard required in the certificates issued by the Education Department of Nova Scotia in 1908 and subsequent years is a mark of at least 30 per cent. in each of the subjects required for Matriculation. For the present the percentage required for certificates issued prior to 1908 is 40. When any one of the subjects specified above as required for Matriculation is omitted from the examination, the percentage required for the remaining subjects is 30 per cent. The mark obtained for the omitted subject is the mark for such parts taken as the mark obtained for the subject. Marks obtained in the subjects other than those required for Matriculation are not considered.

All information with reference to the requirements for this examination, exemptions granted, etc., may be obtained on application to the Registrar of the Board, Dr. A. W. H. Lindsay, 281 Pleasant Street, Halifax.

1 and 2. Two of the following: Latin, Greek, French, German.

3. English.
4. History and Geography.
5. Arithmetic and Algebra.
6. Geometry.
7. Trigonometry.
8. Either Chemistry or Botany.

Candidates must select the two foreign languages which they intend to take in the second year of the course they enter.

#### REQUIREMENTS IN EACH SUBJECT.

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

**LATIN.**—For 1909.—Cicero: *In Catilinam*, *Pro Milone*, *De Senectute*; Vergil: *Aeneid*, Books IV and V.

**GREEK.**—For 1909.—Xenophon: *Hellenica*, I-II; Homer, *Iliad* I-II (omitting the catalogue of the ships).

The papers in Latin and Greek will contain passages for translation from the books prescribed, together with grammatical and other questions arising out of these books, and short and easy passages for translation from books not prescribed. General questions in Latin and Greek Grammar will also be set, and some English sentences to be turned into Latin and Greek.

**FRENCH.**—Mérimee, *Colombes* (Hachette & Cie, London); Molière, *L'Avar* (D. C. Heath & Co.). Grammar and prose composition based upon the rules and vocabularies contained in Fraser and Squal's *French Grammar* (Copp, Clark Co.).

**GERMAN.**—Schiller, *Wilhelm Tell*; Baumhauer, *Der Schmiedepferd* (Holt & Co.). Grammar, including both accidence and syntax; German Prose Composition.

**ENGLISH.**—Language: Grammar, Analysis, Parsing, Composition: An essay on one of several set subjects; to be drawn from: Macaulay: *Warren Hastings*; Shakespeare: *Mercutio of Venice*; Longfellow: *Evangeline*; Scott: *The Lady of the Lake*. (See note to English in Junior Matriculation).

**Literature.**—Eighteenth Century: Addison, *Papers Contributed to the Spectator*; Johnson, *Life of Pope* (Macaulay, Samuel Johnson); Dryden, *MacFlecknoe*, *St. Cecilia's Day*, *Alexander's Feast*; Pope, *Rape of Lock*; Gray, *Elegy in a Country Churchyard*; Goldsmith, *Traveller*, *Deserted Village*; Burns, *Twa Dogs*, *Cotter's Saturday Night*.

Instead of the works prescribed here in Latin, Greek, French, German, and English, candidates for matriculation may offer equivalents, provided they have been previously approved by the President, who should receive notice not later than August 1st.

**HISTORY AND GEOGRAPHY.**—Outlines of English and Canadian History and General Geography.

**ARITHMETIC AND ALGEBRA.**—As specified for the Junior Matriculation Examination and in Mathematics 1: Indices.

**Irrational Quantities.** Quantities involving  $\sqrt{-1}$ . Theory of Quadratic Equations. Proportion. Progressions. Permutations and Combinations. Binomial Theorem. Properties of Logarithms. Interest and Annuities. Undetermined Coefficients. Partial Fractions. Graphical representation of functions, and plotting of loci of equations. Exponential and Logarithmic Series. Probability.

**GEOMETRY.**—As specified for the Junior Matriculation Examination and in Mathematics 1: Euclid, Books I-IV, definitions of Book V, Books VI, XI, Propositions on Harmonic Ranges and Pencils, Polars and Polars, and Transversals. Geometry and Mensuration of the Prism, Cylinder, Cone, and Sphere. Elementary propositions in the geometrical treatment of the Parabola, Ellipse and Hyperbola.

**TRIGONOMETRY.**—As in Mathematics 1: The solution of plane triangles. Measurements of heights and distances. Elementary angular analysis.

**CHEMISTRY.**—Elements of General Chemistry as in Smith's *General Chemistry for Colleges* (The Century Co.), or an equivalent, omitting the rarer elements.

In the examination special importance will be attached to an acquaintance with the experimental evidence upon which the more important facts and the fundamental laws of the science are based, including, for example, the evidence for the composition of the more important compounds, as water, hydrochloric, acetic and sulphuric acids, ammonia, and the oxides of carbon, nitrogen and sulphur.

Candidates in Science, Engineering or Medicine, are required to satisfy the examiner that they have done an amount of laboratory work equivalent to that prescribed in Chemistry 1A. (See Courses of Instruction).

**BOTANY.**—The elements of General Botany. Bessey's *Essentials of Botany* and Spottis' *High School Botany* may be taken to indicate in a general way the extent of knowledge required and the method to be pursued. The examination will be designed to test the extent to which the candidate's knowledge of the subject is founded upon practical study.

Candidates who have previously passed in one or more of the above subjects, either at the Senior Matriculation examination or at the Junior Matriculation and First Year examinations, shall be exempt from further examination therein.

Candidates in Engineering who pass the above examination are exempt from the following classes of the first year in the Engineering courses: French 1 or German 1, English 1, Mathematics 1 and Chemistry 1A. Similarly candidates in Medicine or Dentistry who pass in Chemistry and Botany are exempt from Chemistry 1A and Botany in their course.

All candidates for a degree who do not take Chemistry in this examination are required to take Chemistry 1, or 1A, as one of the classes of their course.

#### CERTIFICATES EXEMPTING FROM EXAMINATION.

Candidates who hold the following licenses, diplomas or certificates, are exempted from the above examination in subjects, except Chemistry, which were included in the examinations by which such licenses, diplomas or certificates were obtained, and in which a sufficiently high standard was reached:

- (a) High School Certificate of Grade XII of Nova Scotia.
- (b) Honour Diplomas, as issued by the Prince of Wales College, P. E. I.
- (c) Grammar School Licenses of New Brunswick.

Students who enter the second year by certificate, and are found to be deficient in English Composition, may be required to take English 1 as an additional class, without fee.

#### Admission to Advanced Standing

Students of other Universities may, on producing satisfactory certificates, be admitted *ad eundem statum* in this University, if they are found qualified to enter the classes proper to their years. But if their previous courses of study have not corresponded to the courses on which they propose to enter in this College, they may be required to take additional classes. In no case, however, shall a candidate admitted to advanced standing be admitted to a degree in course in this University until he has attended and passed in at least five classes or their equivalents.

Persons seeking admission to advanced standing must, in making application, submit certificates of good character and standing with duly certified statements of their Matriculation, and of the classes attended and passed with the grades attained by them; also a calendar or calendars of the institution from which they have come to such date as to show the courses which they have followed.

A graduate of a University approved by the Senate, who has received his degree in course, may be admitted *ad eundem gradum* in this University on producing satisfactory evidence of good character and academic standing and on payment of the required fee, provided the applicant is pursuing a course of study or research in this University, or is associated with the academic work of the University, or has similar qualifications.

A graduate of another University who is a candidate for a higher degree in this University must be admitted *ad eundem gradum* before proceeding to the higher degree.

<sup>\*</sup>See foot note, page 35. The mark required in Botany is 50 per cent.

## UNIVERSITY REGULATIONS

#### Academic Year

The Academic Year, or Session, will begin in the Faculties of Medicine and Dentistry on Thursday, August 26th, 1909; in the Faculty of Law, on Tuesday, August 31st; and in the Faculty of Arts and Science, on Thursday, September 7th. In Law it will end on Wednesday, March 2nd, 1910; and in all other Faculties, on Thursday, April 28th, 1910.

In the Faculty of Arts and Science the Session is divided into two terms, the Autumn term extending from the beginning of the Session to Friday of the week preceding Christmas day, and the Spring term, from the first Tuesday following New Year's day to the last Thursday in April.

#### Registration

All students of the University are required to enter their names in the Register annually, and pay the required fees before entering any class or taking any examination. After registration and payment of fees a student is given a registration certificate, on presentation of which to the professors and lecturers whose classes he proposes to attend, his name is entered on the class register.

#### Residence

All students are required to report their place of residence to the President on or before the day appointed in the University Almanac (October 15th).

All students not residing with relatives or friends are required to reside in approved lodging houses.

Persons who wish to take students as boarders must furnish the President with satisfactory references. A register is kept by the President, containing the names of those persons who have met this requirement; and, for the convenience of students, a list of the names and addresses of such persons will be posted on the notice-board in the College hall at the beginning of the session.

#### Church Attendance

All students not residing with parents or guardians are required to report to the President on or before the day appointed in the University Almanac (October 15) the churches which they intend to make their places of wor-

ship during the session. Intimation will be made to the various clergymen of the city of the names and addresses of the students who have chosen their respective places of worship.

### Discipline

The Senate may use all means deemed necessary for maintaining discipline. It is the duty of the Dean of the College to see that order is maintained within the buildings and on the premises of the College. Every professor or officer of the University is required to report to the 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 University.

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

### University Library

The library is open during the session on every weekday, except Saturday, from 10 A. M. till 1 P. M., and 3 to 5 P. M.

Books other than those on the lists of reserved books may be taken out by instructors or students and kept for two weeks. They should 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.

No more than two books may be borrowed at one time by a student not in an Honour course, nor more than four by a student taking Honours.

Students are allowed the privilege of borrowing books from the library for the period between the Spring and Autumn convocations. Students using this privilege are required to make a deposit of two dollars with the librarian. This deposit is returned when the books are replaced in the library.

### Conduct of Examinations

Candidates are forbidden to bring any book or manuscript into the Examination Hall except by direction of the Examiner, or to give or receive assistance, or to hold any communication with one another at the examinations. If a student violate this rule he shall be excluded from the

examination and such other penalty shall be imposed as the Senate may determine.

No candidate shall be permitted to enter the Examination Hall after the expiry of one half hour, or leave it before the expiry of one half hour, from the commencement of the examination. Any candidate leaving the examination room after the distribution of the examination papers in any subject, shall not be permitted to return during the course of that examination.

All assessors are expected to attend strictly to the supervision of the examinations while they are in the hall.

### Academic Costume

Undergraduates and general students attending more than one class are entitled to wear gowns at lectures and all meetings of the University. The forms prescribed are the Oxford undergraduate gown of black stuff with sleeves, and the black tunic with insole.

Graduates of the University shall be entitled to wear gowns of black stuff, and hoods. The distinctive part of the costume is the hood. The following are the kinds of hoods appointed for the various degrees:

- B. A.—Black stuff lined with white silk and bordered with white fur.
- M. A.—Black stuff lined with crimson silk.
- B. Sc.—Black stuff lined with white silk and bordered with scarlet silk.
- M. Sc.—Black stuff lined with scarlet silk.
- B. E.—Black stuff lined with white silk and bordered with dark green silk.
- B. Mus.—Black stuff lined with white silk and bordered with lavender silk.
- L. B.—Black stuff lined with white silk and bordered with gold coloured silk.
- M. D.—Black stuff lined with scarlet silk and bordered with white silk.
- L. D.—Black silk lined with purple silk.

Doctors of Law shall be entitled to wear gowns of black silk.

### 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 absentia*.

# Faculty of Arts and Science.

## THE PRESIDENT.

A. MACMECHAN, PH. D.	G. K. BUTLER, M. A.
H. MURRAY, B. A., LL. B.	JAMES CARMUTHERS.
E. MACKAY, PH. D.	A. McLEAN SINCLAIR.
A. S. MACKENZIE, PH. D.	J. H. THRELFALL, M. A.
H. F. JONES, PH. D.	H. D. BRUNT, B. A.
M. MACNEIL, M. A.	F. H. MCLEARN, B. E.
C. D. HOWE, S. R.	G. M. J. MACRAY, M. A., M. S.
R. MAGILL, M. A., PH. D.	W. S. LENNOX, B. A.
J. W. LOGAN, B. A.	J. MCG. STEWART.

*Secretary of the Faculty:* PROFESSOR H. P. JONES.

Correspondence should be addressed:

The Secretary, Faculty of Arts and Science,  
Dalhousie College, Halifax, N. S.

## 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.), and Bachelor of Music (B. Mus.). Preliminary courses in Engineering, extending over two years, are prescribed for students who look forward to subsequently completing a course in Civil, Mechanical, Electrical or Mining Engineering at the Nova Scotia Technical College, or other technical institution.

The course for the degree of Bachelor of Arts extends over four years. Candidates for the degree may either follow the ordinary course or, if they have obtained a sufficiently high standing in the work of the first two years, may then enter upon an Honour course. Bachelors of Arts of at least one year's standing, on submitting a satisfactory thesis, or completing an approved course of study, may be admitted to the degree of Master of Arts.

The course for the degree of Bachelor of Science also extends over four years. Honour courses in Science are open to candidates who have completed the work of the first two years with sufficient credit. Bachelors of Science of at least one year's standing who have completed after graduating an approved course of scientific study, or an

approved thesis embodying a scientific research, may be admitted to the degree of Master of Science.

The course of study for the degree of Bachelor of Music extends over three years.

Students who have passed the Senior Matriculation may complete the course for the degree of Bachelor of Arts or Bachelor of Science in three instead of four years.

## Ordinary Course for Bachelor of Arts

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

- (i) Three classes in either Latin or Greek.
- (ii) Two classes in one of the following languages: the classical language not selected as subject (i), or French, or German.
- (iii) Two classes in English, including Elocution.
- (iv) Two classes in Physics, or one in Geology, in which case read *eight for seven* in (vi).
- (v) One class in each of the following: History, Philosophy, Mathematics, Chemistry.
- (vi) Seven classes, so selected from the subjects in the following groups that not less than one shall be taken from each of the groups A. and B., and not more than five from any one group.

A.—Latin, Greek, New Testament Greek, Hebrew, French, German, English, Celtic.

B.—History, Constitutional History, Constitutional Law, Political Economy, Philosophy, Education.

C.—Mathematics, Astronomy, Physics, Chemistry, Geology, Mineralogy, Biology.

The details of subjects studied in the above classes will be found under Courses of Instruction.

## CHOICE OF ELECTIVE CLASSES.

In choosing their elective classes undergraduates, and general students who wish to appear at the Christmas and Spring examinations, should select classes whose examination hours do not conflict.

The first class in Latin, Greek, French or German, is not recognized as part of a course for a degree unless the 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 Friday, September 24th, 1909.

## AFFILIATED COURSES.

An undergraduate looking forward to the study of Divinity, Law, or Medicine, may offer one of the following groups in place of three of the electives required from groups A., B. and C. above:

For Divinity: D.—Hebrew, New Testament Greek, one being a \*double class.

For Law: E.—Constitutional History, Constitutional Law, Contracts.

For Medicine: F.—Biology, Histology, Physiology.

An undergraduate who selects one of these groups must then select from groups A., B. and C. above the remaining four electives required, so that of the seven electives chosen at least one shall be taken from each of the groups A. and E., and not more than five from any one group.

Undergraduates who have passed in the classes of group E. may complete a subsequent Law course in this University in two years. Students registered as undergraduates in Medicine, whose course in Arts has included Chemistry 1 and Physics 1 in addition to group F., and who have passed in Junior Anatomy and Practical Anatomy as additional subjects, may afterwards take a degree in Medicine in this University in four years; and if their Arts course has also included Chemistry 3, and they have taken Senior Anatomy as additional work, they may subsequently take the degree in Medicine in three years. Undergraduates who look forward to the study of Engineering may shorten a subsequent Engineering course by including in their Arts course as many as possible of the classes common to it and the Engineering course they have in view.

## ORDER OF CLASSES.

The classes of a course may be taken in any order subject to the regulations regarding Order of Classes (page 40). The following schedule in which the classes are arranged in years shows the order recommended; and it is upon this arrangement that the time tables of lectures and examinations are based:

## First Year

1. Latin 1, or Greek 1.
2. The classical language not selected as subject 1, or French 1, or German 1. (The candidate must pass Junior Matriculation in the foreign language selected.)

\*A double class is one in which at least five lectures a week are given.

3. English and \*Elocution.
4. Mathematics 1.
5. Chemistry 1 or 1A.

## Second Year

1. The language selected as subject 1 in the first year.
2. The language selected as subject 2 in the first year.
3. English 2.
4. Philosophy 1.
5. One class in any of the following subjects:—Mathematics, Mechanics, Chemistry, a language not already selected as subject 1 or 2.

## Third and Fourth Years

1. Latin 3, or Greek 3, or New Testament Greek (the language selected must have been taken during the first and second years).

2. History 1.

3. Physics 1 or Geology 1. (See page 21, iv).

- 4—10. Seven classes selected from the subjects in the following groups, so that not more than five shall be taken from any one group, and at least one from each of the groups A. and B.:

A.	B.	C.
Latin,	History,	Astronomy,
Greek,	Constitutional History,	Physics,
Hebrew,	Constitutional Law,	Chemistry,
French,	Political Economy,	Geology,
German,	Philosophy,	Biology,
Keltic,	Education,	Mathematics,
English.		

Or, one of the following groups, together with five classes from groups A., B. and C., selected in accordance with the conditions stated under Affiliated Courses.

D.	E.	F.
Hebrew,	Constitutional History,	Biology,
N. T. Greek.	Constitutional Law,	Histology,
		Physiology.

\*Students who matriculate into the second year must take Elocution with English 2 if they have not previously taken it.

†Students selecting Physics 1 in the third year must take Mechanics in the second year.

### Ordinary Course for Bachelor of Science

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

- (i) Three in German or French.
- (ii) Two in each of the following: English including Elocution, French or German.
- (iii) One in each of the following: Mathematics, Mechanics, Physics, Chemistry, Drawing.
- (iv) Either one class in Geology or Philosophy, or a second class in Mathematics or Chemistry.
- (v) Eight classes, so selected from the following groups that at least one class shall be chosen from each group and not more than four from groups B. and C. taken together:
  - A.—Mathematics, Physics, Chemistry, Geology, Mineralogy, Biology, Anatomy, Histology, Physiology.
  - B.—Philosophy, Education, History, Political Economy.
  - C.—English, French, German.

The details of subjects studied in the above classes will be found under Courses of Instruction.

In choosing their elective classes students should have regard to the restrictions stated under Choice of Elective Classes in the course for the degree of Bachelor of Arts (page 21).

Lists of the elective classes chosen must be submitted for approval not later than Friday, September 24th, 1909.

#### AFFILIATED COURSES.

Undergraduates who look forward to the study of Engineering may complete a subsequent course in Engineering in two years after the completion of the Science course, provided they so select the classes in their Science course as to include the classes common to it and one of the Preliminary courses in Engineering, and take Surveying and Shop-work as additional classes.

Students who have registered as undergraduates in Medicine may complete their course in Medicine in four years after the completion of their Science course by taking

the following classes as part of their course: Physics 1, Chemistry 1, Biology (Botany and Zoology), Junior Anatomy and Practical Anatomy. Such students are recommended to take the class in Histology also, in order to avoid conflict of hours in the time table of their subsequent course in Medicine.

Students registered as undergraduates in Medicine whose course in Science has included Chemistry 3, Histology and Physiology, in addition to the classes in Physics, Chemistry, Biology and Anatomy specified above, and who have taken Senior Anatomy (in the Faculty of Medicine) as an additional subject, may complete their course in Medicine in three years after completing the Science course.

#### ORDER OF CLASSES.

The classes of the above course may be taken in any order subject to the regulations regarding Order of Classes (page 40). The following schedule in which the classes are arranged in years shows the order in which it is recommended that they be taken. The time table of lectures and dates of examinations are based upon this arrangement.

##### First Year

1. \*French 1.
2. German 1.
3. English 1 and †Elocution.
4. Mathematics 1.
5. Chemistry 1A.
6. Drawing 1, or Freehand Drawing.

##### Second Year

1. French.
2. German.
3. English 2.
4. Mechanics.
5. One class in any of the following subjects:—Mathematics, Chemistry, Geology or Philosophy.

\*Students who have selected French as one of the languages for Matriculation must take French 1, and those who have selected German must take German 1. See page 23.  
See footnote page 23.

## Third and Fourth Years

1. French or German.

2. Physics.

**3—10.** Eight single classes, or their equivalents, selected from the subjects in the following groups, so that at least one class shall be chosen from each group, and not more than four from groups B. and C. taken together:

A.	B.	C.
Mathematics,	Astronomy, Political Economy, English,	
Physics,	Biology, Philosophy, French,	
Chemistry,	Anatomy, Education, German,	
Geology,	Histology,	
Mineralogy.	Physiology.	

## HONOUR COURSES

An undergraduate who has completed the work recommended for the first and second years of the ordinary Arts and 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. For admission to an Honour course an undergraduate must obtain the permission of the Faculty which will, in ordinary circumstances, only be granted to students who have attained a first-class standing in these classes of the second year corresponding to the subjects of the Honour course selected, as well as a satisfactory standing in the other classes recommended for that year.

Honour courses are provided in the following departments:—(i) Classics, (ii) Latin and English, (iii) Greek and English, (iv) English and English History, (v) Philosophy, (vi) Pure and Applied Mathematics, (vii) Mathematics and Physics, (viii) Chemistry and Chemical Physics. 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, namely, Philosophy, Pure and Applied Mathematics, Mathematics and Physics, Chemistry and Chemical Physics.

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

## HONOUR COURSES.

these classes. He may select the remaining classes of his course, if he is an undergraduate in Arts, from any of the subjects named in groups A. to C. of the ordinary course in Arts, and if an undergraduate in Science, from any of the subjects in groups A. to C. 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.

## I. CLASSICS

Undergraduates taking the Honour course in Classics are required to take the ordinary and advanced classes of the third and fourth years in Latin and Greek and in addition two elective classes. They shall be examined in the following subjects:

## LATIN.

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

Plautus: *Captivi*, *Miles Gloriosus*. Terence: *Adelphi*, *Phormio*, *Vergil*: *Georgics*, I., IV. Horace: *Epiptis*, I., II.; *Arte Poetica*. Juvenal: *Satires*, I., VII., VIII., XIV. Cicero: *De Oratore*, I; *Philippes*, I., II.; *Pro Caelio*. Livy: XXI., XXII., Tacitus: *Annae*, I., II.; Agricola. Pliny: *Letters*, Bks. I.-III.

II. COMPOSITION.—Translation from English into Latin prose.

III. LITERATURE.—A general knowledge of the history of Latin literature, with a more minute knowledge of the lives and writings of the authors prescribed. (Maskall, *Latin Literature*; Craftwell, *History of Roman Literature*).

IV. TRANSLATION AT SIGHT.—Passages from Latin books not prescribed will be set.

## GREEK.

I. Aeschylus: *Eumenides*, *Proscenethus Tinctus*. Sophocles: *Oedipus Coloneus*, *Philoctetes*. Aristophanes: *Frogs*, *Knight*. Homer: *Odyssey*, V.-VIII. Thucydides: II., III. Plato: *Republic*, I.-IV. Demosthenes: *De Corone*, *Ariatote*: *Poetics*.

II. COMPOSITION.—Translation from English into Greek prose.

III. 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, *Priests of Greek Literature*; Jebb, *Introduction to Homer*; Mahaffy, *History of Greek Literature*; Haigh, *Athenian Theatre*).

IV. TRANSLATION AT SIGHT.—Passages from Greek books not prescribed will be set.

**II. LATIN AND ENGLISH**

Undergraduates taking the Honour course in Latin and English are required to take the ordinary and advanced classes of the third and fourth years in Latin and English and in addition two elective classes. They shall be examined in the following subjects:

**LATIN.**

The Latin subjects prescribed for the Honour course in Classics.

**ENGLISH.**

The historical development of the language and literature to the year 1399. Bright, *Anglo-Saxon Reader*; Siervos, G. E. Grossauer (trans. by Cook); P. H. Morris, *Specimens of Early English*; L. Emerson, *History of the English Language*; Sight reading of Old English.

History of the Elizabethan and Early Stuart Literature—Sidney: *Apology 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*; Johnson: *The Alchemist*; Every Man in His Humor; Beaumont and Fletcher: *Philaster*; *The Knight of the Burning Pestle*; Massinger: *A New Way to Pay Old Debts*; Webster: *The Duchess of Malfi*; Shakspere: *Titus Andronicus*; Romeo and Juliet; Julius Caesar; Hamlet; Othello; Lear; Muchad, Antony and Cleopatra; Coriolanus; Timon; *The Two Noble Kinsmen*.

**Books Recommended:** Sidney, Cook's edition (Ginn & Co.); Hooker, Church (Clarendon Press); Bacon; *Advancement*, Wright (Clar. Press); Greene (Bright); G. T. Serjeant, *History of Literature*; Tom Brisk; Shakspeare, Brooks (Clarendon Press); "mermaid," "Temple Dramatists," "Belle Lettres," and Arthur editions of Elizabethan works.

In awarding Honours, the thesis for Distinction in English 4 (D) will be taken into consideration.

**III. GREEK AND ENGLISH**

Undergraduates taking the Honour Course in Greek and English are required to take the ordinary and advanced classes of the third and fourth years in Greek and English, and in addition two elective classes. They shall be examined in the following subjects:

**GREEK.**

The Greek subjects prescribed for the Honour course in Classics.

**ENGLISH.**

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

**IV. ENGLISH AND ENGLISH HISTORY**

Undergraduates taking the Honour course in English and English History are required to take the ordinary and

**HONOUR COURSES.**

advanced classes of the third and fourth years in English, and History 1, 2 and 3, and in addition three elective classes. They shall be examined in the following subjects:

**ENGLISH.**

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

**ENGLISH HISTORY.**

English History from A. D. 1066-1689.

**Books Recommended:** Green: *History of the English People*, Vol. II; Liggett: *History of England*, Vols. 5-12; Hallam: *Constitutional History of England*; Ranke: *History of England*; S. R. Gardiner's works on this period; Clarendon: *History of the Great Rebellion*; Masson: *Life of Milton*; Motteux: *Life of Cromwell*; Froude: *Life of Eliz.*; Bayne: *Chief Events in the Puritan Revolution*.

**V. PHILOSOPHY**

Undergraduates taking the Honour course in Philosophy are required in the third and fourth years of their course to take the ordinary and advanced classes in Philosophy, and in addition, a sufficient number of electives to make ten classes in all. They are recommended to take German. They shall be examined in the following subjects:

I. Weber, *History of Philosophy*; Barnet, *Early Greek Philosophy*; K. Fischer, *Descartes and His School*.

II. Greek Philosophy from the Sophists to Aristotle. Plato. Metaphysics, Book I, Ethics (with Muirhead's Introduction).

III. Modern Philosophy from Locke to Kant. Fraser, *Prolegomena to Locke*; Seth, *Scottish Philosophy*; Royce, *Modern Philosophy*, Part I.

A knowledge of Locke, Berkeley, Hume and Reid, as studied in the Class on Modern Philosophy is presupposed.

IV. Kant, *The Critiques of Pure Reason, of Practical Reason and of Judgment* (as in Watson's Selections); Hegel, *Logic*; Chaps. I-VI (Wallace's Translation); Seth, *Mechanism and Personalism*.

**V. Any three of the following:**

- (1) Principles of Logic. Bosanquet, *Logic*.
- (2) Principles of Psychology. James, *Principles of Psychology*.
- (3) Principles of Ethics. Green, *Prudgessness to Ethics*; Hobhouse, *Morals in Evolution*.
- (4) Principles of Metaphysics. Taylor, *Metaphysics*; Sturt, *Idola Theatre*; James, *Pragmatism*.
- (5) Philosophy of Religion. Caird, E., *Evolution of Religion*; McTaggart, *Some Dogmas of Religion*.

## VI. Any one of the following:

- (1) History of Philosophy from Descartes to Leibnitz; *Descartes, Method, Meditations and Principles*; *Spinosa, Joachim, Ethics of Spinoza*; Leibnitz, *Metaphysics* (with Latta's Introduction).
- (2) History of Philosophy from Kant to Hegel. Hegel, *Logic* (Wallace's Translation); *Seth, Hegelianism and Personality*, and *From Kant to Hegel*; McTaggart, *Studies in Hegelian Dialectic and Cosmology*.
- (3) History of Philosophy from Hume to Spencer. Comte, *Positive Philosophy*; Mill, as in Watson's Selection; Spencer, *First Principles*; Mill, Comte and Positivism; Douglas, *John Stuart Mill*; Watson, *An Outline of Philosophy*; Stephen, *English Utilitarianism*.
- (4) History of Ethics in Great Britain. Selby-Bigge, *British Moralists*. Douglas, *Ethics of Mill*; Spencer, *Data of Ethics*; Green, *Prolegomena to Ethics*. Sidgwick, *History of Ethics*, Ch. IV. Watson, *Hegelian Theories*, Chaps. IV-XI; Sorley, *Ethics of Naturalism. Courtesy, Construtive Ethics*, Pt. II, Bk. I; Schurman, *Ethical Import of Darwinism*; Albee, *Utilitarianism*; Sidgwick, *Martineau, Spencer and Green*.

## VI. PURE AND APPLIED MATHEMATICS

Undergraduates taking the Honour course in Pure and Applied Mathematics are recommended to take French or German in their first and second years, and Physics I, 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 four Advanced classes in Mathematics, Physics, 2, 3 and 4 and three electives. The standard of attainment shown in the examinations in Physics 2 and 3 in both years will be considered in estimating the results of the final examinations of the Honour course.

The subjects of examination shall be as follows:—

## 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.

## APPLIED MATHEMATICS.

Kinematics and Dynamics of Particles, rigid bodies, flexible strings, elastic solids and fluids,—those portions of these subjects which are treated in Physics 4 or may be appointed for private reading in the course of the work of that class, the mode of treatment being by application of Analytical Geometry and the Differential and Integral Calculus.

## VII. MATHEMATICS AND PHYSICS.

Undergraduates taking the Honour course in Mathematics and Physics are recommended to take French or German in their first and second years and Mathematics 3 and 4 and Physics I 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 year one Advanced class in Mathematics, Physics 2 or 3, Physics 6, and Chemistry 2; and in their fourth year one Advanced class in Mathematics, Physics 3 or 2, and Physics 4, 5, 7 and 8. The standard of attainment shown in the examinations in Physics 2 and 3 in both years will be considered in estimating the results of the final examinations of the Honour course.

Those who aim at High Honours will be expected either to prepare a thesis embodying the results of a short original investigation, or to exhibit a high standard of excellence in the more mathematical parts of the course.

The subjects of examinations shall be as follows:—

1. MATHEMATICS.—Analytic Geometry and Calculus as in Mathematics 3 and 4, and any two of the advanced courses in Pure Mathematics.

2. APPLIED MATHEMATICS.—As outlined in the Honour Course in Pure and Applied Mathematics.

3. GENERAL PHYSICS.—A systematic general knowledge of all sections of the subject, as, e.g., in Watson's *Text-book of Physics* (Longmans & Co.) with a more detailed knowledge of special sections illustrating the use of theory in research, such as the kinetic theory of gases, the theory of solutions and of electrolysis, and the wave theory of light. These requirements are based on the courses called Physics 2, 3, and 5.

4. EXPERIMENTAL METHODS.—A general acquaintance with the methods applicable in different classes of investigation, as in Glaisher and Shaw's *Practical Physics* (Longmans, Green & Co.), Ostwald's *Physico-Chemical Measurements* (Macmillan & Co.). The experimental methods of the following memoirs:—Joule's papers on the determination of the Mechanical Equivalent of Heat, contained in his *Scientific Papers* (Taylor & Francis), vol. I, pp. 123, 172, 298, 542, 632; Faraday's *Experimental Researches in Electricity* (Quaritch), vol. I, Series III, iv, v, vi, viii; Lord Kelvin's papers on the Electrodynamical Qualities of Metals, in his *Mathematical and Physical Papers*, Vol. II, (Camb. Univ. Press). The treatment of observations and the discussion of the accuracy of experimental results, as in Holman's *Precision of Measurements* (John Wiley & Sons) supplemented by the more purely physical chapters of Merriman's *Text-book of Least Squares* (J. Wiley & Sons).

**VIII. CHEMISTRY AND CHEMICAL PHYSICS**

Undergraduates taking the Honour course in Chemistry and Chemical Physics are recommended to select German as one of the subjects of their first and second years. In order to complete the course in four years it is necessary for them to take Mathematics 1, 2, 3, 4, Mechanics, Physics 1, Chemistry 1A and Chemistry 2 in their first and second years; and Physics 2, 3, 5 and 6, Chemistry 5, 6, 7 and 8, in their 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 special attainments in some branch of laboratory work, as the preparation of organic compounds, or the analysis of iron and steel, of ores, or of water. In estimating the results in the final examination of the Honour course, the standard of attainment shown in the following Physics and Chemistry classes will be considered:—Physics 2 and 3 (Distinction courses), Physics 6, and Chemistry 7 and 8.

Candidates shall be examined on the following subjects:

1. **GENERAL CHEMISTRY.**—The principles of Chemistry as in Ostwald's *Principles of Inorganic Chemistry*, translated by Findlay (Macmillan & Co.).

2. **ORGANIC CHEMISTRY.**—The occurrence, general modes of formation, physical properties, behavior and constitution of the principal compounds of carbon as in Berthelot's *Organic Chemistry*, translated by McGowan (Blackie & Son, Van Nostrand); and some present day problems of Organic Chemistry as in Lehmkuhl's *Spirit of Organic Chemistry* (The Macmillan Co.).

3. **HISTORY OF CHEMISTRY.**—Outlines of the history of Chemistry. Candidates will be expected to have an acquaintance with the following: Tikhon, *Short History of the Progress of Scientific Chemistry* (Longmans, Green & Co.); Schorlemmer, *Rise and Development of Organic Chemistry* (Macmillan & Co.); Roscoe, Dalton and the Rise of Modern Chemistry (Macmillan & Co.); Thorpe, *Essays in Historical Chemistry* (Macmillan & Co.). Candidates will also be expected to have read the following memoirs:—Graham, *Researches on the Acetates, 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).

4. **LABORATORY METHODS.**—The principles and methods of qualitative and quantitative analysis and the practical details of laboratory operations as in Talbot's *Quantitative Analysis* (The Macmillan Co.), Ostwald's *Foundations of Analytical Chemistry* (Macmillan & Co.), and in typical exercises selected from Cohen's *Practical Organic Chemistry for Advanced Students*, Gatterman's *Practical Methods of Organic Chemistry*, translated by Schober, and Langfield's *Inorganic Chemical Preparations* (The Macmillan Co.).

The above requirements in Chemistry are in large part based on the work of the classes known as Chemistry 5, 6, 7, and 8.

5. **CHEMICAL PHYSICS.**—Those sections of Physics which have an intimate bearing upon chemical research, viz., the properties of gases and liquids, including the kinetic theory of gases and the theory of solutions, the theory of heat, electrolysis, and the wave theory of light.—Physical experimental methods which are applicable in chemical research, as in Ostwald's *Physico-Chemical Measurements* (Macmillan & Co.).—The discussion of the degree of accuracy of experimental results, as in Holman's *Precision of Measurements* (J. Wiley & Sons).

A large part of the requirements in Chemical Physics is based on the work of the classes known as Physics 2, 3, and 5.

**Degrees with Distinction**

The degree of Bachelor of Arts or Science with Distinction will be conferred on undergraduates for special excellence shown in the classes recommended to be taken in the second, third and fourth years of the ordinary course. The award of such degree is based upon the Class Distinctions (page 41) 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. Distinctions gained in recognized classes of other Faculties of the University are taken into consideration, but not those gained in other colleges, though such classes may be recognized for the degree.

Candidates for Distinction are advised to consult the Faculty at the beginning of the third and fourth years with respect to the selection of classes.

**Degrees with Honours**

The Bachelor of Arts or Bachelor of Science degree with Honours in any one or more of the departments of study in which Honour courses are provided, will be conferred on undergraduates for special excellence shown in the subjects of such courses.

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.

### Degree of Master of Arts

The degree of Master of Arts will be conferred on a Bachelor of Arts of this University of at least one year's standing and of good character, either on his submitting to the Faculty a satisfactory thesis embodying the results of original research in some literary, philosophical or scientific subject, or on his passing his examination in a course of study, appointed or approved by the Faculty, of at least the extent represented by the academic work of one year of the Arts course. In the latter case, no fixed courses of study are laid down, the intention being to encourage graduates to prosecute advanced courses of study either at this or at any other College, or by private reading, and to adapt the courses to their individual tastes and capacities. But no course of study shall be approved unless it is confined either to one department of study or to closely related departments.

Theses must be sent to the Secretary of the Faculty on or before the first day of March. Examinations shall be held ordinarily at the time of the Spring Examinations; but in special circumstances, they may be held in Autumn. Candidates must give one month's notice to the Secretary of the Faculty of Arts and Science of their intention to appear for examination.

### Degree of Master of Science

The degree of Master of Science may be conferred on a Bachelor of Science of at least one year's standing and of good character, either on his submitting to the Faculty a satisfactory thesis embodying the results of original research in some department of pure or applied science, or on his passing an examination in a course of scientific study, appointed or approved by the Faculty, of about the extent represented by the academic work of one year of the Science course. In the latter case no fixed courses of study are laid down, the intention being to encourage graduates to prosecute advanced courses of study, either at this or at any other College, or by private reading, and to adapt the course to their individual tastes and capacities; but no course of study shall be approved unless it is confined either to one department of science, or to closely related departments.

Theses must be sent to the Secretary of the Faculty on or before the first day of March. 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 Arts and Science of their intention to appear for examination.

### Degree of Bachelor of Music

The course of study for the degree of Bachelor of Music may be completed in three years, and includes, besides Acoustics (Physics 1), the following subjects:—English, Harmony, Counterpoint, Canon and Fugue, Form, and History of Music, for two years in each case; Instrumentation and Analysis of Scores, for one year.

Candidates are required to pass in French and German in the Junior Matriculation examination, and to satisfy the examiners before proceeding to the final examination for the degree that they have a good reading knowledge of these languages.

Besides attending the courses of instruction in the above subjects given in this University or in recognized institutions, performing the required class exercises and passing the examinations, candidates are also required to compose the exercises specified below, and to give evidence of their ability as musical performers by playing before one or more of the examiners, on the pianoforte or organ, the pieces of music named below.

#### SCHEDULE OF CLASSES

The classes in the above subjects may, if desired, be extended over more than three years. Students are recommended to take them in the following order:—

##### First Year

1. Harmony in not more than four parts. Analysis.
2. Strict Counterpoint in two parts.
3. History of Music, 1600 to 1750.
4. Acoustics.
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, in two parts.
4. Canon and Imitation, in two parts.
5. Fugue as far as subject and answer.
6. History of Music from 1750 to the present time.
7. English 2.

##### Third Year

1. Strict and Free Counterpoint, in not more than five parts.
2. Canon and Imitation, in two, three, and four parts.
3. Double Counterpoint in the octave, tenth, twelfth, and fifteenth.

4. Strict and Free Fugue in not more than five points.
5. Analysis of Form.
6. Elements of Orchestration.
7. Analysis of certain prescribed scores.

#### EXERCISES

The following exercises are to be composed by the candidate:  
 (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.

#### PRACTICE OF MUSIC

The final examination in the Practice of Music shall include one of the following groups:

##### FOR THE PIANOFORTE.

Prelude and Fugue in E minor .....	Mendelssohn.
C. major Sonata (Waldeinsamkeit).....	Beethoven.
A ♭ major Polonaise .....	Chopin.
D ♭ major Nocturne .....	Chopin.
Concert-Rondo No. 1 (Waldesrauschen) .....	Liszt.
Rhapsodie No. 12.....	Liszt.

##### FOR THE ORGAN.

Prelude and Fugue in E minor .....	Bach.
Sonata in D minor (solo form) .....	Mozart.
Air with Variations and Fugato in A .....	Mozart.
Third Organ Sonata.....	Mendelssohn.

##### FOR THE VIOLIN.

Sonatas for Piano and Violin .....	Rode.
Caprices .....	Gossec.
Studies .....	Bach, Spohr, Bruck, Mendelssohn and Beethoven.
Concertos .....	Bach.
Sonatas for Violin alone .....	Begleitkonz.

The examinations will take place at such times as the Faculty may hereafter appoint. Applications accompanied by the proper fees should be made to the Secretary of the Faculty of Arts and Science at least one month before the time at which the candidates expect to be examined. The fee for the First Year examination is \$5.00; for the Second Year, \$10; for the Third Year, \$15. For a Supplementary examination the fee is \$5.00 for each paper, provided the total fee for the Supplements for any one year does not exceed the regular fee for that year.

#### Certificate in Teaching

This Certificate will be granted to candidates on the following conditions:

1. They must have received the degree of Bachelor of Arts or Science from this or some recognized University before the certificate is granted. Candidates, however, may have qualified for the certificate before attaining to the Bachelor's degree.

2. They must have spent, at least, 100 hours in observation and practice under approved supervision, and must have taught two or more lessons in a manner satisfactory to Examiners appointed or approved by this University.

3. They are required to attend the courses in the Science, History and Practice of Education given in this University. Candidates, however, who have taught and whose work has been favorably reported upon by a recognized authority, or who have taken a course in a Normal School, will not be required to take a course in Practice. Such candidates may be exempted from the second requirement mentioned above.

4. They must pass examinations in the following—

James, *Talks to Teachers*; King, *Development of the Child*; Hall, *Youth*; Pitch, *Lectures on Teaching*; Adams, *Primer on Teaching*; Bagley, *The Educational Process, and Classroom Management*; Laurie, *Language and Linguistic Method*; Adams, *Herbartian Psychology*; Plato, *Republic*, as in Bouquett's Selections; Burnet, Aristotle on Education; Ascham, *Scholemaster*; Milton, *Treatise on Education*; Locke, *Thoughts on Education*; Spencer, *Education*; Thring, *Theory and Practice of Teaching*; Laurie, *Educational Opinion since the Renaissance*; Russell, *German Secondary Schools*. School Systems in Canada and United States.

Candidates may, however, be exempted from such parts of the above examination as are included in the class examinations passed by them.

#### Preliminary Courses in Engineering

The following preliminary courses are prescribed for students who look forward to completing courses in Civil, Electrical, Mechanical or Mining Engineering in the Nova Scotia Technical College or other technical institution. These courses correspond to the requirements prescribed for admission to the courses for a degree in Engineering in the Nova Scotia Technical College. They extend over two years and cover the work usually included in the first two years of a four years' course in the above branches of Engineering. Attendance for three weeks on Engineering Camp is required in all courses between the first and second years. An announcement with regard to the shop work required will be made at the beginning of the session.

In the following schedule the time required for the work of each class in lecture-room and laboratory or draw-

ing-room is expressed in hours per week for the session. Details of the class-work and hours of meeting of classes will be found under Course of Instruction (pp. 51 et seq.).

**FIRST YEAR****CIVIL, ELECTRICAL AND MECHANICAL ENGINEERING.**

	LECTURE HOURS.	LABORATORY HOURS.	TUTOR HOURS.
Mathematics 1	3		
Mathematics 2	3		
Mechanics	2		
Chemistry 1A (General Chemistry)	3	4	
English 1	2		
French 1 or	2		
German 1	2		
Drawing 1 (Mechanical Drawing)	0	8	
Drawing 2 (Descriptive Geometry)	1	2	
Shop-work			
<i>Engineering Camp.</i>			

**MINING ENGINEERING.**

	LECTURE HOURS.	LABORATORY HOURS.	TUTOR HOURS.
Mathematics 1	3		
Mathematics 2	3		
Mechanics	2		
Chemistry 1A (General Chemistry)	3	4	
English 1	2		
French 1 or	2		
German 1	2		
Drawing 1 (Mechanical Drawing)	0	8	
Shop-work			
<i>Engineering Camp.</i>			

**SECOND YEAR****CIVIL ENGINEERING.**

	LECTURE HOURS.	LABORATORY HOURS.	TUTOR HOURS.
Mathematics 3 (Analytical Geometry)	3		
Mathematics 4 (Calculus)	3		
Physics 1 (General Physics)	3		
Physics 6 (Laboratory)	0	5	
Chemistry 4 (Qualitative Analysis)	1	5	
Geology 2 (General Geology)	2	4	
Mineralogy			4
English 2			3
Drawing 3		0	3
Surveying			1
Shop-work			2
<i>Engineering Camp.</i>			

**GENERAL REGULATIONS.****ELECTRICAL AND MECHANICAL ENGINEERING.**

	LECTURE HOURS.	LABORATORY HOURS.	TUTOR HOURS.
Mathematics 3 (Analytical Geometry)		3	
Mathematics 4 (Calculus)		3	
Physics 1 (General Physics)		3	
Physics 6 (Laboratory)	0	5	
Chemistry 4 (Qualitative Analysis)	1	5	
English 2		3	
Drawing 3 (Machine Design)	0	3	
Surveying		1	2
Shop-work			

**MINING ENGINEERING.**

	LECTURE HOURS.	LABORATORY HOURS.	TUTOR HOURS.
Mathematics 3 (Analytical Geometry)		3	
Mathematics 4 (Calculus)		3	
Physics 1 (General Physics)		3	
Physics 6 (Laboratory)	0	5	
Chemistry 4 (Qualitative Analysis)	1	5	
Geology 2 (General Geology)	2	4	
Mineralogy		2	4
English 2		3	
Drawing 3		0	3
Surveying		1	2
Shop-work			

**General Regulations****MATRICULATION.**

Candidates for a degree or certificate must pass the Junior or Senior Matriculation (pp. 10, 13), and they are recommended to do so before entering upon any of the prescribed courses of study. Only those classes which a student attends as an undergraduate or matriculant are recognized as qualifying for a degree or certificate.

A matriculant pursuing a course for a degree in Arts, Science or Music must complete his Matriculation before entering the classes proper to the \*third year of his course; and no class which he may subsequently attend as a matriculant is recognized as qualifying for a degree.

A matriculant in Engineering must complete his Matriculation before entering the classes proper to the second year of his course.

\*For the purpose of this regulation attendance on five single classes or equivalents shall be regarded as constituting a year of attendance.

## ATTENDANCE.

Candidates for a degree or certificate are required to attend the classes of their prescribed course regularly and punctually. Attendance is recorded in each class immediately before the work of the class is begun, and the record is not amended in the case of students entering thereafter unless satisfactory reasons are assigned. A student's attendance on a given class is not under ordinary circumstances regarded as regular, unless he has attended at least nine-tenths of the lectures or other meetings of the class.

A student whose attendance on any class is irregular may be excluded from the Christmas and Spring examinations in that class, and in such case his attendance is not recognized as qualifying for a degree.

## CLASS-WORK.

Candidates, in order that their class-work may be recognized as qualifying for a degree or certificate, must conform to the following requirements:—

1. They must appear at all examinations, prepare such essays, exercises, reports, etc., as may be prescribed, and in the case of a class involving field or laboratory work, complete such work satisfactorily. Failure to meet these requirements in any class may involve exclusion from the Christmas and Spring examinations in that class.

2. 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.

3. Candidates taking affiliated courses must, in the case of classes taken in other Faculties, conform to the regulations of such Faculty and must secure a position on the Pass list in accordance with such regulations.

## ORDER OF CLASSES.

The order in which the classes of a course may be taken is subject to the following provisions:—

1. In any one subject classes are to be taken in the order of their advancement.

2. The class or classes specified under Courses of Instruction (pp. 51, et seq.) as preliminary to a given class are to be taken before that class.

3. A student who has failed to pass in an elementary or preliminary class in any subject shall not be permitted to enter a more advanced class requiring that subject, unless he has taken the Supplementary or a Special examination in such preliminary class. A student who has appeared at, but has failed to pass the examination, may enter the more advanced class only by permission of the Faculty. Such permission will be granted only to those whose standing seems to justify it; and if granted, may be withdrawn if the instructor of such advanced class report unfavorably upon the work done by the student so admitted.

## Examinations

## SESSIONAL AND CLASS EXAMINATIONS.

In all classes other than purely laboratory classes, two examinations, at least, are held,—the Christmas examination immediately before the Christmas vacation, and the Spring examination, after the close of lectures in the Spring. In some classes other examinations may be held, at dates appointed by the instructor. At the Spring examination questions may be set on any subject treated during the session. The dates of examination are arranged so as to enable students who follow the order of classes recommended above (pp. 22, 25) to appear at all the examinations of the classes they may be attending.

## DISTINCTION EXAMINATIONS AND CLASS DISTINCTION.

Students who attain a certain standard of excellence in the work of a class are awarded Distinction in that class. In some classes, in addition to the ordinary work required for the attainment of a position on the Pass list, additional work, consisting of private reading, essays, reports, field or laboratory work, may be prescribed for students who aim at Class Distinction. In such classes special 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. In all other classes the award is made upon the standard reached in the ordinary class-work.

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 appearing on the Pass list are arranged in order of merit. In the Distinction lists names are arranged in alphabetical order in each grade.

## SUPPLEMENTARY AND SPECIAL EXAMINATIONS.

A student who fails to secure a position on the Pass list in any class, but who has otherwise completed his class-work, shall 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 Autumn or Spring term.

The following are the times at which Special examinations may be held:—

- (a) During the Supplementary examinations.
- (b) Within one week following the first day of lectures after the Christmas vacation.
- (c) During the first week of November (for theological students 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 the date set for such notice in the University Almanac, the fee to be remitted with the notice. For fees for Supplementary and Special examinations, see p. 48.

## 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).*

## GRADUATION PRIZES.

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 Pure and Applied Mathematics, provided he attain a standard considerably above that required for High Honours.

\*Students who have failed to pass in any class should carefully note that any examination taken subsequent to the Supplementary examination held in the September of the next session of their attendance is a Special Examination.

UNIVERSITY MEDALS will be awarded on graduation to students who take High Honours in other departments than Mathematics, on the same conditions as the Sir William Young Gold Medal.

THE AVERY PRIZE.—This prize, the interest of \$500, bequeathed for this purpose by the late J. F. Avery, M. D., will be awarded on graduation to the student standing highest among those graduating with Distinction.

## UNDERGRADUATE PRIZES.

NORTH BRITISH SOCIETY BURSARY.—A Bursary of the annual value of \$60, founded by the North British Society of Halifax, will be awarded biennially. Candidates must be undergraduates who are just completing \*two years of residence, and must be eligible at the proper age 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: Latin 2, Greek 2, French 2, German 2, English 2, Philosophy 1, Mechanics, Physics 1, Chemistry 2, Mathematics 3, Mathematics 4. It is tenable for two years, namely, during the third and fourth years of residence. The next award will be made in April, 1910.

THE WAVERLEY PRIZE.—This prize, the interest of an endowment of \$1000, will be awarded annually to the student just completing \*two years of residence and standing highest at the examinations in Mathematics 3 and 4, the winner of the North British Society Bursary being excluded.

## ENTRANCE SCHOLARSHIPS.

SIR WILLIAM YOUNG AND PROFESSOR'S SCHOLARSHIPS.—These scholarships are each of the value of Fifty Dollars, and awarded to qualified students entering one of the courses in Arts, Sciences or Engineering, leading to a degree. In order to qualify for a scholarship a student must satisfy the requirements for Matriculation, either by passing the Matriculation examination or by presenting a certificate accepted as an equivalent. The award is made on the recommendation of one of the following academies or schools. In making a recommendation the staff is required to have regard to the candidate's standing only in the subjects required for matriculation. Should an academy not be prepared to make a nomination at the time

\*For students who have passed the Senior Matriculation, read see for two.

appointed, it may transfer its privilege to the next year in which it has no nomination. Where one scholarship is assigned to two academies and neither nominates, the right to nominate may be transferred to a later date.

The privilege of recommending a scholar in 1909, and probably in 1910, has been granted to Prince of Wales College, Picton Academy, Truro Academy, Halifax Academy, Sydney Academy, and the New Glasgow High School. To the following the privilege is also given:—In 1909, Amherst Academy, Lunenburg Academy, North Sydney High School, Kentville Academy, Annapolis or Digby Academy, Bridgewater or Parrsboro High School, Shelburne or Liverpool Academy, Guysborough Academy, Stellarton or Oxford High School. In 1910, Yarmouth Academy, Windsor Academy. This list will be revised each year. When a nomination is offered to one of two institutions, the candidate standing the highest will be appointed.

**THE MACKENZIE BURSARY.**—The Mackenzie Bursary, of the value of Two Hundred Dollars, will be offered annually in accordance with the following condition of bequest:—Competitors of the name of Mackenzie, Maclean or Fraser, who obtain Distinction, will be given the preference. Should no candidate of the name of Mackenzie, Maclean or Fraser obtain Distinction, the Bursary will be awarded to the candidate standing highest among those obtaining Distinction.

The Bursary is payable in four annual instalments; and the payment of any instalment is conditional on the bursar's attending the classes required for undergraduates, and making satisfactory progress therein.

#### THE RHODES SCHOLARSHIPS.

The scholarships, established by the late Right Hon. Cecil J. Rhodes for male students, are of the annual value of £300, and are tenable for three consecutive academic years. The holders of these scholarships are required to continue their studies at the University of Oxford.

The election of scholars in Canada takes place each year during the month of January. The scholars begin residence at Oxford in October of the year for which they are elected.

In this Province it has been determined that nominations to the scholarships shall be made by the chartered Universities and Colleges in the following order:—

1904.....	Dalhousie,	1909.....	Kings.
1905.....	Acadia,	1910.....	Dalhousie.
1906.....	Dalhousie.	1911.....	St. Francis Xavier.
1907.....	Acadia.	1912.....	Acadia.
1908.....	Dalhousie.		

Where Universities make appointments the Trustees require the final decision to be made through a Committee of Selection consisting of the President or Principal and four members elected by the Faculty of the University.

The conditions of eligibility for a Canadian Scholarship, according to a memorandum issued by the Trustees, are as follows:—

- Candidates shall be British subjects, and unmarried. They shall have passed their nineteenth, but not have passed their twenty-fifth birthday, on October 1st of the year for which they are elected.
- An elected Scholar shall have reached at least the end of his sophomore or second year's work in some recognized degree-granting University or College of Canada.
- Candidates may elect whether they will apply for the Scholarship of the Province in which they have acquired any considerable part of their educational qualification, or for that of the Province in which they have their ordinary private domicile, home or residence. They shall be prepared to present themselves for examination or election in the Province they select. No candidates may compete in more than one Province, either in the same or in successive years.
- Only candidates who have passed an equivalent to the Oxford Responsions Examination, or those who are exempted from Responsions by the Colonial Universities' Statute, are eligible for election.

**NOTE.**—Undergraduates of this University who have taken a full course for two years, including Greek, are admitted to advanced standing at Oxford, and are exempted from Responsions.

In any doubtful cases of eligibility the decision of the Committee of Selection shall be final.

The following have been elected by this University:—

1904.—GILBERT S. STAIRS, B. A.
1906.—ARTHUR MOXON, B. A.
1908.—ERNEST A. MUNRO, B. A.

#### 1851 EXHIBITION SCIENCE RESEARCH SCHOLARSHIP.

Her Majesty's Commissioners for the Exhibition of 1851 have, for some years, offered Scholarships in certain Universities of the United Kingdom and the Colonies, with the intention of enabling students of science who have indicated high promise of capacity for original

research to continue the prosecution of science with the view of aiding in its advance or in its industrial applications. In 1894 and alternate years since, the nomination to one of these Scholarships has been placed at the disposal of this University. It is expected that a similar nomination will be placed at the disposal of the University in 1910.

The following, nominated by this University, have held scholarships:-

1894-6.....	F. J. A. McKITTRICK, B. Sc.
1898-9.....	D. MCINTOSH, B. Sc.
1898-1899.....	E. H. ARCHIBALD, M. Sc.
1900-3.....	JAMES BARRETT, B. A.
1902-4.....	T. C. HEBB, M. A., B. Sc.
1904-7.....	W. H. BOSS, M. Sc.
1906-8.....	G. M. J. MACKAY, M. A.
1908.....	H. J. CREDGHTON, M. A.

These Scholarships are of the annual value of one hundred and fifty pounds sterling; are tenable for two years, subject to fulfilment of certain conditions mentioned below, or, by special resolution of the Commissioners, for three years; and are open to women as well as to men.

The following were the conditions of nomination in 1908:-

(a) The nominee must be a British subject.

(b) He (or she) must, at the date of the nomination, have been for a term of three years, a bona fide student of Science in a University or College (or in Universities or Colleges) in which special attention is given to scientific study, a graduate who has continued his studies at a College after graduation being regarded as a student.

(c) He must have been a student of Dalhousie College either during the academic year at the end of which the nomination is made, or during the previous year, but in the event of his having ceased to be a student of Dalhousie College at the end of the previous year, he must have been engaged during the year of nomination solely in scientific study.

(d) He must have indicated high promise of capacity for advancing Science or its applications by original research. Evidence of capacity for original research in Science is strictly required, this being one of the main qualifications for a scholarship; and the nominee will be selected from the students qualified for nomination mainly on the ground of superiority in this respect, although the general proficiency attained in the study of Science, special knowledge of departments of Science closely related to that to which the candidate intends to devote himself, and a knowledge of such subjects as French and German which are useful in the prosecution of research, will also be taken into account.

(e) There is no absolute restriction as to age; but a nominee whose age exceeds 30 will only be accepted by the Commissioners under very special circumstances.

The nomination which is to be made by this University to the Commissioners in London, will be referred by them to a committee of eminent scientific men, who will advise them upon it; and the nominations will take effect on its being confirmed by the Commissioners.

The scholarship may be held at any University in the United Kingdom or abroad, or in any other institution to be approved by the Commissioners, the only restriction being that the institution selected shall be properly equipped for the prosecution of Science. But a scholar will be required, in the absence of special circumstances, to proceed to an institution other than that by which he is nominated.

The scholar, during his tenure of the scholarship, must devote himself wholly to study and research, more especially in some branch of Science, such as Physics, Mechanics, or Chemistry, the extension of which is especially important to our national industries; and he is not allowed during such tenure to hold any position of emolument.

The continuance of the scholarship for the second year is dependent upon the work done in the first year being satisfactory to the Scientific Committee appointed by the Commissioners.

Only one-fourth, at most, of the scholarships granted in any one year, are renewed for a third year, the renewals being awarded to the most deserving of the candidates.

In cases in which the candidate nominated for a scholarship appears to H. M. Commissioners to have had insufficient opportunity of showing whether or not he has the power to carry on independent research, and not therefore to be immediately qualified for a scholarship, but to give promise of becoming so after a year's experience of research work, said candidate also not being in a position to continue his studies without assistance, H. M. Commissioners may award him a Prolatory Bursary. The regulations under which such Bursaries are tenable may be obtained on application to the Secretary of the Senate.

Students who desire to become candidates for nomination to the above Scholarship must make application to the President of the University on or before the 1st day of February. In making such application they must furnish a statement of the following particulars:-

(a) Name and address.

(b) Age and birth place.

(c) Institution or institutions in which candidate's term of study has been passed.

(d) Specific statement of qualifications of candidate, including particulars of his college career, and of original research in which he has been engaged.

(e) Name of institution to which candidate proposes to attach himself during the tenure of Scholarship.

(f) Statement of the particular scientific work, specifying the branch of science, to which the candidate proposes more especially to devote himself.

(g) Statement as to whether or not the candidate will be prepared to accept a probationary Bursary in the event of the Commissioners being unable to award a full Scholarship on the evidence submitted; and in the event of his being prepared, a further statement as to his being unable to continue his studies without assistance.

As the University is required to certify the correctness of the above statement in the case of the candidate nominated, the statement must be accompanied by satisfactory evidence as to all particulars which are not in the University records. Thus age, attendance at other Universities or Colleges, and accounts of original researches conducted elsewhere, must be properly attested.

#### Fees

*All Fees are payable in advance, and until the Fees are paid the student will neither receive credit for attendance upon any class, nor be admitted to any examination.*

The Registration Fee entitles a student to the use of the University Library.

A graduate of this University attending classes is exempted from payment of the Registration Fee.

The following is a detailed statement of the fees:

#### FEES FOR REGISTRATION, EXAMINATIONS, CERTIFICATES AND DIPLOMAS.

##### FOR REGISTRATION.

Registration, payable by students taking one class only .....	\$ 3 00
" " " more than one class .....	5 00
Additional, payable by all students registering after the first Tuesday after the beginning of Lectures.....	1 00

##### FOR EXAMINATIONS.

Each Supplementary examination .....	\$ 2 00
Each Special examination .....	4 00
Matriculation examination at outside centre .....	5 00
Examination for the degree of B. Mus., First Year.....	5 00
" " " " " Second Year.....	10 00
" " " " " Third Year.....	15 00
Examination for the degree of M. A. or M. Sc. taken elsewhere than at the University .....	10 00
Each Supplementary examination in Music .....	5 00

\*A Matriculation examination taken by a student after his second Autumn term of attendance at the University will be charged for as a Supplementary or Special examination, according to the time when the examination is taken.

#### FOR CERTIFICATES AND DIPLOMAS.

Certificate under the University seal .....	\$ 1 00
B. A. or B. Sc. diploma .....	5 00
B. Mus. diploma .....	10 00
M. A. or M. Sc. diploma (whether given on examination or thesis) .....	20 00
<i>Ad eundem gradus diplomas</i> .....	10 00
Additional fee for any degree conferred in absentia .....	5 00
Application must be accompanied by fee.	

#### TUITION FEES PAYABLE BY STUDENTS WHO HAVE REGISTERED PRIOR TO SEPTEMBER, 1909.

Elocution, or Beginners' Greek (when taken with Greek 1) .....	3 00
Physics 6, 7 or 8, Geology 2, or Mineralogy .....	8 00
Chemistry 1A, including laboratory work of not more than four hours a week .....	8 00
Chemistry 1A or 2, with laboratory work of five or more hours a week, Chemistry 3 or 4, Biology, Drawing 1 or Surveying 1 .....	10 00
Physics 2, Chemistry, 7, 8, or 9 .....	12 00
Any other class .....	14 00
For changing course of study after October 1st, fee for each class added or substituted .....	6 00
	1 00

#### TUITION FEES PAYABLE BY STUDENTS WHO REGISTER FOR THE FIRST TIME IN SEPTEMBER, 1909, AND THEREAFTER.

For each class (excepting purely laboratory or drawing classes, and exclusive of extra fee required for classes involving work in laboratory or draughting-room), payable by students taking less than five classes .....	\$ 9 00
Ditto, payable by students taking more than four classes .....	8 00
*Additional for each class involving work in laboratory or draughting-room .....	4 00
*For each purely laboratory or draughting-room class .....	12 00
For changing course of study after October 1st, charge for each class added or substituted .....	1 00

(Note.—A class taken a second time is charged for as if taken for the first time.)

The fees payable by students who follow the prescribed courses in Engineering are as follows:

First year of any course .....	\$65 00
Second year of any course .....	75 00

These amounts include the Registration fee and entitle to attendance on all the prescribed classes of a course. Students who are not qualified to enter all the prescribed

\*All students taking classes involving laboratory work are required to make a deposit of Five dollars on entering the class. This amount, or if charges for damage or materials used have been incurred, what remains of it after such charges have been deducted, is returned to the student at the end of his laboratory course.

classes of the course they select, or who for any other reason do not enter all of them, must pay the Registration fee and the individual class fees for the classes they enter.

### Caution Money

Each male student on registration is required to deposit \$2.00 as caution money to cover damage done to furniture, apparatus, etc. This amount, less deductions (if any), will be returned at the close of the session. There shall be no deduction from the Caution Fund for damages which have been charged to, or assumed by, individuals.

## COURSES OF INSTRUCTION

### L.—CLASSICS

(McLeod Professorship.)

Professor.....	HOWARD MURRAY, B.A., LL.D.
Tutor.....	J. McG. STEWART, B.A.

### LATIN.

#### 1. Mondays, Wednesdays and Fridays, 11 A.M.—12 M.

(After Christmas this class will be conducted by the Tutor.)

Cicero, *Orations apud Catilinam*; Vergil, *Aeneid*, Book VI; Cicero, *De Imperio Gnaei Pompei (Pro Lige Hispanis)*; \*Vergil, *Aeneid*, Book IV. Latin Prose Composition. Exercises in Sight Translation.

BOOKS RECOMMENDED: Cicero, *Selected Orations and Letters*, (Kellsy's, Allyn & Bacon, Boston, \$1.25); \*Vergil, *Aeneid*, Book VI, (Page's Macmillan, Toronto, 25 cents). Vergil, *Aeneid*, Book IV, (Stephens' Macmillan, Toronto, 25 cents). Bradley's Arnold's Latin Prose Composition, (Longmans, London, £1). Allyn & Greenough's New Latin Grammar, (Ginn & Co., Boston, \$1.25), or Bennett's Latin Grammar, (Allyn & Bacon, 80 cents).

#### 2. Mondays, Wednesdays and Fridays, 10—11 A.M.

Livy, Book I; Horace, Odes, Books I and II; \*Livy, *Selections from Books V-VII* (as in Dennison's edition); \*Vergil, *Aeneid*, Book V. Latin Prose Composition. Exercises in Sight Translation.

BOOKS RECOMMENDED: Livy, Book I and Selections Books II-X, (Dennison's Macmillan, Toronto, 60 cents). Horace, Odes, Books I and II, (Page's Macmillan, Toronto, each 35 cents). Bradley's Arnold's Latin Prose Composition.

#### 3. [1910-11.] Mondays and Wednesdays, 12 M.—1 P.M.

Tacitus, *Histories* Book I; Horace, *Selected Satires*; \*Tacitus, *Histories*, Book III; \*Vergil, *Bacchics*. Latin Prose Composition. Exercises in Sight Translation.

#### 4. [1910-11.] Mondays and Wednesdays, 12 M.—1 P.M.

Plautus, *Trinummus*; Juvenal, *Satires*, III, V, X, XIII; Tacitus, *Germans*; \*Tacitus, *Anals*, Book IV, \*Lucretius, Book III. Latin Prose Composition. Exercises in Sight Translation.

BOOKS RECOMMENDED: Plautus, *Trinummus*, (Freeman & Stimson's, Oxford University Press, 3s.). Juvenal, (Clarke's, Macmillan, £1.25). Tacitus, *Germans*, Church & Bradbury's, Macmillan, 50 cents). Tacitus, *Anals*, Books I-IV, (Parson's, Oxford University Press, 5s.). Lucretius, Book III, (Dale's, Cambridge University Press, 2s.).

\*For private reading by students seeking First or Second Class Distinction. Passages for translation at sight will be set in all examinations.

## GREEK.

- 1. Tuesdays and Thursdays, 10—11 A.M.; Fridays, 12 M.—1 P.M.**  
(Conducted by the Tutor.)

Xenophon, *Hellenica*, Books I and II; \*Xenophon, *Agesilaus*, Greek Prose Composition. Exercises in Sight Translation.

BOOKS RECOMMENDED: Xenophon, *Hellenica*, Books I and II, (University, Oxford University Press, 2s. 6d.); Xenophon, *Agesilaus*, (Halifax, Halifax University Press, 2s. 6d.); Fletcher & Nicholson's *Greek Prose Composition*, (Copp, Clark Co., Toronto, \$1.25); Goodwin's *Greek Grammar*, (Ginn & Co., Boston, \$1.50).

- 2. Tuesdays and Thursdays, 11 A.M.—12 M.**

Lucian, *Selected Dialogues*; Homer, *Odyssey*, Book IX; \*Lucian, *Titos* (as in Ingo & Macnaghten's edition); \*Homer, *Odyssey*, Book XII. Greek Prose Composition. Exercises in Sight Translation.

BOOKS RECOMMENDED: Lucian, *Selections*, (Ingo & Macnaghten's, Longman's, 2s. 6d.); Homer, *Odyssey*, Book IX, (Edwards, Cambridge University Press, 2s. 6d.); *Odyssey*, Book XII, (van Maanen, Ginn & Co., Boston, 40 cents); Fletcher & Nicholson's *Greek Prose Composition*.

- 3. [1919-20.] Tuesdays and Thursdays, 12 M.—1 P.M.**

Demosthenes, *Philippics*, I-III; Eupides, *Medea*; \*Demosthenes, *Olynthiacs*; \*Euripides, *Alecsis*. Greek Prose Composition. Exercises in Sight Translation.

- 4. [1919-20.] Tuesdays and Thursdays, 12 M.—1 P.M.**

Plato, *Apology* and *Crito*; Aristophanes, *The Clouds*; \*Homer, *Iliad*, Books I, II (1-43) and VI. Greek Prose Composition. Exercises in Sight Translation.

BOOKS RECOMMENDED: Plato, *Apology* and *Crito*, (Wagner's Gen. Bell & Sons, 2s. 6d.); Aristophanes, *The Clouds*, (Merry's, Oxford University Press, 2s.); Homer, *Cloud*, Books I-VI, (Seymour's School Head, 1-VI, Ginn & Co., Boston, \$1.75).

## ADVANCED CLASSES.

- Professor . . . . . HOWARD MURRAY, B.A., LL.D.  
Lecturers . . . . . J. W. LOGAN, M.A.  
                      [G. K. BUTLER, M.A.]

- 5 and 6. LATIN.**—Plautus, *Captivi*, *Miles Gloriosus*, Terence, *Adelphoi*, *Phormio*, Vergil, *Georgics* I, IV. Horace, *Epiodes* I, II. *Ars Poetica*. Juvenal, *Satires* I, VII, VIII, XIV. Cicero, *De Oratore* I, *Philippics* I, II, *Pro Caelio*, *Livy*, XXI, XXII. Tacitus, *Annales* I, II, *Agricola*, Pliny, *Letters*, Books I-III.

- 5 and 6. GREEK.**—Aeschylus, *Eumenides*, *Prometheus Vinctus*; Sophocles, *Oedipus Colonus*, *Philoctetes*; Aristophanes, *Frogs*, *Knight*; Homer, *Odyssey*, V-VIII. Thucydides, II, III. Plato, *Republic*, I-IV. Demosthenes, *De Corone*. Aristotle, *Poetics*.

## BEGINNERS' CLASS IN GREEK.

Three or four times a week.

This class, which is conducted by the Tutor, is intended for beginners in the language, and also for those who have come to college without sufficient preparation in the elements of Greek

## COURSES OF INSTRUCTION.

science and syntax to enable them to attend with profit the first undergraduate class. The books used will be White's *First Greek Book*, (Ginn & Co., Boston, \$1.25); and Colson's *First Greek Reader*, (Macmillan Co., Toronto, 75 cents). Occasional examinations will be given, and those who satisfy the instructor in these examinations may have their work in this class counted as exempting them from the Junior Matriculation in Greek.

## II.—NEW TESTAMENT GREEK

Tuesdays, Wednesdays, Fridays and Saturdays, 12.30 P.M.

The class and examinations in New Testament Greek, conducted by Professor J. W. FALCONER, M.A., B.B., in the Presbyterian Theological College, Halifax, are recognized as qualifying for a degree. Similar classes in other Theological Colleges approved by the Faculty, are also recognized for the same purpose.

The work of the class consists of the interpretation of the Gospels. Lectures are also given on the language of the New Testament, the principles of Textual Criticism, introduction to the Gospels, and problems arising out of the Gospel narratives.

TEXT BOOKS: Westcott and Hort's or the new Bible Society's edition of the New Testament. Hack Spence's *Four Gospels*; H. J. Metzler, *Introduction to N. T. Greek*; Hammond or Lake, *Textual Criticism of the New Testament*; Mathew, *A History of the New Testament Times in Palestine*.

BOOKS RECOMMENDED: F. Blass, *Grammar of N. T. Greek*; Burton, *New Testament Moods and Tenses*; Nestle's or Kenyon's *Textual Criticism of the Greek N. T.*

## III.—HEBREW

Daily 8.35 to 9.30 A.M.

The class and examinations in Hebrew, conducted by Professor JOHN CURRIE, D.D., in the Halifax Theological College are recognized as qualifying for a degree. Similar classes in other Theological Colleges approved by the Faculty, are also recognized for the same purpose.

The aim of the course is, by a thorough drill in paradigm, and by exercises in reading and writing, to impart a fair knowledge of inflection and syntax, and the ability to read at sight early parts of the Hebrew Scriptures.

TEXT BOOK: Davison's *Introductory Hebrew Grammar*, with Prolegomena, Exercises in Reading and Writing, (T. & T. Clark, Edinburgh, 7s. 6d.)

BOOKS RECOMMENDED: Gesenius' *Hebrew Grammar*, revised edition, (Mitchell, Bradley & Woodruff, Boston, \$2.50); Green's *Hebrew Grammar*, new edition, unbridged, (Wiley and Sons, New York, \$3); Baer's *Introductory Hebrew Method and Manual*, latest edition, (American Publication Society of Hebrew, Chicago); Bablitz's *Gesenius' Hebrew Lexicon*, (Bablitz, Mifflin & Co., Boston, \$8).

## IV.—MODERN LANGUAGES

(McLeod Professorship.)

- Professor . . . . . HOWARD P. JONES, Ph.D.  
FRENCH.

\*ELEMENTARY FRENCH. Tuesdays and Thursdays, 3—5 P.M.

Kuhn's *French Reading for Beginners* (Holt & Co.); Fraser and Squair's *French Grammar* (Copp, Clark Co.). Composition

\*This class may be discontinued after the session of 1919-20.

and exercises in Sight Translation. Additional for Distinction: Verne, *Les Aventures de Blockus* (D. Appleton & Co.).

This class will not count towards a degree in any Faculty.

**1. Tuesdays and Thursdays, 10—11 A. M., 2—3 P. M.**

About: *Le roi des Mosquées* (Macmillan & Co.); Guérac, *Standard French Authors* (Ginn & Co.); Bazin, *Couer Choisi* (D. C. Heath & Co.). Exercises in Grammar, Composition and Sight Translation. Additional for Distinction: Mérimee, *Colombe*; Scribe, *Le cœur d'eau*.

**2. Tuesdays and Thursdays, 9—10 A. M., or Mondays, 9—10 A. M.; Wednesdays, 2—3 P. M.**

Molière, *Le Misanthrope* (Heath & Co.); Sandea, *Sacs et Parades* (Macmillan & Co.); Gautier, *Scènes de voyage*. French Prose Composition, Conversation, Dictation. History of French Literature, with special reference to the post-romantic period. Weekley's *Primer of French Literature*.

Additional for Distinction: Balzac, *Eugénie Grandet*; Dumas, *Histoire de la Littérature française* (selected chapters).

**3. [1910-11] Tuesdays and Thursdays, 9—10 A. M.**

Diderot, *Louis XI*; Warren, *French Prose of the XVIIIth Century*; Boileau, *L'Art poétique*. French Prose Composition, Conversation, Dictation. History of French Literature with special reference to the 17th century. Additional for Distinction: Horace, *U'Art poétique*; Buffon, *Discours sur le Style*; Véronel, *Lettre à Fléaubert*; Butcher, Aristotle's Poetics (selected chapters of the commentary).

**4. [1911-12] Tuesdays and Thursdays, 9—10 A. M.**

DeVigny, *Cinq-Mars* (Macmillan & Co.); Bazin, *Les Géants* (Holt & Co.); Taine, *Selections* (Blakie & Son). French Prose Composition, Conversation, Dictation. History of French Literature with special reference to the Romantic School.

Additional for Distinction: Victor Hugo, *Selections in Prose and Verse* (Holt & Co.); Herzen.

**GERMAN.**

**ELEMENTARY GERMAN. Mondays, Wednesdays and Fridays, 2—4 P. M.**

Harris, *German Lessons* (D. C. Heath & Co.); Jones, *A German Reader* (D. Appleton & Co.). Exercises in Grammar and Composition.

Additional for Distinction: Blehl, *Burg Neideck* (Holt & Co.). This class will not count towards a degree in any Faculty.

**1. Mondays and Fridays, 2—3 P. M.**

Schiller, *Wilhelm Tell*; Baumhauer, *Der Schädelversatz* (Holt & Co.). German Syntax (van Jagernam). Prose Composition (Harris). Exercises in Sight Translation.

Additional for Distinction: Heyse, *Das Märchen von Treppi* (Heath & Co.); Schiller, *Die Jungfrau von Orleans* (Acts I, II and III).

**COURSES OF INSTRUCTION**

**2. Wednesdays and Fridays, 9—10 A. M.**

Lessing, *Misere von Berndoles* (Holt & Co.); Freytag, *Röll und Haken* (Heath & Co.); Goethe, *Iphigenie*. German Prose Composition, Conversation, Dictation. History of German Literature (selected period).

Additional for Distinction: Elster, *Zwischen den Schlachten*; Schiller, *Die Braut von Messina*.

**3. [1910-11] Wednesdays and Fridays, 9—10 A. M.**

Freytag, *Die Journalisten*; Helmholtz, *Pupillare Vorträge*; Goethe, *Sæusselein*. German Prose Composition, Conversation, Dictation. History of German Literature (selected period).

Additional for Distinction: Dahn, *Eis Kampf um Rom*; Schiller, *Maria Stuart*.

**4. Wednesdays and Fridays, 9—10 A. M.**

Goethe, *Hermann and Dorothea*; Heine, *Prose Selections*; Schiller, *Wilkenstein's Tod*. German Prose Composition, Conversation, Dictation. History of German Literature (selected period).

Additional for Distinction: Hauff, *Lichtenstein*; Fulda, *Der Tollheimer*.

**V.—BIBLICAL LITERATURE**

**Lecturer.**

**Mondays and Wednesdays.**

There are three courses in the Old Testament, and two in the New Testament. The work of any one session will be accepted as an elective in the third or fourth year of the Arts course.

**OLD TESTAMENT.**

**First Course.** The Historical Books of the Old Testament as a basis for the history of Israel from its origin till the rise of written Prophecy.

**Second Course.** Written Prophecy.

**Third Course.** The Poetry and Wisdom Literature of the Hebrews.

**NEW TESTAMENT.**

**First Course.** The four gospels—their origin, literary characteristics and contents.

**Second Course.** The literature of the apostolic age, exclusive of the gospels.

**TEXT BOOKS:** *The Message of the Bible*; Utley, *History of the Hebrews*; Kippenberg, *The Activities of the Prophets*; Weymouth, *The New Testament in Modern English*; Burton and Matthews, *Constructive Studies in the Life of Christ*.

**FOR DISTINCTION:** Books prescribed during the session.

**FOR EXAMINATIONS:** McGroarty, *History, Prophets and the Monarchs*; Robertson Smith, *The Prophets of Israel*; Mottram, *The Literary Study of the Bible*; relevant articles in Hastings' *Dictionary of the Bible*; McFayden, *Introduction to the Old Testament*.

## VI.—KELTIC

*Lecturer*.....REV. A. MACLEAN SINCLAIR.

*Junior division meets Mondays, Wednesdays and Thursdays, 2—3 p. m. Senior division meets Mondays, Wednesdays and Fridays, 5—6 p. m. Lecture on History and Literature, Thursdays 5—6 p. m.*

This course begins after the Christmas holidays and continues throughout the remainder of the session. There are two divisions—a Junior Class in Gaelic and a Senior Class in Gaelic. A lecture on the History and Literature of the Kelts is given once a week. It is open to members of both divisions of the class and to any one interested in the subject. Any student who has attended for two sessions and passed the examinations may offer Kelts as one of the electives of the third or fourth year.

In the Junior division the books used are *An Tráincheach*; *Filidh na Colle*. In the Senior division they are Macintyre's Poems; Alexander Macdonald's Poems; Macleod's *Cúraid na Gaidheal*; *Lochlu Gáisín air Thír aon ag*; Stewart's Gaelic Grammar; Joyce's Grammar of the Irish Language; McLeod's Gaelic Dictionary; Dineen's Irish-English Dictionary.

## VII.—ENGLISH LANGUAGE AND LITERATURE

(George Muaro Professorship.)

*Professor*.....ARCHIBALD MACMECHAN, PH.D.

The course in English is mainly literary; the method pursued is historical. The different periods are studied in the representative works of the period; and in all cases actual acquaintance with the texts precedes criticism upon them. This part of the course is intended to furnish the student with an outline picture of English literature from Chaucer to Tennyson. The work for Class Distinction is meant to broaden the knowledge of more ambitious students. The essential facts of Historical English Grammar are taught by means of lectures in the Second Year. Special stress is laid upon composition. Practice is set before theory; the various exercises are corrected and preserved; the writing of "reports" forms part of this work. The prompt and satisfactory performance of the written work is a condition of examination. In the Advanced Classes the aim of the instruction is to acquaint the student with the grammar of Old and Middle English, and to broaden his knowledge of Elizabethan literature.

## 1. (A) Tuesdays and Thursdays, 12—1 P.M.

**COMPOSITION.**—Christmas Term; imitative exercises in the construction of narrative and descriptive paragraphs, Spring Term; ten narrative and descriptive themes based on personal experience, and work read in class.

**LITERATURE.**—Eighteenth Century Prose. Addison, *Papers Contributed to "The Spectator."* Swift, *Voyage to Lilliput*, *Voyage to Brobdingnag*. Johnson, *Life of Pope*. (Macaulay, Samuel Johnson). Poetry. Dryden, *MacFleckne*, *St. Cecilia's Day*, *Alexander's Feast*. Pope, *Rape of the Lock*. Gray, *Elegy in a Country Churchyard*; Goldsmith, *Traveler*, *Deserted Village*; Burns, *Twa Dogs*, *Cotter's Saturday Night*.

For reference: Gosse, *History of Eighteenth Century Literature*.

Candidates for Class Distinction will be examined in these additional works which are not read in class. Dryden, *Aebion and Achiseion*, Pl. I.; Pope, *Essay on Man*; Johnson, *Lures of Dryden*, *Addison* and *Gray*.

Two reports on private reading, assigned by the instructor, are required from each student.

**BOOKS RECOMMENDED:** Hale, *Longer English Poems* (containing all the poetry read in class); Addison ed. T. Arnold; Clarendon Press Series; Johnson, *Six Chief Lives*, ed. M. Arnold.

**PARALLEL READING.**—As a preparation for the course, the student is recommended to read the following works: Thackeray, *English Bitternests*; Congreve and Addison, *The History of Henry Esmond* (bk. II, cap. xi, at least); Macaulay, *The Comic Dramatists of the Restoration*, Addison.

## 2. (B) Mondays, Wednesdays and Fridays, 12—1 P.M.

**COMPOSITION.**—Lectures on the Principles of Narration, Description and Exposition. Twenty expository themes, based chiefly upon the work in class.

**LITERATURE.**—Elizabethan. Shakespeare, *King John*, *Twelfth Night*, *King Lear*, Milton, *L'Allegro*, *Il Penseroso*, *Lycidas*, *Comus*, *Sonnets*, *Paradise Lost*, Bk. I. ii. Lectures.

**ENGLISH LANGUAGE.**—A short course of *Lectures on the History of the English Language*, at the end of the Spring Term.

For reference: Sidney Lee, *A Life of William Shakespeare*; Drexel, *Shakespeare Primer*; Salisbury, *History of the Elizabethan Literature*.

A report on private reading assigned by the instructor, is required from each student. Candidates for Distinction are required to present a second report.

Candidates for Class Distinction will be examined in the following plays which are not read in class:—Henry V, *As You Like It*, *Coriolanus*.

**PARALLEL READING.**—As a preparation for this course, the student is recommended to read the following works: Kingsley, *Westward Ho!*; Scott, *Kensalweir*, *Hentzner*, *Truels in England*, Harrison, *Description of England*. (Scott Library.) Macaulay, *Milton*.

## 3. (C) Tuesdays and Thursdays, 12—11 A.M.

(Not given in 1929-30.)

**LITERATURE.**—Middle English and Pre-Shakespearian. Chaucer, Prologue, *Knight's Tale*, *Nun's Priest's Tale* (ed. Skeat), Sweet, *Middle English Primer* II., Spenser, *Faerie Queene*, bks. I. ii. Marlowe, *Dr. Faustus*. Lectures.

**History of Literature.** Pollard, *Chaucer Primer*. For reference: Lowndesbury, *Chaucer Studies*; See Miski, Morley, *English Writers*, V.

For Distinction: Chaucer, *The Prioress's Tale*, *Sir Topas*, *The Monk's Tale*. The whole volume of Skeat, with the exception of "The Squire's Tale."

**Composition.** Eight expository themes on the work of the class.

**4. (D) Tuesdays and Thursdays, 5-5 P. M.**  
*(Not given in 1909-10.)*

LITERATURE.—Nineteenth Century. Lectures; the historical and social background, the influence of the French Revolution, the predecessors of Wordsworth.—Cowper, Crabbe, Blake, Burns, Chatterton, Scott, *Old Mortality*, Marston, Byron, Poems, edited by Matthew Arnold. Wordsworth, Poems, edited by Dowden. Coleridge, *The Rime of the Ancient Mariner*, Christabel, Kubla Khan. Shelley, Alastor, *The Seasick Plant*, Adonais, The Cloud, The Skylark, Ode to Liberty. Keats, Sleep and Poetry. Odys, Sonnets, Hyperion, Eve of St. Agnes, *La Belle Dame Sans Merci*.

Composition: Eight expository themes on subjects of the course.

History of Literature. Saintsbury, *History of Nineteenth Century Literature*. Herford, *Age of Wordsworth*. Oliphant, *Literary History of England*.

For Distinction. A thesis on a subject assigned by the instructor.

This subject may be assigned at the end of the previous session and completed during the summer vacation. It should in any case be selected at the beginning of the session in which the student intends to present it, and must embody the results of an original literary investigation. The following are the titles of representative theses which have been accepted: Chatterton, *A Study in Style*; The Relation of "Tristress Skandus" to "Anatomy of Melancholy"; Tennyson's Treatment of Colour in "The Idylls of the King"; "Alastor," edited with Introduction and Notes. The thesis must be written on special thesis paper and bound. A copy must be deposited in the College Library.

**5. (E) Tuesdays and Thursdays, 5-5 P. M.**

LITERATURE.—Nineteenth century. Tennyson, *The Lady of Shalott*, *Genove*, *Lotus-Eaters*, *Dream of Fair Women*, *Morte d'Arthur*, *Dore, Sir Galahad*, *Lord of Burleigh*, *Ulysses*, *The Revenge*, *Rip Van Winkle*. Poems of Tennyson, ed. MacMechan, (*Bell's Letters series*). Browning, Selections from Men and Women, (*Dent's one vol. ed.*), *Andrea del Sarto*, *Epistles of Karissiah*, *Memoranda*, *Edwin Hope*, *A Toccata of Galuppi's*, *The Statue and the Bust*, *In a Balcony*, *The Last Ride Together*, Arnold, *Sakunt and Bustum*, *The Sick King in Babylon*, *The Strayed Reveller*, *Rugby Chapel*, *Heine's Grave*, *Sonnets from the Grand Chartreuse*. Dickens, *David Copperfield*, (*Everyman's Library*). Thackeray, *Vanity Fair*, (*Everyman's Library*). Ruskin, *Sunrise and Edies*, (*Everyman's Library*). Carlyle, *Sartor Resartus*, ed. MacMechan, (*Athenaeum Press Series*).

Composition: Eight expository themes on subjects of the course.

History of Literature. Saintsbury, *History of Nineteenth Century Literature*. Walker, *The Age of Tennyson*.

For Distinction, as in English 4 (D).

**6. (F) Mondays and Fridays, 9 A. M.**  
*(Gives, if required.)*

OLD ENGLISH.—Bright, *Anglo-Saxon Reader*. Simons, O. E. Grammar, trans. Cook. Sight translation from easy texts.

**7. (G) (Not given in 1909-10.)**

ELIZABETHAN DRAMA. 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*, Masque, *A New Way to Pay Old Debts*, Webster, *The Duchess of Malfi*, Shakespeare, the Tragedies, *Troilus and Cressida*, *Timon of Athens*, *Measure for Measure*.

This course is conducted as a Seminar.

ELOCUTION.

**Lecturer..... REV. JAMES CARETHEUS,**

1. This course continues to Christmas. It is required of all students taking English 1; but students who do not take English 1 will be required to take Elocution as part of English 2. Students are required to pass in Elocution, and credit will be given for it in the determination of their standing in English.

The subjects treated are:

**Vocal Training**—Elements, Breathing, Natural use of Voice, Faculties of the Voice, Principles of Training, Vocal instruments and their use, Voice Production.

**Phonology**—Vowels, their formation; Articulation, (consonants), Elements of Speech, Development of organs of Articulation, Common faults, Pronunciation, Training of the ear, Vocal quantity.

**Vocal Expression**—Elements, Principles of Inflection, Modulation, Emphasis, Verbal Grouping, Pacing, Expressive Reading.

2. Public speaking and debate—lectures given on methods of public address, accumulation and arrangement of material, brief arrangement and use of evidence. Oral practice mainly on selected speeches. Debates in which each student takes part at least three times as a principal speaker.

This course must be preceded by course one or its equivalent.

3. **Advanced Course**—Study and application of the principles of argumentative, preparation of briefs, training in delivery of the argumentative oration, the eulogy and the platform address. Debates in which each student takes part at least three times as principal speaker.

This class is open to those who have taken courses one and two, or their equivalent. Fee \$5.00.

4. **Dramatic interpretation**—Study and oral practice, as a basis for public presentation of characters in classic drama, or criticism of such presentation.

This course must be preceded by course one or its equivalent. Fee \$5.00.

Courses 2, 3, 4, are optional.

**VIII.—HISTORY AND POLITICAL ECONOMY**

(George Muaro Professorship.)

Professor ..... PRESIDENT FOREST.

## HISTORY.

**1. Mondays, Wednesdays and Fridays, 10—11 A. M.**

Medieval History and Modern History to 1555.

The class work will be conducted by means of lectures and examinations on prescribed reading. A detailed syllabus, with references and passages prescribed for reading, will be given to students on the opening of the class.

Candidates for First Class Distinction will be examined on Hallam's Middle Ages, Bryce's Holy Roman Empire, and introductory sections of Robertson's Charles V.

**BOOKS RECOMMENDED:** Gibson, Decline and Fall of the Roman Empire; Hallam, Middle Ages; Bryce, Holy Roman Empire; Irving, Makarem and His Successors; Guizot, History of Civilization; Michaelis, History of the Crusades; Robertson, Charles V.; Stubbs, Constitutional History of England; Historical Freeman's Historical Geography.

**2. Tuesdays and Thursdays, 10—11 A. M.**

Modern History from 1555.

The class work will be conducted by means of lectures and examinations on prescribed reading. In the lectures, books of reference will be named and selected portions specified for reading.

Disputed points will be marked out for special study and students required to examine authorities and weigh conflicting opinions, and thus learn to study history critically for themselves.

Candidates for Distinction will be examined in additional work which will be announced at the beginning of the session.

**BOOKS RECOMMENDED:** Green, England, Vol. IV.; Guizot, France, Modern Absolutism; Macaulay, Grammar; Martineau, Duties, Republic; Bancroft, United States; McMaster, History of the People of the United States; Parkman, France and England in North America; Freeman's Historical Geography.

**3. Once a week.**

English History from 1603 to 1688.

The work of the class will be conducted by means of lectures and examinations on reading prescribed from Clarendon, Gardiner, Green, Hallam, Ranke, Lingard, and other authorities.

This class is intended especially for undergraduates taking the Honour course in English and English History.

## POLITICAL ECONOMY.

**1. Tuesdays and Thursdays, 11—12 A. M.**

The work of the class will be conducted by means of lectures and examinations on prescribed reading.

The lectures will generally follow the order of arrangement of Mill's Principles of Political Economy. 1—THE NATURE OF WEALTH: Analysis of fundamental conceptions of Wealth, &c. 2—PRODUCTION OF WEALTH: Labor, Capital, Population and their relations to each other. 3—DISTRIBUTION OF WEALTH: Wages, Profits, Rent, Socialism, Labor Unions, Land Tenure, &c.

EXCHANGE: Value, Money, Banking. 5—RELATIONS OF GOVERNMENT TO TRADE AND INDUSTRY: Tariffs, Taxation.

Particular attention will be given to the problems of the day: Protection and Free Trade, Trade Unions, Combines, Bimetallism. Each student is required to read the whole of Mill's Principles, together with prescribed passages from leading economists and current literature on the subjects. Weekly examinations will be held on prescribed reading.

Candidates for Distinction will be examined on additional work, which will be announced at the beginning of the session.

**TEXT BOOKS:** Mill, *Principles of Political Economy*; Gide, *Political Economy*.

**2. Twice a week.**

The work of this class will consist of lectures, entering into the Principles of Political Economy more fully than in the ordinary class, with examinations on reading prescribed in the works of the leading writers on the subject.

**IX.—CONSTITUTIONAL HISTORY AND LAW**

The classes in Constitutional Law and Constitutional History, conducted by Professor Weldon in the Faculty of Law, and the examinations conducted in these subjects by the Faculty of Law, are recognized as qualifying for a degree, provided students taking the Class in Constitutional History as an elective in Arts have also passed an examination in Bagehot's *English Constitution*, or in other prescribed work. Students taking the affiliated course in Arts and Laws are exempted from this provision.

**X.—CONTRACTS**

The class in Contracts conducted by Professor Russell in the Faculty of Law, and the examinations conducted in this subject by the Faculty of Law, are recognized as qualifying for a degree.

**XI.—PHILOSOPHY**

(George Muaro Professorship.)

Professor ..... ROBERT MAGILL, PH. D.

**1. LOGIC AND PSYCHOLOGY. Mondays, Wednesdays and Fridays, 11—12 A. M.**

The work of this class will consist of two courses of lectures, one on Logic, and one on Psychology, with essays, discussions, and oral examinations.

**TEXT BOOKS:** Creighton, Introductory Logic; Angell, Psychology.

**2. ADVANCED LOGIC. Tuesdays and Thursdays, 11—12 A. M.**

This course of lectures will be devoted to the study of Bosanquet's *Logic*.

**BOOKS RECOMMENDED:** Logic, Logic; Stewart, Logic; Bradley, Principles of Logic.

**3. MODERN PHILOSOPHY.** Mondays and Wednesdays, 10—11 A.M.

After a preliminary sketch of the principal problems of Metaphysics, the development of Modern Philosophy from Descartes will be studied in Descartes' *Method and Meditations*, Locke's *Essay*, Berkeley's *Principles of Knowledge*, and Siris, Hume's *Enquiry*, Reid's *Inquiry*, Kant's *Prolegomena*, and Watson's Extracts from Mill's Writings.

**BOOKS RECOMMENDED:** See (A), *Scottish Philosophy*; Berkeley Selections by Fraser; Blackwood's *Philosophical Classics*; Hettling's or Falckenberg's or Weber's *History of Philosophy*; Open Court Editions of Berkeley, Hume and Kant.

**4. GREEK PHILOSOPHY.** Mondays and Fridays, 3—4 P.M.

In this course an introductory sketch of the development of Greek Philosophy from Thales is followed by a critical study of Plato's *Apology*, *Crito*, *Phaedo*, *Republic*, and *Thaeatetus*; and Aristotle's *Ethics* (*Muirhead's Edition*).

**BOOKS RECOMMENDED:** Christ's *Apology*, *Crito* and *Phaedo* (Golden Treasury Series); Davies and Vaughan's *Republic*, G. T. S.; Dyer's *Theophrastus*; Burnet, *Early Greek Philosophy*; Netterup, *Philosophical Lectures and Readings*; Jowett's *Plato's Dialogues*; Wallace, *Epicureanism*; Caird, *Evaluation of Greek Theology*.

**5. METAPHYSICS.** Mondays and Wednesdays, 10—11 A.M.

For 1909-10. This course of lectures is intended to serve as an introduction to Metaphysics. Taylor's *Elements of Metaphysics* will be the text-book.

**BOOKS RECOMMENDED:** Watson, *Outline of Philosophy*; Parsons, *Introduction to Philosophy*; Balfour, *Foundations of Belief*; Ward, *Naturematters and Agnosticism*.

**6. ETHICS.** Mondays and Fridays, 3—4 P.M.

This course of lectures attempts a systematic presentation of the Principles of Moral Philosophy.

**BOOKS RECOMMENDED:** Seth, *Ethical Principles*; Green, *Prolegomena to Ethics*; Dewey, *Outline of Ethics*; Mill, Utilitarianism; Spencer, *Data of Ethics*; Parsons, *Ethics*; Wood, *Ethics*; Hobbes, *Evolution of Morals*; Westermarck, *Development of Moral Ideas*; Jesus, *Politics*.

**7. KANT.** Tuesdays and Thursdays, 11—12 A.M.

For 1909-10. The subject of this course is Kant's Philosophy. The *Prolegomena*, *Critique of Pure Reason*, *of Practical Reason*, and *of Judgment*, will be studied.

**TRANSLATIONS RECOMMENDED:** Watson's Selections; Macrae and Bernard, *Prolegomena*; Max Muller, *Critique of Pure Reason*; Abbott, *Theory of Ethics*; Bernard, *Critique of Judgment*; Kent, *Prolegomena* (Open Court Edition).

**COMENTARIES AND EXPOSITIONS RECOMMENDED:** Stirling, *Text-book to Kant*; Wallace, *Kant*; Fisher, *Kant*; Caird, *Critical Philosophy*; Watson, *Kant and his English Critics*; and *An Outline of Philosophy*; Macrae and Bernard, *Kritik of Pure Reason Dissected and Explained*; Green, *Philosophical Works*, Vol. II; Parsons, *Kant*.

**8. SOCIOLOGY.** Tuesdays and Thursdays, 3—4 P.M.

For 1909-10. The object of the course will be to study the social questions of the present age.

N.B.—The above courses are subject to revision.

**XII.—EDUCATION**

**Lecturers.....** J. H. TREFFRY, M.A.  
H. D. BRUNT, B.A.

Education 1 and 2 are supplementary. In each there will be concurrent courses in History and Theory, and together they will provide fairly comprehensive courses in history of Education in Greece, Rome and Britain, and courses in Educational psychology and theory. Education 3 is chiefly practical.

**1. Two hours a week.**

In 1908-09 the historical course will be devoted to Greek and Roman Education. For this Munro's *Source Book of the History of Education* is the most comprehensive text book, though Bosanquet's *Plato* and Burnet's *Aristotle* are sufficient for the Greek period. The theoretical course will be principally psychological. James' *Talks to Teachers*, Hall's *Youth and King's Child Development* or a similar book will be studied. Candidates for distinction will be examined on Fitch's *Lectures*, Tucker's *Life in Athens* and another book to be announced during the session.

**2. Two hours a week.**

In 1909-10. The History of Education since the Renaissance, more particularly in Britain, will be studied. Laurie's *Educational Opinions Since the Renaissance* should prove a sufficient guide to the student seeking a pass, but an acquaintance with the writings of Eliot, Ascham, Milton, Locke, Mill and Spencer will be required of candidates for distinction. For the theoretical course, Bagley's *Educative Process and Classroom Management* will be the text-book. Laurie's *Language and Linguistic Method* and a book on special methods will also be required of candidates for distinction.

**3. This Class consists of a course in Practice of Teaching, School Management and School Law.**

**PRACTICE OF TEACHING.**—At least 75 hours must be spent in observation, discussion, and actual practice in good Schools under supervision.—**SUPERVISOR** A. MCKAY.

**SCHOOL MANAGEMENT AND SCHOOL LAW.**—A course of lectures will be given on School Management and the School Law of Nova Scotia.

**XIII.—MATHEMATICS**

**Professor.....** MURRAY MACNEIL, M.A.

**1. Monday, Wednesday and Friday, 10—11 A.M.**

A general course in Elementary Mathematics open to those who have passed the Matriculation examination or its equivalent, and prescribed for regular first year students in Arts and Science and Engineering.

**Geometry.**—Euclid Book XI; Mensuration of the Sphere, Prism, Pyramid, Cylinder and Cone; Geometrical Conic Sections.

**Trigonometry.**—Solution of plane triangles; angular analysis.

*Algebra.—Indices, Logarithms, Interest and Annuities, Permutations and Combinations, Probabilities, Binomial Theorem, Indeterminate Equations, Graphs of Simple Expressions.*

*TEXTS:—Wilson's Solid Geometry and Conic Sections. Murray's Plane and Spherical Trigonometry with Tables. Rose Elementary Algebra Part II.*

**2. Tuesday, Thursday and Saturday, 9—10 A. M.**

Open to those who are taking or have taken Mathematics 1; prescribed for regular first year students in Engineering, elective for students in Arts and Science.

*Algebra.—Undetermined Coefficients and Partial Fractions, Exponential and Logarithmic Series.*

*Spherical Trigonometry.—The solution of spherical triangles with applications to navigation and astronomy.*

*Elementary Analytic Geometry of the point and straight line.*

**3. Tuesday and Thursday, 10—11 A. M.**

Prerequisites: Mathematics 1, 2.

Analytic Geometry.

**4. Monday, Wednesday and Friday, 9—10 A. M.**

*Infinitesimal Calculus.* This course may be taken by those who are taking or have taken Mathematics 3.

Mathematics 3, 4, form the regular work for second year students in Engineering.

**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 Pure and Applied Mathematics are required to take four of these courses in class.

Two of these courses will be given during each year. Each class meets two hours weekly throughout the year. The particular classes organized will depend on the students making application for them.

**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.—ASTRONOMY**

*Lecturer.....*

**I. DESCRIPTIVE ASTRONOMY.**—Two hours a week through the year. (The course will be given in 1910-11 if a sufficient number of students apply for it.)

This is a general course in which the leading facts and principles of Descriptive Astronomy are presented. It may be taken by students who have the requisite mathematical equipment, namely, an elementary knowledge of algebra, geometry and trigonometry.

BOOK RECOMMENDED: YOUNG, *General Astronomy*.

**XV.—PHYSICS**

(George Macrae Professorship.)

*Professor.....A. STANLEY MACKENZIE, PH. D.  
Demonstrator.....*

**LECTURE COURSES.**

**MECHANICS.**—Given yearly. Tuesdays and Thursdays, 11—12 M.

Prerequisites: Elementary trigonometry.

This course gives an elementary treatment of kinematics and dynamics, and of the general properties of solids, liquids and gases. It must be taken by all students intending to enter Physics 1. Special attention is paid to the solution of problems, all students being required to hand in papers for correction and criticism.

BOOKS RECOMMENDED: Watson, *Physics*; Duff, *Mechanics*.

For Distinction: MacGregor, *Kinematics and Dynamics*.

**MEDICAL PHYSICS.**—Given yearly. Lectures, Mondays and Wednesdays, 9—10 A. M. Laboratory, Thursdays, 11 A. M.—1 P. M.

This class, designed for those intending to take the examination in Medical Physics, treats in an elementary manner of Dynamics and of the fundamental phenomena of Experimental Physics. Those taking the class must in addition to attending the lectures, spend two hours per week in the laboratory carrying on a series of practical exercises in physical measurement.

BOOKS RECOMMENDED: Duff, *A text-book of Physics*.

**I. GENERAL PHYSICS.**—Given yearly. Mondays, Wednesdays and Fridays, 11 A. M.—12.

Prerequisite: Mechanics.

In the work of this course a rapid survey of the whole subject of Experimental Physics is taken, the subjects treated being: Sound, Heat, Electricity, and Magnetism, Light and other forms of Radiation. The course is fully illustrated by experiments, and special attention is paid to the solution of problems, all students being required to hand in papers for correction and criticism.

Members of the class who aim at passing merely will be examined on those parts of the subject only which are discussed in lectures. Those who aim at Distinction will be examined on private reading to be assigned, and will be expected to consult the

books on the general subject of Physics recommended by the Lecturer.

**BOOKS RECOMMENDED:** Watson, *Physics*; Jones, *Heat, Light and Sound*; Cairns, *Electricity treated experimentally*.

FOR DISTINCTION:

**2A. ELEMENTARY MATHEMATICAL—HEAT AND ELECTRICITY.**—Given in alternate years. To be given in 1909-10. Tuesdays and Thursdays, 11-12 M.

Prerequisites: Mathematics 2, Physics 1, and Physics 6.

The subjects studied will be Heat, and Electricity and Magnetism. Students aiming at Distinction will be examined on private reading to be assigned in the Kinetic Theory of Gases.

**BOOKS RECOMMENDED:** Maxwell, *Theory of Heat*, Peirce & Thomas, *Heat*; Thomson, *Elements of the Mathematical Theory of Electricity and Magnetism*; E. P. Thompson, *Lectures on Electricity and Magnetism*.

FOR DISTINCTION: Baynes' Mayer, *Kinetic Theory of Gases*.

**2B. ENGINEERING PHYSICS.**—The specifications of this course are the same as those of Physics 2A, with the additional requirement that the student will be examined on assigned reading in the theory of Steam Engine and of Dynamo-electric Machinery. The course is intended for students in Engineering courses.

**BOOKS RECOMMENDED:** Ewing, *Steam Engine and other Heat Engines*; Thompson, *Dynamo-Electric Machinery*.

**3. ELEMENTARY MATHEMATICAL—LIGHT AND SOUND.**—Given in alternate years. To be given in 1909-10. Tuesdays and Thursdays, 11 A. M.—12 M.

Prerequisites: Mathematics 2, Physics 1 and Physics 6.

The subjects studied will be Light and Sound. Students aiming at Distinction will be examined on private reading to be assigned in the Wave Theory of Light.

**BOOKS RECOMMENDED:** Preston, *The Theory of Light*; Ellis' *Electrostatics. The Structure of the Atom*.

FOR DISTINCTION: Mans & Millikan's Drude, *The Theory of Optics*; Mans, *Manual of Advanced Optics*.

**2. ADVANCED MATHEMATICAL.**—Given in alternate years. To be given in 1909-10. Mondays and Wednesdays, 10-11 A. M.

In this course and introduction to Mathematical Physics and Applied Mathematics will be given. It is intended for candidates for Honours in Pure and Applied Mathematics, and in Mathematics and Physics, but other students with the necessary qualifications may enter the class.

**BOOKS RECOMMENDED:** Tait & Strutt, *Dynamics of a Particle*; Lore, *Elasticity*; Whittaker & Taitson, *Dynamics*; Minchin, *Statics*; South, *Rigid Dynamics*; Greenhill, *Hydrostatics*; Bourd, *Hydromechanics*.

**3. EXPERIMENTAL METHODS.**—Given yearly. Fridays, 10-11 A. M.

This course deals with experimental methods, and the relation of theory to research, as exemplified by papers of classic interest, or by recent developments of Physics. 1908-9 and 1909-10 the subjects studied were taken from the writings of Professor J. J. Thomson and E. Rutherford on Ionization, Radioactivity, and

allied topics. In 1907-8 the lectures dealt with alternating currents of electricity. The course may be conducted by lectures, by private reading, or by laboratory work or by a combination of them.

This course is intended primarily for candidates for Honours in Mathematics and Physics, and in Chemistry and Chemical Physics; but it may be elected by any student who shows that he is able to undertake it.

#### LABORATORY COURSES.

All students in laboratory courses are required to keep a detailed record of the investigations made, describing the methods and apparatus used, giving the results obtained and discussing the degree of accuracy and the causes of error. The excellence of this record will count largely toward the student's final mark in the course. No student is admitted to the final examination in the course whose actual work in the laboratory is unsatisfactory either from the standpoint of quantity or quality.

**6. ELEMENTARY PRACTICAL.**—Given yearly. At least five hours per week. Laboratory open on Mondays, Tuesdays, Wednesdays and Thursdays, 2-3 P. M.

In this course the student makes a series of elementary experimental investigations to aid him in grasping the fundamental quantitative physical laws upon which the science is based, and to familiarize him with the methods and instruments used in physical measurements.

**BOOKS OF REFERENCE:** Ariss & Ellis, *Manual of Experiments in Physics*; Stewart & Gee, *Elementary Practical Physics*.

**7. ELECTRICAL MEASUREMENTS.**—Given yearly. At least five hours per week. Laboratory open on Tuesdays and Thursdays, 2-3 P. M.

Prerequisite: Physics 1, Physics 2, and Physics 6.

This class is intended for Engineering students, and consists of a series of measurements in Magnetism and Electricity, such as Magnetic Fields, Elements of Earth's Magnetism, Magnetic qualities of Iron, use and calibration of Galvanometers, Voltmeters, Resistance, Electromotive Force, Capacity, Self-induction, Power, Management of Storage Batteries, Photometry.

**BOOKS OF REFERENCE:** Stewart & Gee, *Elementary Practical Physics*, Vol. II; Ariss, *Practical Electricity*; Nichols, *Laboratory Manual of Physics and Applied Electricity*.

**8. ADVANCED PRACTICAL.**—Given yearly. At least five hours per week. Laboratory open Tuesdays and Thursdays, 2-3 P. M.

Prerequisite: Physics 1, Physics 2 or Physics 3, and Physics 6.

The work of this class consists of the investigation of physical laws of a more complex kind than in Physics 6, and a greater degree of precision will be expected in the determinations made. Students who show sufficient ability will be allowed to conduct new investigations, provided they do not use for that purpose a large portion of the time prescribed. Members of the class are required to take Physics 3, and to study the methods they may use in the works recommended by the instructor.

**BOOKS OF REFERENCE:** Those in Physics 7, and also Glaister & Shaw, *Pactical Physics*, and Gossard, *Physics-chemical Measurements*.

**9. 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.

Members of the class will be required to acquaint themselves with the literature of the subject in which their investigations lie, to prepare critical reports on those portions of it with which their work is more immediately concerned, and to prepare full reports on the methods and results of their own observations.

**XVI.—CHEMISTRY**

(McLeod Professorship.)

*Professor..... E. MACKAY, PH. D.  
Demosator..... G. M. J. MACKAY, M. A., M. S.*

**1. GENERAL CHEMISTRY.—Mondays, Wednesdays and Fridays, 9—10 A. M.**

Measurement of mass, volume, pressure, temperature, heat; solids and liquids; gases and gas laws; melting-points, boiling-points, solution, crystallization; preparation and properties of common acids and alkalies; combustion, air, water, oxygen, hydrogues; fundamental laws of combination, atomic theory, Avogadro's law, formulae, equations; chlorine; halogen group; dissociation, mass action; valence; sulphur; nitrogen; argon; carbon; periodic law; nitrogen group; isomorphism; potassium, sodium, ammonium; silver, copper, gold; atomic heat; calcium, barium; magnesium, zinc, cadmium, mercury; thermochemistry; boron, aluminium; carbon group; chromium; manganese; iron, nickel, cobalt, platinum. Some common organic compounds.

The lectures are illustrated as fully as possible by experiments. A tutorial class, attendance on which is in general optional, meets on Friday afternoons.

Candidates for Distinction are required to take laboratory work as specified under Chemistry 1A.

*Books recommended:* Smith, *General Chemistry for Colleges* (Cassier Co.). For occasional reading: *Alembic Club Reprints* (W. F. Clay); *Lasser-Cohn, Chemistry in Daily Life*.

**1A. The work of this class is that of Chemistry 1, with four to six additional hours a week devoted to laboratory work.**

The laboratory work is designed to make the student familiar with ordinary laboratory operations and to lead him to solve simple problems in chemistry by experiment. Several common inorganic substances are prepared and studied; simple quantitative experiments, leading to the fundamental laws of Chemistry, are performed; and some time is devoted to elementary work in qualitative analysis.

**2. ADVANCED INORGANIC AND ELEMENTARY ORGANIC CHEMISTRY.—Tuesdays and Thursdays, 9—10 A. M. Laboratory: Tuesdays and Thursdays, 2—4:30 P. M.**

For admission to this class Chemistry 1A, or an equivalent class in chemistry, is required.

**Autumn term:** the metals and their compounds; elements of Physical Chemistry, especially the portions bearing on analysis.

**COSESSES OF INSTRUCTION.**

Spring term: compounds of carbon, their purification and analysis; the paraffins and their chief derivatives; ethylene; acetone; benzene and its chief derivatives.

At least five hours a week must be devoted to laboratory work. This will include qualitative analysis and the preparation of pure laboratory reagents and typical inorganic and organic substances.

*Books recommended:* A. A. Noyes, *Qualitative Chemical Analysis*, (The Macmillan Co.); Remsen, *Compounds of Carbon*, 4th edition, (D. C. Heath & Co.).

**3. MEDICAL CHEMISTRY.—Autumn term: Saturdays, 9—10 A. M. Spring term: Tuesdays, Thursdays and Saturdays, 9—10 A. M. Laboratory: Tuesdays and Thursdays, 10—11 A. M., Fridays, 11 A. M.—12 M.**

Students entering this class must have taken Chemistry 1A, or an equivalent class in chemistry.

**Class Work.**—The subjects of study in the class include pure chemistry and the applications of chemistry to medicine.

Pure Chemistry: review of the chemistry of metals, noting especially compounds having medicinal or toxic properties; compounds of carbon—their purification and analysis; the paraffins and their chief derivatives; ethylene; acetylene; benzene and its chief derivatives.

Medical chemistry: air, water, its sanitary analysis and purification; adulteration of foods; the proximate principles of the body and of food; typical foodstuffs—as milk, flour, bread, meat; the blood; the digestive fluids and digestion; urine.

**Laboratory Work.**—All members of the class are required to devote at least three hours a week to laboratory work. This will consist of qualitative analysis, including the detection of the more commonly occurring poisons, the detection of adulterations in milk, simple quantitative exercises in the analysis of air and water, and the quantitative estimation of glucose, albumen and urea.

*Books recommended:* Remsen, *Compounds of Carbon*, 4th edition (D. C. Heath & Co.); F. M. Perkins, *Qualitative Chemical Analysis* (Longmans); Wolf, *Physiological Chemistry* (W. B. Saunders & Co.).

**4. ENGINEERING CHEMISTRY.—Autumn Term: Tuesdays and Thursdays, 9—10 A. M. Laboratory: Tuesdays and Thursdays, 2—4:30 P. M.**

For admission to this class Chemistry 1A, or an equivalent class, is required.

The lectures in this class are the same as those of the Autumn term in Chemistry 2.

Five hours a week are devoted to laboratory work, which includes a thorough course in qualitative analysis.

*Books recommended:* A. A. Noyes, *Qualitative Analysis* (The Macmillan Co.). For reference: Talbot and Blanchard, *Electrolytic Dissociation Theory* (The Macmillan Co.); Stillman, *Engineering Chemistry* (Chemical Publishing Co.); Mason, *Evaporation of Water* (Wiley & Sons).

**ADVANCED CLASSES.**

The following classes are especially intended for candidates for Honours in Chemistry and Chemical Physics; but any student who has passed in Chemistry 2 with Distinction may be admitted. The classes are given in alternate years.

**5. HISTORY OF CHEMISTRY.—(1919-II).** Once a week.

The development of chemical theory from the time of Boyle.

**BOOKS RECOMMENDED:** Tilden, *Short History of the Progress of Scientific Chemistry* (Longmans & Co.); Ernst von Mller, *History of Chemistry* (Macmillan & Co.); Berthelot, *History of Modern Chemistry* (Macmillan & Co.); Erlenmeyer, *Johann von Liebig* (Macmillan & Co.); Thoms, *Essays on Historical Chemistry* (Macmillan & Co.); Scherzer, *Briefer Progress of Organic Chemistry* (Macmillan & Co.); Schmid, *Handbuch der Organischen Chemie* (Braun & Fischer); and selected memoirs from the *Allemann Club Reprints* and Ostwald's *Kalender*.

**6. PHYSICAL CHEMISTRY.—(1919-19).** Once a week.

Solutions; thermo-chemistry; electro-chemistry; and chemical dynamics.

**BOOKS RECOMMENDED:** Walker, *Introduction to Physical Chemistry* (Macmillan & Co.); Selected portions of Ostwald's *Principles of Inorganic Chemistry* (Macmillan & Co.).

**LABORATORY CLASSES.****7. PRACTICAL INORGANIC CHEMISTRY.—At least ten hours a week.**

For admission to this class Chemistry 2, or 4, or equivalent work, is required.

The work of the class consists of quantitative analysis and the preparation of inorganic substances.

One hour a week is taken for the discussion of analytical methods, and at least ten hours a week must be devoted to laboratory work. The preparation and analyses prescribed are designed to illustrate typical methods. The quantitative exercises carried out are the following: preparation of standard solutions of acids and alkalies, estimation of chlorine, sulphur, phosphorus, carbon in carbonates, silicon, silver, copper, iron, manganese, zinc, calcium and magnesium, volumetric as well as gravimetric methods being employed wherever applicable.

Candidates for Distinction are required to undertake additional work selected from the following: estimation of iodine, nitrogen in nitrates, potassium, chromium, aluminium and lead, analysis of iron and steel, analysis of ores, water analysis.

**BOOKS RECOMMENDED:** Roscoe, *Inorganic Preparations* (John Murray Press); Langford, *Inorganic and Physiological* (The Macmillan Co.); Tamm, *Quantitative Analysis* (The Macmillan Co.); Morris, *Exercises on Quantitative Chemistry* (Ginn & Co.); Blair, *Chemical Analysis of Iron* (J. B. Lippincott & Co.); Masson, *Estimation of Water* (Wiley & Sons).

**8. PRACTICAL ORGANIC CHEMISTRY.—At least ten hours a week.**

For admission to this class Chemistry 2, or 3, or equivalent work, is required. The work of the class consists of the preparation and analysis of organic compounds. At least ten hours a week must be devoted to laboratory work. A sufficient number of organic compounds are prepared to illustrate the most important reactions and methods of working. Quantitative determinations are carried out of carbon, hydrogen, oxygen and nitrogen; and some molecular weights are determined.

Students are permitted to substitute for the analytical work an equivalent amount of work in other branches of analysis, or in Physiological Chemistry.

**COURSES OF INSTRUCTION.**

Candidates for Distinction are required to do additional work of the kind outlined above.

**BOOKS RECOMMENDED:** Remens, *Compounds of Carbon*, 4th edition, (D. C. Heath & Co.); Cohen, *Practical Organic Chemistry for Advanced Students* (Macmillan & Co.); Gatterman, *Practical Methods of Organic Chemistry*, translated by Scheber (Macmillan & Co.).

9. The work of the class will consist either (a) of original investigation conducted by students who have shown themselves qualified to undertake it, or (b) of work in analytical or syntheses chemistry in continuation of the work of either Chemistry 7 or 8.

**CHEMICAL LABORATORY.**

The general laboratory is open on Mondays and Wednesdays for students in Chemistry 1A from 10 to 11 a.m., and from 2 to 3 p.m.; and on Tuesdays and Thursdays for students in Chemistry 2, 3 and 4, from 10 to 12, and from 2 to 4:30; also on Fridays for Chemistry 1A from 10 to 11, and for Chemistry 3 from 11 to 12.

The qualitative laboratory is open daily at 9 a.m. It closes on Saturdays at 1 p.m., and on other days at 5 p.m.

**VII.—GEOLOGY AND MINERALOGY****1. GENERAL GEOLOGY.—Lectures and collateral reading.—Tuesday and Thursday, 12 M.—1 P. M.**

This course is required for candidates in Civil and Mining Engineering, second year, and is elective for candidates in Arts and Science. It covers the field of general inorganic geology, and methods of fossilization and formation of organic deposits. It is intended that the course shall be equally advantageous to the academic and the engineering student.

2. GEOLOGY.—The work of this class includes that of Geology 1, together with field and laboratory work. The field and laboratory work occupies Saturday mornings throughout the year, except when there are excursions, beginning at 9. Excursions are held during the autumn except on stormy days, occupying Saturday mornings or all day. Required for candidates in Civil and Mining Engineering, second year, and elective for candidates in Arts and Science.

The course is so arranged as to allow some differentiation between the two engineering groups in the laboratory work. The collection of maps, minerals and rocks for use in Geology 2 is unusually complete, and the work is entirely individual. The vicinity of Halifax offers a varied field for the excursions, which can be completed at small expense. Much of the work in the field is individual, and reports are required upon each excursion.

**MINERALOGY.—Lectures and laboratory work. Lectures, Tuesday and Thursday, 10-11 A. M.; Laboratory, Tuesday and Thursday, 1:30 to 6 P. M.**

The ground covered includes crystallography and general physical mineralogy, and the determination of about 200 species of minerals, chiefly by gross physical means.

Required for candidates in Mining Engineering, second year, and elective for candidates in Arts and Science.

## XVIII.—BIOLOGY

*Lecturer*

1. Tuesdays, 2—4 P.M.; Saturdays, 11 A.M.—1 P.M.

**BOTANY.**—The course in Botany will have special reference to the following subjects: Protoplasm and Plant-cells; the Tissue and Tissue Systems of Plants; Morphology of the Plant-body; Plant Physiology, the Principles of Classification and the Laws of Distinction, the Protophyta (Scleridoplycota), the Phycomycetes (Chlorophyceae and Phaeophyceae), the Carpophyta (Rhodophyceae, Ascomycetes and Basidiomycetes specially), the Bryophyta (Mosses and Liverworts), the Pteridophyta (Ferns, Horsetails and Club-mosses), the Anthophyta (especially the Conifers, Gramineae, Orchidaceae, Liliaceae, Urticaceae, Labiate, Composite, Umbelliferae, Rosaceae, Cruciferæ, Leguminosæ, Bambusaceæ). The Morphology and life history (the anatomy, histology, and development) of at least two common or representative species of each group of plants above named, in minute detail.

General attention will be given to the native flora of the Province, with special notice of the economic, medicinal, or injurious properties of foreign as well as native species of interest.

The preliminary study in Botany as indicated in Grade IX of the Public School Course, and especially the formation of a local collection of plants, even if unnamed and unclassified, will be an advantage to any student entering upon the course.

Practical instruction will be given in the collecting, drying and mounting of specimens, the use of the microscope, the preparing of microscopical sections, and the general dissection of plants. The use in class of a number of microscopes, will be granted the students under the care and direction of the Lecturer; but a hand lens, glass slides, cover glasses, scalpels and other apparatus or books necessary for each student, should be supplied by each for himself. Collections, notes, class-work and drawings of students will be estimated for incorporation into final class standing.

Students aiming at Distinction are required, in addition, during the summer vacation to study practically the flora or a section of the flora in some district, to present a collection of the said flora properly classified and mounted, and to pass an oral and practical examination on the same at the beginning of their next session.

**TEXT BOOK:** *Principles of Botany* by Bergey and Davis.

Manuals of the practical work prescribed for the summer will be recommended by the Lecturer.

**FEES AND REFERENCE:** Special text-books will be recommended in each sub-division of the subject during the course of the lectures and demonstrations.

**ZOOLOGY.**—The course in Zoology will consist of lectures supplemented by practical work.

The student will be expected to master the system of Zoology as contained in Colton's "Zoology Descriptive and Practical," parallel with the course of lectures expounding zoological principles and sketching local distribution of species and genera, and with the life-study or dissections of local species under the microscope or scalpel as follows:

1. Five species of the local leposa; 2. One species each from any one of the following: The Foraminifera, Radiolaria,

Flagellata, Choanoflagellata, Dinoflagellata, Paramaecium, Vorticella, Sporozoa; 3. Three species of marine, and three of fresh-water Sponges; 4. One species each of Hydra; the Campanulariidae, Plumulariidae, and Seriulariidae; Aurelia, Metridium; and the skeletons of Zoantharia and Alcyonaria; 5. A species each of the Platynematophores and of the Nemertinellimata; 6. Five species of local freshwater and marine Polynes and a Rotifer; 7. The common Starfish; 8. The common sea-urchin; 9. An Earthworm; 10. A Lobster; 11. Ectenotrichaea in water supply, and dissection of Grasshopper in detail; 12. Oyster, Clam, or Mussel; 13. A Trout, Smelt, Herring or Cod. (Or No. 16 in full detail); 14. A Frog. (Or No. 16 in full detail); 15. A Pigeon. (Or No. 16 in full detail); 16. A Rabbit. (If in full detail for 12, 13, 14, and 15). The scarcity of any of the above during the season, or the abundance of other species may modify the list of species for dissection or life-study as may suit the circumstances most conveniently.

**FOR DISTINCTION:** The candidate must pass an examination on supplementary topics to be named after the opening of the course; or present a paper showing practical, original, or local explanatory work in some zoological sub-division; or present a collection made and determined, proving the ability of the candidate to deal with practical zoological problems.

## XIX.—FREEHAND DRAWING

The class in Freehand Drawing conducted by the Victoria School of Art and Design is recognized as qualifying for a degree. It is held in the rooms of the Victoria School of Art on Argyle Street. Candidates offering this class for a degree must present certificates, showing that they have given the required attendance and have satisfactorily completed the work of the class. Blank form of certificate may be had from the Secretary of the Faculty of Arts and Science. Information regarding the hours of meeting of the class, fees, etc., may be obtained on application to Mr. Alexander McKay, Secretary of the Victoria School of Art and Design.

The subjects studied are as follows:

Free-hand Drawing. Geometrical Drawing. Shaded Drawing from the Round. Modelling in clay. Principles and practice of Decorative Design and elements of Perspective.

## XX.—ANATOMY

The University provides no instruction in this subject, but the Junior or the Senior Anatomy Class and the Practical Anatomy Class, conducted in the Halifax Medical College by Professor A. W. H. Lindsay, M.D., are recognized as qualifying for a degree. The Junior Anatomy Class meets on Mondays, Wednesdays and Fridays at 12—1 p.m., and Saturdays at 10—11 a.m. The fee for each of these classes is \$15.00. The Practical Anatomy Class meets daily (Saturdays excepted), at 3.30 p.m.; fee, \$15.00.

Undergraduates who have taken the Practical Anatomy Class as part of their course are required to produce evidence of hav-

ing, during their attendance on such class, carefully dissected at least three "parts" of the body.

Undergraduates who have taken the above classes as part of their course are required to present certificates of having passed the examinations conducted by the Faculty of Medicine.

#### XXI.—HISTOLOGY

The University provides no instruction in this subject, but the class conducted in the Halifax Medical College is recognized as qualifying for a degree. The class meets on Mondays, Wednesdays and Fridays at 11 A.M.—12 M. The fee for the course is \$15.00.

#### XXII.—PHYSIOLOGY

The University provides no instruction in this subject, but the class conducted in the Halifax Medical College, is recognized as qualifying for a degree. The class meets on Tuesdays, Thursdays and Saturdays, at 11 A.M.—12 M. The fee for the course is \$15.00.

Undergraduates who have taken this class as part of their course are required to present a certificate of having passed the examination of the Faculty of Medicine.

#### XXIII.—THEORY AND HISTORY OF MUSIC

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.

#### XXIV.—DRAWING

Professor..... C. D. HOWE, B.S.

**1. MECHANICAL DRAWING.**—Lectures two hours and drawing ten hours per week during the first term; lectures two hours and drawing four hours per week during the second term.

The work includes the selection, care, and use of drawing instruments, lettering, geometrical exercises, instrumental rendering, object drawing, both freehand and to scale from measurements, isometric and wash drawings, tracing, blue-printing, and the theory of perspective and shades and shadows. All engineering students are required to take this course in the first year.

**2. DESCRIPTIVE GEOMETRY.**—Lectures two hours per week, drawing four hours per week during the second term.

The work includes the projection of lines, plane figures, and solids, problems on the relations of straight lines and planes in space, intersections and developments, surfaces of revolution. The course aims not only to develop the power to visualize magnitudes involving three dimensions, but also to point out practical applications to engineering work. Required of all students in Civil, Mechanical, and Electrical Engineering.

**3. MACHINE DESIGN.**—Lectures two hours per week, drawing four hours per week, during the first term.

The course includes the drawing of bolts, nuts, and screws, pipe connections, belt, chain, and tooth gearing, and the detail drawings and assembly of some machine, made from freehand sketches and measurements taken by the student. Required of students in Mechanical and Electrical Engineering.

#### XXV.—SURVEYING

Professor..... C. D. HOWE, B.S.

Lectures two hours per week, field work four hours per week first term, drawing four hours per week second term.

Instruction is given in the use and adjustment of the various surveying instruments, also in plane land surveying by chain, compass, transit, and level, city surveying, hydrographic surveying, triangulation, topographical, and mine surveying. The work includes theory, practice in field work and plotting, and conventional representation of topographical features.

Required of all students in Civil and Mining Engineering.

# Faculty of Law.

## THE PRESIDENT.

R. C. WELDON, PH. D., K. C. H. McKNEE, K. C., LL. B.  
 Hon. R. RUSSELL, D. C. L., J. S. C. W. B. WALLACE, LL. B., J. C. C.  
 Hon. A. DETHMADLE, J. S. C. W. F. O'CONNOR, R. C. L., LL. B.  
 G. PATTERSON, A.M., LL.B., J.C.G.

Correspondence should be addressed to  
 Dean Weldon, Law School, Dalhousie College.

## COURSES OF LECTURES

The following Courses of Lectures to be given in the Session of 1909-10, will begin on the 31st August, 1909, and end on the 16th February, 1910.

### CONSTITUTIONAL AND INTERNATIONAL LAW

(George Munro Professorship.)

Professor..... R. C. WELDON, K. C.

#### CONSTITUTIONAL LAW.

Two lectures per week. Subjects of lectures:

Constitutional Conventions. Royal Prerogative.  
*Lex Parliamenti*. Colonial Laws Validity Act.  
 Select Cases; Cartwright's Cases.

#### CONSTITUTIONAL HISTORY.

Two lectures per week. Subjects of lectures:

Feudalism in England. Origin and growth of the Two Houses of Parliament. Origin and Development of Trial by Jury. Origin and Development of the Courts of Law. The Royal Prerogative. History of the Law of Treason. The Liberty of the Person. The Liberty of the Press. History of Party Government. Origin and Development of the Cabinet System. History of the Reform Bills. The Written Code of the Constitution. Magna Charta. Petition of Right. Bill of Rights. *Habeas Corpus*.

TEXT BOOK: *Tawell-Laguerre's Constitutional History of England*.

#### CONFLICT OF LAW.

One lecture per week. Subjects of lectures:

Leading rules as to (1) personal capacity, (2) rights of property, (3) rights of obligation, (4) rights of succession, (5) family

rights, (6) forms of legal acts. The use of courts by strangers. The effect of foreign judgments. Select cases upon the Conflict of Laws.

TEXT BOOK: *Nelson's Private International Law*.

## INTERNATIONAL LAW.

One lecture per week. Subjects of lectures:

History of North Atlantic Fisheries. Convention of London 1818. Territorial Waters. Treaty of Washington, A. D. 1871. Consuls. Commercial Treaties. Naturalization. Extradition. Blockade. Contraband. Intervention. Capture. Prize Courts.

TEXT BOOK: *Hall's International Law*.

## CRIMES

Lecturer..... W. B. WALLACE, LL. B., J. C. C.

Two lectures per week. Subjects of lectures:

Sources of Criminal Law. Offences against Public Order, Internal and external. Offences affecting the administration of Law and Justice. Offences against Religion, Morals, and Public Convenience. Offences against the Person, and Reputation. Offences against rights of property and rights arising out of Contract and offences connected with trade. Procedure. Proceedings after conviction.

TEXT BOOKS *The Canadian Criminal Code*, 1892.

## SHIPPING

Lecturer..... PROFESSOR WELDON.

Subjects of lectures:

Registration of Shipping. Transfer. Mortgage. Bottomry and Respondentin. Charter Party. Bills of Lading. Collision. Damage. Salvage. Freight. Towing. General Average.

## CONTRACTS

Professor..... R. RUSSELL, M. A., D. C. L., J. S. C.

Two lectures per week. Subjects of lectures:

Definition of terms: agreement, consideration, proposal, acceptance, promise, &c. Persons who may contract. Principal and agent. Disabilities arising from infancy, coverture, lunacy, intoxication, &c. Express and implied contracts. Verbal and written contracts. Specialties. Statutory requirements as to the validity and authentication of contracts; Statute of Frauds. Causes vitiating agreements; mistake, fraud, duress, &c. Discharge of contracts, revision, performance, payment, release, merger, &c. Leading cases.

TEXT BOOKS: *Firth's Contracts*, and *Anson on Contracts*.

**EQUITY JURISPRUDENCE**

*Lecturer.....* PROFESSOR RUSSELL.  
One lecture per week, extending over two years. Subjects of lectures:

Trusts, Mortgage, Frauds, Mistake. Specific Performance of Contracts, Administration of Assets, Election, Account, Discovery, Injunction.

TEXT BOOK: Smith, H. A.

**SALES OF PERSONAL PROPERTY**

*Lecturer.....* PROFESSOR RUSSELL.  
One lecture per week. Subjects of lectures, [1910-11]:  
Capacity to buy and sell. Executed and executory contracts of sale. Statute of Frauds. Lord Tenterden's Act. Rules as to passing of property. Reservation of jus disponendi. Stoppage in transitu. Condition. Warranty, express and implied. Remedies of seller and buyer.

TEXT BOOK: Benjamin on Sales.

**NEGOTIABLE INSTRUMENTS**

*Lecturer.....* PROFESSOR RUSSELL.  
One lecture per week. Subjects of lectures, [1909-10]:  
Formal Requisites, Consideration. Indorsement and Transfer Real and Personal Defense. Over-due Paper. Notice of Dishonor Protest.

TEXT BOOK: McLarens on Bills.

**EVIDENCE**

*Lecturer.....* GEORGE PATTERSON, A. M., LL. B., J. C. C.  
Two lectures per week. Subjects of lectures:  
Nature of proof. Production and effect of Evidence. Relevancy Instruments of Evidence.

TEXT BOOKS: Greenleaf on Evidence; Judicature Acts and Rules.

**PARTNERSHIP**

*Lecturer.....* W. B. WALLACE, LL. B., J. C. C.  
Subjects of lectures:  
Constitution. Liability of partners inter se and to third persons. Change of firm. Retirement of partners. Dissolution.

TEXT BOOK: Lindsey on Partnership.

**PRACTICE AND PROCEDURE**

*Lecturer.....* MR. HECTOR MCINNES, LL. B.  
Subjects of lectures:  
Judicature Act and Rules, General Principles of Pleading, and Rules of Practice.  
Candidates for the Degree of LL. B. are not required to attend lectures or take the examination in Procedure.

**TORTS**

*Lecturer.....* PROFESSOR WELDON.  
One lecture per week. Subjects of lectures:  
Definitions. Torts considered with reference to Crime and Contracts. Deceit. Slander and Libel. Malicious Prosecution Conspiracy. Assault and Battery. Trespass to Property. Conversion. Nuisance. Negligence.

TEXT BOOK: Bigelow, or Pollock.

**REAL PROPERTY (First Year)**

*Lecturer.....* MR. W. F. O'CONNOR, B. C. L., LL. B.  
One lecture per week. Subjects of lectures:  
Estates in lands. Seisin. Limitation of present and future estates in lands. Joint tenancies and tenancies in common. Equitable estates in lands.

TEXT BOOKS: Williams on Real Property, and Challis on Real Property.

**WILLS (Second Year)**

*Lecturer.....* MR. W. F. O'CONNOR, B. C. L., LL. B.  
One lecture per week. Subjects of lectures:  
Origin of Wills. The Statute of Frauds as affecting Wills. Form and characteristics of instrument. Personal disabilities of testators. What may be devised or bequeathed. Execution, publication, revocation and republication of Wills. The Wills Acts of the various Maritime Provinces. Probate Court practice.

TEXT BOOK: Hays and Jarman on Wills.

**Admission of Students**

(1.) Students may enter the University by (a) entering their name in the Register, and (b) paying the prescribed fees.

(2.) Students who wish to obtain University Degrees must become undergraduates. They may become undergraduates by (a) passing the Matriculation Examination of the Arts Faculty or a recognized equivalent, or (b) producing certificates of Articled Clerkship, or the like, in cases where they rely on having passed the preliminary law examinations in their several provinces, and (c) entering their names on the Register as Undergraduates.

(3.) Students, who are not undergraduates, are classed as General Students.

### Degree of Bachelor of Laws

(1.) All candidates for the Degree of LL. B., are required to pass the Matriculation Examination of the Arts Faculty, or a recognized equivalent, to attend not less than five-sixths of the lectures given in each subject of the Course of Study, to pass the prescribed Examinations in the subjects of the three years Course of Study, and to argue at least two cases in the Moot Court.

*Students presenting themselves for the first time to register as undergraduates in law must submit to the Dean their diplomas or certificates to establish their qualifications as graduates, undergraduates, or enrolled law students, respectively. Without such diplomas or certificates students cannot be registered as Undergraduates in law.*

(2.) Undergraduates of other Law Schools, may on producing satisfactory certificates, be admitted to advanced standing in this Law School. But if their previous courses of study have not corresponded to the course on which they enter in this University, they may be required to take extra classes.

### Courses of Study for the Degree of LL. B.

#### First Year

- |                   |                            |
|-------------------|----------------------------|
| 1. Real property. | 4. Torts.                  |
| 2. Crimes.        | 5. Constitutional History. |
| 3. Contracts.     |                            |

#### Second Year

- |                            |              |
|----------------------------|--------------|
| 1. Equity.                 | 5. Shipping. |
| 2. Partnership.            | 6. Wills.    |
| 3. Negotiable Instruments. | 7. Evidence. |
| 4. Constitutional Law.     |              |

#### Third Year

- |                       |                                |
|-----------------------|--------------------------------|
| 1. International Law. | 4. Equity.                     |
| 2. Conflict of Laws.  | 5. Sales of Personal Property. |
| 3. Evidence.          | 6. Companies.                  |

The Faculty urgently recommend that students devote their whole time during Sessions to the work of the School, experience having proved that students who undertake office work in addition to the work of their classes, receive comparatively little advantage from the lectures.

### Sessional Examinations

(1.) The Sessional Examinations will begin next Session on February 17th, 1910.

(2.) Students are forbidden to bring any book or manuscript into the Examination Hall, except by direction of the Examiner, or to give or receive assistance, or to hold any communication with one another at the examinations. If a student violate this rule, he shall be excluded from the Sessional Examinations of the session, and such other penalty shall be imposed as the Faculty may determine.

(3.) If an Undergraduate fail to pass in one or two subjects at the Sessional Examination, he shall be allowed a supplementary examination in such subject or subjects at the beginning of any subsequent session.

(4.) If an Undergraduate fail to pass in more than two subjects at any Sessional Examination, he shall lose his Session.

(5.) Undergraduates who wish to present themselves at a Supplementary Examination must give notice addressed to the Secretary of the Faculty, Dalhousie Law School, Halifax, on or before August 26th, 1909.

(6.) Hereafter Supplementary Examinations shall be held but twice during the year, at the beginning of the Session and at the end.

(7.) The Supplementary Examinations for the present year will begin on August 31st, at 3 p. m. Fee \$5, payable on the day of the Examination.

### Moot Courts

Moot Courts are held weekly.

The case to be argued is stated by the Professor or Lecturer who is to preside. Every candidate for a degree shall be required to take part in at least two arguments at the Moot Court. The senior counsel on either side shall file briefs with the Dean one day before the day on which the case is argued. A record is kept of the values assigned to the arguments made, and these values may be considered by the Faculty in recommending a candidate for his degree.

**Fees**

The following are the fees payable by students of the Faculty of Law. *They are in all cases payable in advance.*

Students are requested to pay their Class Fees and sign the University Register on Tuesday, 31st August, 1909, in the office of the Law School.

Registration Fee, payable only by General Students .....	\$ 2 00
Registration after September 22nd, additional fee.....	1 00
Fee for each class attended, per Session, payable by General Students .....	10 00
Fee for each class attended, per Session, payable by students of the Affiliated Course .....	6 00
Fee for the classes of the First Year, payable by undergraduates .....	60 00
Fee for the classes of the Second Year, payable by undergraduates .....	60 00
Fee for the classes of the Third Year, payable by undergraduates .....	50 00
Fee for LL. B. diploma, which is payable before the final examination, and will be returned in case of failure..	10 00
Fee for the Supplementary Examination .....	5 00

Students of any year are permitted to attend lectures in the subjects of an earlier year without extra charge.

*Students will not hereafter be admitted to the Lecture Rooms unless they have paid their class fees.*

In no case will students be asked to pay higher fees than were published in the latest copy of the Dalhousie Law Calendar which had been issued before the date of registration.

**Faculty of Medicine****THE PRESIDENT, (*ex officio*)**

GEOFFREY L. SINCLAIR, M. D.	MURDOCH CHISHOLM, M. D.
A. W. H. LINDSAY, M. D., C. M.	NEWMAN F. CUNNINGHAM, M. D.
ANDREW J. COVIE, M. D.	JOHN W. MACKAY, M. D.
ALEXANDER P. REID, M. D.	A. STANLEY MACKENZIE, PH. D.
MATTHEW A. CURRY, M. D.	E. V. HOGAN, M. D.
LOUIS M. SILVER, M. B., C. M.	J. G. McDONNELL, M. D., C. M.
F. U. ANDERSON, M. B. C. S., H.B.	DANIEL MCINTOSH, M. D.
EDWARD H. MACKAY, Ph. D.	W. R. MOORE, M. D., C. M.
WILLIAM H. HITTIE, M. D.	R. A. H. MCKERN, M. D.
GEORGE M. CAMPBELL, M. D.	A. L. McCALLUM, B. SC.
NEWMAN E. MACKAY, M. D.	A. F. BUCKLEY, M. D., C. M.
H. H. MACKAY, M. D.	F. H. HALEY, M. A.

*Dean of the Faculty:* DR. SINCLAIR.  
*Secretary of the Faculty:* DR. LINDSAY.

Correspondence should be addressed:

*The Secretary, Faculty of Medicine,  
Dalhousie College, Halifax.*

**Courses of Instruction\***

1. Instruction is provided by the University in the following subjects of the Medical Curriculum:—

**L.—CHEMISTRY.**

*(McLeod Professorship.)*

*Professor.....* E. MACKAY, PH. D.  
*Demonstrator.....*

Medical students will be required to attend the University courses in Chemistry known as **I A** and **3**, as follows:†

**I A. GENERAL CHEMISTRY.**—Mondays, Wednesdays and Fridays, 11—12 A. M.

Measurement of mass, volume, pressure, temperature, heat; solids and liquids; gases and gas laws; melting-points, boiling-

\*It is to be distinctly understood that the program and regulations regarding courses of study and examinations contained in this Calendar represent only the requirements of the Administration of the University, while fully sensible of its obligations towards the students, does not hold itself bound to adhere absolutely for the entire period of a student's course to the conditions now laid down.

†See foot-note, page 84.

points, solution, crystallization; preparation and properties of common acids and alkalies; combustion, air, water, oxygen, hydrogen; fundamental laws of combination, atomic theory, Avogadro's law, formulae, equations; chlorine; halogen group; dissociation, mass action; valence; sulphur; nitrogen; argon; carbon; periodic law; nitrogen group; isomorphism; potassium, sodium, ammonium; silver, copper, gold; atomic heat; calcium, barium; magnesium, zinc, cadmium, mercury; thermochemistry; boron, aluminum; carbon group; cerium; manganese; iron, nickel, cobalt, platinum. Some common organic compounds.

The lectures are illustrated as fully as possible by experiments. A tutorial class, attendance on which is in general optional, meets on Friday afternoons.

Three hours a week must be devoted to laboratory work. The laboratory work is designed to make the student familiar with ordinary laboratory operations and to lead him to solve simple problems in chemistry by experiment. Several common inorganic substances are prepared and studied; simple quantitative experiments leading to the fundamental laws of chemistry are performed; and some time is devoted to elementary work in qualitative analysis.

**BOOKS RECOMMENDED:** Smith, *General Chemistry* for Colleges, (Century Co.); *For occasional reading:* Atkinson, *Chemists in Daily Life*.

**3. MEDICAL CHEMISTRY.**—*Autumn term:* Tuesdays and Thursdays, 9-10 A.M. *Spring term:* Tuesdays, Thursdays and Saturdays, 9-10 A.M. *Laboratory:* Tuesdays and Thursdays, 10-11 A.M.; Fridays, 11 A.M.-12 M.

Students entering this class must have taken Chemistry 1 A, or an equivalent class in chemistry.

**Class Work.**—The subjects of study in the class include pure chemistry and the applications of chemistry to medicine.

**Pure Chemistry:** review of the chemistry of the metals, noting especially compounds having medicinal or toxic properties; compounds of carbon—their purification and analysis; the paraffins and their chief derivatives; ethylene; acetylene; benzene and its chief derivatives.

**Medical Chemistry:** air; water, its sanitary analysis and purification; adulteration of foods; the precise principles of the body and of food; typical foodstuffs—as milk, flour, bread, meat; the blood; the digestive fluids and digestion; urine.

**Laboratory Work.**—All members of the class are required to devote at least three hours a week to laboratory work. This will consist of qualitative analysis, including the detection of the more commonly occurring poisons, the detection of adulterations in milk, simple quantitative exercises in the analysis of air and water, and the quantitative estimation of glucose, albumen and urea.

**BOOKS RECOMMENDED:** Bertram, *Compounds of Carbon*, 4th edition (D. C. Heath & Co.); F. M. Perkins, *Qualitative Chemical Analysis*, (Lea & Febiger); Wolf, *Physiological Chemistry*.

#### CHEMICAL LABORATORY.

The general laboratory is open to students in Medicine from 10 to 11 a.m. daily.

\*In 1909-10 and subsequent years the portion of the subject specified under this heading and taken up on Saturday will be omitted from the work of the second year.

Laboratory students are allowed the use of all the more inexpensive reagents. They are required to provide themselves with the more expensive reagents as alcohol and ether, and they are charged with the value of the apparatus they have broken or injured.

All members of practical classes are required to keep a detailed record of their laboratory work. The character of this record is a factor in determining the standing of a student in the class lists.

#### II.—BIOLOGY.

**Lecturer.**  
*Tuesday, 11 A.M.—1 P.M.; Saturday, 9—11 A.M.*

**BOTANY.**—The course in Botany will have special reference to the following subjects: Protoplasm and Plant-cells, the Tissue and Tissue Systems of Plants, Morphology of the Plant-body, Plant Physiology, the Principles of Classification and the Laws of Distinction, the Protophytes (Schizophytes), the Phycophytes (Chlorophytes and Phaeophytes), the Carpophytes (Rhodophytes, Ascophytes and Basidiophytes specially), the Bryophytes (Mosses and Liverworts), the Pteridophytes (Fern, Horsetails and Club-mosses), the Anthophytes (especially the Conifers, Gramineae, Orchidaceae, Liliaceae, Urticaceae, Labiate, Composite, Umbelliferae, Rosaceae, Cruciferae, Leguminosae, Ranunculaceae). The Morphology and life history (the anatomy, histology, and development) of at least two common or representative species of each group of plants above named, in minute detail.

General attention will be given to the native flora of the Province, with special notice of foreign as well as native species of interest from economic, medicinal or injurious properties.

The preliminary study in Botany as indicated in Grade IX. of the Public School Course, and especially the formation of a local collection of plants, even if unnamed and unclassified, will be an advantage to any student entering upon the course.

Practical instruction will be given in the collecting, drying and mounting of specimens, the use of the microscope, the preparing of microscopic sections, and the general dissection of plants. The use in class of a number of microscopes will be granted the students under the care and direction of the Lecturer; but a hand lens, glass slides, cover glasses, scalpels and other apparatus & books necessary for each student, should be supplied by each for himself. Collections, notes, class-work and drawings will be estimated for incorporation into final class standing.

**TEXT BOOKS:** Berger and Davis, *Principles of Botany* (Glencoe & Co.); Macoun and Speer, *High School Text Book of Botany*.

**FOR REFERENCE:** Special text books will be recommended in each sub-division of Botany and Zoology during the course of the lectures and demonstrations.

**ZOOLOGY.**—The course in Zoology will consist of lectures supplemented by practical work.

The student will be expected to master the system of Zoology as contained in Colton's "Zoology, Descriptive and Practical," parallel with the course of lectures expounding zoological principles and sketching local distribution of species and genera, and the life-study or dissections of local species under the microscope or scalpel as follows:

1. Five species of the local lobosa; 2. One species each from any five of the following: The Foraminifera, Heliozoa, Radiolaria,

Flagellata, Choanoflagellata, Dinoflagellata, Paramoecium, Vorticella, Sarcoscypha; 3. Three species of marine, and three of Freshwater Sponges; 4. One species each of Hydra; the Campanularidae, Planularidae, and Sertularidae; Aurelia, Metridium; and the skeletons of Zoothanaria and Aleyrodomaria; 5. A species each of the Platyhelminths and of the Nemathelminths; 6. Five species or local freshwater and marine Polyzoa and a Rotifer; 7. The common Starfish; 8. The common Sea-Urchin; 9. An Earthworm; 10. A Lobster; 11. Entomology in water supply, and dissection of Grasshopper in detail; 12. Oyster, Clam, or Mussel; 13. A Trout, Sardine, Herring or Cod (or No. 16 in full detail); 14. A Frog (or No. 16 in full detail); 15. A Pigeon (or No. 14 in full detail); 16. A Rabbit. (If in full detail for 12, 13, 14 and 15.) The scarcity of any of the above during the season, or the abundance of other species may modify the list of species for dissection or life-study as may suit the circumstances most conveniently.

TEXT BOOKS: Coates, *Zoology, Descriptive and Practical*.

### III.—MEDICAL PHYSICS.

Professor ..... A. STANLEY MACKENZIE, PH. D.  
Demonstrator .....

*Lectures, Mondays and Wednesdays, 9—19 A. M. Laboratory, Thursdays, 11 A. M.—1 P. M.*

This class, designed for those intending to take the examination in Medical Physics, treats in an elementary manner of Dynamics and of the fundamental phenomena of Experimental Physics. Those taking the class must in addition to attending the lectures, spend two hours per week in the laboratory carrying on a series of practical exercises in physical measurement.

BOOKS RECOMMENDED: DEX, *A Text-book of Physics*.

2. In other subjects the necessary classes may be attended at any other University or College recognized by the Senate.

### General Regulations for Courses

1. Students wishing to attend the above courses may do so either as Special Medical Students without preliminary examination, or as regular Undergraduates in Medicine. In either case they must enter their names in the University Register at the beginning of the Session.

2. Except as hereinafter specified,\* attendance on classes by those registered as Special Medical Students will not qualify for Degree Examinations in this Faculty.

3. Undergraduates in Arts or Science who are also matriculated in the Medical Faculty may offer for their Arts or Science degree certain classes of the Medical curriculum and thereby shorten their subsequent course in Medicine. See "Affiliated Courses," Calendar of Faculty of Arts and Science, pp. 22, 24-5.

4. Certificates indicating less than 90 per cent. of attendance upon any class will not be accepted without valid reason for absence being shown.

### The Academic Year

The Academic Year consists of one session of eight months' duration. The session of 1909-1910 will begin on Thursday, August 26th, 1909, and end on Thursday, April 28th, 1910.

### Degrees

Two Medical Degrees are conferred by this University, viz., Doctor of Medicine (M. D.) and Master of Surgery (C. M.); but neither degree is conferred on any person who does not at the same time obtain the other.

### Matriculation Examination

1. Candidates for medical degrees must give evidence of having obtained a satisfactory general education, by presenting certificates of having passed, before entering on the course of study qualifying for the degrees, either the Preliminary Examination of the Provincial Medical Board of Nova Scotia, the Junior Matriculation Examination of this University, with Latin as one of the languages selected, or some other examination recognized by the Board as sufficient,\* and of having completed their sixteenth year before the passing of such examination.

2. The examinations recognized *pro tanto* by the Provincial Medical Board will be similarly recognized by this Faculty.

3. Candidates who may have passed in all but one of the subjects required for the Preliminary Examination of the Provincial Medical Board either before the Board's Examiners or at any of the recognized Examinations indicated above, provided they shall have made at least 25% in such subject, may enter as undergraduates, but will subsequently be required to comply with the Board's regulations as regards the remaining subject of examination before being admitted to the classes of the second year.

\*All information in reference to Requirements for the Preliminary Examination of the Provincial Medical Board, Exemptions, etc., may be obtained on application to the Registrar of the Board, Dr. A. W. H. Lindsay, 245 Pleasant Street, Halifax.

### Degree Examinations

Candidates for the degrees of M. D. and C. M., who began the study of medicine previous to July 1, 1908, will be required to pass two main examinations—the Primary and the final M. D., C. M. Examinations; candidates who began study subsequent to July 1, 1908, will be required to pass a "Professional Examination" at the end of each year.

All candidates for examinations must enter their names in the University Register at the beginning of the session.\* They will be required to satisfy before admission to the examinations certain conditions as to fees, attendance on classes, etc. Tickets of admission will be issued to all candidates who have complied with these requirements of the Faculty, which tickets shall be produced at each examination.

The Regular Degree Examinations will be held during the second and third weeks in April of each year.

At all examinations a minimum of 50% in each subject† will be required to obtain a "Pass," except under the conditions specified on p. 99, see. 4. Candidates making 75% or over in any subject shall be indicated in the published class lists as having "*Passed with distinction.*" The names in the two divisions of the class lists and in the general pass lists shall be placed in alphabetical order.

Should a candidate fail to pass or to hand in a paper in any subject or subjects at the Regular Examinations, his fee will not be returned to him, but he will be permitted a supplementary examination in any subject or subjects on payment of \$5.00 for each subject, with or without evidence of further attendance on said subject or subjects as the Faculty may direct.

A candidate who has been prevented by exceptional circumstances from presenting himself at the Regular Examination may by special permission of the Faculty be allowed a *special* examination, but such examination shall only be allowed at the dates specified in the University Almanac, and the fee shall be \$5.00 for each subject of examination.

\*Fee for persons registering before Sept. 21, two dollars; subsequent to Sept. 21, three dollars.

†In Chemistry and in Physics the same percentage will be required of Medical Students as of other students in those subjects, viz.: 40%.

Candidates are not permitted to present themselves for examination in selected subjects, but are required to take each section (or each "Professional Examination") as hereafter defined (pp. 89, 90, 92, 95) as a whole, except (a) Candidates obtaining the special permission of the Faculty; (b) Students taking one of the affiliated courses (p. 86, sub. sec. 3).

In either case the fee will be \$5.00 for each subject, and such examination shall only be allowed at the dates specified in the University Almanac for the supplementary or the regular examinations.

Candidates who have been granted supplementary examinations, will be required to pay the examination fee whether they take the examination in the Autumn or at the time of the regular April examinations.

**NOTE.—The following regulations regarding the Primary and Final Examinations apply to students who begin the study of medicine previous to July 1st, 1908.**

### Primary M. D., C. M. Examination\*

This examination shall consist of two parts as follows:—

#### (A) PRIMARY EXAMINATION, SECT. A.

This examination shall include Anatomy, Chemistry, Elementary Biology, and Medical Physics, to the extent indicated in the following synopsis:—

#### ANATOMY.

A written examination on Osteology, including general physical characters, chemical composition and coarse structure of bone, ossification, Arthrology; classification of Joints, structure and mechanism of the most important (hip, knee, shoulder, elbow, ankle, etc.)

#### CHEMISTRY.

Elementary general chemistry, as in the course outlined on pp. 83, 84.

#### BIOLOGY.

Candidates will be expected to show a practical acquaintance with the topics indicated as forming the subject matter of the courses of lectures and instruction in Botany and Zoology, outlined at pp. 83, 84.

#### MEDICAL PHYSICS.

A written examination on the subject matter included in the course on General Physics as limited for Medical Students, as indicated at p. 86.

\*See foot-note, page 83.

(2.) Candidates for this examination will be required to produce certificates to the following effect:

a) Of having, either before or after passing the Preliminary Examination or other equivalent examination attended either at this University, or at some other University or College approved by the Senate, the following courses of lectures and instruction, viz., *Chemistry*, a course of at least 75 lectures with a laboratory course of not less than three hours per week for six months; *Biology*, a course of at least 100 hours of lectures and laboratory work; *Medical Physics*, a course of at least 50 lectures.\*

b) Of having, after passing the Preliminary Examination or other equivalent examination, attended either in this University, or in some other University or College approved by the Senate, during at least one medical session of eight months' duration a course in *Anatomy*, (*Osteology and Arthrology*) of at least 75 lectures and demonstrations with 10 hours laboratory work per week for six months.

(3) Exemption from examination in any or all of these subjects may be allowed on production of satisfactory certificates.

#### (B) PRIMARY EXAMINATION, SECT. B.

1. This examination shall include Anatomy, Physiology and Histology, and Chemistry, to the extent indicated in the following synopsis:-

##### ANATOMY.

This examination will be partly written and partly *osce*. The paper may include questions in Descriptive and Regional Anatomy, Surgical and Medical Anatomy. At the oral examination, candidates will be examined on the skeleton, recent dissections, models, preparations, etc.

##### PHYSIOLOGY AND HISTOLOGY.

A written and an oral examination on: (a) The physiology of digestion, absorption, circulation, respiration, secretion, nutrition, animal heat, animal motion; the functions of the nervous system and sense organs; reproduction and development.

(b) The composition of food, and of the tissues, secretions, excretions and other fluids of the body.

(c) Histology.

At the oral examinations, microscopical preparations of the tissues and organs of the body will also be submitted for identification and description.

\*In the five year course a course of 50 hours is required in Practical Physics.

##### CHEMISTRY.

Inorganic, organic and medical chemistry as in the course of the Medical Chemistry Class, outlined on pp. 83, 84. The examination will include (a) A written paper. (b) A practical examination in the laboratory. (c) An oral examination, in which questions may be put to candidates upon the entire work of the Junior and Senior courses.

(2) Candidates for this examination will be required to produce certificates to the following effect:

(a) Of having passed the Preliminary Examination, or other examination recognized as sufficient, at least two academic years previously.\*

(b) Of having passed in the subjects of the first part of the Primary Examination either at this University or at some other University or College recognized by the Senate.

(c) Of having after passing the Preliminary Examination or other equivalent examination, attended either in this University, or in some other University or College approved by the Senate, during at least two medical sessions each of eight months' duration, the following courses of lectures and instruction, in addition to those prescribed for Sect. A. of the Primary Examination, (p. 90), viz.: *Senior Anatomy*, a course of at least 75 lectures and demonstrations with 10 hours laboratory work per week for six months†; *Senior Chemistry*, a course in Organic and Medical Chemistry of 50 lectures with a laboratory course of not less than 3 hours per week for six months; *Physiology*, a course of at least 75 lectures; *Histology*, a course of at least 100 hours of lectures and laboratory work.

(3) (a) Candidates who have not passed Sect. A. of the Primary Examination may, by special permission of the Faculty, be allowed to complete their Primary Examination at both sections at the same time.

(b) Exemption from examination in any or all of the subjects† of the Primary Examination, may be allowed on production of satisfactory certificates.

2. The Primary M. D., C. M. Examination will be held in the second and third weeks in April. Candidates

\*Or, of having satisfied the conditions specified at p. 81 *Matriculation Examination*, Sect. 21, one academic year previously.

†On completion of their course in Practical Anatomy candidates will be required to show by certificate that they have satisfactorily dissected each of the parts of the body twice.

†Candidates exempted from Sect. A. of the Primary Examination will be required to pay one-half of the graduation fee before being admitted to Sect. B.

are required to hand in their applications and to transmit as far as possible the certificates specified above for Sect. A or Sect. B, as the case may be, to the Secretary of the Faculty on or before the date specified for that purpose in the University Almanac, and the remainder of the required certificates not less than two days before the date of the examination, to enter their names in the Register of Undergraduates of the University before the date of the examination, and to pay before the date of the examination, one-sixth of the amount of the graduation fee in the case of candidates for Section A, and one-third the amount of the graduation fee in the case of candidates for Section B.

### FINAL M. D., C. M. EXAMINATION\*

This examination shall also consist of two parts as follows:

#### (A) FINAL EXAMINATION, SECT. A.

(1) This examination will include the following subjects:—*Materia Medica, Pharmacy and Therapeutics; Pathology and Bacteriology.*

#### MATERIAL MEDICA. PHARMACY AND THERAPEUTICS.

This examination will be partly written and partly oral. Candidates will require to possess a knowledge of:—

(a) The general nature and composition, and the most important physical and chemical characters of the Pharmacopeial drugs, named in the annexed Schedule.

(b) The composition of the Pharmacopeial preparations of these drugs, and the process employed in making them.

(c) The doses, therapeutical uses and modes of administration of these drugs and their preparations; writing prescriptions.

At the oral examination, candidates will also be required to recognize the drugs indicated by initials in the annexed Schedule.

*Calei Chloridum; Liquor Soda Chlorinate.*

*Ammonii Bromidum; Potassii Bromidum; Sodii Bromidum.*

*Iodatum; Potassii Iodidum; Sodii Iodidum; Plumbi Iodidum.*

*Sulphur Subacetatum; Sulphur Precipitatum; Calx Sulphurata; Potassa Sulphurata.*

*Phosphorus; Caleii Phosphas; Sodii Phosphas; Ferri Phosphas; Calcii Hypophosphas; Sodii Hypophosphas.*

*Acidum Hydrochloricum; Acidum Nitricum; Acidum Sulphuricum.*

*Acidum Aceticum; Acidum Citricum; Acidum Tartaricum.*

*Acidum Boricum; Acidum Sulphureum.*

*Acidum Hydrocyanicum Dilutum.*

*Liquor Ammoniae; Liquor Potassie; Petasia Caustica.*

*Ammonii Carbomas; Ammonii Chloridum; Liquor Ammonii Acetatis.*

*Potassi Bicarbonas; Potassii Sulphas; Potassii Chloras; Potassii Tartaris Acidas; Potassii Permannessas;*  
*Sodii Bicarbonas; Sodii Sulphas; Sodii Nitras; Borax.*  
*Calx; Caleii Hydras; Creta Praeparata; Calcii Carbomas Precipitatum.*

*Magnesia; Magnesii Carbomas; Magnesii Sulphas.*

*Alumen; Alumen Easicutum.*

*Zinci Oxidum; Zinci Chloridum; Zinci Sulphas.*

*Cupri Sulphas.*

*Argenti Nitras.*

*Hydroxygryi Oxidum Flavum; Hydroxygryi Oxidum Rubrum; Hydroxygryi Subchloridum; Hydroxygryi Perchloridum; Hydroxygryi Iodidum Rubrum; Hydroxygryi Ammonium.*

*Hydroxygryi Oleas; Liquor Hydroxygryi Nitratris Acidus.*

*Fusilli Oxidum; Plumbi Acetas; Liquor Plumbi Subacetatis Fortis.*

*Antimonium Tartratum.*

*Acidum Arseniosas; Ferri Arsenias; Sodii Arsenias; Arsenii Iodidum; Liquor Arsenii et Hydroxygryi Iodidi.*

*Bismuthi Subnitras; Bismuthi Carbomas; Bismuthi Salicylas.*

*Ferrum; Ferri Sulphas; Ferri Sulphas Exsiccatus; Ferri Corbosis Saccharinum; Syrupus Ferri Iodidi; Liquor Ferri Acetatis; Liquor Ferri Perchloridum; Liquor Ferri Ferratitatis; Liquor Ferri Perplutatis; Ferri et Ammonii Citras; Ferri et Quinque Citras; Ferrum Tartaratum; Ferrum Reductum.*

*Alcohol Absolutus; Spiritus Rectificatus.*

*Ether; Chloroformum; Iodoformum.*

*Chloral Hydras; Butyl Chloral Hydras; Paraldehyde; Sulphonol.*

*Amyl Nitras; Tabella Triatritri; Liquor Triatritri; Spiritus Etherae Nitrosi.*

*Acetanilidum; Phenazetin; Phenazonum.*

*Collodium.*

*Crocoatum; Acidum Carbolicum; Acidum Salicylicum; Sodii Salicylas; Salol.*

*Acossit Radix; Aconitina.*

*Opium; Morphina Hydrochloridum; Morphina Acetas; Morphina Tartras; Apomorphina Hydrochloridum; Codeina; Codeinum Phospha.*

*Cocae Folia; Cocaine; Cocaina Hydrochlorina.*

*Johorensis Folia; Pilocarpine Nitras.*

*Quassiae Lignum; Galumbe Radix; Gentianae Radix.*

*Physostigmine Resina; Physostigminum Sulphas.*

*Caffeina; Caffeina Citra.*

*Cosmi Fructus et Polia.*

*Anafloetida; Ammoniacum; Myrrha; Gossypii Resina.*

*Cinchona Barkae Carter; Quininae Sulphas; Quininae Hydrochloridum; Quininae Hydrochloridum Acidum.*

*Salicinum.*

\*See foot-note, p. 83.

*Ipecacuanhae Radix; Sennae Radix.  
Glycerium.*

*Nux Vomica; Strychnine; Strychnine Hydrochloridum.*

*Belladonnae Radix et Folia; Atropina; Atropina Sulphas; Hyoscyami Folia; Stramonii Semina et Folia; Homatropina Hydrobromidum.*

*Cannabis Indica.*

*Oleum Crotonis; Aloe Barbadosis; Aloe Socotrensis; Aloëss; Cassava Sagrada; Colocynthidis Palpa; Eleuterium; Elaterium; Jalapa; Podophyllum Rhizoma; Rhei Radix; Senna Alata; Senna et Indica; Camphora; Oleum Terebinthinae.*

*Acidum Tannicum; Acidum Gallicum; Kino; Catechu; Hamamelidis Cortex et Folia.*

*Acidum Benzoinum.*

*Copalina; Culicetar Fructus.*

*Coleoica Corvus et Semina.*

*Seilla.*

*Filix Mas; Santoninum.*

*Ergota.*

*Oleum Murrhinae.*

*Castorina.*

#### PATHOLOGY AND BACTERIOLOGY.

The examination will be partly written, and partly vice versa. Candidates will be expected to possess a knowledge of:—

(a) General Pathology, including Degenerative Processes, Inflammation, Morbid Growths, etc.

(b) General Etiology, with reference to Parasitic and Infective Diseases.

(c) Systematic Pathology, the more important diseases of the principal systems and organs of the body.

(d) Bacteriology, to include the General Morphology and Life History of Micro-Organisms; Characters of Organisms Pathogenic to the Human Subject, and their modes of producing disease, etc.

At the oral examination candidates will be examined on gross and microscopical preparations, and will be expected to possess a knowledge of the preparation of Culture Media, Methods of Isolation and Cultivation, Staining, Separation of Bacterial Products, Incubation.

(2) Candidates for this examination will be required to furnish certificates to the following effect, viz.:—

(a) Of having passed the Preliminary Examination, or other examination recognized as sufficient, at least three academic years previously.\*

(b) Of having passed the Primary M. D., C. M. Examination at this University, or of having passed an

equivalent examination at some other University or College recognized by the Senate.

(c) Of having, after passing the Preliminary Examination or other equivalent examination, attended at some University or College approved by the Senate, during at least three medical sessions, each of eight months' duration, the following courses of lectures and instruction, in addition to those prescribed for the Primary Examination, (pp. 89, 90), viz.:—*Materia Medica*, a course of at least 25 lectures; *Therapeutics*, a course of at least 25 lectures; *Pathology and Bacteriology*, a course of at least 150 hours of lectures, demonstrations and laboratory work.

(d) Of having, after passing the Preliminary Examination, or other equivalent examination, attended at some University or College, approved by the Senate, one course of instruction of at least thirty lessons in Practical Dispensing, or under the same conditions had three months practice in the dispensing of drugs with a registered apothecary or dispensing medical practitioner.

#### (B) FINAL EXAMINATION, SECT. B.

(1) This examination will include the following subjects:—Medical Jurisprudence and Insanity and Hygiene, Surgery, Clinical Surgery, Medicine, Clinical Medicine, Obstetrics and Diseases of Women and Children.

#### MEDICAL JURISPRUDENCE AND INSANITY AND HYGIENE.

The examination will be partly written, partly oral. Candidates will be examined on the following topics:—

##### Forensic Medicine.

I. Examination of Persons found Dead, with reference to:—(1) Identification; (2) Time of Death; (3) Cause of Death.

II. Violent causes of Death:—(1) Drowning; (2) Strangulation.

III. Poisons and Poisoning:—(1) Symptoms and post mortem appearances in cases of poisoning by the following agents: Inorganic—Mineral Acids; Solutions of Alkalies; Copper; Lead; Mercury; Antimony; Arsenic; Phosphorus. Organic—Oxalic Acid; Carbolic Acid; Opium; Strychnine; Belladonna; Aconite; Chloroform; Chloral Hydrate; Cyanides. (2) Duties of Medical men in cases of Poisoning as regards—Observation; Treatment and Preservation of parts for Analysis. (3) Preliminary Tests for Poisonous Substances for Clinical Use before reference to an Analyst.

\*Or, of having satisfied the conditions specified at p. 81 (Matriculation Examination, Sect. 2) two academic years previously.

- IV. Medico-legal points in connection with—Pregnancy, Delivery, Rape, Criminal Abortion, Infanticide, Assaults and Homicides, Wounds and other external Injuries; Mental Capacity in relation to Criminal Responsibility, Contracts and Wills; Malpractices, and Neglect of Duty.
- V. Forms of Insanity. Examination of persons supposed to be insane. The Lunacy Laws in so far as they affect the Medical Practitioner when signing Certificates of Lunacy.

#### Hygiene.

- I. Water, in its relation to Health and Disease:—(1) The Character and Classification of Drinking Water. (2) The Causes and Sources of the Impurities found in Water and Methods of Purification. (3) The Diseases conveyed by Water, and the Methods of dealing with Epidemics of such Diseases.
- II. Air, in relation to Health and Disease:—(1) The Causes and Sources of the Impurities found in Air. (2) The Diseases conveyed through the Air. (3) The quantity of Air necessary for Health; the Principles of Ventilation.
- III. Soil, in relation to Health and Disease:—(1) The Causes and Sources of the Impurities in the Soil, and the Methods of dealing with them. (2) Diseases connected with the Soil. (3) The Methods of dealing with Excreta and Sewage.
- IV. Food, in relation to Health and Disease:—(1) Dietetics. (2) The common Adulterations of the Chief Articles of Diet. (3) Diseases connected with Deficiency or Impurity of Food-supply.
- V. The Dwelling, in relation to Health and Disease:—The Principles of House Drainage.
- VI. The Principles of Disinfection, and the mode of Action of the chief Disinfecting Agents.
- VII. The Provisions of "The Act for the Notification of Disease."

#### SURGERY.

The examination in this subject will be partly written and partly oral. The candidates will be expected to possess a knowledge of the Principles and Practice of Surgery, of Surgical Pathology, Surgical Anatomy, and Operative Surgery. They will also be examined on the more common Diseases of the Skin, of the Eye, Ear, Throat and Nose.

#### CLINICAL SURGERY.

This examination will be partly practical and partly oral. Cases will be submitted for diagnosis and treatment. Pathological specimens may be exhibited for identification. Candidates will also be examined on the application of Splints and Bandages, and on the uses of Surgical Instruments and Appliances.

#### MEDICINE.

In this subject there will be a written and an oral examination on the Clinical History, Causes, Diagnosis, Prognosis and Treatment of the Diseases of the different Systems and Organs of the Body. The examination will also include Infectious Diseases, Constitutional Diseases, Mental Diseases, and Diseases of the Nervous System. Candidates may also be questioned on Medical Anatomy and on Therapeutics.

#### CLINICAL MEDICINE.

The examination in Clinical Medicine will be partly practical and partly oral. Patients will be submitted for Examination, Diagnosis and Treatment. Examination of specimens of Urine, Sputa, etc., will be required.

#### OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

In these subjects there will be a written and an oral examination, which will embrace the following:—

- The Anatomy and the Physiology of the Female Organs of Reproduction.
- The Physiology, Pathology and Therapeutics of Pregnancy.
- Parturition, natural and morbid.
- Hygiene, Pathology and Therapeutics of the Puerperal State.
- Hygiene, Pathology and Therapeutics of Infancy and Childhood.
- Special Pathology and Therapeutics of the Female Organs of Reproduction.

At the oral Examination, candidates may also be questioned on Gynaecological Operations and the use of Instruments and Appliances.

(2) Candidates for this examination will be required to furnish certificates to the following effect, viz.:—

- That they have completed their twenty-first year, or that they will have done so, on or before the day of graduation. This certificate shall be signed by themselves, and shall be after the following form:

HALIFAX....., 19..

I, the undersigned, being desirous of obtaining the Degrees of Doctor of Medicine and Master of Surgery, do hereby declare that I have attained the age of twenty-one years (or if the case be otherwise, that I shall have attained the age of twenty-one years before the next graduation day). Signed, A. B.

- Of having passed the Preliminary Examination, or other equivalent examination, at least four academic years previously.\*

\*Or, of having satisfied the conditions specified at p. 81 (Matrikelation Examinations, Sect. 3) three academic years previously.

(c) Of having passed the Primary M. D., C. M. Examination at this University, or having passed an equivalent examination at some other University or College recognized by the Senate;

(d) Of having passed the First part (Sect. A) of the Final Examination at this University;

(e) Of having, after passing the Preliminary Examination or other equivalent examination, fulfilled the following requirements:

a. Attended at some University or College recognized by the Senate, during at least four academic years, each of at least 8 months' duration, two courses of at least 75 lectures each in each of the following, in addition to the subjects prescribed (pp. 90, 91, 95), viz.: *Surgery, Medicine, Obstetrics and Diseases of Women and Children, Clinical Surgery, Clinical Medicine*; one course of at least 50 lectures and demonstrations in *Medical Jurisprudence (including Insanity)*; and one course of at least 25 lectures and demonstrations in *Hygiene*, and the same in "*Ophthalmology, Otology and Laryngology*";

b. Attended at some University or College recognized by the Senate, a course of at least 25 hours in Operative Surgery, and of having performed operations on the dead body to the satisfaction of the Teacher.\*

c. Attended during at least eighteen months the practice of the Victoria General Hospital, or that of some other General Hospital approved by the Senate, or attended such hospital practice for twelve months with at least six months additional attendance on the practice of a recognized Dispensary, or of the out-patient department of an approved Hospital;

d. Attended at a recognized Hospital or Dispensary courses of practical instruction of at least 25 lessons or demonstrations each, in Medicine and in Surgery, including:—the methods of examining various organs and other parts of the body, in order to detect the evidence of disease or the effect of accidents, the employment of instruments and apparatus used in diagnosis or treatment, the examination of the urine and other secretions, and of morbid products;

e. Served at least three months as a dresser in the Surgical wards, and three months as a Clinical Clerk in the Medical wards of a recognized Hospital, and reported

at least 10 Medical and 10 Surgical cases, or having done other equivalent practical work in Surgery and Medicine\*;

f. Attended at least four cases of midwifery, under a recognized practitioner;

g. Attended the Post Mortem Examinations in a recognized Hospital for a period of at least six months, during which they received practical instruction in the methods of making Post Mortem Examinations and in framing Reports; such certificates to be accompanied by reports of at least six autopsies which the candidate has attended.

h. Received instruction and attained proficiency in the practice of Vaccination, under a recognized medical practitioner.\*

(3) Candidates who have not passed Sect. A of the Final Examination, may, by *special* permission of the Faculty, be allowed to complete their Final Examination in both sections at the same time.

2 The Final M. D., C. M. Examination will be held in the second and third weeks in April. Candidates are required to hand in their applications and to transmit as far as possible the certificates specified above for Section A or Section B, as the case may be, to the Secretary of the Faculty, on or before the date specified for that purpose in the University Almanac, and the remainder of the required certificates not less than two days before the date of the examination, and to enter their names in the register of undergraduates before the date of the examination, and to pay before the date of the examination, one-sixth of the amount of the graduation fee in case of candidates for Section A, and one-third of the graduation fee in the case of candidates for Section B.

3. Candidates who may have been exempted from passing the Primary Examination under the provisions on p. 91, sub-section (3) (b) will be required to pay the balance of the full graduation fee before being admitted to the last part of the Final Examination.

4. A candidate having failed to make 50% in any subject of Section B of the final Examination will also be required to pass again in any other subject in which he may have made less than 60% with or without evidence of further attendance on such subject or subjects as the Faculty, in their discretion may determine. At all such Supplementary Examinations candidates are required to make at least 60% in each subject.

\*Blank certificates will be issued to candidates which must be filled out and signed by the proper authority.

<sup>\*</sup>Blank certificates will be issued to candidates which must be filled out and signed by the proper authority.

### Medals and Prizes

MEDICAL FACULTY MEDAL.—This medal will be awarded on graduation to the student who stands first at the Final M. D., C. M. Examination (Section B), provided he shall have obtained distinction in at least four of the six subjects of examination.

DR. LINDSAY'S PRIZE.—A prize of Books will be awarded to the student who stands first among those taking Section B of the Primary M. D., C. M. Examination, provided he shall have obtained distinction in at least two of the three subjects of examination.

### Sponsio Academica

Before receiving his degree, the candidate will be required to sign the following oath or affirmation:—

#### SPONSIO ACADEMICA.

In Facultate Medicinae Universitatis Dalhousianae.

Ego, Doctoratus, in Arte Medica titulo jam donandus, sancto coram Deo cordum sororatu, spendo—me in omni grati animi officio erga Universitatem Dalhousianam ad extrellum vita halitum, perseveraturum. Tum perro Artem Medicam caute, enste, probeque exercitaturum et quodcumque potero, omnia ad agrotorum corporum salutem condicuisse, cum fide precaraturum. Quae denique, inter medendum visa vel audita silere conveniat, non sine gravi causa valgaturum. Ita praesens mihi spoudenti adscit Numen.

### Fees

The following fees payable by students and candidates for the degrees of M. D., C. M., are in all cases payable in advance:—

Registration, if paid on or before Sept. 21*	\$ 2.00
Junior Chemistry Class Fee (including Laboratory Fee)†	10.00
Senior " " " "	12.00
Biology Class Fee (including use of microscopes and reagents)	12.00
Physics Class Fee (including Laboratory Fee)†	10.00
Graduation Fee	20.00

\*After September 21, \$3.00.

† Students who have paid \$30.00 or upwards as Examination Fees are not required to pay an additional Graduation Fee.

### GENERAL MEDICAL COUNCIL.

The following announcement is made which will prove of great importance to all Medical Students and Graduates of this University:

That any person who holds the degrees of Doctor of Medicine and Master of Surgery of the DALHOUSIE UNIVERSITY, and is at the same time duly registered in the Medical Register of Nova Scotia, shall be entitled to be registered in the Colonial List of the British Medical Register, and shall thereby become equally entitled to the same privileges as persons registered in the regular Home Register.

In 1886 an Imperial Act was passed, providing for reciprocity with regard to Medical Education and Registration between the various British Possessions (and foreign countries) and Great Britain. Owing to a defining clause in the Act being at variance with the B. N. A. Act, Canada was unable to secure the benefits of the Imperial Act for graduates from any of her medical institutions. In 1905 a Bill was passed through the British House of Commons known as the "Laurie Act" amending the Act of 1886, and pursuant to this Act an Order was obtained from the Privy Council U. K., May 11, 1906, declaring Nova Scotia a British possession to which the Act of 1886 applies. Application was then made to the General Medical Council U. K. for the recognition of the Medical degrees of this University and the above announcement embodies the decisions adopted by the Council May 28, 1907.

Nova Scotia is thus the first Canadian Province to secure these important concessions including the right to practise in Britain, and in certain other Colonies and Countries; also admission to the army and other medical services.

### THE FIVE YEARS COURSE

In order that this recognition may be maintained the Medical Council has intimated that the curriculum for the M. D., C. M. degrees must be extended to include five academic years. An Act was also passed by the local legislature and assented to by the Lieutenant-Governor, April 16, 1908, which demands a five years' course from all candidates for the License of the Medical Board of Nova Scotia who began the study of medicine after July 1, 1908. To meet these requirements and in accordance with notice

\*Second Professional Examination of the five year course.

given in the Calendar of 1907-08, students who began their medical course at this University and at the Halifax Medical College subsequent to the above prescribed date, will therefore be required to produce evidence of having completed five *assi medici* before being admitted to the Final Examinations for degree.

### Order of Classes

The following is recommended as the order of classes to be taken for the first two years of the five year course.

#### FIRST YEAR.

Junior Anatomy	Practical Anatomy
*Junior Chemistry	Practical Chemistry
Biology	Practical Biology
Physics	Practical Physics
Histology	Practical Histology

#### SECOND YEAR.

Senior Anatomy	Practical Anatomy
*Senior Chemistry	Practical Chemistry
Physiology	Practical Physiology
Practical Materia Medica (or its equivalent)	Advanced Histology

### Degree Examinations

The following is a brief *synopsis* relating to the degree examinations to be taken at the completion of the first and second years respectively of the five year course:

#### FIRST PROFESSIONAL EXAMINATION.

This Examination will include—

- Anatomy, one paper
- \*Inorganic Chemistry, one paper
- Biology, two papers
- Medical Physics, one paper

as indicated at page 89.

The fee for this examination is Ten Dollars.

#### SECOND PROFESSIONAL EXAMINATION.

This Examination will include—

Anatomy, one paper and an oral examination

Physiology and Histology, two papers and an oral examination

\*Chemistry, a written, practical and oral examination as indicated at pages 90, 91.

The fee for this examination is Ten Dollars.

Candidates for these examinations will be required to produce the certificates specified and comply with all the other requirements indicated at pages 90, 91, for persons who began study previous to July, 1908, and Candidates for the Primary M. D., C. M. Examination. All other general and special regulations applying to Sections A and B of the Primary Examination will apply equally to Candidates for these examinations.\*

The curriculum for the remaining three years and the requirements and regulations for the subsequent Professional Examinations will be announced hereafter.

\*Candidates for the First Professional Examination will be required to produce evidence of attendance on a course of 50 hours in Practical Physics.

The special course in Medical Chemistry is not required of candidates for the Second Professional Examination. See page 84.

\*Specially known in the University Calendar as Chemistry 1A.

†Specially known in the University Calendar as Chemistry 2.

‡The character of the work in the University practical classes is valued in determining the standing of the student in the class lists.

# Faculty of Dentistry

## THE PRESIDENT (*ex officio*).

HISSEK WOODBURY, D. D. S.	H. G. DUNBAR, D. D. S.
A. C. HARDING, D. D. S.	H. W. BLACK, D. D. S.
FRANK WOODBURY, D. D. S.	A. W. H. LINDSAY, M. D., C. M.
J. M. MAGIE, D. D. S.	L. M. SILVER, M. D., C. M.
E. A. RANDALL, D. D. S.	F. U. ANDERSON, M. R. C. S.
M. F. HARRINGTON, D. D. S.	F. V. WOODBURY, M. D., C. M.
M. K. LANGELLE, D. D. S.	E. MACKEY, Ph. D.
F. W. RYAN, D. D. S.	A. S. MACKENZIE, Ph. D.
A. W. COGSWELL, D. D. S.	H. H. MACKEY, M. D., C. M.
G. K. THOMSON, D. D. S.	A. L. McCALUM, B. Sc.
F. W. STEVENS, D. D. S.	F. R. HALEY, M. A.
S. G. RITCHIE, D. M. D.	

*Dean of the Faculty:* Dr. FRANK WOODBURY.

*Secretary of the Faculty:* Dr. F. W. RYAN.

Correspondence should be addressed to DR. FRANK WOODBURY.

## Courses of Instruction\*

I. Instruction is provided by the University in the following subjects of the Medical Curriculum:—

### I.—CHEMISTRY.

(McLeod Professorship.)

Professor.....	E. MACKEY, Ph. D.
Demonstrator.....	B. M. J. MACKEY, M. A., M. S.

Dental students will be required to attend the University courses in Chemistry known as **1 A** and **3**, as follows:

**I. A. GENERAL CHEMISTRY.**—*Mondays, Wednesdays and Fridays, 11–12 A. M.*

Measurement of mass, volume, pressure, temperature, heat; solids and liquids; gases and gas laws; melting-points, boiling-

\*It is to be distinctly understood that the programs and regulations regarding courses of study and examinations, contained in this Calendar hold good for year ending April 30, 1910 only, and that the Faculty, while fully sensible of its obligation towards the students, does not hold itself bound to adhere absolutely for the entire period of a student's course to the conditions now laid down. Necessary modifications of these courses will be made for dental students who do not take the concurrent courses in Medicine and Dentistry.

points, solution, crystallization; preparation and properties of common acids and alkalies; combustion, air, water, oxygen, hydrogen; fundamental laws of combination, atomic theory, Avogadro's law, formulae, equations; chlorine; halogen group; dissociation, mass action; valence; sulphur; nitrogen; argon; carbon; periodic law; nitrogen group; isomorphism; potassium, sodium, ammonium; silver, copper, gold; atomic heat; calcium, barium; magnesium, zinc, cadmium, mercury; thermochemistry; boron, aluminium; carbon group; chromium; manganese; iron, nickel, cobalt, platinum. Some common organic compounds.

The lectures are illustrated as fully as possible by experiments. A tutorial class, attendance on which is in general optional, meets on Friday afternoons.

Three hours a week must be devoted to laboratory work. The laboratory work is designed to make the student familiar with ordinary laboratory operations and to lead him to solve simple problems in chemistry by experiment. Several common inorganic substances are prepared and studied; simple quantitative experiments leading to the fundamental laws of chemistry are performed; and some time is devoted to elementary work in qualitative analysis.

BOOKS RECOMMENDED: Smith, *General Chemistry for Colleges*, (Century Co.). For occasional reading: *Alenic Club Reprints* (W. E. Clark); *Lamar-Cook, Chemistry in Daily Life*.

**3. MEDICAL CHEMISTRY.**—*Fall term: Tuesdays and Thursdays, 3–10 A. M. Spring term: Tuesdays Thursdays and Saturdays, 9–10 A. M. Laboratory: Tuesdays, Thursdays and Saturdays, 10–11 A. M.*

Students entering this class must have taken Chemistry 1 A, or an equivalent class in chemistry.

**Class Work.**—The subjects of study in the class include pure chemistry and the applications of chemistry to medicine.

**Pure Chemistry:** review of the chemistry of the metals, noting especially compounds having medicinal or toxic properties; compounds of carbon—their purification and analysis; the paraffins and their chief derivatives; ethylene; acetylene; benzene and its chief derivatives.

**Medical Chemistry:** air; water, its sanitary analysis and purification; adulteration of foods; the proximate principles of the body and of food; typical foodstuffs—as milk, flour, bread, meat; the blood; the digestive fluids and digestion; urins.

**Laboratory Work.**—All members of the class are required to devote at least three hours a week to laboratory work. This will consist of qualitative analysis, including the detection of the more commonly occurring poisons, the detection of adulterations in milk; simple quantitative exercises in the analysis of air and water, and the quantitative estimation of glucose, albumen and urea.

BOOKS RECOMMENDED: Kossman, *Compounds of Carbon*, 4th edition (D. C. Heath & Co.); F. M. Perkins, *Qualitative Chemical Analysis*, (Longmans); Wolf, *Physiological Chemistry*.

## CHEMICAL LABORATORY.

The general laboratory is open to students in Medicine from 10 to 11 a. m. daily.

\*In 1909-10 and subsequent years the portion of the subject specified under this heading will be omitted from the work of the second year.

Laboratory students are allowed the use of all the more inexpensive reagents. They are required to provide themselves with the more expensive reagents as alcohol and ether, and they are charged with the value of the apparatus they have broken or injured.

All members of practical classes are required to keep a detailed record of their laboratory work. The character of this record is a factor in determining the standing of a student in the class lists.

#### II.—BIOLOGY.

Lecturer.....

Tuesday, II A. M.—I P. M.; Saturday, 9—II A. M.

**BOTANY.**—The course in Botany will have special reference to the following subjects: Protoplasm and Plant-cells, the Tissue and Tissue Systems of Plants, Morphology of the Plant-body, Plant Physiology, the Principles of Classification and the Laws of Distinction, the Protothynia (Schiophytes), the Phycophyta (Chlorophytes and Phaeophytes), the Carpephyta (Rhodophytes, Ascophytes and Basidiocystes specially), the Bryophyta (Mosses and Liverworts), the Pteridophyta (Ferns, Horsetails and Club-mosses), the Anthophyta (specially the Compositae, Gramineae, Orchidaceae, Liliaceae, Urticaceae, Labiate, Composite, Umbellifera, Rosaceae, Cruciferæ, Leguminosæ, Hamamelidaceæ). The Morphology and life history (the anatomy, histology, and development) of at least two common or representative species of each group of plants above named, in minute detail.

General attention will be given to the native flora of the Province, with special notice of foreign as well as native species of interest from economic, medicinal or injurious properties.

The preliminary study in Botany as indicated in Grade IX. of the Public School Course, and especially the formation of a local collection of plants, even if unnamed and unclassified, will be an advantage to any student entering upon the course.

Practical instruction will be given in the collecting, drying and mounting of specimens, the use of the microscope, the preparing of microscopic sections, and the general dissection of plants. The use in class of a number of microscopes will be granted the students under the care and direction of the Lecturer; but a hand lens, glass slides, cover glasses, scalpels and other apparatus or books necessary for each student, should be supplied by each for himself. Collections, notes, class-work and drawings will be estimated for incorporation into final class standing.

**TEXT BOOKS:** Berger and Davis, *Principles of Botany* (Ginn & Co.); Macoun and Spear, *High School Text Book of Botany*.

**FOR INFORMATION:** Special text books will be recommended in each sub-division of Botany and Zoology during the course of the lectures and demonstrations.

**ZOOLOGY.**—The course in Zoology will consist of lectures supplemented by practical work.

The student will be expected to master the system of Zoology as contained in Colton's *Zoology, Descriptive and Practical*, parallel with the course of lectures expounding zoological principles and sketching local distribution of species and genera, and with the life-study or dissections of local species under the microscope or scalpel as follows:

1. Five species of the local lobosa; 2. One species each from any five of the following: The Foraminifera, Heliozoa, Radiolaria,

Flagellata, Choanoflagellata, Dinoflagellata, Paramaecium, Vorticella, Sporozoa; 3. Three species of marine, and three of Fresh-water Spores; 4. One species each of Hydra; the Campanularidae, Plumularidae and Sertularidae; Aurelia, Metridium; and the skeletons of Zoantharia and Aleyrodonia; 5. A species each of the Platyhelminths and of the Nemathelminths; 6. Five species of local freshwater and marine Polypora and a Rotifer; 7. The common Starfish; 8. The common Sea-Urchin; 9. An Earthworm; 10. A Lobster; 11. Entomostraca in water supply, and dissection of Grasshopper in detail; 12. Oyster, Clam, or Mussel; 13. A Trout, Smelt, Herring or Cod (or No. 16 in full detail); 14. A Frog (or No. 16 in full detail); 15. A Pigeon (or No. 16 in full detail); 16. A Rabbit. (If in full detail for 12, 13, 14 and 15.) The scarcity of any of the above during the season, or the abundance of other species may modify the list of species for dissection or life-study as may suit the circumstances most conveniently.

**TEXT BOOKS:** Colton, *Zoology, Descriptive and Practical*.

#### III.—MEDICAL PHYSICS.

**Professor** ..... A. STANLEY MACKENZIE, PH. D.  
**Demonstrator** .....

**Lectures, Mondays and Wednesdays, 9—10 A. M. Laboratory, Thursdays, II A. M.—I P. M.**

This class, designed for those intending to take the examination in Medical Physics, treats in an elementary manner of Dynamics and of the fundamental phenomena of Experimental Physics. Those taking the class must in addition to attending the lectures, spend two hours per week in the laboratory carrying on a series of practical exercises in physical measurements.

**BOOKS RECOMMENDED:** Duff, *A text-book of Physics*.

#### Degree of Doctor of Dental Surgery

The course for the degree of Doctor of Dental Surgery extends over four years. The Academic Year consists of a session of eight months for each of the first and second years, and of seven months for the third and fourth years. The University provides the instruction required in Chemistry, Physics and Biology, and recognizes the instruction in other required subjects given in the Halifax Medical College and the Maritime Dental College, or other approved colleges. The course prescribed is in harmony with the standards of the Dominion Dental Council of Canada. A certificate of qualification, issued by the Council, entitles the holder to practice in nearly every province in Canada.

### Matriculation

Candidates seeking admission to the course in Dental Surgery should first register at the Maritime Dental College. In order to register as an undergraduate in Dentistry a candidate must satisfy the requirements for Matriculation either by passing the Matriculation examination in Arts of this University, or the examination of the Provincial Dental or Provincial Medical Board of N. S., or by presenting certificates accepted as equivalent, or such certificates as are accepted by the Dominion Dental Council of Canada, or by the province in Canada in which the candidate is regularly registered as a student of Dentistry.

Candidates who are looking forward to the Medical degree should register with the Provincial Medical Board at the beginning of their course. This will enable them to take the Medical and Dental courses concurrently and so reduce by two years the time required for the degrees of M. D., C. M., and D. D. S. combined.

### Examinations

Four professional examinations are required for the degree of D. D. S. An examination is held at the close of each year during the month of April.

Before being admitted to a Professional examination a candidate must produce satisfactory certificates:

(a) Of having passed the examination for Matriculation and of having passed the said examination after the completion of his sixteenth year.

(b) Of having passed the earlier Professional examinations; but by special permission of the Faculty a candidate who has failed in the previous examination may take the two together.

(c) Of having attended in an approved College 90 per cent. of the lectures in the subjects prescribed for the examination.

(d) Of having registered in the University and having paid the fee required for the examination.

The tickets granted for admission to examination must be shown at the examination in each subject.

Candidates who have taken the degree of B. A. or B. Sc., and in their course have taken classes in Chemistry or Physics or Biology, equivalent to those required, and have attained a sufficiently high standard in the examina-

tions, may be granted exemption from the corresponding portions of the Professional Examinations, provided their certificates are satisfactory. Candidates from approved Dental Colleges may, on the production of satisfactory certificates, be exempted from any of the subjects of the first three Professional Examinations.

Application for examination should be sent to the Dean of the Faculty at least two weeks before the date of the first examination.

At all examinations a minimum of 50 per cent. in each subject will be required to obtain a "pass," except in the Final Professional, where a candidate who has failed in any subject will be required to pass a supplementary not only in that subject but also in every other subject in which he has made less than 60 per cent., and in the supplementary he must make not less than 60 per cent. Candidates making 75 per cent. or more in any subject in the regular examination shall be declared to have "Passed with distinction." The names in the two divisions of the lists shall be placed in alphabetical order.

A candidate who has failed to pass in a subject or in more than one subject may be permitted to appear at a supplementary examination in those subjects at the dates appointed for such examinations, provided he has paid a fee of \$5.00 for each subject in which he wishes an examination.

Candidates are not permitted to present themselves for examination in selected subjects, but are required to take each Professional examination as a whole, except (a) candidates who are exempted from part of the examination by certificates or otherwise. (b) students taking one of the Medical or Scientific subjects as an elective in their course in Arts or Science.

### First Professional Examination

This examination held at the close of the first session shall include Anatomy, Chemistry, Biology, to the extent required for the first Professional examination for the M. D., C. M. degree; also Operative Dentistry and Prosthetic Technic.

The following is a synopsis of the subjects required:—

#### ANATOMY.

A written examination in Osteology, including general physical characters, chemical composition and structure of bone; classification. Arthrology; classification of joints, structure and mechanism of the most important (temporo-maxillary, hip, knee, shoulder, elbow, ankle, etc.)

**CHEMISTRY.**

Elementary general Chemistry and laboratory work as given in the University class known as Chemistry I A.

**BIOLOGY.**

Candidates will be expected to show a practical acquaintance with the topics in Botany and Zoology named in the University class in Biology.

**OPERATIVE TECHNIC.**

General Anatomy of the teeth; the relation of the different dental tissues as taught in the Operative Technic Laboratory.

**PROSTHETIC TECHNIC.**

Fundamental principles of denture construction; forms and occlusion of the teeth; materials used in Dental Prosthetics and their manipulation.

Candidates for this examination shall be required to present certificates of having attended either in this University or in some other College or University approved by the Senate, such as the Halifax Medical College or the Maritime Dental College, the following courses of lectures and instruction:—*Chemistry*, 75 lectures, with a laboratory course of not less than three hours per week for six months; *Biology*, a course of at least 100 hours of lectures and laboratory work; and a certificate of having attended after having passed the Matriculation Examination or its equivalent, a course in *Anatomy* of at least 75 lectures, and a course in *Practical Anatomy* in which the head and neck and one other part shall have been dissected and demonstrations held and examinations passed; a course of lectures throughout the year in *Operative Dental Technic*; and in *Prosthetic Technic*, a course of lectures including laboratory work throughout the year.

**Second Professional Examination**

This examination shall include Anatomy, Chemistry, Physiology, and Histology (General and Dental), Operative and Prosthetic Dentistry, and Comparative Dental Anatomy.

The requirements in Anatomy, Chemistry, Physics, and Physiology, shall be the same as those prescribed for the Second Professional Examination of the M. D., C. M. degree.

**ANATOMY.**

This examination will be partly written and partly *vis à vis*. The paper may include questions in Descriptive and Regional Anatomy, Surgical and Medical Anatomy. At the oral examination, candidates will be examined on the skeleton, recent dissections, models, preparations, etc.

**PHYSICS.**

The course in General Physics as outlined in the University class in Physics for medical students.

**PHYSIOLOGY.**

A written and an oral examination on:

(a) The Physiology of digestion, absorption, circulation, respiration, secretion, nutrition, animal heat, animal motion; the functions of the nervous system and sense organs; reproduction and development.

(b) The composition of food, and of the tissues, secretions, excretions, and other fluids of the body.

**CHEMISTRY.**

Inorganic, organic and medical chemistry as in the University class, know as Chemistry 3. The examination will include:

(a) A written paper on the work outlined under "class-work" and "laboratory work" in the above course;

(b) A practical examination in the laboratory;

(c) An oral examination, in which, in addition to the preceding, questions may be put to the candidate upon the work prescribed in Chemistry I A.

**PROSTHETIC DENTISTRY**

Detail of Technic principles; metals and materials used in Dental Prosthesis; arrangement and occlusion of artificial teeth; relation of the muscles of mastication and of other tissues to artificial dentures; other subjects as announced later.

**OPERATIVE DENTISTRY.**

Operative Technic; demonstrations on extracted teeth; classification and preparation of cavities; treatment of pulps and root canals; properties of filling materials; instruments and their management; development and eruption of the teeth.

**COMPARATIVE ANATOMY AND HISTOLOGY.**

Comparative Dental Anatomy and General and Dental Histology.

Candidates for this examination shall be required to present certificates of having attended either in this University or some other approved college or university, such as the Halifax Medical College or the Maritime Dental College, the following courses of lectures and instruction: *Senior Anatomy*, at least 75 lectures and demonstrations with 10 hours laboratory work per week; *Chem-*

istry, 50 lectures in Organic and Medical Chemistry with a laboratory course of not less than 3 hours per week; *Physics*, a course of at least 50 lectures and 50 hours of laboratory work; *Physiology*, 75 lectures; *Histology*, 60 lectures and laboratory work; a course of lectures and demonstrations, also practical work throughout the year in *Prosthetic Dentistry*; a course of lectures, etc., in *Operative Dentistry*; a course of lectures in *Comparative Dental Anatomy*, and a course of lectures in *Dental Histology*.

### Third Professional Examination

The subjects of this examination include Prosthetic Dentistry, Crown and Bridge Work, Ceramics and Oral Hygiene, Operative Dentistry, Orthodontia, Pathology and Bacteriology, Materia Medica, and Oral Therapeutics to the extent indicated below:—

#### **PROSTHETIC DENTISTRY.**

Construction of full and partial dentures in metal, valoalite, porcelain, etc.; study of human face; laws governing retention of artificial dentures; metallurgy; other subjects to be announced later.

#### **CROWN AND BRIDGE WORK.**

Technic work in second year; preparation, properties, and manipulation of materials; various methods; porcelain technic and practice; the processes involved in Preventive Dentistry.

#### **OPERATIVE DENTISTRY.**

Principles of practice; cavity formation; selection and introduction of filling materials; crowning, porcelain inlays and other operations in conservative dentistry; diagnosis and treatment of pathological conditions in the teeth and surrounding tissues.

#### **ORTHODONTIA.**

Normal occlusion; derangement of alignment and malformation of the maxillæ; methods and appliances for restoration of normal conditions in the mouth.

#### **PATHOLOGY AND BACTERIOLOGY.**

General and dental pathology—etiology and pathology of the diseases peculiar to the teeth and mouth; morphology and life history of bacteria peculiar to the oral cavity.

#### **MATERIA MEDICA AND ORAL THERAPEUTICS.**

Selected subjects from the Materia Medica requirements for the M. D., C.M.; oral therapeutics; general pathological conditions and the agents indicated in their treatment; choice and application of remedies for diseased conditions of the teeth and surrounding tissues; prescription and administration of drugs; toxic action of poisons and antidotes.

Candidates for this Examination shall be required to present certificates of having attended either in the Halifax Medical College or the Maritime Dental College, or in some other college approved by the Senate, the following courses of lectures, demonstrations and laboratory work:—*Prosthetic Dentistry*, a course of lectures extending over the third session with infirmary and laboratory practice; *Crown and Bridge Work, Ceramics and Hygiene*, a course of lectures extending over the third year with infirmary and laboratory practice and the presentation of a set of models; *Operative Dentistry*, a course of lectures extending over the session with infirmary practice and the presentation of practical cases; *Orthodontia*, a course of one session's lectures with laboratory and infirmary work; *General and Oral Pathology and Bacteriology*, a course of lectures on subjects selected from those required for the M. D., C.M. degree, and those of special interest to dentists; *Materia Medica and Therapeutics*, a selected course of lectures on Materia Medica as given in the Halifax Medical College, and a course on Special Materia Medica and Oral Therapeutics extending throughout the third session.

### Final Professional Examination

This examination includes General and Oral Surgery, Operative Dentistry, Orthodontia, Prosthetic Dentistry, Crown and Bridge Work, Ceramics, History of Dentistry, Professional Ethics and Jurisprudence to the extent indicated below:—

#### **SURGERY.**

General and Oral Surgery; Surgical Anatomy and Pathology, infection, inflammation, suppuration, necrosis, ankylosis, dislocation, fractures, tumours; surgical affection of lip, tongue, and mouth; cleft palate, hare lip.

#### **OPERATIVE DENTISTRY.**

The principles and methods of all operations included in Conservative Dentistry.

#### **PROSTHETIC DENTISTRY.**

The principles and methods of all operations included in Dental Prostheses.

#### **HISTORY OF DENTISTRY, JURISPRUDENCE, ETC.**

History and Development of Dentistry; Professional Ethics, obligations of professional men to their patients, fellow practitioners and the public; Jurisprudence, qualifications and duties of expert witnesses; dental records; responsibilities of practitioners.

Candidates for this examination shall be required to present certificates of having attended in some approved college the following courses of lectures, laboratory and infirmary work: *General and Oral Surgery, and Anaesthetics*, a course of lectures in the third and fourth sessions; *Operative Dentistry*, a course of lectures, demonstrations and practice extending over the fourth session, including certified cases of successful operations performed during the year; *Orthodontia*, a course of demonstrations, infirmary practice extending throughout the fourth session, including certification of specified cases, also models; *Prosthetic Dentistry*, a course of lectures, demonstrations, laboratory work and infirmary practice, including certification of specified cases; *Crown and Bridge Work, Ceramics*, a course of special lectures, including presentation of practical cases; *History, Ethics, and Jurisprudence*, a course of lectures.

The final D. D. S. examination will be held in the second and third weeks in April. Candidates are required to hand in their applications to the Dean of the Dental Faculty at least fourteen days before the date of the Examination, and the required certificates not less than two days before the examination, to enter their names in the register of the undergraduates, and to pay the required fees.

#### PRIZES

GEORGE S. CAMPBELL, Esq., chairman of the Board of Governors, offers a prize of Twenty-five Dollars to the dental student of the second year who makes the best general average in the spring examinations in 1910.

THE MARITIME DENTAL SUPPLY COMPANY, LTD., of Halifax, offers a prize of Twenty-five Dollars to the student in the first year who makes the best average in Operative and Prosthetic Dentistry and Technic in April, 1910.

#### ACADEMIC COSTUME

Undergraduates and general students attending more than one class are entitled to wear gowns at lectures and all meetings of the University. The forms prescribed are the Oxford undergraduate gown of black stuff with sleeves, and the black trencher with tassel.

The distinctive part of the costume is the hood.

The D. D. S. hood shall be of black stuff lined with scarlet silk and bordered with gold colored lace.

#### FEES

ALL FEES\* ARE PAYABLE IN ADVANCE.

Registration	\$ 2.00
Registration after Sept. 22nd	3.00
Chemistry 1 At	10.00
Chemistry 3†	12.00
Biology	12.00
Physics (without laboratory)	6.00
Each Annual Professional Examination	**10.00
Each Supplementary Examination	5.00
Caution Money‡	2.00

\*The University collects the Registration and Examination fees and Laboratory deposits. The Class Fees are paid by the Maritime Dental College.

\*\*This includes the diploma fee. Where a candidate for the D. D. S. degree has not taken all his professional Examinations at this University, the total fee payable to the University shall be \$60.00.

† All students taking classes involving laboratory work are required to make a deposit of Five Dollars on entering the class. This amount, or a charge for breakage have been incurred, what remains of it after such charges have been deducted, is returned to the student at the end of the laboratory course.

‡See (University) Calendar, page 59.

# Societies

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## THE ALUMNI ASSOCIATION.

(Organized 1871. Incorporated 1876.)

The Thirty-ninth Annual Meeting of the Alumni Association was held at the Halifax Hotel on April 28th, at 8 p. m., and was well attended. The president, A. S. Barnstead, B. A., LL. B., occupied the chair.

The treasurer's report showed that the receipts for the year were \$965.66 and the expenditure \$842.24, leaving a balance of \$223.42. The expenditure included a gift of \$725.00 to the University distributed as follows :

Civil Engineering Department .....	\$125.00
Chemical Laboratory .....	250.00
Physical Laboratory .....	50.00
Law Library .....	50.00
Arts and Science Library .....	50.00

A suggestion that the Alumni Association should support a new chair in the University was approved.

Mr. Hugh Mackenzie, B. A., Truro, was nominated to represent the Alumni on the Board of Governors.

The following officers were elected :

President.....	A. S. BARNSTEAD, B. A., LL. B.
1st Vice-President.....	MELVILLE CUMMING, B. A.
2nd Vice-President.....	MURRAY MACNEIL, M. A.
Secretary-Treasurer.....	S. A. MORTON, M. A.
	R. M. MACGREGOR, B. A., M. L. A., Alumni Governor ( <i>ex-officio</i> ).
Executive Committee.....	J. W. LOGAN, M. A. E. MACFARLIE, PH. D. A. S. MACKENZIE, PH. D. G. W. STILES, H. A. J. H. TREFRY, M. A. D. C. SINCLAIR, B. A., Associate editor of <i>Genetic</i> .
Auditors.....	J. M. GEDGETT, LL. B. J. F. PUTNAM, B. A.

The officers of the C. B. Branch last reported were

Honorary President.....	CHARLES S. CAMERON, M. A.
President.....	H. P. DUCHESNE, B. A.
Vice-Presidents.....	F. B. A. CHIPMAN, M. A., LL. B. J. L. ESTHURSE, M. D. W. P. CARROLL, B. A., LL. B. D. FINLAYSON, B. A., LL. B., M. P.
Secretary.....	C. D. LIVINGSTON, LL. B.
Treasurer.....	J. E. A. MACLEOD, M. D. M. T. MACLEAN, M. D.
Other Members of the Executive Committee.....	D. McD. CAMPFIELD, M. A., B. Sc. G. A. B. HOWLING, B. A., LL. B. REV. W. H. RUMBLE, B. A., PH. D. FINLAY MACDONALD, B. A., LL. B.

The officers of the New England Branch are :

President.....	K. G. T. WEBSTER, PH. D., Cambridge, Mass.
Secretary-Treasurer.....	ROY DAVIS, M. A., Cambridge, Mass.

During the year a Branch Association was organized in Vancouver for the Province of British Columbia. The officers are as follows :

President.....	HON. MR. JUSTIN MORRISON, LL. B., Vancouver, B. C.
Vice-Presidents.....	H. W. C. ISAK, LL. B., Vancouver, B. C. H. M. STRANGERS, B. A., New Westminster, B. C.
Treasurer.....	ALEXANDER ROBINSON, B. A., LL. B., Victoria, B. C. GEO. E. ROBINSON, B. A., Vancouver, B. C.
Secretary.....	G. G. BRENNICK, B. A., Vancouver, B. C. JUDGE HOWAY, LL. B., New Westminster, B. C.
Executive Com.,.....	H. C. SHAW, B. A., Vancouver, B. C. MISS JEANNETTE CANN, B. L., Victoria, B. C.

## THE ALUMNÆ ASSOCIATION.

(Organized March, 1909.)

Honorary President.....	Mrs. TUTEMAN.
President.....	Mrs. JEAN F. FORREST.
1st Vice-President.....	Mrs. JEANNETTE CANN.
2nd Vice-President.....	Mrs. ROBERT SCHERMAN.
Recording Secretary.....	Mrs. LOIS MACKAY.
Corresponding Secretary.....	Mrs. DOA G. PAULKNER.
Treasurer.....	Mrs. FLORENCE BLACKWOOD. Miss LILLIAN MARSHALL.
Other Members of the Executive Committee.....	Mrs. W. THOMAS. Miss L. M. MURRAY. Miss HARRIET M. BATES. Miss GRACE TUPPER.

## STUDENT SOCIETIES.

## University Students' Council.

Meetings are held regularly in November and February to conduct business in which all the students of the University are interested. Special meetings may be called by the President at any time.

President .....	W. C. ROSS.
Vice-Presidents .....	W. A. McDONALD, B. A. J. J. McDONALD, E. S. KENT.
Secretary-Treasurer .....	W. V. COFFIN. C. W. STRAMBERG.
Executive Committee .....	N. C. RALSTON, (A. T. McDONALD, D. C. SINCLAIR, B. A.)
Auditors .....	(W. S. LINDSAY, B. A.)

The DALHOUSIE GAZETTE is published by the students of the University under the authority of the Council.

The following have been appointed by the students of the University as Editors for 1909-10:-

H. S. DAVIS (Arts, '10).	W. A. McDONALD, B.A. (Law, '10).
W. C. ROSS (Arts, '10).	W. V. COFFIN (Med., '10).
A. D. McDONALD (Arts, '11).	W. F. KENNEY (Med., '11).
L. M. FULTON (Arts, '12).	C. H. MACDONALD (Eng., '10).
J. S. MAYOR (Law, '11).	H. A. MAJOR (Eng., '12).

Lady Editors .....	MISS L. ALBERTA UMLAN (Arts, '10)
	(MISS F. MCG. STEWART (Arts, '11))
Alumni Editor .....	D. C. SINCLAIR, B. A.
Alumnae Editor .....	MISS DORA G. FAULKNER, M. A.

## Arts and Science Students' Society.

This Society meets in October and April to conduct business in which the Arts students alone are interested. Special meetings may be called at any time by the President.

## OFFICERS.

President .....	J. P. MCINTOSH.
Vice-President .....	J. K. MURCHISON.
Secretary-Treasurer .....	D. YAIR.
Executive Committee .....	H. F. KEMP. C. L. GARS. J. H. CHATAUVENT.

## STUDENT SOCIETIES.

## Law Students' Society.

This Society meets at the opening of the Session for general business, and thereafter at such times as the President may deem necessary.

## OFFICERS.

President .....	J. DOULL, B. A.
Vice-President .....	R. W. LANDRY.
Secretary-Treasurer .....	E. C. BURNS, B. A.

## The Mock Parliament.

The Mock Parliament meets every Saturday night until the Christmas vacation. All students of the University are welcome, but only students taking Law classes are allowed to take part in the debates which are wholly of a political character on current questions. Parliamentary procedure is strictly observed.

## OFFICERS.

Speaker .....	
---------------	--

## The Moot Court.

The Moot Court is intended for law students only, so far as arguing is concerned. It is conducted as nearly as possible after the manner of the Supreme Courts; and all law students of second and third year standing are required to take part in at least one case during the session. (See Law Faculty.)

## The Medical Debating Club.

The meetings of this Society are held weekly throughout the session. Topics of general interest are discussed, and papers on medical subjects are read.

## OFFICERS.

President .....	A. CALDER, M. D.
Vice-President .....	W. V. COFFIN.
Secretary .....	A. A. CAMERON.
Treasurer .....	H. G. GRANT.
Executive Committee .....	W. F. KENNEY. E. K. MACLELLAN, M. D. J. I. MACDONALD, B. A.

## The Sodales Debating Club.

The Sodales Debating Club meets fortnightly during the session, subjects of general interest being discussed.

OFFICERS.	
Honorary President .....	DEAN WELDON.
President .....	W. V. COFFIN.
Vice-President .....	J. C. MACLENNAN.
Secretary-Treasurer .....	D. C. HARVEY.
	H. S. DAVIS.
Executive Committee .....	{ F. M. DAVIDSON, D. C. SINCLAIR, B. A. A. M. JOHNSON.
Representative on Committee for Intercollegiate Debate .....	A. CALDER, M. D. C. L. GASK.
Auditors .....	T. R. HALL.

**Young Men's Christian Association.**

Meetings of the Association are held every Saturday evening at the College.

## OFFICERS.

Honorary President .....	DEAN WELDON.
President .....	H. S. DAVIS.
Vice-President .....	A. D. MACDONALD.
Corresponding Secretary .....	J. C. MACDONALD.
Recording Secretary .....	A. P. McIVER.
Treasurer .....	J. P. MCINTOSH.

**Young Women's Christian Association.**

Meetings of the Association are held every Monday afternoon at 5 o'clock.

## OFFICERS.

President .....	LENORE SMITH.
Vice-President .....	MARGERY C. OUTSHIT.
Treasurer .....	MARGARET McLELLAN.
Secretary .....	ANNIE BETTEL.

**Dalhousie Dramatic Club.**

## OFFICERS.

Honorary President .....	DR. MACMECHAN.
President .....	W. C. ROSS.
Vice-President .....	MISS M. J. McCURDY.
Secretary .....	JOHN E. READ, B. A.
Treasurer .....	J. D. MACLEOD.
Director .....	MISS J. CHICHTON.
Costumer .....	MISS SEXTON.
Property Man .....	E. FOXER.
Stage Carpenter .....	A. SUTHERLAND.
	J. S. MATOR.
Executive Committee .....	{ W. S. LEXISAY, P. R. FLEMMING, MISS J. G. BAYER, MISS D. GORHAM, D. C. SINCLAIR, B. A. J. P. MACINTOSH.
Auditors .....	

**The Dalhousie Amateur Athletic Club.**

Honorary President .....	PRESIDENT FOREST.
President .....	N. C. RALSTON.
Vice-President .....	A. J. LAWRENCE.
Secretary .....	J. MCG. STEWART, B. A.
Treasurer .....	PROF. MACNEILL.
	D. A. CAMERON.
Executive Committee .....	{ W. C. ROSS, J. J. MACDONALD, A. O. THOMAS.
Captain .....	{ M. G. BERRIE, M. G. BERRIE.
Trophy Committee .....	{ N. C. RALSTON, J. A. JOHNSON.
Field Committee .....	{ J. RANKINE, M. D., PROF. A. S. MACMCKENZIE.
Auditors .....	{ J. E. READ, B. A., W. S. LEXISAY, B. A.

**The Delta-Gamma Society.**

The Delta-Gamma Society meets bi-monthly during the session. All lady students are eligible for membership. Debates are held, and literary programmes are prepared.

President .....	MARY SMITH.
Vice-President .....	
Secretary .....	HELEN ARMITAGE.
Treasurer .....	ANNIE DICKEE.

**The Engineering Society.**

This Society meets monthly to hear addresses by Engineers.

Honorary President .....	PROF. A. S. MACMCKENZIE.
President .....	F. E. ARCHIBALD, B. A.
Vice-President .....	
Secretary .....	G. STAIRD.
Treasurer .....	E. S. KENT.

## AFFILIATED COLLEGES.

**The Prince of Wales College.**

(Founded in 1869.)

- S. N. ROBERTSON, M. A. (Dal.), LL. D., Principal, *Latin, Greek and School Management.*  
 H. H. SHAW, B. Sc. (McGill), Vice-Principal, *Chemistry, Physics.*  
 E. E. JORDAN, M. A. (Dal.), *Mathematics and Book-keeping.*  
 J. D. COLLIER, *Dressing and Manual Training.*  
 J. A. MACDONALD, B. A. (Laval), A. M. (Harv.), *French and Latin.*  
 THEO. BOIS, B. A. (Dal.), *Botany and Physical Geography.*  
 A. W. SEAMAN, M. A. (Dal.), *English and History.*  
 A. F. MATTHEWS, M. A. (Dal.), *English and History.*  
 B. MARTIN, *French.*

Prince of Wales College, Charlottetown, amalgamated with the Provincial Normal School of Prince Edward Island in 1879, is intended to provide for young people of both sexes a liberal education in Literature and Science, and also to educate and train the teachers for the Public Schools of the Province. Its curriculum is conformed to the common needs of the teacher and of the student seeking a general education.

The College course is planned for a term of three years. Admission to the College is to the First Year, or lowest class. Students who attain a high mark at the matriculation examination will be permitted, if on further examination found worthy, to enter the Second Year.

To the Second Year are admitted all students who have made 60 per cent. in the examinations of the First Year, and also those persons who hold a Provincial license of the Second Class.

To the Third Year are admitted those who have made 60 per cent. in the Second Year work, and also those persons who hold a license of the First Class.

At the close of the session Honour Diplomas are granted to Third Year students who make over 65 per cent. in the examinations of the year; to those students who have shown throughout their course exceptional merit, High Honour Diplomas are issued.

Certificates are granted to Second Year students who make an average of 65 per cent. in the examinations of their year. These Certificates entitle their holders to First Class license without further examination, providing that Normal training has also been taken.

Students holding High Honour Diplomas are admitted to the Third Year of the B. A. Course in Dalhousie, those holding Honour Diplomas to the Second, those holding Certificates or First Class licenses to the First Year.

# University Lists

## DEGREES

CONFERENCE APRIL 29TH, 1909.

### DOCTOR OF LAWS (*Honoris Causa*)

- JOHN EUGENE CALKIN, M. A.—*Late Principal of the Provincial Normal School.*  
ALBERT ROSS HILL, PH. D.—*President of the University of Missouri.*

### MASTER OF ARTS.

- JEAN GORDON RAYER, B. A.—*By Examination in Latin.*  
WILLIAM STUART BEEBE, B. A.—*By Examination and Thesis in Geology.*  
WILLIAM WALTER CONRAD, B. A.—*By Examination in Tenebrion.*  
HARRY CLEMENT FRASER, B. A.—*By Examination in Philosophy.*  
MABEL ENSWORTH GOUDGE, B. A.—*By Examination in Latin and Greek.*  
WILLIAM GOODWOOD, B. A.—*By Examination and Thesis in Philosophy.*  
WILLIAM P. GRANT, B. A.—*By Examination and Thesis in Philosophy.*  
JOTHAM WILBERT LOGAN, B. A.—*By Examination in Greek.*  
HECTOR FRANCIS MCRAE, B. A.—*By Examination and Thesis in Philosophy.*  
ALLAN FEARNE MATTHEWS, B. A.—*By Examination in Tenebrion.*  
JAMES AMOS SCHENCKE, B. A.—*By Examination and Thesis in Philosophy.*  
ATHOL WENDELL SEAMAN, B. A.—*By Examination in Tenebrion.*

### BACHELOR OF ARTS

- FRANK ROGERS ARCHIBALD ..... Halifax.  
WILLIAM ROBERT RAMSAY ARMITAGE ..... Halifax.  
CHARLES GUY BLACK ..... Oxford.  
AMELIA CREEMLAN ..... Bass River.  
SETH WILSON CROWELL ..... Yarmouth.  
AGNES MILLER DENNIS ..... Halifax.  
JOHN DOUL ..... New Glasgow.  
AMY CLARE GIFFIN ..... Inverness Harbour.  
RUBY HILL ..... Ossaw.  
ROBERT EBENEZER INGLIS ..... Lochaber.  
GEORGE WILFRED IRVINE ..... St. John, N. B.  
AMOS JESSE LAWRENCE ..... Southampton.  
MARY GLADYS LAWRENCE ..... Dartmouth.  
MARIE MACDONALD ..... Halifax.  
ALEXANDER MCKAY ..... Emerald, P. E. I.  
ALEXANDER GIBNEY MCKAY ..... Dartmouth.  
MASEL ELIZABETH MCLEOD ..... Penobscot, N. B.

## DEGREES.

- |                              |                         |
|------------------------------|-------------------------|
| VICTORIA KATHERINE MACMILLAN | West Bay, C. B.         |
| JOHN MACNEIL                 | Glow Bay, C. B.         |
| WILLIAM WALLACE MALCOLM      | Sq. John, N. B.         |
| ELIZABETH JANE MAYCOCK       | Halifax.                |
| JAMES BERNARD MUISE          | Weymouth.               |
| KENNETH MCLEOD MUNRO         | Boultarderie, C. B.     |
| CLARE MURPHY                 | Halifax.                |
| ALEXANDER MURRAY PORTER      | Alma.                   |
| SARAH ELIZABETH PORTER       | Alma.                   |
| JOHN ERKINE READ             | Halifax.                |
| WILMER BETIDONE ROSSBOROUGH  | North Sydney, C. B.     |
| LILY HAMILTON SEAMAN         | Charlottetown, P. E. I. |
| LUCIA WILHELD SIBLEY         | Halifax.                |
| DONALD CARMICHAEL SINCLAIR   | New Glasgow.            |
| JAMES MACGREGOR STEWART      | Pictou.                 |
| ARTHUR OGDEN THOMAS          | Tivra.                  |
| EUPHEMIA MAY THOMSON         | Halifax.                |
| GRACE MARJORIE TUPPER        | Bridgewater.            |
| ELIZA CLARA WALKER           | New Glasgow.            |

### BACHELOR OF SCIENCE.

- |                        |             |
|------------------------|-------------|
| FLORENCE ELLEN DOOP    | St. John's. |
| CURTIS CLAYTON WALLACE | Halifax.    |

### BACHELOR OF MUSIC.

- |                         |            |
|-------------------------|------------|
| BEATRICE ELLINOR DAYISS | Dartmouth. |
|-------------------------|------------|

### BACHELOR OF ENGINEERING.

- |                         |                    |
|-------------------------|--------------------|
| In Civil Engineering.   |                    |
| HARRY CAVANAGH          | New Glasgow.       |
| GORDON LITHGOW CHICHTON | Halifax.           |
| HORACE WALDO FLEMING    | Halifax.           |
| GEOFFREY ABBOTT GARNETT | Halifax.           |
| FRANCIS CARE KNIGHT     | Bedford.           |
| CHALMERS JACK MCKENZIE  | St. Stephen, N. B. |
| DENIS STAKEY            | Halifax.           |

### DOCTOR OF MEDICINE AND MASTER OF SURGERY.

- |                           |                          |
|---------------------------|--------------------------|
| ALLISTER CALDER           | Springville, Pictou.     |
| FREDERICK AUSTEN COX      | Upper Stewiacke.         |
| HECTOR ALEXANDER GRANT    | Boultarderie East, C. B. |
| CLYDE STRACHAN HENXIGAR   | Chester.                 |
| STEPHEN REGINALD JOHNSTON | Dartmouth.               |
| JOHN ALEXANDER MACDONALD  | Har. an Bonne, Antig.    |
| EDWARD KIRK MACLELLAN     | Halifax.                 |
| ROBERT GORDON MACLELLAN   | Pictou.                  |

### BACHELOR OF ARTS

- |                          |           |
|--------------------------|-----------|
| <i>Ad custom profum.</i> |           |
| WILLIAM WALTER CONRAD    | Leesburg. |

## DEGREES PREVIOUSLY CONFERRED DURING THE SESSION.

## BACHELOR OF LAWS.

HAROLD MUNRO CHASE	Sheffield Mills.
COLLINGWOOD STEEVE CLARK	Moncton, N. B.
ALEXANDER FARQUHAR	Newport, Hants.
ARTHUR COCHRANE FRAME	Halifax.
JOHN JAMES GILLIES, B. A.	Sydney, C. B.
LIONEL ROBERT LORIEN	Chester.
COLIN MACKENZIE, B. A.	Red Island, C. B.
ROBERT WILLIAM MACLELLAN, B. A.	Halifax.
JOHN JOSEPH MARTIN, B. A.	Leamington.
HARRY WESTON MENZIE	Tatamagouche.
GERALD VINCENT PELTON	Yarmouth.
JAMES HARPER PROWSE, B. A.	Halifax.
DON CECIL SMITH	Halifax.

## HONOURS, PRIZES, Etc. 1908-9.

## DIPLOMAS OF HONOUR.

## BACHELOR OF LAWS.

CLASSICS.—*High Honours*.—James MacGregor Stewart.

ENGLISH AND ENGLISH HISTORY.—Honours.—Amy Clare Griffin.

CHEMISTRY AND CHEMICAL PHYSICS.—Honours.—Curtis Clayton Wallace.

## DIPLOMAS OF GENERAL DISTINCTION.

Great Distinction.—Marge Macdonald, Clare Murphy, John Eskein Read, Lily Hamilton Seaman, Denis Stairs.  
Distinction.—William Robert Ramsey Armitage, Ruby Hill, Elizabeth Jane Maycock.

## GRADUATE PRIZES AND MEDALS.

UNIVERSITY MEDAL.—Classics.—James MacGregor Stewart.

MEDICAL FACULTY MEDAL.—Clyde Strangahn Henniger.

AVERY PRIZE.—Cliff Murphy.

## UNDERGRADUATE PRIZES AND SCHOLARSHIPS.

## Junior Entrance Scholarships:

MACKENZIE BURSARY.—R. E. Day and J. C. Stairs, equal.

SIR W. YOUNG SCHOLARSHIPS.—Daniel C. Harvey (Prince of Wales), J. H. L. Johnstone (Picton), L. E. Brownell (Turo), Irene Bremer (Sydney), Margaret P. Irving (New Glasgow), Beatrice Mumford (Halifax), R. A. McDonald (Yarmouth), Lillian McKittrick (Kentville).

## Special Prizes:

WATERLEY PRIZE (Mathematics).—James A. Mackay.

DR. LINDSAY PRIZE (Primary M. D. C. M.).—Donald A. MacLeod.

## EXAMINATIONS 1908-1909

## FACULTY OF ARTS, SCIENCE AND ENGINEERING

## MATRICULATION

## BY EXAMINATION.

SENIOR.—Passed in certain subjects: L. E. Brownell, in English and Trigonometry; C. G. Black, in French; H. Davis, in Chemistry; J. W. Morrison, in Chemistry.

JUNIOR.—Second Class Distinction: R. E. Day and J. C. Stairs, equal.

Passed.—A. L. McLean.

Passed in certain subjects: L. M. Thompson, in Latin; Harvey Doane, in English; Gladys V. Smith, in English; G. A. Barre, in History; L. M. Robinson, in Latin, History and Geography; S. Geller, in Latin, French and History; R. W. Landry, in History; H. M. Blois, in Latin and French; Eliza P. Brison, in Latin; A. T. Macdonald, in English and History; H. Williston, in Algebra; Mossie Munro, in Latin; Florence Stewart, in Algebra and Geometry; Nora Carter, in Latin; A. Farquhar, in Latin; T. R. Hall, in French; A. O. Thomas, in Greek; M. E. Lewis, Kathleen MacAloney, and Gladys Masters, in French; A. B. Smith, in English.

## BY CERTIFICATE.

SENIOR—FOR ARTS.—Passed—E. J. O. Fraser, J. H. L. Johnstone.

Passed in certain subjects: L. E. Brownell, in History, Latin, German, Geography; Isabel Grant, in all except Chemistry; A. Y. MacKay, in all except Algebra and Trigonometry; E. T. Parker, in all except Foreign Languages; D. J. Vair, in all except Mathematics and Chemistry; Annie S. MacKenzie, in all except one Foreign Language; A. A. MacKenzie, in German, English, History, Trigonometry, Botany; Margaret McLellan, in all except Latin.

JUNIOR—FOR ARTS.—Passed—Irene Bremer, Sara Dennis, Annie Dökké, H. W. Jones, W. J. McLeod, D. Fraser, Margaret Irving, G. M. Lewis, E. A. McDonald, Mary L. McKittrick, Beatrice Mumford, Dorothy Mumme.

Passed in certain subjects: Edith Chisholm, Margaret Christie, Jessie S. Macdonald, M. R. McGregor, J. K. Macleishon, Faany Toomey, A. P. McIver, Edith Blackie, Edna Forsyth, in all except a Foreign Language; Harriet Bligh, D. J. Nicholson, Annie Retrie, Manda Stevens, in all except two Foreign Languages; L. P. Archibald, in all except Mathematics; E. V. Askhurst, Lillias Colpozen, in Latin, English, History and Geography; L. M. Fulton, in Latin, English, History and Algebra; S. W. Chambers, J. H. Chateaubriand, E. D. Chabot, in English, History and Geography; E. R. Clayton, in History and Mathematics; Lillian Macdonald, in English and Mathematics; E. S. Smith, in English, History and Geography; Lily Lawrence, D. S. MacIntosh, D. A. McMillan, in English, History and Mathematics; P. Gittelson, in German, History and Geography; G. L. Keefer, in German, History

and Mathematics; G. K. King, J. N. Lyons, in History and Geography; W. R. McAskill, J. A. Macdonald, W. K. McKay, J. B. Reid, in History and Mathematics; Noah Lantz, in English, History, French and Geometry; D. C. McKenzie, in Geometry; H. M. Stairs, in Latin, History and Mathematics; L. M. Thompson, in German; Jean McGregor, in Algebra; L. E. Brownell, in French.

## FOR ENGINEERING.

JUNIOR.—Passed in certain subjects; H. L. Garrett, F. E. Hiscock, in all except a Foreign Language; H. Dame, L. B. McCurdy, in all except English; S. E. Trites, in all except Algebra; H. McKinnon, J. Messevey, F. H. Palmer, in History and Mathematics; A. B. Smith, in Mathematics; F. Tupper is English, History and Geometry; J. W. Morrison, in English, History and Mathematics.

## ADMITTED OF CANDIDATE STATUS.

Harvey, D. C.; Major, J. S.; McLean, Margaret.

## SPECIAL AND SUPPLEMENTARY EXAMINATIONS

LATIN 1.—A. O. Thomas, C. S. Ferguson.

LATIN 2.—A. K. Herman.

FRENCH 1.—H. A. Major, A. McLeod.

FRENCH 2.—E. W. Chapman, A. J. Lawrence, H. W. Fleming, D. J. Matheson, Victoria McMillan.

ENGLISH 1.—G. E. Herman.

ELOCUTION.—E. W. Chapman, P. R. Fleming, A. G. McKay, D. Stairs.

HISTORY 1.—A. M. Porter.

ECONOMY 1.—J. Doull.

PHILOSOPHY 1.—A. R. Campbell, T. M. Creighton, G. E. Herman, Effie Thomson, A. K. Herman, A. G. McKay.

MATHEMATICS 1.—R. A. Neish.

TRIGONOMETRY.—Margaret J. Irwin.

ALGEBRA.—J. W. Morrison.

GEOMETRY.—Katherine Whitman.

ANALYTIC GEOMETRY.—A. B. Campbell, E. S. Kent.

CALCULUS.—N. W. McKay, E. B. Allan, E. L. Thorne, A. R. Campbell, E. S. Kent, J. F. Cahan, R. W. McCollough.

PHYSICS 1.—E. L. Dimock, J. G. Macdonald, F. G. Mack, E. L. Thorne.

PHYSICS 2 B.—F. R. Archibald, F. C. Knight.

CHEMISTRY 1 A.—H. Williston, E. W. Chapman.

CHEMISTRY 4.—G. L. Crichton.

GEOLGY 2.—J. R. Cornelius.

SURVEYING 2.—J. F. Cahan.

SURVEYING 1.—A. Ferguson, A. G. McAuley.

DRAWING 2.—T. M. DeBlois.

DRAWING 1.—F. C. Knight, J. G. Cotter, R. A. Major, A. McLeod.

HYDRAULICS 1.—E. L. Thorne.

## DEGREE EXAMINATIONS

## CLASS LISTS.

Names in "Class I" and "Class II" are in Alphabetical Order.

Names under Heading "Passed" are in Order of Merit.

The Asterisk Indicates a High First Class.

ELEMENTARY LATIN.—Class II.—McIntosh, D. S.; McIver, A. P.; Nicoll, Margaret A.; Stevens, Manie Achsa. Passed—Blackie, Edith M.; Christie, Margaret A.; Toomey, Fanny H.; Bettie, A. L.; Chisholm, Edith Annie; McDonald, J. A.; Lawrence, Lily F.; Smith, E. S.; Taylor, Florence Ann; Bligh, Harriet A.; McLeod, M. D.; Forsyth, Edna Inn; Macdonald, M. Lillian; McMillan, D. A.; King, G. K.; Lantz, Noah Gladys; Reid, J. B.

LATIN I.—Class I.—Bremner, Irene; Fulton, L. McL.; Jones, H. W. Class II.—Day, R. E.; Dennis, Sara M.; Franklin, Georges; McLean, A. L.; Passed—MacDonald, Jessie; Cutler, Nora F.; McKittrick, May; Fraser, D. F.; Watt, E. B.; Collier, Florence; Irving, Margaret; Mumford, Beatrice; Mumus, Dorothy; Archibald, L. A.; McLeod, W. J.; Smith, Gladys C.; Dickie, Annie K.; Stairs, H. M.; Stairs, J. C.; Leslie, K.; McGregor, M. H.; Ackhurst, E. V.; Gittelson, P. M.; McKenzie, A. A.

LATIN 2.—Class I.—Fraser, E. J. O.; Grant, Isabel M.; Vair, J. D.; Wier, Elsie M. Class II.—Armitage, Helen D. A.; Broun, M. E.; Guia, Beata Catherine; MacDonald, J. C.; Neish, E. A.; Outbit, Marion C. Passed—McDonald, A. D.; Goss, C. L.; MacKay, A. L.; Cutler, Nora F.; Hall, T. R. H.; Jones, O. R.; Syvester, G. MacD.; McLean, Margaret; Crowe, J. C.; Stewart, Florence M.; Mumus, Jessie M.; Ross, Margaret L.; Blois, H. M.; Fleming, F. R.; Ferguson, C. S.; Reiper, J. S.

LATIN 3.—Class I.—Armitage, W. R. H.; Hill, Ruby; Macdonald, Madge E.; Maycock, Elizabeth J.; Murphy, Clare; Read, J. E.; Seaman, Lily H.; Smith, Lenore; Stewart, J. MacG.; Class II.—Cornelius, J. R.; Livingstone, G. C.; Silver, Margarette H. L. Passed—Elliott, W. C.; Wafer, Edna Clara; Tupper, Grace M.; Sibley, Lena M.; Duffy, L. L.; McLeod, Mabel E.; Archibald, A. A.; Clay, Vera B.; Inglis, E. E.; Mackay Georgina M.; MacLeod, J. D.; Rudin, H. A.; Thomson, Effie; MacMillan, Victoria H.; Wissell, G. B.; Muise, J. H.; McLean, J. G.; Creelman, Amelia; MacNeill, J.; Smith, Mary E. S.; Umiah, Lillie A. B.; Forbes, E. McE.; Irwin, Margaret J.; Rosborough, W. R.; Ross, A.; Simelair, D. C.; Lawrence, A. J.

ELEMENTARY GREEK.—Passed—McKay, A.; Archibald, L. P.; McIver, F. M.; McLeod, W. J.; McKay, W. K.; MacLennan, K. J.; Murdoch, J. K.; Smith, E. S.

GREEK I.—Class I.—Jones, H. W.; McLean, A. L. Passed—Fulton, L. McL.; McIver, A. P.; Fraser, D. R.; Mumford, Beatrice.

**GREEK 2.**—*Class I.*—Grant, Isabel M.; Harvey, D. C.; Murphy, Clare; *Class II.*—Armitage, Helen D.; Fraser, E. J. O.; Macdonald, J. C.; Neish, R. A.; Vair, J. D.; Wier, Elsie May; Passed—McDonald, A. D.; Tait, H. S.; Weatherbee, J. A. T.; McLennan, J. C.; Ferguson, C. S.

**GREEK 3.—Class I.**—Armitage, W. R. E.; \*Stewart, J. MacL.; Passed—Kemp, H. F.; McLean, J. G.; Cornelius, J. R.; McIntosh, J. P.; Smith, Mary E.

**HEBREW.**—Passed—Irvine, G.; Malcolm, W.; Porter, A. M.; McDonald, D. W.; Passed—Munro, K. M.; McKay, A.; Irvine, G. W.; Ferguson, C. S.; McKay, J. F.; Creighton, T. M.; Porter, A. M.

**N. T. GREEK.**—*Class II.*—Malcolm, W. W.; Milligan, F. M.; McDonald, D. W. Passed—Munro, K. M.; McKay, A.; Irvine, G. W.; Ferguson, C. S.; McKay, J. F.; Creighton, T. M.; Porter, A. M.

**FRENCH 1.**—*Class I.*—Blackie, Edith M. *Class II.*—Hinsey, S. R. Passed—Stevens, Maud A.; Macdonald, John A.; Irving, Margaret F.; Etelle, Annie L.; McIntosh, Donald S.; Stairs, Herbert M.; Lawrence, Lily F.; (Eligh, Harriet A.; Nielsen, Daniel J.); Colquhoun, Lillian W.; Garrett, Harry L.; Bell, Hugh P.; Chisholm, Kenneth G.; Farquhar, Alexander; Clayton, E. Reginald.

**FRENCH 2.—Class I.**—Day, R. Earle; Faulkner, Georgine L.; Jones, Harvey W.; Lantz, Norah; Stairs, John C.; Waith, Edgar B. *Class II.*—Bremner, Irene G.; Dennis, Sara M.; McKittrick, M. Lillian; Passed—Toomey, Fanny; Munroe, Dorothy K.; MacNeil, John; (Fraser, Edith L. M.); Macdonald, Randal A.; Marsters, Charles G.; Dickie, Annie K.; (Christie, Margaret A.; MacGregor, Murdoch; Palmer, Fred); (Matheson, Howard; McCurdy, Leslie); Beak, Ellis C.; (Messervey, John; Robinson, Louis); (Bilos, Harry M.; Cavanagh, Harry); Ritchie, Henrietta; James, Allan M.

**FRENCH 3.—Class I.**—Clay, Vera B.; Cutler, Norah F.; Gorham, Dorothy C.; Hill, Ruby; Maycock, Elizabeth; Murphy, Clare; Macdonald, Madge; Outslay, Marion C.; Seaman, Lily H.; Sibley, Lena M.; Silver, Marguerite; Smith, Lenore. *Class II.*—Munro, Jessie M.; Prisk, Grace; Raynor, Laura M.; Ross, Margaret I. Passed—Butler, George K.; Johnston, J. H. B.; Thomson, Effie M.; Deull, James A.; Jones, Owen R.; Holder, Ella G.; MacKay, George M.; Smith, Gladys U.; Parker, Eugene T.; (Esper, John S.; Wiswell, Gordon R.); Sylvester, George M.; Ross, Albert; O'Brien, Nora; Matheson, Donald J.; McLean, Margaret.

**FRENCH (for B. Mus. Degree, Preliminary).**—Passed—Dorris, Beatrice E.; MacKay, Helen; Crichton, Helen R.; Thorne, Emilie.

**GERMAN 1.—Class I.**—Grant, Frances H. *Class II.*—Ross, William C.; Townsend, William T. Passed—Faulkner, Georgine L.; Hesler, Frank E.; Holder, Edna G.; O'Brien, Nora; James, Alan M.; Reid, John B.

**GERMAN 2.—Class I.**—Blackie, Edith M. *Class II.*—Bremner, Irene G.; Guen, Helen C.; Mackay, Helen S.; Muise, James R.; Munro, Jessie M. Passed—Davis, Harold; Gittelson, Philip M.; Chase, Margaret C.; MacGregor, Jean; Kendall, Emily B.; Williston, C. H. P.; McKinnon, Ronah; Dewis, Martha E.; Mackay, James A.

**GERMAN 3.—Class I.**—Boyes, Florence J.; Cutler, Norah F.; McLean, Margaret E.; \*Silver, Marguerite H. L. Passed—MacKenzie, Archibald A.; Mackenzie, Charles E.; Crowell, Seth W.; Whitman, Katherine M.; Matheson, Howard W.; Reper, John S.

**GERMAN (for B. Music Degree, Preliminary).**—Passed—Davis, Beatrice E.; Mackay, Helen; Thorne, Emilie; Crichton, Helen R.

**ENGLISH 7.—Class I.**—Harvey, Daniel C. *Class II.*—MacIntosh, John Philip; Seaman, Lily H. Passed—Kemp, Hector Francis.

**ENGLISH 4.—Class I.**—MacIntosh, John Philip; \*Smith, M. Lenore. *Class II.*—MacMillan, Victoria K.; Walker, Elizabeth C.; Umph, Alberta. Passed—Kemp, H. F.; Tupper, Grace M.; McLeod, Mabel E.; Crooman, Amelia A.; MacKay, A. G.; McLeod, James D.; Sibley, Lena M.; Raynor, Laura M.; Whitman, Katherine; Chase, Margaret; MacKay, George M.; Grant, Francis H.; Sinclair, D. C.; Thomas, A. O.; Marsden, Gladys M.; Smith, Olive; MacAloney, Kathleen; Milligan, F. M.; Prisk, Grace; Rosborough, W. R.; Clay, Vera B.; Crowe, J. C.; McLeman, J. C.; Lawrence, A. J.; Townsend, W. T.; Smith, Mary E.; Dowis, Martha E.; Irwin, Margaret J.; Thompson, L. M.; Whidden, W. A.; Fraser, James; Gorham, Dorothy C.; Inglis, E. E.; Irvine, G. W.; Macdonald, A. T.

**ENGLISH 3.—Class I.**—Giffa, Amy Clare; Harvey, Daniel C.; Macdonald, Madge E.; Seaman, Lily H.; \*Smith, M. Lenore. *Class II.*—Armitage, E.; Muise, J. E.; Porter, Sadie E. Passed—McLeod, Mabel E.; Crowe, J. C.; Grant, Francis H.; Forbes, E. M.; Hall, E. R.; Chase, Margaret C.

**ENGLISH 2.—Class I.**—Brownell, L. E.; Sylvester, George M. *Class II.*—Brownell, Pearl; Fraser, E. J. O.; Grant, Isabel M.; Gunn, Helen C.; Macdonald, A. D.; Macdonald, J. C.; MacKintosh, Archibald A.; MacKenzie, Annie S.; McLean, Margaret E.; Outslay, Marion C.; Ross, Margaret L.; Smith, Gladys Una; Stewart, Florence M.; Vair, James D. Passed—Doull, J. A.; MacGregor, Jean E.; Parker, E. T.; Earle, C. A. M.; Johnston, J. H. L.; Jones, O. B.; Wier, Elsie May; Kendall, Emily B.; Neish, R. A.; Ritchie, Henrietta M.; Armitage, Helen R.; Bilos, H. M.; Earle, B. D.; Ross, W. A.; MacLean, W. H.; Rice, G. E.

**ENGLISH 1.—Class I.**—Eligh, Harriet Alice; Faulkner, Georgine L.; Irving, Margaret; Lantz, Norah; MacKittrick, M. Lillian; Stevens, Maud A. *Class II.*—Bremner, Irene F.; Dennis, Sara M.; Macdonald, Janet S.; McIntosh, D. S.; McIver, A. F.; Robinson, L. M.; Waith, Edgar B. Passed—MacDonald, R. A.; Chisholm, Edith A.; Colquhoun, Lillian; Fulton, L. M.; Mansford, Beatrice; Nicoll, Margaret; Forsyth, Edna L.; Dickie, Annie E.;

Jones, H. W.; Smith, E. S.; Murchison, J. E.; Boak, C. Fillis; Christie, Margaret A.; Lawrence, Lily; Lockie, Edith; Doane, H. W. L.; Fraser, D. R.; Garrett, H. L.; Hiseler, F. E.; McCurdy, L. B.; McDonald, J. A.; McGregor, M. R.; Stairs, H. M.; Archibald, L. P.; Macdonald, M. Lillian; Stairs, J. C.; Taylor, Florence A.; Munro, Dorothy; McLeod, V. J. Passed—Palmer, F. H.; Reid, J. B.; Hettie, Annie J.; King, G. K.; McCuish, A. A.; Farley, S.; McLean, A. L.; Toomey, Fanny H.; Trites, S. R.; Mackay, W. K.; Day, R. E.; Forbes, A. G.; Kester, C. L.; Kerr, E.; Smith, A. B.

**ELOCUTION** (names in alphabetical order)—Passed—Ackhurst, E. V.; Archibald, L. P.; Barss, W. D.; Blackie, Edith; Book, Florence; Bligh, Alice; Brunell, L. E.; Brownell, Pearl; Brewster, Irene; Buckerfield, E. E.; Chateaubert, J. H.; Christie, Margaret; Chisholm, Edith; Clayton, E. R.; Colquhoun, Lillian; Collier, Florence; Day, E. K.; Dennis, Sara; Dickie, Anne; Doane, H. W. L.; Farley, D.; Forsyth, Edna; Fraser, D. E.; Fraser, E. J. O.; Fulton, L. M.; Garrett, H. L.; Gettelson, P. M.; Grant, Isabel; Hiseler, F. E.; Irving, Margaret; Johnston, J. H.; Jones, H. R.; Kester, G. L.; Kerr, J.; King, G. K.; Laatz, Nora; Lawrence, Lillie; Masters, C. J.; Messerry, J.; Mansford, Beatrice; Munro, Dorothy; Murchison, J. K.; McCurdy, L. B.; McCuish, A.; McDonald, M. Lillian; McDonald, Jeanie; McDonald, R. A.; McDonald, J. A.; McGregor, M. R.; McIntosh, D. S.; McIver, A. P.; McKeon, Lillian; McKay, A. T.; McKay, W. K.; McKenzie, A. A.; McKenzie, Annie; McKenzie, D. C.; Archibald, E.; McLeod, W. J.; McLean, A. D.; McLean, Margaret; McLean, Margaret E.; McLeanan, K. J.; McMillan, D. A.; Nicholson, D. J.; Parker, E.; Parker, E. T.; Robinson, L. M.; Reid, J. B.; Hettie, Annie J.; Ross, Margaret; Smith, A. B.; Smith, E. S.; Stairs, H. M.; Stairs, J.; Stevens, Mandie; Tupper, F.; Toomey, F.; Taylor, Florence; Trites, S. B.; Yair, J. D.; Waith, E. R.

**HISTORY 2.—Class I.**—Bligh, H. A.; Crowell, S. W.; Livingstone, G. C.; Tupper, Grace. **Class II.**—Brownell, L. E.; Maycock, E. J. Passed—Walker, E. C.; Umiah, Alberta; McLean, J. G.; McAloney, K.; Cutler, N. F.; Ferguson, C. S.; Robertson, A. W.; Butler, G. K.; Buckerfield, E. E.; Whidden, W. A.; Taylor, Florence.

**HISTORY 3.—Class I.**—Armitage, W. R.; Gillin, A. C.; Harvey, D. C.; McKay, G. E.; Class II.—Brownell, F.; Livingstone, G. C.; McIntosh, J. P.; McKenzie, A. S.; McLeod, J. D.; Prisk, A. G. Passed—Sinclair, D.; Doall, J.; Creighton, T. M.; Archibald, A. A.; Duffy, L. L.; Irwin, M. J.; Robertson, A. W.; Clay, V. E.; Whitman, K. A.; McLeanan, J. C.; Thomson, Effie; McNeil, J.; Kemp, H. F.; McKay, A. G.; Mack, Frank; Ross, A.; Radin, H. A.; Smith, Gladys; Cameron, A. A.; Milligan, F. M.; McIntosh, D. W.; Lawrence, A. J.; Macleod, W. W.; Cornelius, J. R.; McCuish, A. A.; Silver, M. H.

**ECONOMY 1.—Class I.**—Armitage, W. R. R.; Macdonald, Madge; McKenzie, A. A.; Munro, M. M. **Class II.—Archibald, F. R.; Creighton, T. M.; Roper, J. S. Passed—McKay, G. M.; Prisk, J. G.; Hill, Ruby; Matheson, D. J.; Porter, S. E.**

## EXAMINATIONS.

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Umlah, Alberta; Irvine, G. W.; Cutler, H. F.; Forbes, E. M.; Dodd, F. E.; Mack, Frank; McDonald, R. A.; Clay, V. B.; Hall, T. R.; McLean, Margaret; Buckerfield, E. E.; McDonald, A. T.; Chisholm, K. G.; Herres, A. K.; Herman, G. E.; Rice, G. E. A.; McAloney, K. I.; Whidden, W. A.; Jones, O. B.; Taylor, Florence.

**ECONOMY 2.—Class I.**—Creedman, Amelia; Maycock, E. J.; McMillan, V. K. **Class II.—Cameron, A. A.; McNeil, J.; Thomas, A. O.; Thompson, E. M. Passed—Butler, G. K.; McKay, A. G.**

**PHILOSOPHY 1.—Class I.**—Harvey, D. C. **Class II.—Archibald, F. R.; Gunn, Helen; MacKenzie, A. A. Passed—Stewart, Florence; Armitage, Helen; Fraser, E. J.; Grant, Isabel; McDonald, A. D.; Brownell, L. E.; O'Brien, Nora; Earle, B. D.; Parker, E.; McKenzie, Annie S.; Outhit, Marion; Weatherbie, J. A.; McLeishan, Margaret; Smith, Gladys L.; Earle, C. A.; McDonald, J. C.; Wier, Elsie; Munro, Jessie; Butler, G. K.; Rice, G. E.; Neish, R. A.; McGregor, Jean; Jones, O. B.; Ross, A. W.**

**PHILOSOPHY 3.—Class I.**—Armitage, W. R.; Duffy, Leon L.; Livingston, S. C.; MacKintosh, J. P. **Class II.—Inglis, R. E.; Robertson, A. W.; Bessborough, W. B.; Tupper, Grace; Passed—Whidden, W. A.; Kemp, H. F.; Smith, Olive; Black, C. S.; McLean, J. S.; McLean, J. C.; Milligan, F. M.; Porter, Sadie; McLeod, Mabel; Fraser, James.**

**PHILOSOPHY 4.—Class I.**—Armitage, W. R.; Hill, Ruby; MacKintosh, J. P.; MacMillan, Victoria; Seaman, Lily; Sibley, Lena; Silver, Marguerite; Smith, Lenore; Stewart, James; Bessborough, W. B. **Class II.—MacKay, Georgie; McLeod, J. D.; Robertson, A. W. Passed—Kemp, H. F.; Whidden, W. A.; Duffy, L. L.; Archibald, A. O.; Hall, T. R.; Livingston, S. C.; Walker, Eliza; Creedman, Amelia; Marstera, Gladys; Hattie, D. E.; Black, C. S.; Radin, H. A.; Tupper, Grace; Irwin, Margaret; McLeanan, J. C.; Thomas, A. O.; Chase, Margaret; Hayner, Laura; Ferguson, C. S.; Milligan, F. M.; Irvine, S. W.; McKay, A. G.; Porter, A. M.; Malcolm, W. W.**

**PHILOSOPHY 5.—Class I.**—Road, J. E. **Class II.—Roshborough, W. B.; Ross, W. C. Passed—Muise, J. B.; Hattie, D. E.; Porter, Sadie; Porter, A. M.; McLean, D. E.**

**EDUCATION 1.—Class I.**—Hill, Ruby; Murphy, Clare; Macdonald, Madge; Seaman, Lily. **Class II.—Creelman, Amelia; Dodd, Florence; Maycock, Elizabeth; Masters, Gladys; Porter, Sara; Walker, Elizabeth. Passed—MacLeod, Mabel; Umlah, Alberta; Kemp, H. F.; Sibley, Lena; Davis, Martha; Whidden, W. A.; Irwin, Margaret; Robertson, A. W.; MacLeanan, J. C.; McLean, J. S.; Bligh, Alice; Prisk, Grace; Muise, J. B.; Whitman, Katherine; Grant, Francis; Crose, J. C.; Forsyth, Edna; Archibald, Arnold; MacLeanan, K. J.; Herman, A. K.; Ross, A.; MacAloney, Kathleen; Cunningham, K.; Chase, Margaret; Matheson, G. E.; Thomson, Effie; Mary E.**

**MATHEMATICS 1A.—Class I.**—Fulton, L. M.; Nicholson, D. J.; Stevens, Mandie. **Class II.—Macdonald, J. S.; McKinnon, R.; McLean, A. Passed—Murchison, J. K.; Macdonald, J. A.**

Messervey, J.; Garret, H. L.; Bligh, Harriet; Day, R. E.; Macdonald, R. A.; Palmer, F.; Stairs, H. M.; Leslie, K.; Christie, Margaret; McCurdy, L. B.; Dickie, Annie; McIver, A.; McKay, W. K.; Mitchell, W.; McGregor, M. R.; Smith, A. H.; Bremner, Irene; Keefer, G. L.; Fraser, D. H.; Jones, H. W.; Lawrence, Lily; McKittrick, M.; Lillies; Munro, Dorothy; Smith, Margaret; Cutler, J. G.; Rettie, Annie; Forsyth, Edna; Irving, Margaret; Macdonald, Lillian; McIntosh, D. A.; MacMillan, D. A.; Major, R. A.; Robins, L.; Toomey, Fanny. Passed—Special—Stairs, J. C.

MATHEMATICS 1B.—Class I.—Macdonald, J. S.; Stairs, J. C.; Stevens, Maude; Class II.—Fulton, L. M.; McLean, A. L.; Macpherson, J. K.; Nicholson, D. J. Passed—Irving, Margaret; Messervey, J.; Keefer, G. L.; Macdonald, J. A.; Macdonald, R. A.; Bremner, Irene; McGregor, M. R.; McKinnon, E.; Garrett, H. L.; Day, R. E.; Palmer, F.; Macdonald, Lillian; McIver, A. P.; Blackie, Edith; McIntosh, D. S.; Smith, E. S.; Stairs, H. M.; Chisholm, Edith; Christie, Margaret; Forsyth, Edna; Smith, Oliver; Bligh, Harriet; Jones, H. W.; Lawrence, Lily; Leslie, K.; MacMillan, D. A.; Major, R. A.

MATHEMATICS 2.—Analytic Geometry.—Class I.—Fraser, E. J. O.; Mackay, J. A.; Weatherbee, J. A. Class II.—Chisholm, K. Passed—DeBliss, T. M.; Collingwood, D. M.; Morrison, J. W.; Stairs, G. S.; Dodd, Florence; Bell, H. P.

MATHEMATICS 3.—Calculus.—Class I.—Fraser, E. J. O.; Mackay, J. A.; Class II.—Weatherbee, J. A. Passed—Chisholm, K.; Morrison, J. W.; Stairs, G. S.; Macpherson, D. J.; DeBliss, T. M.; Bell, H. P.; Collingwood, D. M.; Cavanagh, J. L.; Dodd, Florence; Mylles, L. A.

MATHEMATICS 10.—Class I.—Read, J. E.

ASTRONOMY.—Class I.—Macdonald, C.; Stairs, D. Class II.—Cavanagh, H.; Dawson, F. H.; Dimock, C. L.; Putnam, W. Passed—Giberty, G. A.; McKenzie, C.; Kent, E. S.; Archibald, F.; Cahan, J. F.; Crichton, G. L.; McCollough, R.; Macdonald, J.; Rabson, N. C.; Thorpe, E. E.

PHYSICS 1.—Class I.—Grant, Isabel M.; Johnstone, J. H. L.; McKenzie, Annie S. Class II.—Weatherbee, J. A. T. Passed—Crowe, J. C.; MacKay, J. A.; Stairs, Gordon S.; O'Brien, Nora E.; Ross, A. J.; Parker, E. T.; Collingwood, D. M.; Gass, C. L.; MacKenzie, C. E.; (Brownell, L. E.; Hall, T. R.; Reynolds, H. M.); (Bell, H. P.; Hills, W. E.); (Allan, E. R.; Mylles, L. A.); Willistons, C. H. F.; (Dodd, J. A.; Gunn, Helen; MacLellan, Margaret; Sylvester, G. M.); Cavanagh, J. L.; Chapman, E. W. G.; Ross, W. C.; Stewart, Florence McG.; Vair, J.

PHYSICS 2.—Class I.—Read, J. E. Passed—McDonald, C. H.; Dawson, F. M.; Putnam, W.; Hardy, T. W.; Crowell, S. W.; Thorpe, E. L.

PHYSICS 3.—Class I.—Davis, H. S.; Matheson, H. W. Passed—Stapleton, W. C.; Wallace, C. C.

PHYSICS 5.—Class II.—Stapleton, W. C.; Wallace, C. C.

PHYSICS 6.—Class I.—Davis, Harold S. Class II.—Johnstone, J. H. L.; MacKay, J. A.; Read, J. E.; Simpson, G. F.; Stairs, Gordon S. Passed—Reynolds, H. M.; Matheson, D. J. D.; Collingwood, D. M.; Archibald, F. R.; (Hills, W. E.; Major, R. A.; Mylles, L. A.); Williston, C. H. F.; MacKenzie, C. E.; Cutler, J. G.; Simmonds, J. R. (Chapman, E. W. G.; Morrison, J. W.); Cante, C. C.; Crichton, C. S.; (Cavanagh, J. L.; Layton, M. M.); Wiswell, G. B.)

PHYSICS 7.—Class I.—Giberty, G. A.; MacLean, A. S.; \*Stairs, Dennis. Class II.—Cavanagh, H.; Crichton, G. L.; Flemming, H. W.; Hardy, T. W.; MacKenzie, C. J. Passed—Thorne, E. L.; Knight, F. C.; Cahan, J. F.

CHEMISTRY 1.—Passed—MacIntosh, D. S.; Grant, Isabel; Stevens, Maude; McKenzie, Annie; Fulton, W. A.; MacIver, A. P.; MacKay, Georgina F.; (Irving, Margaret; Ross, Margaret); (Bligh, Harriet; Whidden, W. A.); (Chisholm, Edith; Fraser, D. R.); (Crooman, Amelia; McLean, A. L.); (Dickie, Annie; Vair, J. D.); Smith, Lessore; Dewis, Martha; (Day, R. E.; Thomson, Effie M.); (Bremner, Irene; Jones, H. W.; Marsters, Gladys); (McKittrick, Lillian; Prisk, Grace); Christie, Margaret; Ursula, Alberta; (Holder, Ella G.); Macpherson, J. K.; Robinson, L. M.); Wier, Elsie; Smith, E. S.; Stewart, Florence McG.; (McGregor, Jessie; MacGregor, M. R.; Neish, E. A.); Smith, Gladys U.); Gittelson, P. M.; (Brownell, L. E.; MacLeod, W. J.; Watch, E. B.); (Berman, G. E.; Macdonald, A. T.; Ritchie, Henrietta.)

CHEMISTRY 1A.—Class I.—Johnstone, J. H. L.; Keefer, G. L.; MacLeod, J. D.; Stairs, J. C. Class II.—Hischer, F. E.; Messervey, J.; Nicholson, D. J.; Palmer, F. Passed—Garrett, H. L.; (Doane, H. W. L.; McKinnon, E. J.); Reid, J. B.; McCurdy, L. B.; (Smith, A. H.; Stairs, H. M.); Mitchell, W.; (MacKenzie, S. G.); Major, R. A.)

CHEMISTRY 2.—Passed—Dodd, Florence E.

CHEMISTRY 4.—Class I.—Mackay, J. A. Class II.—Cavanagh, J. L.; Collingwood, D. M.; Mylles, L. A.; Reynolds, H. M.; Stairs, G. S. Passed—Williston, C. H.; (Crowell, S. W.; Hills, W. E.); Archibald, F. R.

CHEMISTRY 6.—Passed—Wallace, C. C.

CHEMISTRY 7.—Class I.—Davis, H. S.; Matheson, H. W. Class II.—None. Passed—Mackay, N. W.

CHEMISTRY 8.—Class I.—Wallace, C. C. Class II.—DeBliss, T. M. Passed—Stapleton, W. C.

GEOLOGY 1.—Class II.—Collingwood, D. M.; Crowell, S. W. Passed—McLean, A. S.; Dawson, F. M.; MacDonald, C. H.; Knight, F. C.; Mitchell, E. F.; Kent, E. S.; Mylles, L. A.; Putnam, W.; Cavanagh, J. L.; Chisholm, K.; Hills, W. E.; McCollough, R. W.; Macdonald, J. G.; Eissor, J. J.; Ralston, N. C.; Dimock, C. L.; Allan, E. B.

**GEOLGY 2.**—*Class I.*—Murphy, Clare; Sibley, Lena. *Class II.*—Crighton, J. M.; Dodd, Florence; McDonald, A. D.; McMillan, W. K.; Munro, M. M.; Prisk, J. Grace; Roseborough, W. B.; Walker, Elizabeth. *Passed.*—Ross, Margaret; Raynor, Laura; Armitage, Helen; Outhit, Marion; Kendall, Emily; Creedman, Anna; Earle, C. A. M.; Nisbet, R. A.; Butler, G. K.; Gerham, Dorothy C.; McGregor, Jean E.; Black, C. G.; Maleolis, W. W.; Chisholm, E.; Thomson, E. M.; Irwin, Margaret J.; Masters, Gladys; Dewis, M. E.; Wier, Elsie M.; Earle, B. D.; Chase, Margaret C.; Jones, O. E.; Macdonald, J. C.

**GEOLGY 3.**—*Passed.*—Mackay, N. W.

**GEOLGY 4.**—*Class II.*—Crichton, G. L.; Gaberty, G. A.; Stairs, D. *Passed.*—McKenzie, C. J.; Thorne, E. L.; Cahen, J. F. (provisionally); Cavanagh, H.; Flemming, H. W.; F. C. Knight.

**GEOLGY 6 and 7.**—*Class II.*—Hardy, T. W. *Passed.*—Mackay, N. W.

**MINERALOGY.**—*Class II.*—Mackay, N. W.

**BIOLOGY.**—*Class I.*—Ross, W. R. *Passed.*—Sancroft, Geo. R.; McKay, A. G.; Dickie, W. R.; Doull, J.; Thompson, L. M.; MacKenzie, S. G.; Little, F. R.

**BOTANY.**—*Passed.*—Leatman, J. D.

**METALLURGY 6.**—*Class II.*—Crichton, G. L.; Gaberty, G. A.; Kent, E. S.; Macdonald, J. G.; MacKenzie, C. J.; McCollough, R. W.; McLean, A. S.; Ralston, N. C.; Stairs, D.; Thorne, E. L. *Passed.*—McAulay, A. G.; Cavanagh, H.; Allan, E. B.; Cahen, J. F.; Knight, F. C.

**METALLURGY 1 (Assaying).**—*Class I.*—Hardy, T. W.; MacKay, N. W. *Passed.*—Crichton, G. L.

**METALLURGY 3.**—*Class II.*—Hardy, T. W.; Mackay, N. W.

**MINING 1.**—*Passed.*—Hardy, T. W., jr.; MacKay, N. W.

**STRUCTURES 2.**—*Class I.*—Stairs, D. *Class II.*—Cavanagh, H.; McKenzie, C. J. *Passed.*—Gaberty, G. A.; Flemming, H. W.; Crichton, G. L.; Wall, A. S.

**SURVEYING 3.**—*Class I.*—Stairs, D. *Class II.*—Cavanagh, H.; Crichton, G. L.; Gaberty, G. A.; McKenzie, C. J. *Passed.*—Thorne, E. L.; Cahen, J. F.

**HYDRAULICS 2.**—*Class I.*—McKenzie, C. J.; Stairs, D. *Class II.*—Cavanagh, H.; Crichton, G. L. *Passed.*—Knight, F. C.; Gaberty, G. A.; Thorne, E. L.

**APPLIED MECHANICS.**—*Class II.*—Archibald, F. R.; Dawson, F. M.; Kent, E. S.; Macdonald, C. H.; McAulay, A. G. *Passed.*—McCollough, R. W.; Dimock, C. L.; Putnam, W.

**GRADUATION THESIS APPROVED.**  
Cavanagh, H.—An Experimental Study of Sybley Slag Cement (with H. W. Flemming).  
Crichton, G. L.—A Study of the Effect of Calcium Chloride on Portland Cement.  
Flemming, H. W. (W. H. Cavanagh).  
Gaberty, G. A.—A Design of a Reinforced Concrete Standpipe for the City of Halifax, N. S.

Knight, F. C.—The Design of a Reinforced Concrete Storage Warehouse.  
McKenzie, C. J.—The Design of a Riveted Pratt Truss Railroad Bridge.  
Stairs, D.—The Design of a Reinforced Concrete Arch Bridge, Five Spans.  
Wall, A. S.—The Design of a Plate Girder Railroad Bridge.

**HYDRAULICS 1.**—*Class I.*—Dawson, F. M. *Class II.*—Kent, E. S.; McDonald, C. H.; McAulay, A. G. *Passed.*—Hardy, T. W.; Putnam, W.; McCollough, R. W.; Archibald, F. R.

**STRUCTURES 1.**—*Class I.*—Dawson, F. M. *Class II.*—Dimock, C. L.; Kent, E. S.; MacDonald, C. H.; Putnam, W. *Passed.*—McCollough, R. W.; Archibald, F. R.; McAulay, A. G.; Ralston, N. C.; Macdonald, J. G.

**DESCRIPTIVE GEOMETRY.**—*Class I.*—Dawson, F. M.; Mackay, J. A.; McDonald, C. H. *Class II.*—Crowell, S. W.; Stairs, G. S. *Passed.*—McCollough, R. W.; Major, R.; Dimock, C. L.; McAulay, A. G.; McDonald, J. G.; Reynolds, H. M.; Simmonds, J. L.; Simes, G. F.

**SURVEYING 2.**—*Class II.*—Dawson, F. M.; Kent, E. S. *Passed.*—McCollough, R. W.; Putnam, W.; Dimock, C. L.; McDonald, C. H.; McAulay, A. G.; Ralston, N. C.

**SURVEYING 1.**—*Class I.*—Mackay, J. A. *Class II.*—Crowell, S. W.; Mackay, N. W.; Stairs, G. S.; Williston, H. *Passed.*—Chapman, E. W. G.; MacLeod, A.; MacLean, N. C.; Layton, M. M.; Mitchell, W. B.; Major, R.; Simonson, G. F.; MacKenzie, C. E.

**DRAWING 1.**—*Class II.*—Garrett, H. L.; Johnston, J. H. L.; Messervy, J.; Palmer, F. H.; MacKenzie, C. E. *Passed.*—Doane, H.; McCurdy, L. B.; Bell, H. F.; Smith, A. B.; Tupper, F.; James, A. M.; Bisdee, F. E.; McKinnon, R.; Crichton, C. E.; Trites, S. H.; Donkin, R. P.; Chapman, E. W. G.

**SUMMER THESIS APPROVED.**—Cohen, J. F.; Cavanagh, H.; Crichton, G. L.; Gaberty, G. A.; MacKenzie, C. J.; Stairs, D.; Thorne, E. L.; Ralston, N. C.; Macdonald, C. H.; McDonald, J. G.; McCollough, R. W.; Kent, E. S.; McAulay, A. G.; Putnam, W.; Dawson, F. M.; Allen, E. B.; Chapman, E. W. G.; Crichton, C. S.; Layton, M. M.; Mackay, J. A.; MacLeod, A.; MacLean, N. C.; Simmonds, J. R.; Simes, G. F.; Stairs, G. S.; Williston, H. F.; Culter, J. H.; Major, R.; Crowell, S. W.; MacIntosh, R. M.

**HISTORY OF MUSIC.**—*Passed.*—Davis, Beatrice; MacKay, Helen; Thorne, Emilie.

**FORM AND SCORE.**—*Passed.*—Davis, Beatrice; MacKay, Helen; Thorne, Emilie; Crichton, Helen.

**ORCHESTRATION.**—*Passed.*—Davis, Beatrice.

**FIGURE.**—*Passed.*—Davis, Beatrice.

**IMITATION, CANON AND DOUBLE COUNTERPOINT.**—*Passed.*—Davis, Beatrice.

**COUNTERPOINT.**—*Passed.*—Davis, Beatrice; Crichton, Helen; Thorne, Emilie.

**COMPOSITION.**—*Passed.*—Davis, Beatrice.

FACULTY OF LAW.  
DEGREE EXAMINATIONS.

## CLASS LISTS.

Names in *Classes I.* and *II.* in order of merit.  
Names in *Pass List* in alphabetical order.

## INTERNATIONAL LAW.

*Class I.*—Maclellan, R. W.; Menzies, H. W.; Cameron, D. A.; Lordly, L. R.  
*Class II.*—Pelton, G. V.; Chase, H. M.; Martin, J. J.; Smith, D. C.; Farquhar, A.  
*Passed.*—Clarke, C. S.; Prowse, J. H.; Frame, A.

## CONFLICT OF LAWS.

*Class I.*—Menzies, H. W.; Maclellan, E. W.; Layton, G. P.  
*Class II.*—Lordly, L. R.; Chase, H. M.; Martin, J. J.; Pelton, G. V.; MacKenzie, C.; Farquhar, A.  
*Passed.*—Cameron, D. A.; Clarke, C. S.; Craig, K. G.; Frame, A.; Prowse, J. H.; Smith, D. C.

## CONSTITUTIONAL LAW.

*Class I.*—Doull, John; Cameron, J. J.; Sinclair, D. C.; Blanchard, C. P.; McArthur, N. R.; Macdonald, W. A.  
*Class II.*—McNeil, J.; Burns, E. C.; Richard, E. R.; Rosborough, W. R.  
*Passed.*—Conroy, F. R.; Craig, K. G.; Forbes, E. McK.; Ingilis, R. E.; Lawrence, A. J.; Maclean, Matthew; Mavor, J. S.; Rice, G. E.

## SHIPPING.

*Class I.*—Macdonald, W. A.  
*Class II.*—Cameron, J. J.; Gillies, John; Richard, E. R.  
*Passed.*—Conroy, F. R.; Doull, John; McIsaac, J. P.; Maclean, Matthew.

## TORIES.

*Class I.*—McArthur, N. R.; (MacKenzie, Collie; Maclellan, D. A.).  
*Class II.*—(McIsaac, J. P.; Maclellan, R. S.); Burns, R. C.; Newcombe, H. P.; Owen, D.; Cameron, D. A.; Fenwick, G. P. O.  
*Passed.*—Chishill, R. C.; Geller, S. M.; Keefe, J. M.; McGrath, J. W.; McKay, C. C.; MacNeil, Alex.; Russell, B. W.; Smith, E. K.

## CONSTITUTIONAL HISTORY.

*Class I.*—Maclellan, D. A.; Newcombe, H. P.; Fenwick, G. P. O.  
*Class II.*—Livingstone, G.; Harvey, D. C.; McLeod, J. D.; Read, J. E.  
*Passed.*—Archibald, A. A.; Blois, H. M.; Backerfield, E. E.; Duffy, L. L.; Forbes, E. McK.; Herman, A. K.; Ingilis, R. E.;

## EXAMINATIONS.

Keefe, J. M.; Macdonald, A. T.; McGrath, J. W.; MacKay, A. G.; MacKay, C. C.; MacLean, M.; Maclellan, R. S.; Mavor, J. S.; Owen, D.; Russell, B. W.; Smith, R. K.; Thompson, L. M.

## EQUITY.

*Class I.*—Doull, John; Menzies, H. W.; Maclellan, R. W.; Martin, J. J.; Farquhar, A.; Layton, J. P.; McArthur, N. R.  
*Class II.*—Pelton, G. V.; Macdonald, W. A.; Prowse, J. H.; MacKenzie, C.; Gillies, John; Blanchard, C. P.; Richard, E. R.  
*Passed.*—Cameron, J. J.; Cameron, D. A.; Chapman, C. Y. M.; Chase, H. M.; Clarke, C. S.; Conroy, F. R.; Craig, K. G.; Frame, A.; Landry, R. W.; Lordly, L. R.; Maclean, Matthew; MacNeil, Alex.; Smith, D. C.

## SALES.

*Class I.*—Doull, John; Menzies, H. W.; Martin, J. J.; Maclellan, R. W.; Macdonald, W. A.; Layton, J. P.  
*Class II.*—Cameron, D. A.; Farquhar, A.; Pelton, G. V.; Gillies, John; Prowse, J. H.  
*Passed.*—Blanchard, C. P.; Cameron, J. J.; Chapman, C. Y. M.; Chase, H. M.; Clarke, C. S.; Conroy, F. R.; Craig, K. G.; Frame, A.; Lordly, L. R.; McArthur, N. R.; MacKenzie, C.; MacLean, M.; Richard, E. R.; Smith, D. C.

## CONTRACTS.

*Class I.*—Maclellan, D. A.; Newcombe, H. P.; Fenwick, G. P. O.; McIsaac, J. P.; Burns, R. C.  
*Class II.*—Thomas, A. O.; Maclellan, R. S.; MacNeil, Alex.; MacKay, C. C.; Keefe, J. M.  
*Passed.*—Geller, S. I.; Macdonald, R. A.; McGrath, J. W.; Maclean, Matthew; Mavor, J. S.; Smith, R. K.

## PARTNERSHIP.

*Class I.*—Macdonald, W. A.; McArthur, N. R.  
*Class II.*—Doull, John; Cameron, J. J.; Craig, K. G.  
*Passed.*—Conroy, F. K.; Landry, R. W.; Richard, E. R.; Maclean, Matthew; Chapman, C. Y. M.

## CRIMES.

*Class I.*—Fenwick, G. P. O.; Burns, R. C.; McLesman, D. A.; Layton, J. P.  
*Class II.*—McArthur, N. R.  
*Passed.*—Blanchard, C. P.; Blois, H. M.; Craig, K. G.; Geller, S. J.; Keefe, J. M.; McGrath, J. W.; MacIsaac, J. P.; MacKay, C. C.; MacLean, Matthew; Maclellan, R. S.; MacNeil, Alex.; MacNeil, J.; Mavor, J. S.; Newcombe, H. P.; Owen, D.; Russell, R. W.; Sinclair, D. A.; Thomas, A. O.

## WILLS.

*Class I.*—Macdonald, W. A.; Prowse, J. H.; McArthur, N. R.; Richard, E. R.  
*Class II.*—Conroy, F. R.; Blanchard, C. P.; McKay, C. C.; Maclellan, R. S.; Landry, R. W.

*Passed*.—McLennan, D. A.; Cameron, J. J.; Owen, D.; MacLean, J. P.; MacNeil, Alex.

## REAL PROPERTY.

*Class I*.—Layton, J. P.; Fenwick, G. P. O.; Newcombe, H. P.; McLennan, D. A.

*Class II*.—McGrath, J. W.; Blanchard, C. P.; Burns, R. C.; McArthur, N. E.; Russell, B. V.; MacLean, J. P.

*Passed*.—MacLellan, R. S.; Mackay, C. C.; Owen, D.; MacNeil, Alex.; Mavor, J. S.; Keefe, J. M.; Smith, R. K.; Thomas, A. O.; Buckerfield, E. E.; Bleis, H. M.

## EVIDENCE.

*Class I*.—Dowd, John; MacLellan, R. W.; Layton, J. P.

*Class II*.—Blanchard, C. P.; McArthur, N. R.

*Passed*.—Cameron, D. A.; Clarke, C. S.; Conroy, F. R.; Craig, K. G.; Frame, A.; Prowse, J. H.; Richard, E. R.; Smith, B. C.

## FACULTY OF MEDICINE.

## GENERAL PASS LIST.

(Alphabetical Order.)

## PRIMAY M. D., C. M. EXAMINATION.

## Section "A"—First Year.

(Or First Professional.)

\*Barnes, W. F.; Barsa, G. A.; Bethune, R. O.; \*Brison, Eliza P.; Cameron, A. A.; Creighton, T. M.; Johnson, J. M.; McDowell, B. J.; \*Macdonell, W. S.; Mack, F. G.; \*Schwartz, H. W.; Stewart, J. M.; \*Titus, R. L.

## Section "B"—Second Year.

Atlee, H. B.; Collie, J. R. M.; Davis, F. R.; Goodwin, G. S.; Grant, H. G.; Harigan, D. J.; Headman, W. W.; Johnson, A. M.; McAulay, J. P.; \*Macdonell, W. S.; McLeod, D. A.; McLeod, J. R. B.; MacRitchie, J. J.; Murdoch, J. M.; Schwartz, H. W.; Titus, R. L.

## FINAL M. D., C. M. EXAMINATION.

## Section "A"—Third Year.

Bober, Miss R. A.; Burris, M. G.; Collie, W. V.; MacAulay, D. A.; Macdonald, J. J.; Roy, A. K.; Saunders, R. McK.; Spencer, Miss M. G.; Stramserg, C. W.

## Section "B"—Fourth Year.

Calder, Allister; Cox, F. A.; Grant, H. A.; Hensigar, C. S.; Johnson, S. R.; Macdonald, J. A.; MacLellan, E. K.; MacLellan, R. G.

## DEGREE EXAMINATIONS.

## CLASS LISTS.

(Alphabetical Order.)

## JUNIOR CHEMISTRY.

*Distinction*.—Stewart, J. M.

*Passed*.—Barsa, G. A.; Johnson, J. M.; Lebhetter, T. A.; McDowell, B. J.; Mackinnon, A. H.

*Special Examination*, April, 1909.—Morton, L. M.

*Supplementary Examination*, April, 1909.—Brison, Eliza P.; Titus, R. L.

## MEDICAL PHYSICS.

*Distinction*.—None.

*Passed*.—Bethune, R. O.; Creighton, T. M.; Johnson, J. M.; Rogers, K. F.

*Supplementary Examination*, Sept., 1908.—Schwartz, H. W.

*Supplementary Examination*, April, 1909.—Barsa, P.; Macdonell, P. W. S.

*\*Supplementary*, April, 1909.*\*Supplementary*, September, 1908.

## BIOLOGY.

*Distinction—None.*

*Passed*—Balcom, S. R.; Barnes, G. A.; Bethune, R. O.; Finlay, F. S.; Lebbetter, T. A.; McDaniel, B. J.; Mack, F. G.; MacKinnon, A. H.; Rogers, K. F.; Tait, H. S.; Wilson, A. C.

## JUNIOR ANATOMY.

*Distinction*—Johnson, J. M.; Mack, F. G.; MacKinnon, A. H.; Stewart, J. M.

*Passed*—Barnes, G. A.; Bethune, R. O.; Cameron, A. A.; Creighton, T. M.; Finlay, F. S.; Lebbetter, T. A.; McDaniel, B. J.; Rogers, K. F.; Tait, H. S.

*Special Examination, April, 1909*—Black, C. G.

## PHYSIOLOGY AND HISTOLOGY.

*Distinction*—Ailee, H. B.; Goodwin, G. S.; McLeod, D. A.; McLeod, J. R. B.; Titus, R. L.

*Passed*—Balcom, Bessie E.; Barnes, W. F.; Cameron, C. B.; Collie, J. R. M.; Davis, F. R.; Deveau, A. J.; Grant, H. G.; Hartigan, D. J.; Herdman, W. W.; Johnson, A. M.; MacAulay, J. P.; MacRitchie, J. J.; Murdoch, J. A. M.; Schwartz, H. W.

*Supplementary Examination, September, 1908*—Dennis, Agnes M.

*Supplementary Examination, April, 1909*—Macdonnell, P. W. S.  
*Special Examination, April, 1909*—Brison, Eliza F.

## SENIOR CHEMISTRY.

*Distinction*—Goodwin, G. S.; McLeod, D. A.

*Passed*—Ailee, H. B.; Balcom, Bessie E.; Cameron, C. B.; Collie, J. R. M.; Davis, F. R.; Grant, H. G.; Hartigan, D. J.; Herdman, W. W.; Johnson, A. M.; MacAulay, J. P.; McLeod, J. R. B.; MacRitchie, J. J.; Murdoch, J. A. M.; Schwartz, H. W.

*Supplementary Examination, April, 1909*—Macdonnell, W. S.

*Special Examination, April, 1909*—Deull, J. A.; Ross, Albert; Sylvester, G. M.; Wiswell, G. H.

## SENIOR ANATOMY.

*Distinction*—Ailee, H. B.; Balcom, Bessie E.; Goodwin, G. S.; Johnson, A. M.; McLeod, D. A.; Schwartz, H. W.

*Passed*—Barnes, W. F.; Beston, John; Collie, J. R. M.; Davis, F. R.; Deveau, A. J.; Grant, H. G.; Hartigan, D. J.; Herdman, W. W.; MacAulay, J. P.; McLeod, J. R. B.; MacRitchie, J. J.; Murdoch, J. A. M.; Titus, R. L.

*Special Examination, April, 1909*—Brison, Eliza F.

## MATERIAL MEDICA AND THERAPEUTICS.

*Distinction*—Burris, M. G.

*Passed*—Bober, B. Angels; Coffin, W. V.; MacAulay, D. A.; Macdonald, J. J.; Roy, A. K.; Saunders, R. McE.; Spence, Minnie G.; Stromberg, C. W.

## EXAMINATIONS.

## PATHOLOGY AND BACTERIOLOGY.

*Distinction*—Burris, M. G.; Coffin, W. V.; Macdonald, J. J.; Roy, A. K.; Stromberg, C. W.

*Passed*—Bober, B. Angels; MacAulay, D. A.; Saunders, R. McE.; Spence, Minnie G.

## MEDICAL JURISPRUDENCE AND HYGIENE.

*Distinction—None.*

*Passed*—Calder, Allister; Cox, F. A.; Grant, H. A.; Hennigar, C. S.; Johnston, S. R.; Macdonald, J. A.; Maclellan, E. K.; Maclellan, R. G.

*Supplementary Examination, September, 1909*—Thibault, S. H.

## SURGERY.

*Distinction—None.*

*Passed*—Calder, Allister; Cox, F. A.; Grant, H. A.; Hennigar, C. S.; Johnston, S. R.; Macdonald, J. A.; Maclellan, E. K.; Maclellan, R. G.

## MEDICINE.

*Distinction*—Grant, H. A.; Hennigar, C. S.

*Passed*—Calder, Allister; Cox, F. A.; Johnston, S. R.; Macdonald, J. A.; Maclellan, E. K.; Maclellan, R. G.

## OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

*Distinction*—Calder, Allister; Cox, F. A.; Grant, H. A.; Hennigar, C. S.; Maclellan, E. G.

*Passed*—Johnston, S. R.; Macdonald, J. A.; Maclellan, E. K.

## CLINICAL SURGERY.

*Distinction*—Cox, F. A.; Grant, H. A.; Hennigar, C. S.; Macdonald, J. A.

*Passed*—Calder, Allister; Johnston, S. R.; Maclellan, E. K.; Maclellan, R. G.

## CLINICAL MEDICINE.

*Distinction*—Grant, H. A.; Hennigar, C. S.; Maclellan, E. K.; Maclellan, R. G.

*Passed*—Calder, Allister; Cox, F. A.; Johnston, S. R.; Macdonald, J. A.

*Supplementary Examination, September, 1908*—Thibault, S. H.

## FACULTY OF DENTISTRY.

Session 1908-1909.

## DEGREE EXAMINATIONS

(Alphabetical order.)

## BIOLOGY.

Class I.—Faulkner, A. W.; Tolson, H. S.

Passed—Burke, J. A.; Crowe, A. B.; Kelly, W. F. B.

## CHEMISTRY.

Class I.—Faulkner, A. W.

Passed—Crowe, A. B.; Tolson, H. S.

## ANATOMY.

Class I.—Crowe, A. B.; Faulkner, A. W.; Tolson, H. S.

Passed—Burke, J. A.; Kelly, F. W. B.

## OPERATIVE DENTISTRY.

Class I.—Tolson, H. S.

Passed—Burke, J. A.; Crowe, A. B.; Faulkner, A. W.; Kelly, F. W. B.

## PROSTHETIC DENTISTRY.

Class I.—Faulkner, A. W.; Tolson, H. S.

Passed—Burke, J. A.; Crowe, A. B.; Kelly, F. W. B.

## STUDENTS, 1908-1909.

## FACULTY OF ARTS AND SCIENCE.

(The number following the name indicates the year of the course of the student.)

Ackhurst, Ernest Victor, 1	Halifax.
Archibald, Alfred Arnold, 3	N. Westminster, B. C.
Archibald, Frank Rogers, 4	Halifax.
Archibald, Leith Prescott, 1	Upper Stewiacke.
Armitage, Helen Dorothy, 2	Halifax.
Armitage, William Robert Ramsay, 4	Halifax.
Bayer, Jean Gordon, B. A.	Halifax.
Bell, Hugh Philip, 2	Halifax.
Bethune, Roderick Owen, 2	Bridgdeck.
Black, Charles Guy, 4	Oxford.
Blackie, Edith May, 1	Halifax.
Bligh, Harriet Alice, 1	Lakeville, Kings Co.
Blois, Harry Morris, 2	Halifax.
Howes, Florence Jane	Halifax.
Roak Charlotte Fyllis, 1	Halifax.
Bremner, Irene Gertrude, 1	Sydney.
Brodie, William Stuart, B. A.	Halifax.
Brownell, Laurence Edward, 2	Tiverton.
Brownell, Pearle, 1	Tiverton.
Brunt, Blanche Gertrude, 1	Halifax.
Buckerfield, Edward Ernest, 1	Harcourt, N. B.
Butler, George Kelley, 4	Liverpool.
Cameron, Albert Angus, 4	Glace Bay, C. B.
Campbell, Alexander Rae, 4	Merigomish.
Chambers, Stanley Wilfred, 1	Halifax.
Chase, Margaret Cogswell, 4	Poet Williams.
Chateauvert, John Henry, 1	Stellarton.
Chisholm, Edith A., 1	Halifax.
Chisholm, Stanley James, 3	Halifax.
Christie, Margaret Adele, 1	Bedford.
Chublock, Robert Daniel, 1	Amherst.
Clay, Vera Blanche, 3	New Glasgow.
Clayton, Edward Reginald, 1	Halifax.
Codier, Florence, 1	Sydney.
Colebourne, Lillias Williamson, 1	Halifax.
Conrad, William Walter, B. A.	Halifax.
Cornells, Julius Robert, 3	Halifax.
Creedman, Amelia, 4	Bass River.
Crichton, Thomas McCully, 3	Dartmouth.
Crichton, Helen Ramsay, 2	Halifax.
Crowe, John Congdon, 4	Tiverton.
Crowell, Seth Wilson, 4	Yarmouth.
Cunningham, Katherine Howe	Dartmouth.
Cutler, Norah Fitzroy, 3	Dartmouth.
Davis, Harold Simmonds, 3	Tiverton.
Daviss, Beatrice Elinor, 3	Dartmouth.
Day, Robert Earle, 1	Halifax.
Day, William Montgomery Rivers, 1	Parrsboro.
DeBlois, Thomas Melville, 3	Halifax.

Dennis, Agnes Miller, 4	Halifax.
Dennis, Sarah Miller, 1	Halifax.
Dewis, Martha Ellen, 3	Shubenacadie.
Dickie, Annie Katherine, 1	Cen. Osnlow, Col. Co.
Dickie, Walter Reginald, 3	Stewiacke.
Dodd, Florence Ellen, 4	Shubenacadie.
Deull, James Angus, 2	New Glasgow.
Duffy, Leon Levett, 3	Hillboro, N. B.
Earle, Mayne DuWitt, 2	St. John, N. B.
Earle, Chester Allan Moose, 2	St. John, N. B.
Farley, Samson, 1	Armagh, Ireland.
Faulkner, Georgene Lillian, 1	Halifax.
Ferguson, Clarence Sydney, 4	Tangier.
Firth, Alexander, 1	Glenecoe, N. B.
Flemming, Paul Rogers, 2	Halifax.
Forbes, Archibald Graham, 3	North Sydney, C. B.
Forbes, Evan McKenzie, 3	North Sydney, C. B.
Forsyth, Edna Irene, 1	Dartmouth.
Fraser, David, 1	Whind R. Cross, P.E.I.
Fraser, Edith Lillian M., 1	Halifax.
Fraser, Edward James Oxley, 2	Shelburne.
Fraser, Harry Clement, B.A.	Yarmouth.
Fraser, James, 4	Boularderie, C. B.
Fulton, Lewis McLeod, 1	Sydney.
Gass, Charles Leon, 2	Londonderry.
Giffin, Amy Clare, 4	Isaac's Harbor.
Girdwood, William, B.A.	Bathurst, N. B.
Gittelson, Philip Michael, 1	Halifax.
Gosham, Dorothy Constance, 3	Halifax.
Goudge, Mabel Ensworth, B.A.	Halifax.
Grant, Frances Havergal, 4	Halifax.
Grant, Isabel McGillivray, 2	Springville, Picton Co.
Greig, Gladys Stephen	Halifax.
Gunn, Helen Catherine, 2	East River St. Mary's
Hall, Thomas Roy, 3	Sheet Harbor.
Hamilton, James Henry, B.A.	Burnside.
Harvey, Daniel C., 1	Cape Traverse, P.E.I.
Hattie, Daniel	Caledonia.
Herman, Arthur Kenneth, 3	Dartmouth.
Herman, George Evans, 3	Dartmouth.
Hill, Ruby, 4	Osnlow.
Holder, Ella Geraldine, 2	Halifax.
Hussey, Samuel Robert, 1	Halifax.
Inglis, Robert Ebenezer, 4	Lochaber.
Irvine, George Wilmet, 4	St. John, N. B.
Irving, Margaret, 1	New Glasgow.
Irwin, Margaret Jean, 3	Wine Harbor.
James, Alan McKenzie, 2	Halifax.
Jones, Hervey West, 1	Halifax.
Jones, Owen Bell, 2	Halifax.
Keeler, George Lorimer, 1	Dartmouth.
Kemp, Hector Francis, 3	L'Archeveque, C. B.
Kemp, Emily Bernal, 2	Sydney, C. B.
Kerr, Ephraim, 1	Belfast, Ireland.
King, George Kinnear, 1	Buctouche, N. B.
Knowlton, James Edward, 2	Parrsboro.
Lantz, Gwendolen, 1	Halifax.
Lantz, Norah Gladys, 1	Halifax.

Lawrence, Amos Jesse, 4	Southampton.
Lawrence, Lily Frances, 1	Lakefield, Kings Co.
Layton, Anna Henrietta, 1	Oakfield, Halifax Co.
Learment, John Donald, 3	Truro.
Leslie, Eric, 3	Halifax.
Leslie, Kenneth, 2	Halifax.
Lewis, George Murray, 1	Yarmouth.
Little, Ferguson Robert, 2	Halifax.
Livingstone, Grove Cleveland, 3	Harcourt, N. I.
Logan, John Wilbert, B. A.	Halifax.
Lyons, James Robert, 1	Halifax.
Mack, Frank Gordon, 3	Halifax.
MacAloney, Kathleen Isabelle, 3	Rockingham.
MacAskill, William Ross, 1	Baddeck.
McCuish, Archibald Angus, 1	St. Peter's, C. B.
Macdonald, Alexander Thomas, 3	Reserve Mines, C. B.
Macdonald, Angus Dan, 2	Skir Dhu, C. B.
Macdonald, Donald William, 4	Earltown.
Macdonald, James Clarke, 2	Sydney, C. B.
Macdonald, Jennie Sutherland, 1	Sherbrooke, Guys. Co.
Macdonald, John Angus, 1	Sherbrooke, Guys. Co.
Macdonald, Madge, 4	Halifax.
Macdonald, Mary Lillian, 1	Sherbrooke, Guys. Co.
Macdonald, Randal Atwood, 1	Halifax.
MacGregor, Jean Emmeline, 2	Amherst.
MacGregor, Murdoch Robb, 1	Lake Ainslie, C. B.
McInnes, Charles John, B. A., 4	West Riv., Picton Co.
MacIntosh, Donald Smith, 1	Pleasant Bay, C. B.
McIntosh, John Philip, 3	Port Bovis, Vic. Co.
McIver, Arthur P., 1	Emerald, P. E. I.
McKay, Alexander, 4	Dartmouth.
McKay, Alexander Gidney, 4	Pictou.
McKay, Alexander Thomas, 2	Reserve Mines, C. B.
McKay, Georgina Marion, 3	Bridgewater.
McKay, Helen Stuart, 3	Kempt Head, C. B.
McKay, William Kempt, 1	New Glasgow.
McKay, Jamieson Fraser, 4	Sydney, C. B.
MacKeigan, John Angus, B. A.	River John, Picton Co.
MacKenzie, Archibald Alexander, 2	Lr. Mid. River, C. B.
MacKenzie, Annie Sadie, 2	Springhill.
MacKenzie, Charles Edward, 3	Nooth Sydney.
MacKenzie, Daniel Christie, 1	Truro.
MacKenzie, Seymour Gorley, 2	Kentville.
McKittrick, Lillian May, 1	Thorburn, Pictou Co.
McLean, Alexander Leslie, 1	Thorburn.
McLean, John Grant, 4	Mabou Bay.
McLean, Margaret McNaghten, 3	Sidney, C. B.
McLean, William Buchanan, 2	Noel Shore, Hants.
McLellan, Margaret Electa, 2	Big Bras d'Or, C. B.
McLennan, John C., 3	Grand River, C. B.
McLennan, Kenneth John, 3	Scotsburn.
MacLeod, James Duncan, 3	Pensquash, N. B.
MacLeod, Mabel Elizabeth, 4	Wreck Cove, C. B.
MacLeod, Murdoch Dan, 2	New Glasgow.
MacLeod, Wilfred John, 1	Halifax.
MacMechan, Jean Harriet	E. Lake Ainslie, C. B.
MacMillan, Duncan Alexander, 1	West Bay, C. B.
MacMillan, Virtuea Katherine, 4	

MacNeill, John, 4	Glace Bay, C. B.
McRae, Hector Francis, B. A.	Up. Mid. River, C. B.
Malcolm, William Wallace, 4	St. John, N. B.
Marsden, Charles Galitzin, 1	Halifax.
Marsden, Gladys May, 3	Halifax.
Matheson, Donald John, 3	Marble Mtn., Inv. Co.
Matheson, Heward Watson, 3	Lime Rock.
Matthews, Allan Fraser, B. A.	Alberton, P. E. I.
Maynor, John Stewart, 4	Fredericton, N. B.
Maycock, Elizabeth Jane, 4	Halifax.
Milligan, Francis Millidge, 3	Bear River.
Morrison, William Gladstone, 2	Folly Village.
Mulie, James Bernard, 4	Weymouth.
Mumford, Beatrice Eugenie, 1	Dartmouth.
Munnis, Dorothy Knast, 1	Halifax.
Munro, Kenneth McLeod, 4	Boalderie, C. B.
Munro, Jessie Mildred, 3	River John.
Murchison, John Kenneth, 1	Grand River, C. B.
Murphy, Clare, 4	Halifax.
Neish, Robert Arthur, 2	Halifax.
Nicholson, Daniel John, 1	Up. Mid. River, C. B.
Nicholson, Malcolm, 3	Halifax.
Nicoll, Margaret Woollard	Halifax.
O'Brien, Nora Ephrem, 3	Halifax.
Outhit, Marion Carrie, 2	Halifax.
Parker, Eugene Troop, 2	Havelock, Yar. Co.
Perry, William Joseph Geoffrey, 2	Black Point.
Porter, Alexander Murray, 4	Alma.
Porter, Sarah Elisabeth, 4	Alma.
Prisk, Iva Grace, 3	Halifax.
Raynor, Laura May, 3	Emmre, P. E. I.
Read, John Erskine, 4	Halifax.
Read, William Kiever, B. A.	Athole.
Reid, John Burris, 1	Mid. Msqdlt., Hx. Co.
Rettie, Annie Isabel, 1	Stillman, Pictou Co.
Rice, George Edward Anthony, 3	Bear River.
Ritchie, Henriette McColl, 2	New Glasgow.
Robertson, Alexander William, 3	Bridgewater.
Robinson, Louis McKeena, 1	Berwick, Kings Co.
Roper, John Shemstone, 3	Halifax.
Rosborough, Wilmer Brydone, 4	North Sydney, C. B.
Ross, Albert, 3	New Glasgow.
Ross, Margaret Irving, 2	St. John, N. B.
Ross, William Alexander, 2	St. John, N. B.
Ross, William Charles, 3	Halifax.
Rudin, Henry Albert, 3	Porto-Spain, W. I.
Seringeour, James Amos, B. A.	Halifax.
Seaman, Athol Wendell, B. A.	Charlottetown.
Seaman, Lily Hamilton, 4	Charlottetown, P.E.I.
Sibley, Lena Mildred, 4	Halifax.
Silver, Beryl St Clair	Halifax.
Silver, Marguerita Hartnal Louise, 3	Halifax.
Sinclair, Donald Carmichael, 4	New Glasgow.
Smith, Ernest Spurgeon, 1	North Sydney.
Smith, Olive Winifred, 3	Halifax.
Smith, Gladys Una, 2	Halifax.
Smith, Mary Emily Standiford, 3	Truro.
Smith, Minnie Lenore, 3	Sydney, C. B.

Stairs, Herbert Morrow, 1	Halifax.
Stairs, John Cuthbert, 1	Halifax.
Stairs, Dorothy Helen	Dartmouth.
Stapleton, Annie	Dartmouth.
Stapleton, William Clarke, B. Sc.	Dartmouth.
Stewart, James MacGregor, 4	Pictou.
Stewart, Florence MacGregor, 2	Dartmouth.
Stevens, Maude Achsa, 1	Freight, Digby Co.
Strachan, Annie McNab, 1	Rockingham.
Sutherland, Archibald, 3	Trenton.
Sylvester, George McDonald, 2	New Glasgow.
Tuit, Harold Sinclair, 2	St. John's, Nfld.
Taylor, Florence Anne, 1	Sydney.
Thomas, Arthur Ogden, 4	Truro.
Thompson, Lewis Murdoch, 3	New Glasgow.
Thomson, Empathina May, 4	Halifax.
Thorne, Emilie Jesse, 2	Dartmouth.
Titus, Robbie Leale, 4	Digby Co.
Toomey, Fanny Hazel, 1	Halifax.
Townsend, William Thomas, 3	Tangier.
Tupper, Grace Marjorie, 4	Bridgewater.
Umlah, Lillie Alberta Boak, 3	Halifax.
Vair, James Douglas, 2	Charlottetown.
Waith, Edgar Bruce, 1	Halifax.
Walker, Eliza Clara, 4	New Glasgow.
Weldon, Helen Hart, 1	Halifax.
Wallace, Curtis Clayton, 4	Halifax.
Weatherbee, John Alexander Theo., 2	New Glasgow.
Whidden, William Arthur, 3	Brookfield.
Whitman, Katherine McNeil, 3	Halifax.
Wier, Elspeth May, 2	Halifax.
Wiswell, Gordon Blanchard, 3	Halifax.
Wood, Hilda Pauline	Halifax.

## FACULTY OF ENGINEERING.

Allan, Edward Blake, 4	Halifax.
Archibald, Frank Rogers, 3	Halifax.
Cahan, John Frederick, 4	Halifax.
Cavanagh, Harry, 4	New Glasgow.
Cavanagh, John Loraine, 2	New Glasgow.
Chapman, Edward Willard Gordon, 2	Halifax.
Chisholm, Kenneth Gordon, 3	Halifax.
Chute, Clyde Clifton, 2	Berwick.
Collingwood, Douglas Moore, 2	Rosecombe, Eng.
Creighton, Charles Sydney, 2	Dartmouth.
Crichton, Gordon Lithgow, 4	Halifax.
Cutler, John Geoffrey, 2	Dartmouth.
Dawson, Frances Murray, 3	Tralee.
DeBlois, Thomas Nevills, 3	Halifax.
Dimock, Clarence Lewis, 3	Newport.
Donne, Harvey William Lawrence, 1	Halifax.
Donkin, Robert Perry, 1	Halifax.
Eisnor, John James, 2	Langenburg.
Ferguson, Alexander, 4	Halifax.

Flemming, Horace Waldo, 4	Halifax.
Gaherty, Geoffrey Abbott, 4	Halifax.
Garrett, Harry Leigh, 1	Sheffield Mills, K.C.O.
Handy, Thomas Woodburne, 4	Halifax.
Hillis, Wilfred Elmer, 2	Halifax.
Hissel, Frank Ernest, 1	Halifax.
Johnstone, John Hamilton Lane, 2	Dartmouth.
Knight, Frederick Carr, 4	Bedford.
Kent, Edward Sherburne, 3	Truro.
Layton, Max McDonald, 2	Great Village.
McClay, Angus Gillis, 3	Glace Bay, C. B.
McClosough, Reginald Walker, 3	Halifax.
McCurdy, Leslie Briggs, 1	Truro.
McDonald, Charles Hugh, 2	Sydney, C. B.
Macdonald, James Gordon, 2	Truro.
Macintosh, Robert Murray, 2	New Glasgow.
MacKay, James Arthur, 2	Balmoral Mills.
Mackay, Neil Williams, 3	Balmoral Mills.
Mackenzie, Chalmers Jack, 4	St. Stephen, N. B.
McKinnon, Ramsay, 1	New Aberdeen, C. B.
McLean, Alexander Stirling, 4	West Bay, C. B.
McLeod, Angus, 2	Victoria Cove, C. B.
MacRae, Neil Charles, 2	Caneo Cove, P. E. I.
Major, Reginald Aris, 2	Halifax.
Mosservey, John, 1	Halifax.
Mitchell, Edward Frederick, 2	Halifax.
Mitchell, Walter, Jr., 2	Halifax.
Morrison, John William, 1	Oldham, Hx. Co.
Mylius, Louis Aubrey, 2	Halifax.
Palmer, Frederick Herbert, 1	Halifax.
Putnam, Walter, 3	Maristand.
Raleston, Norman Chester, 3	Amherst.
Reynolds, Hector Munro, 2	Halifax.
Simmonds, James Roland, 2	Dartmouth.
Simson, George Francis, 2	Halifax.
Smith, Arthur Balcon, 1	Halifax.
Stairs, Dennis, 4	Halifax.
Stairs, Gordon Salter, 2	Selma.
Thorne, Edward Lefferts, 4	Dartmouth.
Trites, Stanley Blize, 1	Salisbury.
Tupper, Freeman, 1	Milton, Queens Co.
Wall, Arthur Stanford, 4	Truro.
Williston, Charles Hedley, 2	Halifax.

## FACULTY OF LAW.

## THIRD YEAR.

Chase, Harold Munro	Sheffield Mills.
Clark, Collingwood Steeves	Moncton, N. B.
Farquhar, Alexander	Newport, Hants.
Frantz, Arthur Cochrane	Halifax.
Gilles, John James	Sydney, C. B.
Leedly, Lionel Robert	Chester.
MacKenzie, Colin, n.a. (St. F. X.)	Red Island, C. B.
MacLellan, Robert Wm., n.a. (Dal.)	Halifax.
Martin, John Joseph, n.a. (St. F. X.)	Lourdes.
Menzie, Harry Weston	Tatamagouche.
Peltot, Gerald Vincent	Yarmouth.
Prosser, James Harper, n.a. (Dal.)	Halifax.
Smith, Don Cecil,	Halifax.

## SECOND YEAR.

Cameron, John Joseph	Heatherston.
Chapman, Cyril Gilbert Moran	Dorchester, N. B.
Conroy, Frederick Rose	Charlottetown, P. E. I.
Craig, Kenneth Gordon	Amherst.
Doull, John	New Glasgow.
Landry, René Wilfred	Eel Brook, Yarmouth.
Layton, Francis Paul Hamilton, n.a. (Dal.)	Truro.
McArthur, Neil R., n.a. (St. F. X.)	North Sydney.
Macdonald, Wm. Alexander, n.a. (St. F. X.)	Port Hood.
Richard, Ernest Ross, n.a. (St. Jos.)	Dorchester, N. B.

## FIRST YEAR.

Blanchard, Charles Prescott, n.a. (Dal.)	Truro.
Burns, Ralph Chester, n.a. (Dal.)	Milltown, N. B.
Fenwick, George Paget Owen, n.a. (U.N.B.)	Apohaqui, N. B.
Geller, Samuel Joseph	Halifax.
Keefe, John Murray	Lakeville, N. B.
McGrath, John William	St. John's, Nfld.
McIsaac, Joseph Patrick, n.a. (St. F. X.)	Antigonish.
McKay, Charles Curtis	Yarmouth.
McLellan, Robert Simpson, n.a. (St. F. X.)	Waterford, C. B.
MacLennan, Daniel Alexander	Nyanza, C. B.
MacNeil, Alexander, n.a. (St. F. X.)	Giant Lake.
Mavor, John Stewart	Fredericton, N. B.
Newcombe, Harry Phillip	Canning.
Owen, Daniel	Annapolis Royal.
Russell, Bernard Wallace, n.a. (M.R.A.)	Halifax.
Smith, Robert Knowlton	Amherst.

## GENERAL STUDENTS.

Archibald, Alfred Arnold	New Westminster, B. C.
Blois, Harry Morris	Halifax.
Buckerfield, Edward Ernest	Harcourt, N. B.
Cameron, Albert Angus	Glace Bay, C. B.
Cameron, Donald Alexander	Sutherland's River.
Churchill, Burpee Clair	Amherst.

Duffy, Leon Levett.....	Hilliher, N. R.
Forbes, Evan McKenzie.....	North Sydney, C. B.
Harvey, Daniel C.....	Cape Traverse.
Herns, Arthur Kenneth.....	Dartmouth.
Herns, George Evans.....	Dartmouth.
Inglis, Robert Ebenezer.....	Lochaber.
Lawrence, Amos Jesse.....	Southampton.
Livingstone, Grover Cleveland.....	Hareourt, N. B.
Macdonald, Alexander Thomas.....	Reserve Mines, C. B.
Macdonald, Roderick Augustus, B. A.....	Hallifax.
McLean, John Grant.....	Thornburn.
MacLean, Matthew.....	Sydney Mines,
MacLeod, James Duncan.....	Scotia.
MacKay, Alexander Gidley.....	Dartmouth.
MacNeil, John.....	Glace Bay, C. B.
Read, John Erskine.....	Hallifax.
Rice, George Edward Anthony.....	Bear River.
Rosborough, Wilmer Brydone.....	North Sydney, C. B.
Rudin, Henry Albert.....	Port of Spain, W. I.
Sinclair, Donald Carmichael.....	New Glasgow.
Thomas, Arthur Ogden.....	Turk.
Thompson, Lewis Murdoch.....	New Glasgow.

## FACULTY OF MEDICINE.

## UNDERGRADUATES.

## FOURTH YEAR.

Calder, Allister.....	Springville, Pictou.
Cox, Frederick Austin.....	Upp. Stewiacke, Col.
Grant, Hector Alexander.....	Boultardarie, East, C. B.
Hennigar, Clyde Stranghn.....	Chester.
Johnston, Stephen Reginald.....	Dartmouth.
Macdonald, John Alexander.....	Har. au Beche, Astig.
Macellan, Edward Kirk.....	Hallifax.
Macellan, Robert Gordon.....	Pictou.
Thibault, Sifroi Henry.....	Salmon River, Digby.

## THIRD YEAR.

Bober, Bebbie Angela, B.A. (King's).....	Windsor.
Burris, Matthew George, B.A. (Dal.).....	Upp. Musquodoboit.
Coffin, William Vernon.....	Bristol, P. E. I.
MacAskill, Frederic Graham.....	St. Peter's, C. B.
MacAskill, Jasael Angus.....	Englishtown, C. B.
MacDonald, John James, B.A. (St.F.X.).....	New Glasgow.
Macdonell, Peter Winfred Saville.....	Port Hood, Iav.
Roy, Alexander Kerr, B.A. (Dal.).....	Malta Island, Hants.
Saunders, Reginald McLean.....	Clarence West, Annap.
Spencer, Minnie Grace, B.A. (Dal.).....	Hallifax.
Stramberg, Charles William.....	River John, Pictou.

## SECOND YEAR.

Atlee, Harold Benge.....	Annapolis Royal.
Balcom, Bessie Euphemia.....	Aylesford.
Barses, William Fielding.....	Halifax.
Bashill, Harold Bruce.....	Two Rivers, Cumb.
Beaton, John.....	Moose Creek, Ont.
Brison, Elizabeth Perley.....	West Gore, Hants.
Cameron, Clarence Bain.....	New Glasgow.
Celie, John Robert Mitchell.....	River John, Pictou.
Davis, Frank Fay.....	Petite Riviere.
Deveau, Alfred Joseph.....	Meteghan, Digby.
Goodwin, Guy Stuart.....	Halifax.
Grant, Harry Godge.....	Halifax.
Hartigan, David James.....	Sydney Mines.
Herdman, William Walker.....	Pictou.
Johson, Arthur Morrell.....	Tatamagouche.
MacAskill, Frederick Graham.....	St. Peter's, C. B.
McAulay, John Philip.....	Englishtown, C. B.
McLeod, Donald Angus.....	Point Tupper, C. B.
McLeod, John Roderick Bellmore.....	Grand River, Richm.
MacRitchie, John James.....	Englishtown, C. B.
Murdoch, John Allan McIntosh.....	Sherbrooke.
Schwartz, Hugh William.....	Halifax.
Siderski, Louis.....	Glace Bay.
Titus, Robbie Leslie.....	Westport, Digby.

## FIRST YEAR.

Balcom, Samuel Rosborough.....	Port Dufferin.
Bancroft, George Russell.....	Halifax.
Barrs, Geoffrey Alden.....	Dartmouth.
Bethune, Roderick Owen.....	Baddeck.
Black, Charles Guy.....	Oxford.
Cameron, Albert Angus.....	Glace Bay.
Creighton, Thomas McCully.....	Dartmouth.
Dennis, Agnes Miller.....	Halifax.
Johson, James MacGregor.....	Halifax.
Fishay, Francis Stanislaus.....	Tatamagouche.
Lethetter, Thomas Alpheus.....	North Sydney.
McDaniel, Bernard J.....	Margaree.
Mack, Frank Gordon.....	Halifax.
MacKinnon, Albert Hugh.....	Pictou Landing.
McNeil, Daniel.....	Mabou.
Rawley, William Patrick.....	Halifax.
Rogers, John Forrester.....	Yarmouth.
Stewart, John Murdoch, B.L. (Dal.).....	Pictou.
Tait, Harold Sinclair.....	St John's, Nfld.
Wilson, Arthur Augustus Culbert.....	Springhill.

## SPECIAL STUDENTS.

Morton, Lewis M.....	Springville.
Doull, James Angus.....	New Glasgow.
Gass, Charles Leon.....	Tatamagouche.
Ross, Albert.....	New Glasgow.
Sylvester, George MacDonald.....	New Glasgow.
Wiswell, Gordon Blanchard.....	Halifax.

## FACULTY OF DENTISTRY

## FIRST TERM.

Burke, John Anthony .....	St. John's, Nfld.
Crozer, Allen Boyd .....	Annapolis, N. S.
Faulkner, Alden West .....	Selma, N. S.
Kelly, William F. B. ....	Bridgewater, N. S.
Tolson, Henry Stanishaw .....	Bedford, N. S.