CALENDAR

OF

DALHOUSIE COLLEGE

AND

UNIVERSITY.

HALIFAX, NOVA SCOTIA.

1905-06.

HALIFAX:
PRINTED FOR THE UNIVERSITY BY THE MCALPINE PUBLISHING CO., LTD.
1905.

1905-06.

TIME TABLE—FACULTIES OF ARTS AND SCIENCE.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9-10	Chemistry 1	Chem. 2, 3, 4	Chemistry 1	Chemistry 2, 3, 4	Chemistry 1
	German 3	French 3	German 3	French 3	German 3
	Mining 1	Metallurgy 3	Mining 1		Metallurgy 3
10-11	Latin 2	Greek 1	Latin 2	Greek 1	Latin 2
	Math. 1	Math. 2	Math. 1	Math. 2	Math. 1
	Philos. 2	English 3	Philos. 2	English 3	Surveying
	Physics 2	Pol. Econ. 1	Physics 2	Pol. Econ. 1	
		Mineralogy 1	Geol. 1 (Lab.)	Mineralogy 1	
	Mining 3	Hydraulics	Mining 3		
11-12	Latin 1	Greek 2	Latin 1	Greek 2	Latin 1
	History 1	History 2	History 1	History 2	History 1
	Math. 2	Math. 1	Math. 2	Math. 1	Math. 2
	Physics 4	Physics 1	Physics 4	Physics 1	
	Metallurgy 2		Metallurgy 2		
	Mining 3	Mining 3	Mining 2		
	Geology 6		Geology 6		Geology 6
12-1	English 2	English 1	English 2	English 1	English 2
	Math. 3, 4.	Astronomy	Math. 3, 4	Astronomy	Math. 3, 4
	Latin 3	Geology 1	Latin 3	Geology 1	Geology 2
	App. Mech	Greek 3	App. Mech	Greek 3	Adv. Classics
	Chem. 4	Philos. 1		Philos. 1	App. Mech
	Latin 1		Latin 1		Greek 1
2-3	German 2	French 2	German 2	French 2	German 2
		Metallurgy 1		Metallurgy 1	Metallurgy 4
		Biology			
	Surveying	Geology 5		Geology 5	
3-4	German 1	French 1	German 1	French 1	German 1
	Philos. 4	Biology	Philos. 4		
	Chem. (Lab.)	Physics 6	Chem. (Lab.)	Physics 6	Geol. 1 (Lab.)
	Mining 2	Metallurgy 1	Hydraulics	Metallurgy 1	Metallurgy 4
				Education	
4-5		Geology 2	Geology 3	Geology 2	Bib. Lit
	Physics 1	Physics 6	Philos. 1	Physics 6	
	Chem. (Lab.)		Chem. (Lab.)		Metallurgy 4
	Miner. 1 (Lab.)	Metallurgy	Miner. 1 (Lab.)	Metallurgy 1	Miner. 1 (Lab.)
	Geology 3	English 4	Bib. Lit	English 4	Geology 3
5-6	Chem. (Lab.)	Physics 6	Chem. (Lab.)	Physics 6	Metallurgy 4
	Miner. 1 (Lab.)	Metallurgy 1	Miner 1 (Lab.)	Metallurgy 1	Miner. 1 (Lab.

Saturdays: Chemistry 3, 9—10 A. M.
Biology, 11 A. M.—1 P. M.
Geology, 1, 2—Field and Library work throughout the day.
Mining and Metallurgical Excursions and Exercises throughout the day.

N. B.—The days and hours of meeting of classes not mentioned in this Time Table will be announced at the opening of the session.

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CONTENTS.

UNIVERSITY ALMANAC, 1905-1906.

1905.

Aug. 17. Th.—Last day for receiving applications for Autumn Preliminary Examination (Provincial Medical Board).

21. M. Last day for receiving notices of Supplementary Examinations (Medical Faculty).

26. Sa. —Last day for receiving applications for Autumn Professional Examinations (Provincial Medical Board).

29. Tu.—Last day for receiving notices of Supplementary Examination (Law Faculty).

31. Th.—Session begins. Preliminary Examination (Prov. Med. Board) begins at 9 a. m., at Dalhousie College.

Sept. 2. Sa.—10 A. M., Meeting of Senate.

4. M.—Last day for receiving notices of Supplementary Examinations (Arts and Science Faculties).

" " —Supplementary Examinations begin (Medical Faculty).

" " —Results Preliminary Examination (Prov. Med. Board) declared, and certificates issued, 10 a. m.

" " —Registration and Payment of Class Fees (Med. Faculty) 11 a. m.

5. Tu.—Session begins (Arts, Science, and Law Faculties).
Lectures begin at Halifax Medical College.

" " -10 A. M., Registration and Payment of Class Fees (Law Faculty).

" " —3 P. M., Supplementary Examinations (Law Faculty).
Registration of Candidates for Matriculation and Scholarship Examination (Arts and Science Faculties).

6. W.—Lectures begin (Law Faculty).
Examination for Junior and Senior Matriculation and for Entrance Scholarships (Arts and Science Faculties).
9 A. M., Latin.
3 P. M., Greek.
Autumn Professional Examinations (Prov. Med. Board) begin.

7. Th.— 9 A. M., Geometry.
11 A. M., Trigonometry.
3 P. M., Arithmetic, Algebra.

8. F. — 9 A. M., History and Geography.
3 P. M,, English.

9. S. — 9 A. M., French.
3 P. M., German.

11. M.— 9 A. M., Chemistry.
9 A. M., Supplementary Examinations begin (Arts and Science Faculties).

13. W.— 9 A. M., Meetings of Faculties of Arts and Science.
3 P. M., CONVOCATION. Address by ———— ——

14. Th.—Registration and payment of class fees (Arts and Science Faculties).

15. F. —Lectures begin (Arts, Science and Medical Faculties).

Oct. 1. Sa. —Intimation as to elective subjects to be made by undergraduates (Arts and Science Faculties) on or before this day.

14. F. —Returns as to residence and church attendance to be made on or before this day.

Th. —Thanksgiving Day. No lectures.

F. —Munro Day. No lectures.

Dalhousie College & University.

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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, in Maine, during its occupation in 1814 by Sir John C. 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," "in front of St. Paul's Church," on "the Grand Parade."

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 1820, "the corner stone of this College, designed for a Public Seminary in which the youth of this and other British Provinces may be educated in the various branches of literature and science," was laid by the Earl of Dalhousie.

It was not until the 13th of January, 1821, that the "Bill to incorporate the Governors of Dalhousie College at Halifax" became law. The interior of the building was completed about this time, and two rooms were fitted up for lectures. The total cost of the building to June 1822, was £11805.2s. currency, so a MS minute of the Board of Governors states

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, this College went into operation in 1838, with the Rev. Thomas McCulloch, D. D. as President, and the Reverends James Mackintosh and Alexander Romans as professors of Mathematics and Classics.

By an Act passed in 1841, University powers were conferred on the College and the appointment of the Governors was vested in the Lieutenant Governor and Council.

In 1843, President McCulloch died; and in 1845 the College was closed, the Governors considering it "advisable to allow the funds of the institution to accumulate."

In 1848, an Act was passed authorizing the Lieutenant-Governor and Council to appoint a new Board of Governors "to take some steps for rendering the institution useful and efficient as to His Excellency may seem fit." This Board, from 1849 so 1859, employed the funds of the University to support a High School.

In 1856, Gorham College, supported by the Congregationalists, was transferred from Liverpool and united with Dalhousie The transfer brought the Rev. F. J. Tompkins, M. A (Lond.), and the Rev. Geo. Cornish, B A. (Lond), to the chairs of Mathematics and Classics. Hugo Reid continued as Principal.

In 1863 the College was re-organized. The Governors appointed John Johnson, M. A. (Dub). William Lyall, M. A., LL D. and George Lawson, PH. D., LL. D., Professors of Classics, Philosophy, and Chemistry ; and obtained permission from the Legislature of Nova Scotia to grant to any body of Christians, or any individual or number of individuals, the privilege of nominating a representative to the Board of Governors and a Professor for every professorship in the College supported by them to the extent of twelve hundred dollars a year. The Presbyterian Church of Nova Scotia closed their Academies at Truro and Halifax, and nominated the Rev. James Ross and Thomas McCulloch as Professors of Ethics and Political Economy, and of Natural Philosophy ; and the Church of Scotland in Nova Scotia endowed the Chair of Mathematics and nominated the Rev. Charles Macdonald, M. A. (Aber) for the Chair.

When Thomas McCulloch died, the Presbyterian Church undertook the support of Professor Lyall ; but on the death of Principal Ross and of Professor Lyall the Church withdrew its support of these Chairs.

In 1879, Mr. George Munro endowed the Chair of Physics and nominated Dr. J. Gordon MacGregor for the professorship. In rapid succession he endowed the Chairs of History and Political Economy, English Literature, Law, and Metaphysics, and nominated the Rev. John Forrest, Dr. J. Gould Schurman, Dr. R. C. Weldon and Dr. W. J Alexander, for the Professorships. He also supported tutorships in Classics and Mathematics, and provided large exhibitions and bursaries for ten years. His munificent gifts were at that time unparalleled in Canada.

In 1887, Mr. Alexander McLeod left the residue of his estate for the endowment of the Chairs of Classics, Modern Languages, and Chemistry.

The purchase of the old College building by the City and the generous gift of $20,000 by Sir William Young, Chairman of the the Governors for over forty years, led to the erection of a new building, whose corner stone was laid by Sir William in April, 1887.

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

In 1901, Professor Macdonald bequeathed $2,000 to the Library ; and in the next year the Alumni began a movement to erect a Library Building in his memory. Over $25,000 were subscribed.

In 1902, the Governors resolved to establish a School of Mining and obtained nearly $60,000 for the purpose.

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 ; re organized in 1891 ; and enlarged in 1902 and the two following years by the appointment of Professors of Geology, Mining and Metallurgy, and Civil Engineering.

The Faculty of Law was established in 1883.

Constitution.

The Board of Governors is the supreme governing body of Dalhousie College and University. Appointments to it are made by the Governor in-Council on the nomination of the Board. 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 of Arts, Science, Law and Medicine, 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.

DEGREES.

The Senate confers the degrees of Bachelor and Master of Arts, Bachelor and Master of Science, Bachelor of Engineering, Bachelor of Music, Bachelor of Laws, and Doctor of Medicine and Master of Surgery. A candidate for any 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 tantum* in recognition of eminent literary, scientific, or professional services.

By special permission of the Senate, degrees may be conferred upon candidates *in absentia.*

B. A.—For the degree of B. A. a course extending over four academic years is required ; but candidates who pass the senior matriculation may complete the course in three years. By offering as electives in the third and fourth years in Arts a certain number of the less technical

classes, required for one of the professional degrees, candidates may reduce by one year the time required for the B. A. and a degree in Law, Engineering, or Medicine, or Divinity (in a Theological College). By the terms of the affiliation with Prince of Wales College, students of that college holding Honour Diplomas are admitted to the second year, those with High Honour Diplomas to the Third Year of the B. A. course.

B. Sc.—A four years' course in Pure Science, similar to that in Arts, is required for the degree of B. Sc. The senior matriculation admits successful candidates to the second year. The combined B. Sc. and B. E., or B. Sc. and M. D., C. M. degrees may by proper selection of electives be taken in six years.

B. E.—The courses in Civil and in Mining Engineering extend over four years and lead to the B. E. degree. Much stress is laid upon practical work in the field and in the mine.

B. Mus.—A course of study extending over at least three years is required for the degree of B. Mus. The university provides the instruction in the literary and scientific subjects required for the degree, and recognizes the instruction in the professional subjects given by approved Conservatories, of which the Halifax Conservatory is one.

LL. B.—Candidates for the LL. B. degree must complete a course extending over three years. According to the terms of affiliation with the universities of Acadia and Mt. Allison, students of those universities who have taken certain subjects required for the LL. B. degree are admitted into the second year of the LL. B. course in this university.

M. D., C. M.—For the degree of M. D., C. M., a course extending over four years is required. The university provides the required instruction in the pure sciences and recognizes the teaching in professional subjects of the Halifax Medical College or of other approved Schools of Medicine.

The University of Oxford exempts a Bachelor of Arts of this university, who has passed in the Greek of the second or a higher year, from the Responsions Examination; and if he has obtained Honours he 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.

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.

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 LL. B. of that University. Graduates in law of this University are admitted to the Bar of this Province 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.

ENTRANCE REQUIREMENTS.

Admission.—Persons of either sex of good moral character may become students of the University by entering their names in the Register, annually, and paying the annual Registration Fee.

Registered students may, on presentation of their Registration Tickets, and on payment of the proper fees, enter any of the classes of the University, with the consent of the Faculty in which they intend to study.

Students who are candidates for degrees are known as Undergraduates. Candidates for the higher degrees in attendance on classes are known as Graduate students. All others are known as General students.

Admission ad Eundem.—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. But in no case 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 of 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.

Matriculation.—A student in order to become a candidate for a degree must satisfy the requirements for Matriculation either by passing an examination in certain subjects or by presenting a certificate which will be accepted as an equivalent by this University. Candidates, who satisfy the requirements of the Senior Matriculation, may enter the Second Year of the B. A. or B. Sc. course. In general the Matriculation examination is to be passed by a student before he enters upon a course of study leading to a degree. Students, who have not satisfied the Matriculation requirements, may enter as General students, and take such classes as are approved by the Faculty in which they are studying.

When a General student becomes an Undergraduate by satisfying the Matriculation requirements, the Faculty may accept as qualifying for a degree those classes which the student attended and passed previous to Matriculation. The Medical Faculty will not recognize such classes unless the candidate have passed in all, save one, of the subjects of the Matriculation or Preliminary examination, except in the following cases. Candidates who have attended and passed accepted courses in Chemistry, Biology, or Physics, prior to passing the Preliminary or Matriculation examination will be exempted after Matriculation from further attendance and examination on those subjects, provided the standard previously attended is sufficiently high.

The subjects of the Junior or First Year Matriculation examination are English, History and Geography, Arithmetic

and Algebra, Geometry, and Two Foreign Languages. Candidates for the B. A. and LL. B. degree must pass in Latin or Greek and one other foreign language ; candidates for the M. D. must pass in Latin and either Greek or French or German ; candidates for the B. Sc. must pass in French or German and another foreign language ; candidates for the B. E. degree are not required to pass in any foreign languages.

For the Senior or Second Year Matriculation the subjects are those of the Junior Matriculation and those of the First Year.

The Matriculation examinations will be held in the the College, September 6th to 11th, 1905.

Junior Matriculation.—(*a.*) *By Examination.* The details of the subjects of this examination are as follows:—

LATIN.—The paper will contain (1) passages for translation from prescribed books with questions arising out of those books ; (2) easy 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 the next two examinations are :—
For 1905.—Cæsar: *Gallic War*, Book V; and Vergil: *Aeneid*, Book I.
For 1906.—Cæsar: *Gallic War*, Book V; and Vergil: *Aeneid*, Book II.)

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 books prescribed for the next two examinations are :—
For 1905.—Xenophon : *Anabasis*, Book III.
For 1906.—Xenophon : *Anabasis*, Book IV.)

FRENCH.—Voltaire : *Charles XII*, Books I, II, III. Grammar questions limited to the Accidence, and based on the passages selected for translation.

GERMAN.—Buchheim, *German Reader*, Part I, (Clarendon Press), or Hauff, *Das Wirthshaus im Spessart* (MacMillan & Co), omitting the five tales interwoven in the original story. Grammar questions limited to the Accidence, and based on the passages selected for translation.

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

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

NOTE —The essential part of this examination is the essay. Legible writing, correct spelling, and punctuation, will be consldered 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 & 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. and Book VI., first 19 propositions, or their equivalents.

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 Sir William Young Scholarship, and the Mackenzie Bursary.

(*b.*) *By Certificate.* The Faculties of Arts and Science exempt the holders of the following diplomas, licenses, or certificates, from the above examination in those subjects which were included in the examinations by which such diplomas, licenses, or certificates, were obtained, provided a sufficiently high standard was reached in the majority of the subjects required for matriculation.

a) Certificates of Matriculation into recognized Universities.

b) Teachers' Licenses of Grades A or B, or High School Leaving Certificates of Grades XII or XI of Nova Scotia.

c) Honour Diplomas, or Certificates entitling to a First Class License, as issued by Prince of Wales College; or a First Class License, issued by the Education 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 the Education Departments of other Provinces.

Persons may be admitted as Undergraduates of the First Year, without examination, on presentation of certificates from the Principals of High Schools or Academies, approved for this purpose by the Faculty, stating that they have 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, 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 examination.

Senior Matriculation.—(*a*) *By Examination.* The details of the subjects of this examination are as follows :—

Candidates must pass in the foreign languages which they they propose to take in the second year.

LATIN.—(For 1905).—Cicero : *Pro Lege Manilia* and *Pro Archia* : Vergil : *Æneid*, Books V and VI ; Tacitus : *Annals*, Book IV.

(For 1906).—Cicero : *In Catilina I-IV* ; Virgil : Æneid Books V VI ; Tacitus ; *Annals*, Book IV.

GREEK.—(For 1905).—Plato : *Apology and Crito* ; Æschylus : *Prometheus Vinctus.*

(For 1906).—Xenophon : *Hellenica*, Books I-II ; Æschylus : *Prometheus Vinctus.*

The papers in Latin and Greek will contain passages for translation from the books prescribed, together with grammatical and other questions arising out of those 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.—Macmillan's Progressive French Reader, II Year ; Molière, *Le Bourgeois Gentilhomme* ; Scribe, *Valérie* ; Grammar (Brachet, *Public School Grammar*) ; Composition.

GERMAN.—Hauff, *Wirthshaus im Spessart*, excluding the five tales interwoven in the story (Macmillan & Co) ; or, Paul Heyse, *Anfang und Ende* (American Book Company) ; Buchheim : German Reader. Part II ; Schiller, *Wilhelm Tell* ; Grammar (Joynes-Meissner) ; Composition.

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

Literature.—Eighteenth Century : *Prose.* 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 the Lock* Gray. *Elegy in a Country Churchyard.* Goldsmith, *Traveller, Deserted Village.* Burns. *Two Dogs, Cotter's Saturday Night.*

History and Geography.—Outlines of English and Canadian History and General Geography.

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 24th.

MATHEMATICS.—*Arithmetic, Algebra, Geometry,* and *Trigonometry,* as specified for the Junior Matriculation Examination and in MATHEMATICS 1.

Algebra :—Indices, Irrational Quantities, Quantities involving $\sqrt{-1}$, Theory of Quadratic Equations, Proportion, Variation, Progressions, Permutations and Combinations, Binomial Theorem, Properties of Logarithms, Interest and Annuities, Horner's Method of approximating to the roots of an equation. Elementary theorems concerning equations functions, limits and series Graphical representation of functions, and plotting of loci of equations. Elements of Determinants, with applications to elimination and the solution of simultaneous equations Partial Fractions Probability.

Geometry :—Euclid, Books VI, XI. Propositions on Harmonic Ranges and Pencils, Poles and Polars, and Transversals. Geometry of the Sphere Elementary propositions in the geometrical treatment of the parabola and the ellipse.

Trigonometry :—The solution of plane triangles. Measurement of heights and distances. Elementary angular analysis.

CHEMISTRY, OR BOTANY —*Chemistry* —The elements of General Chemistry. Remsen's *Introduction to the Study of Chemistry* (Macmillan & Co) may be taken to indicate in a general way the extent of knowledge required 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.

Candidates in science are required to satisfy the examiner that they have done an amount of laboratory work equivalent to that prescribed in Chemistry 1. (See Courses of Instruction). All candidates for degrees who do not pass in the Chemistry of this examination, are required to take Chemistry as one of the subjects of their course.

Botany The elements of General Botany. Bessey's *Essentials of Botany* and Spotton's *High School Botany* may be taken to indicate in a general way the extent of know edge 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.

(*b.*) *By certificate.* Candidates who hold the following licenses, diplomas or certificates shall be 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) Teachers' Licenses of Grade A of 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 the First English as an additional class, without fee.

THE ACADEMIC YEAR.

The Academic Year in all departments, except Engineering, consists of one session. The session of 1905-6 in Medicine will begin on August 24th : in Arts, Science and Law, on September 5th. In Law, it will end on February 28th ; in Arts, Science, and Medicine, on April 24th, 1906.

In the department of Engineering, the Academic Year consists of a Winter Session of the same duration as the Session in Arts and Science, and a Summer Session. The Summer Session is devoted to field work, and extends over six weeks for Mining and three weeks for three years in Civil Engineering.

REGISTRATION.

All students of the University are required each year to enter their names in the Register and pay the required fees before entering any class or taking any examination. In registering they make the following statement :—I hereby apply to be admitted to Dalhousie College and University on the terms and conditions laid down in the Calendar, and submit the following facts for registration :

After registering the student will be given a registration ticket, on presentation of which to the different professors and lecturers whose classes he proposes to attend, his name will be entered on the Class Register.

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.

Faculties of Arts and Science.—The Registration Fee entitles the student to the use of the University Library.

A graduate of this University attending classes, not leading to a Bachelor's degree, nor of a technical or professional character, is required to pay only the Registration Fee, but should he attend a practical class he must also pay the amount in excess of six dollars required of students taking that practical class.

The following is a statement of the Fees payable by Undergraduates and General students :—

FOR REGISTRATION AND GYMNASIUM.

Registration, payable by students taking only one class	$ 3 00
" " " more than one class	5 00
Gymnasium, payable by all male students	1 50

FOR TUITION.

Physics 6, 7 or 8, Geology 1 or 2, Mineralogy, Engineering laboratory, or Electrical laboratory	8 00
Chemistry 1 or 2, including *laboratory work of not more than four hours a week	10 00
Chemistry 1 or 2, with laboratory work of five or more hours a week, Chemistry 3 or 4, Biology, Metallurgy 4, or Drawing	12 00
Physics 9, Chemistry 6, 7, or 8	14 00
Any other class	6 00

FOR EXAMINATIONS.

Supp'lementary examination in one subject	2 00
" " more than two subjects	5 00
Special Examination in one subject	5 00
" " two or more subjects	10 00
Examination or Report on Thesis for M. A or M. Sc degree	5 00
Examination for B. Mus degree, in each year of the course	10 00

FOR CERTIFICATES AND DIPLOMAS.

Special Certificates of Standing	1 00
B. A , B. Sc., B E., M A , or M. Sc diploma	5 00
B. Mus. diploma	10 00
An *ad eundem* degree	10 00

* All students taking classes involving laboratory work are required to make a deposit of Three Dollars on entering the class. This amount, or if charges for breakage 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.

The Fees payable for each year in the regular courses in Engineering are given in the following schedule. These amounts include Registration and Gymnasium Fees, and entitle to attendance on all compulsory classes. For non-compulsory classes, as French or German in the Mining Course, the usual Fee is required in addition :—

FOR CIVIL ENGINEERING.

First Year	$46 50
Second Year	54 50
Third Year	52 50
Fourth Year	64 50

FOR MINING ENGINEERING.

First Year	46 50
Second Year	52 50
Third Year	66 50
Fourth Year	61 50

Faculty of Law.—Students are requested to pay their Class Fees and sign the University Register on Tuesday September 5th, 1905, in the office of the Law School.

For Registration, payable only by General students	$ 2 00
For each Class attended, per Session, payable by General students	10 00
For each Class attended, payable by students of the Affiliated Course	6 00
For the Classes of the First Year, payable by Undergraduates	40 00
For the Classes of the Second Year, payable by Undergraduates	40 00
For the Classes of the Third Year, payable by Undergraduates	40 00
For LL. B. degree which is payable before the final examination and will be returned in case of failure	10 00
For each Supplementary Examination	5 00

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

Faculty of Medicine.

For Registration	$ 2 00
For Chemistry 1 (including laboratory fee)	10 00
For Chemistry 4	12 00
For Biology (including use of microscopes and reagents)	12 00
For Physics	6 00
For Graduation*	30 00
For use of Gymnasium, payable by all male students attending classes in Dalhousie	1 50

*Students who have paid $30.00 or upwards as examination fees are not required to pay an additional Graduation Fee.

MISCELLANEOUS REGULATIONS.

Residence.—All students are required to report their places of residence to the President on or before the day appointed in the University Almanac (October 14th).

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 14th), the churches which they intend to make their places of worship 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.

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 issue of the examination papers in any subject, shall not be permitted to return during the course of that examination.

All examiners 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 trencher with tassel.

Graduates of this 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.

Ll. 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.

Ll. D.—Black silk lined with purple silk.

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

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

EQUIPMENT.

Libraries.—The University and Law Libraries contain over 20,000 volumes and about 3000 pamphlets. The Law Library contains all the Law Reports which a student will find it necessary to consult. The books in the University Library have been selected to meet the needs of the students of the various classes in Arts and Science. The Cogswell Medical Library in the Halifax Medical College is open to students of Medicine. The Library of the Mining Society of Nova Scotia and the Science Library in the Provincial Museum, the Legislative Library, The Theological Library in Pine Hill College, and the Citizens Free Library may be used, subject to certain conditions, by students for purposes of consultation.

All Registered students are entitled to the use of the University Library. The Law Library is intended for the exclusive use of the students and instructors in the Faculty of Law.

The University Library is in charge of a Librarian, who is also a member of the Library Committee appointed by the Senate. The Dean of the Law Faculty is responsible for the management of the Law Library.

The **University Museum** contains a large and complete collection of native birds, comprising the original collection made by Dr. William McCulloch, and the additions of Mr. T. J. Egan. The valuable Archæological collection, made by the late Rev. George Patterson, D. D., LL. D., F. R. S. C., is also in the Museum. The Zoological section contains between 500 and 600 specimens collected by the late Dr. A. Halliday, Lecturer on Zoology. The Geological and Mineralogical specimens, presented by Dr. McCulloch and Dr. Honeyman, formerly Lecturer on Geology, are placed in the Geological Laboratory.

The fine collections of the Provincial Museum are also easily accessible to students.

Laboratories.—The University is equipped with Laboratories in the departments of Physics, Chemistry, Biology, Geology and Mineralogy, and Civil Engineering. Facilities for research are provided for a limited number of students in Physics, Chemistry, Geology, and Mining 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 with working tables and lockers for 78 students, and a quantitative laboratory accommodating 16 students, with additional rooms for weighing and for storing apparatus and reagents.

The Geological Laboratory occupies a room having 1500 feet of floor space and accommodating 16 students working simultaneously. A small adjacent room 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 one muffle furnace and two pot furnaces with their accessories, and separate working desks for 12 students.

The Mining Laboratory occupies large, well-lighted basement rooms. Its equipment, the installation of which is now being completed, includes the following :—Blake breaker, Gates crusher, Gates fine-grinder, pair of 9″x12″ crushing rolls, Collom jig, Rand compressor, reverberatory roasting furnace, gold clean-up barrel, Wifley concentrating table, Bartlett concentrating table. A five-stamp mill of the most modern pattern and especially designed for laboratory work is being manufactured for the laboratory. Power is furnished by a 10 H. P. three-phase motor.

Gymnasium.—A Committee of six, three of whom are appointed by the Senate and three by the Dalhousie Amateur Athletic Club, have charge of the Gymnasium. All registered male students who have paid the gymnasium fee are entitled to the use of the gymnasium and to the services of the Instructor in Gymnastics.

Faculty of Arts.

THE PRESIDENT.
JOHN JOHNSON, M. A., LL. D.
JAMES LIECHTI, M. A.
ARCHIBALD MACMECHAN, PH. D.
WALTER C. MURRAY, M. A., LL. D.
HOWARD MURRAY, B. A.
EBENEZER MACKAY, PH. D.
DANIEL A. MURRAY, PH. D.
J. EDMUND WOODMAN, S. D.
JOTHAM W. LOGAN, B. A.
ROBERT A. FALCONER, D. LITT.
WILLIAM F. P. STOCKLEY, M. A.
ROBERT MAGILL, PH. D.
GEORGE K. BUTLER, M. A.
A. C. JOHNSON, B. A.

Secretary to the Faculty.– PROFESSOR MACMECHAN.

Registrar to the Faculty.—PROFESSOR LIECHTI.

Correspondence should be addressed :

" *The Secretary, Faculty of Arts,*
Dalhousie College, Halifax, N. S.

REQUIREMENTS FOR THE B. A. DEGREE.

Candidates for this degree must pass the Junior or Senior Matriculation, attend with regularity the prescribed classes, perform the exercises required, and appear at the examinations held in connection with such classes, and secure a position on the Pass lists in all subjects. The course of study extends over four years, but in the case of students who enter by senior matriculation it may be completed in three years. Undergraduates of other universities or colleges may be admitted to higher standing should their courses elsewhere justify it.

The Course for B. A.—The following classes are prescribed in the course of study for the B. A. degree :—

a) Three in either Latin or Greek.

b) Two in English.

c) Two in one of the following :—The classical language not selected to be studied for three years, German, French.

d) One in each of the following : — History, Philosophy, Mathematics, Physics, Chemistry.

e) Eight single classes (or equivalents) to be selected, subject to the approval of the Faculty, from the lists given below—a single class being one in which two or three lectures per week are given, a double class, one in which the number is four or five, and one double class being regarded as equivalent to two single classes when a double fee has been paid. An advanced class may in the third or fourth year be taken as an elective, if approved by the Faculty.

The classes not specified above, which are selected by students as part of their course, must be submitted to the President for approval at a date not later than Sept. 23rd, 1905.

Undergraduates in taking French or German for the first time, enter the classes for which the Professor considers them fitted. In other subjects, they enter the first or elementary classes.

The first class in Latin, Greek, French and German is not recognized as a part of the course for a degree unless the second class is subsequently taken.

No class in which the subjects studied are the same from year to year, can be taken twice as part of a course.

A sufficient number of the more purely literary, philosophical, or scientific subjects of the theological, legal, and medical courses respectively, are included among the elective subjects, to enable the student during his course to complete part of one or other of these professional courses. Students taking Constitutional History, Constitutional Law and Contracts, and passing therein, during their Arts Course, are allowed to complete their Law Course in this College subsequently in two years. Students who have registered as undergraduates in Medicine, may complete their course in Medicine in three years after the completion of their Arts Course by taking Chemistry 1, Physics 1, and Biology, as part of their Arts course, and by taking Junior Anatomy as an additional subject. They are recommended to attend the class in Histology, to avoid conflict of hours in the time-table. (See Faculty of Medicine).

Faculty of Arts.

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REQUIREMENTS FOR THE B. A. DEGREE.

Candidates for this degree must pass the Junior or Senior Matriculation, attend with regularity the prescribed classes, perform the exercises required, and appear at the examinations held in connection with such classes, and secure a position on the Pass lists in all subjects. The course of study extends over four years, but in the case of students who enter by senior matriculation it may be completed in three years. Undergraduates of other universities or colleges may be admitted to higher standing should their courses elsewhere justify it.

The Course for B. A.—The following classes are prescribed in the course of study for the B. A. degree :—

a) Three in either Latin or Greek.

b) Two in English.

c) Two in one of the following :—The classical language not selected to be studied for three years, German, French.

d) One in each of the following : — History, Philosophy, Mathematics, Physics, Chemistry.

e) Eight single classes (or equivalents) to be selected, subject to the approval of the Faculty, from the lists given below—a single class being one in which two or three lectures per week are given, a double class, one in which the number is four or five, and one double class being regarded as equivalent to two single classes when a double fee has been paid. An advanced class may in the third or fourth year be taken as an elective, if approved by the Faculty.

The classes not specified above, which are selected by students as part of their course, must be submitted to the President for approval at a date not later than Sept. 23rd, 1905.

Undergraduates in taking French or German for the first time, enter the classes for which the Professor considers them fitted. In other subjects, they enter the first or elementary classes.

The first class in Latin, Greek, French and German is not recognized as a part of the course for a degree unless the second class is subsequently taken.

No class in which the subjects studied are the same from year to year, can be taken twice as part of a course.

A sufficient number of the more purely literary, philosophical, or scientific subjects of the theological, legal, and medical courses respectively, are included among the elective subjects, to enable the student during his course to complete part of one or other of these professional courses. Students taking Constitutional History, Constitutional Law and Contracts, and passing therein, during their Arts Course, are allowed to complete their Law Course in this College subsequently in two years. Students who have registered as undergraduates in Medicine, may complete their course in Medicine in three years after the completion of their Arts Course by taking Chemistry 1, Physics 1, and Biology, as part of their Arts course, and by taking Junior Anatomy as an additional subject. They are recommended to attend the class in Histology, to avoid conflict of hours in the time-table. (See Faculty of Medicine).

The classes in the Arts course may be taken in any order subject to the provisions:—(1) that in any one subject classes are to be taken in the order of their advancement; (2) that Mathematics 1 is to be taken before Physics 1; and (3) that Physics 1 is to be taken before Physics 7, and Chemistry 1 before Geology 1, or Mineralogy 1.

In the following statement, the classes are arranged in years, to show the order in which it will generally be found most convenient to take them. The time table of lectures and the dates of examinations are based upon this arrangement.

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

First Year.

1. Latin 1, or Greek 1.

2. The classical language not selected as subject 1, or French, or German.

3. English 1 and Elocution.

4. Mathematics 1.

5. Chemistry 1.

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—5. Any two of the following:—Mathematics 2, Chemistry 2, Physics 1, Philosophy 1, Geology 1, a language not selected as subject 1 or 2.

If the classes in Physics and Philosophy are not taken in this year, they must be taken in a subsequent year.

Third and Fourth Years.

1. Latin 3, or Greek 3, or N. T. Greek. The language selected must have been taken during the First and Second Years.

2. History 1.

3—10. Eight classes selected from the subjects in the following groups, so that not more than five, and not less than

one, are taken from any one group. An undergraduate who has attended the classes in Mathematics and Chemistry in the First Year, may, if he wish, be excused from taking a class from group C.:—

A	B	C
Latin,	History,	Mathematics,
Greek,	Constitutional History,	Astronomy,
Hebrew,	Political Economy,	Physics,
French,	Philosophy,	Chemistry,
German,	Education,	Geology,
English,	Fine Art,	Mineralogy,
Biblical Literature,		Biology.

An undergraduate looking forward to the profession of Divinity, Law, or Medicine, may offer for three of the electives, groups D or E or F respectively, and select the remaining five electives from groups A, B, and C, subject to the conditions stated above.

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

B. A. WITH DISTINCTION.

The degree of B. A. with Distinction will be conferred on undergraduates for special excellence shewn, at Examinations and otherwise, in the work of the ordinary classes recommended to be taken in the Second, Third, and Fourth Years of the Course. Such degrees imply greater specialization of subject than the ordinary degree and less than the degree with Honours ; but they are intended to involve as much work as the latter.

Successful candidates will be declared to have won their degrees with Distinction or with Great Distinction.

The award of such degrees is based upon the Class Distinctions gained by candidates ; not only are the number and grade of the Distinctions considered, but also the private work required for them, and the relation to one another of the subjects in 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 classes which are not taken as parts of the Course, or in recognized classes taken in other colleges.

Candidates for Distinction should so select the elective classes of the Third and Fourth Years that the classes thus selected together with required classes of these years, shall form groups of three or four classes in such of the following departments as they may prefer, viz.: (*a*) Latin ; (*b*) Greek ; (*c*) German ; (*d*) French ; (*e*) English ; (*f*) History and Political Economy ; (*g*) Philosophy ; (*h*) Mathematics and Physics ; (*i*) Chemistry, and (*j*) Geology. They should aim at the attainment of a good standing in all the classes thus taken, and at a high standing in all the classes of as many of the groups selected as possible.

Candidates are advised to consult the Faculty at the beginning of the Third and Fourth Years with respect to the selection of classes.

B. A. WITH HONOURS.

The B. A. 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 shewn at the examinations in the subjects of such courses.

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

A candidate for Honours is expected to present himself for examination in the subjects of his Honour Course at the end of his Fourth Year ; he may, however, defer this examination until a year after he has passed the examinations in the ordinary subjects of the Fourth Year, in which case such candidate shall not be entitled to his Degree until he has passed the examinations of such Honour Course.

Honour Courses.—An undergraduate shall be allowed, after completing the work recommended for the first two years of his course, to restrict his attention to a more limited range of subjects than that of the ordinary course, by entering upon one of the Honour Courses, provided he has either attained both a First Class standing at the previous Examination in the subject corresponding to that of the Honour Course selected, and a satisfactory standing in the other subjects, or has received the special permission of the Faculty.

Honour Courses are provided in the following departments, viz., Classics, Latin and English, Greek and English, English and German, English and English History, Philoso-

phy, Pure and Applied Mathematics, Mathematics and Physics, Chemistry and Chemical Physics, Geology.

An undergraduate taking a special course in any of the above departments shall be required to attend the Advanced Classes provided in the subjects of such department, to make progress satisfactory to the Professors who conduct such classes, and to pass the examinations in the subjects of such department. He shall be allowed to omit, from the subjects of the ordinary course, certain subjects specified below, and may select as his ordinary classes in any year, any of the classes of that year, subject to the following regulations and the approval of the Faculty.

Undergraduates taking the Honour Course in **Classics** may, in each of the Third and Fourth Years omit any two of the subjects of those years, except Latin and Greek.

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 : *Miles Gloriosus.*
Terence : *Adelphi.*
Vergil : *Georgics*, Books I, IV.
Horace : *Epistles*, Books I, II ; *Ars Poetica.*
Juvenal : *Satires*, Books VII, VIII, XIV.
Cicero : *De Oratore*, Books I, II, III.
Livy : Books XXI, XXII.
Tacitus : *Agricola : Annals*, Book II.

II. Candidates will be required to show a general knowledge of one prose and one verse subject, to be chosen by them from the following list :—

Plautus : *Aulularia* and *Captivi.*
Terence : *Andria* and *Heautontimorumenos.*
Cicero : Select Letters, (Muirhead's edit., Longmans, London).
Tacitus : *History*, Books II, IV, V.

III. COMPOSITION.—Prose.

IV.—LITERATURE.—Cruttwell's History of Roman Literature, selected chapters.

V.—PHILOLOGY.—Victor Henry's Comparative Grammar of Greek and Latin.

GREEK.

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

Aeschylus : *Eumenides.*
Sophocles : *Oedipus Rex.*
Aristophanes : *The Knights.*
Homer : *Odyssey*, Books, V, VI, VII, VIII.
Thucydides : Book II.
Plato : *Phaedo.*
Demosthenes : *De Corona.*
Aristotle : *Poetics.*

II. Candidates will be required to show a general knowledge of one prose and one verse subject, to be chosen by them from the following list :—

Aeschylus : *Agamemnon*, and *Choephori.*
Sophocles : *Oedipus Coloneus*, and *Antigone.*
Thucydides : First and Third Books.
Aeschines : *Contra Ctesiphonten*, and
Demosthenes : *De Falsa Legatione.*

III. COMPOSITION.—Prose.

IV. PHILOLOGY.—Victor Henry's *Comparative Grammar of Greek and Latin.*

V.—LITERATURE.—Mahaffy, *History of Greek Literature*, the portions bearing on the authors and subjects read by the candidate during his college course. Haigh, *Theatre of the Greeks.*

Undergraduates taking the Honour Course in **Latin and English** may, in each of the Third and Fourth Years of their course, omit any two of the subjects of those years except Latin and English. 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 1300. Bright, *Anglo-Saxon Reader.* Sievers, *O. E. Grammar* (trans by Cook), Pt II. Morris, *Specimens of Early English*, I. Emerson, *History of the English Language.* Sight reading of O E.

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

Marlowe, *Tamburlaine, Edward II., The Jew of Malta.* Greene, *Friar Bacon and Friar Bungay.* 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 Julie*

Julius Cæsar, Hamlet, Othello, Lear, Macbeth, Antony and Cleopatra, Coriolanus, Timon, The Two Noble Kinsmen.

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

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

Undergraduates taking the Honour Course in **Greek and English** may, in each of the Third and Fourth Years of their course, omit any two of the subjects of those years, except Greek and English. 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.

Undergraduates taking the Honour Course in **English and German** must have taken German in the First and Second Years of their course, and may in each of the Third and Fourth Years omit any two subjects of those years except English and German. They shall be examined in the following subjects :—

ENGLISH.

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

GERMAN.

Middle High German; Grammar (Wright's Middle High German Primer); Selections from Hartmann von Aue, Walther von der Vogelweide, Nibelungenlied, Gudrun, Wolfram von Eschenbach, Freidank, or Gottfried von Strassburg, Sebastian Brant, (Wackernagels Kleineres Altdeutsches Lesebuch).

Selections from Swiss and Plattdeutsch dialect literature.

German Literature of the 16th, 17th and 18th centuries, with selections from authors of that period.

Two of the chief literary works of Goethe not read in the ordinary course.

Translations of unspecified passages from any Modern High German author.

Prose Composition.

Undergraduates taking the Honour Course in **English and English History** may, in each of the Third and Fourth Years of their course omit any two of the subjects of those years, except English and History. 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. 1603-1689.

Books recommended : Green's History of the English People, Vol. 3; Lingard's History of England, Vols. 8-10; Hallam's Constitutional History of England; Ranke's History of England; S. R. Gardiner's works on this period; Clarendon's History of the Great Rebellion; Masson's Life of Milton; Carlyle's Life of Cromwell; Foster's Life of Eliot; Bayne's Chief Actors in the Puritan Revolution.

Undergraduates taking the Honour Course in **Philosophy** may, in each of the Third and Fourth Years of their course omit any one of the subjects of those years, except Philosophy. They are recommended to take German. They shall be examined in the following subjects :

I. General History of Philosophy.
Burnet : Early Greek Philosophy.
K. Fischer : Descartes and his School.

II. Greek Philosophy from the Sophists to Aristotle.
Plato : Republic (with Nettleship's Lectures)
Theaetetus (with Dyde's Introduction).
Aristotle : Metaphysics. Book I
Ethics (with Muirhead's Introduction).

III. Modern Philosophy from Locke to Kant.
Fraser : Prolegomena to Locke.
Green : Introduction to Hume.
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 : Hegelianism and Personality.

V. Any *three* of the following :
1. Principles of Logic. Bosanquet : Logic.
2. Principles of Psychology. Ward : Psychology.
3. Principles of Ethics. Green : Prolegomena to Ethics ; Sidgwick : Methods of Ethics
4. Principles of Metaphysics. Ward : Naturalism and Agnosticism.
5. Philosophy of Religion. Caird, E.: Evolution of Religion ; Lotze : Philosophy of Religion.

VI. Any *one* of the following :

1. History of Philosophy from Descartes to Leibnitz ; Descartes : Method, Meditation and Principles ; Spinoza : Ethics ; Caird : Cartesianism ; Pollock : Spinoza ; Joachim : Ethics of Spinoza ; Leibnitz : Monadology (with Latta's Introduction.)

2. History of Philosophy from Kant to Hegel Hegel : Logic (Wallace's Translation), and Philosophy of Right (Dyde's Translation); Everett : Fichte's Science of Knowledge. Seth : Hegelianism and Personality; and From Kant to Hegel McTaggart ; Studies in Hegelian Dialectic.

3. History of Philosophy from Hume to Spencer Comte : Positive Philosophy. Mill : as in Watson's Selections. Spencer : First Principles Mill : Comte and Positivism ; Douglas : John Stuart Mill Watson : An Outline of Philosophy ; Stephen : English Utilitarians

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 : Hedonistic Theories Chaps IV-XI. Sorley : Ethics of Naturalism Courtney : Constructive Ethics Pt II, Bk. I. ; Schurman : Ethical Import of Darwinism ; Albee : Utilitarianism ; Sidgwick : Martineau Spencer and Green

Undergraduates taking the Honour Course in **Pure and Applied Mathematics** are recommended to take German in their First and Second Years, and Physics in their Second Year ; and in the event of their not having done so, they should work up the German in their vacations, and should read the appropriate sections of the elements of Physics (if possible, performing experiments) before entering the Physics class. In their Third and Fourth Years, they are required to take four Advanced Mathematics Classes 2, 3 and 4 Physics, and three electives. The standard of attainment shown in the Examinations in this Class in both Years will be considered in estimating the results in the final examination of the Honour Course.

The subjects of examination will 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.

Undergraduates taking the Honour Course in **Mathematics and Physics** should have studied German in their First and Second Years, and taken Physics 1 in their Second Year. In the event of their not having done so, they should work up the German in their vacations, and should read the proper sections of the elements of Physics (if possible, performing experiments), before entering Physics 2 or 3. They are required, if they wish to complete the course in two years, to take in their Third Year Advanced Mathematics, Physics 2 or 3, Physics, 6, and Chemistry 2, and in their Fourth Year, the Advanced Classes in Mathematics, Physics 3 or 2 and Physics 4, 5, 7 and 8. But they are advised to take three years rather than two to complete the course. 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 or gina investigation, or to exhibit a high standard of excellence in the more mathematical parts of the course.

The subjects of examination will be as follows :—

1. MATHEMATICS.—Analytic Geometry, Calculus, and Spherical Trigonometry as in Mathematics 2, and any two of the advanced courses in Pure Mathematics.

2. APPLIED MATHEMATICS.—The subjects of the Special Course in Pure and Applied Mathematics

3. GENERAL PHYSICS.— A systematic general know'edge 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

4. EXPERIMENTAL METHODS.—A general acquaintance with the methods applicable in different classes of investigation, as in Glazebrook and Shaw's Practical Physics (Longmans, Green & Co.), and 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 Electrodynamic 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).

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, and to take Chemistry 2, and Physics 1, in their Second Year. They are required in their Third and Fourth Years to take the following classes :—Mathematics 2, Physics 2 and 3, Physics 5, Physics 6, Chemistry 5, 6 and 7, and two additional classes not included in the preceding list, selected from the classes prescribed for the Third and Fourth Years.

Candidates for High Honours will be expected either to prepare a thesis embodying the results of a short original investigation, or to show 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 of both Third and Fourth Years will be considered : Physics 2, 3 and 6, and Chemistry 6 and 7.

Candidates will be examined at the end of the Fourth Year in the following subjects :—

CHEMISTRY.

1. The principles and theories of modern Chemistry. The following books are mentioned to indicate the extent of knowledge required :—Remsen's *Inorganic Chemistry, Advanced Course* (H. Holt & Co.); Bernthsen's *Organic Chemistry*, translated by McGowan (Blackie & Sons, Van Nostrand); Meyer's *Outlines of Theoretical Chemistry*, translated by Bedson and Williams (Longmans).

2. Outlines of the history of Chemistry. Candidates will be required to have an acquaintance with the following :—Tilden's *Short History of the Progress of Scientific Chemistry* (Longman's); Schorlemmer's *Rise and Development of Organic Chemistry* (Macmillan & Co); Roscoe's *Dalton and the Rise of Modern Chemistry.* (Macmillan & Co.); Shenstone's *Justus von Liebig*, (Macmillan & Co.) and the essays on Boyle, Priestley, Scheele, Cavendish, Lavoisier, Graham and Woehler, in Thorpe's *Essays in Historical Chemistry*, (Macmillan & Co.)

3. The following memoirs :—*On the Arsenates, Phosphates and Modifications of Phosphoric Acid*, Graham, Philosophical Transactions, 1833; *Ueber das Radikal der Benzoesaüre*, Liebig and Woehler (Ostwalds Klassiker, No 22); *Ueber die Constitution der organischen Sauren*, Liebig (Ostwalds Klassiker, No. 26.)

4. The principles and methods of qualitative analysis and of quantitative analysis, both gravimetric and volumetric, and the practical details of laboratory operations.

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.

Undergraduates taking the Honour Course in **Mathematics and Physics** should have studied German in their First and Second Years, and taken Physics 1 in their Second Year. In the event of their not having done so, they should work up the German in their vacations, and should read the proper sections of the elements of Physics (if possible, performing experiments), before entering Physics 2 or 3. They are required, if they wish to complete the course in two years, to take in their Third Year Advanced Mathematics, Physics 2 or 3, Physics, 6, and Chemistry 2, and in their Fourth Year, the Advanced Classes in Mathematics, Physics 3 or 2 and Physics 4, 5, 7 and 8. But they are advised to take three years rather than two to complete the course. 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 or gina investigation, or to exhibit a high standard of excellence in the more mathematical parts of the course.

The subjects of examination will be as follows :—

1. MATHEMATICS.—Analytic Geometry, Calculus and Spherical Trigonometry as in Mathematics 2, and any two of the advanced courses in Pure Mathematics.

2. APPLIED MATHEMATICS.—The subjects of the Special Course in Pure and Applied Mathematics

3. GENERAL PHYSICS.— A systematic general know'edge 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

4. EXPERIMENTAL METHODS - A general acquaintance with the methods applicable in different classes of investigation, as in Glazebrook and Shaw's Practical Physics (Longmans, Green & Co), and 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 Electrodynamic 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).

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, and to take Chemistry 2, and Physics 1, in their Second Year. They are required in their Third and Fourth Years to take the following classes :—Mathematics 2, Physics 2 and 3, Physics 5, Physics 6, Chemistry 5, 6 and 7, and two additional classes not included in the preceding list, selected from the classes prescribed for the Third and Fourth Years.

Candidates for High Honours will be expected either to prepare a thesis embodying the results of a short original investigation, or to show 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 of both Third and Fourth Years will be considered: Physics 2, 3 and 6, and Chemistry 6 and 7.

Candidates will be examined at the end of the Fourth Year in the following subjects :—

CHEMISTRY.

1. The principles and theories of modern Chemistry. The following books are mentioned to indicate the extent of knowledge required :—Remsen's *Inorganic Chemistry, Advanced Course* (H. Holt & Co.); Bernthsen's *Organic Chemistry*, translated by McGowan (Blackie & Sons, Van Nostrand); Meyer's *Outlines of Theoretical Chemistry*, translated by Bedson and Williams (Longmans).

2. Outlines of the history of Chemistry. Candidates will be required to have an acquaintance with the following :—Tilden's *Short History of the Progress of Scientific Chemistry* (Longman's); Schorlemmer's *Rise and Development of Organic Chemistry* (Macmillan & Co); Roscoe's *Dalton and the Rise of Modern Chemistry.* (Macmillan & Co.); Shenstone's *Justus von Liebig*, (Macmillan & Co.) and the essays on Boyle, Priestley, Scheele, Cavendish, Lavoisier, Graham and Woehler, in Thorpe's *Essays in Historical Chemistry*, (Macmillan & Co.)

3. The following memoirs :—*On the Arsenates, Phosphates and Modifications of Phosphoric Acid*, Graham, Philosophical Transactions, 1833; *Ueber das Radikal der Benzoesaüre*, Liebig and Woehler (Ostwalds Klassiker, No 22); *Ueber die Constitution der organischen Sauren*, Liebig (Ostwalds Klassiker, No. 26.)

4. The principles and methods of qualitative analysis and of quantitative analysis, both gravimetric and volumetric, and the practical details of laboratory operations.

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, electro'ysis, 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).

Undergraduates taking the Honour Course in **Geology** should take Geology 1, and Physics 1, in the Second Year, and German during the first two Years. In the Third Year, candidates are required to take Mineralogy 1, and Geology 2. In the Third and Fourth Years they should take in addition, Biology, Mathematics 2, Chemistry 2, Chemistry 6, and Physics 2. In the Fourth Year, special lines of study will be taken up with the instructor in the Research Course, equivalent in amount to at least two courses, and involving original field work, reading, and one or more theses. In addition, there will be needed extra reading for the final examinations, along such of the lines mentioned below as are not taken up in classes or conference.

In determining Honours at the end of the Honour course, weight will be given not only to the final examination, but to the records of the various courses, and, to the maturity of thought and method shown especially during the four years' work. Candidates for Honours or High Honours will be expected to carry their studies beyond the limit reached by pass students, and to show a grasp of their work of a high order.

At the end of the Fourth Year, examinations will be held upon the following subjects :—

1. A sight translation of a portion of some geological memoir in German, and one in French

2. The History of Geology. Books recommended : — Lyell, Sir C., *Principles of Geology*, 11th ed. vol. 1, chapters 1 and 2; Geikie, Sir A , *The Founders of Geology ;* Zittel, K. von, *History of Geology and Paleontology ;* White, A. D., *A History of the Warfare of Science with Theology in Christendom*, vol. I, esp chapter 5. Some of the original papers read in connection with other topics may be available also for this

3. Advanced structural and dynamical geology, and the geology of Canada, including both reading and field work done in various courses.

4. Economic Geology, metallic and non-metallic ; including (*a*) theories of the formation of coal and petroleum, (*b*) genesis of veins and vein ores, (*c*) the economic geology of some region studied especially in the course.

5. Special topics of the fourth year. This will be in part an oral exposition and defence of a thesis, given at the last seminary conference of the term.

ATTENDANCE AND EXAMINATIONS.

Attendance.—Undergraduates and other students who wish their attendance on classes to be recognized as qualifying for a Degree or a Class Certificate, are required to attend the lectures or other meetings of the classes with regularity and punctuality. Professors and Lecturers are instructed to record the presence or absence of students immediately before commencing the work of the class, and to amend the record in the case of those who may enter thereafter, only provided satisfactory reasons are assigned. Irregularity may involve exclusion from the examinations held at the end of the session, and non-recognition of the attendance.

Class Exercises and Examinations.—Undergraduates and other students who wish their class work to be recognized as qualifying for a Degree, or a Class Certificate, are required to appear at all examinations, and to prepare such exercises, essays, reports, etc., as may be prescribed by the Professors or Lecturers.

In all classes, two examinations are held, one immediately before the Christmas vacation, and the other after the closing of lectures in the Spring. In some classes, other examinations may be held at dates appointed by the Professors At the Spring Examinations, questions may be set on any subject treated during the session.

The dates of examinations are arranged so as to enable undergraduates who follow the order of classes recommended in the course of study, to appear at all the examinations of the classes they may be attending. Undergraduates who attend the classes in any other order, and general students who wish to appear at examinations, should select classes with non-coincident examination dates. (See Almanac).

In order that the work done in a class by a student may be recognized as qualifying for a Degree or a Class Certificate, the student must secure a position on the **Pass List.** In the determination of such list, both the standing obtained in the various examinations and the degree of excellence shown in the essays, reports, and other class exercises referred to above are taken into consideration. The names appearing on the Pass List are arranged in order of merit.

In addition to the ordinary work of the classes required for the attainment of a position in the Pass List, additional work, consisting of private reading, essays, reports, etc., is prescribed for students who aim at **Class Distinction,** special examinations being held in such additional work at the end of the Session. The award of such Distinction is based upon the whole work of the class, the ordinary work as well as the additional, and may be made to any student attending the class, whether undergraduate or general student, provided his attendance has been sufficiently regular.

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 made a High First Class. In the Distinction Lists, the names of successful candidates are arranged in alphabetical order in each grade.

No Supplementary Distinction Examinations are granted to unsuccessful candidates.

A student who fails to obtain a position on the Pass List in one or more subjects at the end of any Session, shall be allowed a **Supplementary Examination** in such subjects at the beginning of the next Session of his attendance, on the day appointed for that purpose in the University Almanac (Sept. 11th, 1905); or he may present himself at the ordinary Christmas and Spring Examinations of such next Session. The fee for a Supplementary Examination, or for appearing as above provided, at the Christmas and Spring Examinations, shall be Two Dollars in each subject, but in the case of students who fail in more than two subjects, the maximum fee shall be Five Dollars.

A student who has failed either to appear at or to pass the Supplementary may be granted a Special Supplementary Examination at the beginning of any subsequent Session; but not in the same session, except by special permission of the Faculty. The fee for a Special Supplementary Examination shall be Five Dollars per subject, but if the examination includes more than two subjects, the maximum fee shall be Ten Dollars.

Students wishing to appear as candidates at any Supplementary or Special Examination shall be required to give notice of their intention to the Secretary of the Faculty, at least one week before the date of such Examination, the fee to be remitted with such notice.

DEGREE OF M. A.

The degree of Master of Arts will be conferred on a Bachelor of Arts of this College, 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 on some literary, philosophical or scientific subject, or on his passing an examination on 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 will 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 of March. Examinations will 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 of their intention to appear for examination—fee to be remitted with notice.

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.)

Graduate prizes.

The Sir William Young Gold Medal, founded by bequest of the late Sir William Yonng, 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.

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.

THE 1851 EXHIBITION SCHOLARSHIP.—This Scholarship, offered by Her Majesty's Commissioners for the Exhibition of 1851, which is of the annual value of £150 sterling and tenable for two years, is open to students of this Faculty. See Faculty of Science.

UNDERGRADUATE PRIZES.

NORTH BRITISH SOCIETY BURSARY.—A Bursary of the annual value of $60, founded by the North British Society of Halifax, is offered for competition at the Examinations of the Second Year's Course in Arts. It is tenable for two years, namely, during the Third and Fourth Years of the Undergraduate Course in Arts. Candidates must be undergraduates who have completed two years of the Curriculum, and must be eligible at the proper age for membership in the North British Society. The next competition will take place in April, 1906.

THE WAVERLEY PRIZE.—This prize, the interest of an endowment of $1000, will be awarded annually to the student of the Second Year, who stands highest at the Examinations in Mathematics 2, the winner of the North British Society Bursary being excluded.

ENTRANCE SCHOLARSHIPS AND BURSARY.

The following Scholarship and Bursary are offered for competition at the Junior Matriculation Examination in the Faculties of Arts and Science, to students entering the First Year of the Faculties of Arts and Science :

The *Sir William Young Scholarship*, of the value of Fifty Dollars, tenable for one year and payable in one instalment.

It will be awarded to the candidate ranking highest at this examination, whose standing is considered satisfactory by the Faculty, provided he or she has not been awarded 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 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.

A number of scholarships of the value of Fifty Dollars each will be awarded from time to time by the Senate to students entering the Arts and Science Faculties, who have been nominated by certain selected institutions or committees in accordance with conditions laid down by the Senate.

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.

Mr. Rhodes directed that one scholarship each year be offered for competition among candidates from each of a number of colonies or provinces of the Empire. He also gave scholarships for each state in the American Union, and a number to Germany. His Trustees have set apart one scholarship each year for Nova Scotia, New Brunswick, Prince Edward Island, Quebec, Ontario, Manitoba, North-West Territories, and British Columbia in Canada.

The Trustees request the various Committees of Selection to comply as nearly as circumstances will permit, in the selection of scholars, with the spirit of the testator's wishes expressed as follows :

" My desire being that students who shall be elected to the Scholarships shall not be merely bookworms, I direct that in the election of a student to a Scholarship, regard shall be had to (1) his literary and scholastic attainments ; (2) his fondness of and success in manly outdoor sports, such as cricket, football, and the like ; (3) his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship ; and (4) his exhibition during school days of moral force of character and of instincts to lead and to take an interest in his school-mates, for those latter attributes will be likely in after life to guide him to esteem the performance of public duties as his highest aim.

" As mere suggestions for the guidance of those who will have the choice of students for the Scholarships, I record that (1) my ideal qualified student would combine these four qualities in the preponderance of three-tenths for the first,

two-tenths for the second, three-tenths for the third, two-tenths for the fourth qualification, so that, according to my ideas, if the maximum number of marks for any Scholarship were 200, they would be apportioned as follows—60 to each of the first and third qualifications, and 40 to each of the second and fourth qualifications ; (2) the marks of the several qualifications would be awarded independently, as follows, (that is to say) the marks for the first qualification by examination, for the second and third qualifications respectively by ballot by the fellow-students of the candidates, and for the fourth qualification by the head master of the candidates' school ; and (3) the results of the award (that is to say, the marks obtained by each candidate for each qualification) would be sent as soon as possible for consideration to the Trustees, or to some person or persons appointed to receive the same, and the persons so appointed would ascertain, by averaging the marks on blocks of twenty marks each, of all candidates the best ideal qualified students.

" No student shall be qualified or disqualified for election to a Scholarship on account of his race or religious opinions."

The Trustees have determined that a candidate eligible for a Canadian scholarship must

1. Be unmarried ;
2. Be a British subject ;
3. Be between the ages of nineteen and twenty-five on the first day of October of the year of election ;
4. Be a student of at least sophomore or second year standing in a recognized degree-granting College or University in Canada ;
5. Have acquired a large part of his educational qualification or have his ordinary private domicile, home, or residence in the province for whose scholarship he is applying.
6. Be fit to enter upon his studies at Oxford. This fitness shall be tested by an examination corresponding to the Responsions examination of Oxford ; but graduates or undergraduates of universities affiliated to Oxford who are entitled to exemptions from Responsions by the terms of affiliation are not required to pass this examination.

The Trustees require each Committee of Selection, whose decision as to the eligibility of candidates shall be final, to send with the nomination of the scholar a statement as full as possible of his school and college career, together with suggestions, if desired, as to the course of study for which he

is best fitted. At the same time the scholar is requested to send to Mr. F. J. Wylie of Oxford, the name of the college, which he wishes to enter.

For the award of the Nova Scotian Scholarship the Trustees have adopted a system by which each University or College with degree conferring powers makes a nomination in certain specified years. The number of nominations placed at the disposal of each university is determined by the number of undergraduates.

A nomination was placed at the disposal of

Dalhousie University in 1904.
Acadia University in 1905.

The following scholar was nominated by this University :—

1904.—Gilbert S. Stairs, b. a.

All selections should be made before March of the year of appointment. The scholar is required to enter upon residence in Oxford the following October.

Faculty of Pure and Applied Science.

THE PRESIDENT.

J. LIECHTI, M. A.
A. MACMECHAN, Ph. D.
W. C. MURRAY, M. A., LL. D.
E. MACKAY, Ph. D.
D. A. MURRAY, Ph. D.
S. M DIXON, M.A., B.A.I., A.M.I.C.E.
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C. E. W. DODWELL, M. I. C. E., M. C. S. C. E.
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REV. R. LAING, M. A.
F. H. MASON, F. C. S.
H. S. POOLE, M. A., D. SC., F.R.S.C.
J. G. S. HUDSON, M. E.

Dean of the Faculty: PROFESSOR E. MACKAY.
Secretary of the Faculty: PROFESSOR D. A. MURRAY.
Registrar of the Faculty: PROFESSOR LIECHTI.

Correspondence should be addressed :—*The Secretary, Faculty of Science, Dalhousie College, Halifax, N. S.*

COURSES.

The Faculty of Science prescribes courses leading to the degrees of Bachelor of Science (B. Sc.), Master of Science (M. Sc.), Bachelor of Engineering (B. E.) and Bachelor of Music (B. Mus.). Short courses, leading to Certificates, are prescribed in Education and Mining.

The course for the degree of Bachelor of Science extends over four years and consists mainly of classes in pure science and modern languages. Bachelors of Science who have completed at least one additional year of approved scientific work may be admitted to the degree of Master of Science.

The courses in Engineering are arranged to meet the needs of those who aim at becoming :—

1. Civil Engineers.
2. Mining or Metallurgical Engineers.
3. Surveyors.
4. Colliery Managers.
5. Prospectors.

The course in Civil Engineering and that in Mining Engineering extend over four years and lead to the degree of Bachelor of Engineering.

The course 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 Science in three instead of four years, and, in general, students who enter at advanced stages may correspondingly shorten the time required to complete any of the above courses.

GENERAL REGULATIONS FOR DEGREES AND CERTIFICATES.

Matriculation.—Candidates for a baccalaureate degree must pass the Junior or Senior Matriculation and they are recommended to do so before entering upon the course of study leading to the degree.

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 case of students entering thereafter unless satisfactory reasons are assigned. Irregularity in any class may involve non-recognition of attendance and exclusion from the Spring examination in that class.

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 final or Spring examination 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. *For a position on the Pass List a higher degree of proficiency is required of candidates in any of the engineering courses or in the B. Mus. course than of candidates in a B. Sc. or other non-professional course.*

Order of Classes.—The order in which the classes of a course may be taken, in case no fixed order is prescribed, 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 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 may only enter a more advanced class by permission of the Faculty ; and such permission, if granted, may be withdrawn if the instructor of such advanced class report unfavourably upon the work being done by the student so admitted.

ORDINARY COURSE FOR THE B. Sc. DEGREE.

Course.—The ordinary course of study prescribed for the B. Sc. degree consists of the following classes :

(i.) Three in German.

(ii.) Two in each of the following : English, French.

(iii.) One in each of the following : Mathematics, Physics, Chemistry, Drawing.

(iv.) *Either* one class in Geology or Philosophy *or* a second class in Mathematics or Chemistry.

(v.) Nine single classes *(or equivalents) so selected from groups A, B and C in the schedule given below that at least one class shall be chosen from each group and not more than four from the last two groups taken together.

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* A "single" class is one in which two or three lectures a week are given, a "double" class, one in which the number of lectures is four or five a week. One double class is regarded as equivalent to two single classes, provided a double fee is paid.

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

Choice of Electives.—In choosing their elective classes undergraduates, and general students who wish to appear at the Christmas and Spring examinations, should select classes with non-coincident examination dates.

No class in which the subjects studied are the same from year to year can be taken twice as part of a course.

An advanced class may be taken as an elective if approved by the Faculty.

Students who have registered as undergraduates in medicine may complete their course in medicine in three 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 attend the class in Histology also, in order to avoid conflict of hours in the time table. (See Faculty of Medicine.)

Candidates for a degree in Engineering may complete their engineering course in two years after the completion of the B. Sc. course, provided they so select the classes of their science course as to include a sufficient number of the classes common to it and the engineering course they have in view.

Lists of the elective classes chosen by students must be submitted to the Dean of the Faculty for approval not later than the first of October, 1905.

Order of Classes.—The classes of the above course may be taken in any order subject to the regulations regarding order of classes (p. 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 the dates of examinations are based upon this arrangement.

Firs Year.

Mathematics 1.
Chemistry 1.
English 1.
French 2.
German.
Mechanical Drawing, *or*
Freehand Drawing.

Second Year.

Mathematics 2, *or* Chemistry 2, 3 or 4, *or* Geology 1, *or* Philosophy 1.
Physics 1.
English 2.
French 3.
German.

Third and Fourth Years.

German.

Nine 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.	Biology.	Philosophy.	English.
Physics	Anatomy.	Education.	French.
Chemistry.	Histology.	Political Economy.	German.
Geology.	Physiology.		
Mineralogy.			

Degree of B. Sc. with Distinction.—The degree of B. Sc. with Distinction will be conferred on undergraduates for special excellence shown in the work of the classes recommended to be taken in the Second, Third and Fourth Years of the ordinary course.

The award of such degrees is based upon the Class Distinctions gained by the candidate ; but not only are the number and grade of the Distinctions considered, but also the private work required for them and the relation to one another of the subjects in which they have been gained. Candidates for this degree should so chose their electives that their course may include two or more groups, each of three or four classes in the same or closely related subjects.

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.

Successful candidates will be declared to have won their degrees With Distinction or With Great Distinction.

HONOUR COURSES FOR THE B. Sc. DEGREE.

An undergraduate who has completed the work of the first two years of the B Sc. course may restrict his attention to a more limited range of subjects than that of the ordinary

* See foot-note p. 40.

course by entering upon an honour course, provided he has either attained a First Class standing on the subjects of the honour course and a satisfactory standing in the other subjects or has received the special permission of the Faculty.

Honour courses are provided in (i) Pure and Applied Mathematics, (ii) Mathematics and Physics, (iii) Chemistry and Chemical Physics, (iv) Geology, and (v) Philosophy.

An undergraduate taking an honour course is required to take the Advanced Classes in the subjects of the course and to make progress satisfactory to the Professor. The examinations in the subjects of the honour course will be held at the end of the Fourth Year, or one year later should the candidate desire it.

For the syllabus of the above honour courses see the corresponding courses in the Faculty of Arts.

Degree of B. Sc. with Honours.—The B. Sc. 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 examinations 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 M. Sc.

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 B. Sc. 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 University, 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 science, or to closely related departments.

Theses must be sent to the Dean 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 of their intention to appear for examination.

On transmitting the thesis, or on giving notice of intention to appear for examination, candidates must pay a fee of Five Dollars. In the event of the degree being granted, a further fee of Five Dollars is payable for the Diploma.

COURSES FOR THE B. E. DEGREE.

Courses extending over four years and leading to the degree of Bachelor of Engineering are offered in—

(i.) Civil Engineering, and
(ii.) Mining and Metallurgical Engineering.

The work of an engineer, in whatever branch of engineering practice he may be engaged, involves the constant application of the principles of certain fundamental sciences, such as Mathematics, Physics and Chemistry. The technical training of an engineer is accordingly based upon a competent knowledge of these sciences, supplemented by training in the art of expression both by drawing and by language. As the necessary subjects preliminary to technical studies are nearly the same for all departments of engineering, the following courses are arranged so that the first two years are almost identical, and afford not only the requisite preliminary training for technical work in Civil and Mining Engineering but also that necessary for students looking forward to courses in Electrical or Mechanical Engineering.

I. CIVIL ENGINEERING.

The course of study in Civil Engineering is arranged so as to give a thorough training in the subjects treating of the principles on which the practice of this profession rests. Although the course is not specialized, still, owing to the method of instruction, the student on completing his studies should be able to begin work successfully in any one of the numerous branches of the profession.

The instruction is carried on by lectures and recitations and by practical work in the drawing office, field and laboratory. In this way the student is drilled in the principles underlying all the branches of Civil Engineering and by working out numerous exercises, becomes familiar with engineering instruments and testing machines and with the problems which occur in ordinary practice.

The work of the first two years is arranged to suit the needs of those wishing to qualify themselves as land surveyors.

Every student of the fourth year is required to prepare a scheme with adequate drawings and designs of some new engineering enterprise or to complete an original research on some material of construction, the subjects to be submitted for approval to the Professor of Civil Engineering not later than Dec. 1st, and the completed report to be handed in on or before April 1st.

During the year a special course of illustrated lectures will be given by distinguished engineers on the construction and maintenance of various engineering works.

The following table shows the prescribed classes of the course, arranged in years and the number of hours per week given to each. Details of the classes will be found under Courses of Instruction.

First Year.

	Hours		Hours.
Mathematics 1	5	French 1, *or*	2
Chemistry 1	7	German 1	3
Mechanical Drawing	16	*Engineering Camp.*	
English 3	10		

Second Year.

	Hours.		Hours.
Mathematics 2	5	Surveying	6
Physics 1	4	French 2, *or*	2
Chemistry 4	7	German 2	3
Descriptive Geometry	5	*Engineering Camp.*	
Topographical Drawing	3		

Third Year.

	Hours.		Hours.
Physics 3	2	Hydraulics	2
Physics 6	5	Hydraulic Engineering	3
Geology 1	6	Masonry Construction	6
Railway and Highway Engineering	8	Applied Mechanics	3
		Engineering Camp.	

Fourth Year.

	Hours.		Hours.
Physics 7	3	Testing Laboratory, (1 term)	$2\frac{1}{2}$
Geology 4	4	Metallurgy 6	2
Astronomy 2, (1 term)	2	Engineering Law	1
Geodesy, (1 term)	5	Engineering Scheme *or* Research.	
Hydraulic Engineering. Designing	3 15		

II. MINING AND METALLURGICAL ENGINEERING.

The course in Mining and Metallurgy is designed to cover two distinct though closely related fields, that of the mining engineer, involved in the locating, developing and operating of mining properties, and that of the metallurgist, in the reduction of ores and the treatment of fuels. As a student may be looking forward to work in one or other of these fields, he is allowed to specialize to a limited extent in his final year of study. The first two years of the course differ but little from the corresponding years in Civil Engineering. The Third and Fourth Years are mainly taken up with technical classes, much attention being given to the mining and metallurgical industries of Nova Scotia.

Summer Work.—Students are required between their Second and Third Years to join the Engineering Camp for field-work in Surveying.

During the summer session at the close of the Third Year all students are required to carry out assigned field work in structural geology and to visit and study under supervision of instructors typical mining or metallurgical plants. Owing to the proximity of Halifax to the principal mining centres, a student's travelling expenses in carrying out this work are relatively small.

Thesis.—Fourth year students are required to prepare a thesis upon some mining or metallurgical topic. The object is to acquaint the student with the general methods of scientific research, or to give him a measure of ability in making a detailed practical report upon mines or works in actual operation.

The thesis will probably fall into one of three classes :

(1.) For students wishing to specialize in metal mining, the paper will treat either of some metalliferous mine and its operation, or some problem in ore dressing. If the former the study will include the structure and economic geology of the

locality, the cost method of working for that particular deposit, design for mill if the operations have not begun, or a plan and specifications of the works if already established. If an ore dressing problem is studied, the thesis will treat of such subjects as the combination of graded crushing, jigging, water classification, table concentration, etc., which will give the best results at the lowest cost on any special ore which may be selected as offering special difficulties.

(2.) For students specializing in coal mining the thesis will usually take the form of a detailed report on the operation of some colliery which may be selected as typical of modern practice, or of some coking or coal washing plant.

(3.) For students wishing to specialize in metallurgy, the thesis will under ordinary circumstances take the form of a special research in assaying, or some metallurgical method, or in metallography. If desired, the student may take up the study of some of the departments of a steel works, such as the operating of a blast furnace, an open hearth furnace, a converter, a rolling mill, etc.

The work of the thesis is in part interwoven with the ordinary classes of the Fourth Year, and some of the field, laboratory and library work of these classes will bear directly upon it. The beginning of the study will be made during the summer vacation preceding the Fourth Year, at the close of the regular Summer Session. Problems connected with the thesis will be discussed in regular conferences, held at stated intervals with the instructors in Mining, Metallurgy and Geology, and occasionally other members of the Faculty.

Order of Classes.—The classes of the course, arranged in years, are given in the following schedule Details of subjects may be found under Courses of Instruction.

First Year.

	Hours.		Hours.
Mathematics 1	5	English 10	3
Chemistry 1	7	French 1 * *or*	2
Mechanical Drawing	16	German 1 *	3

Second Year.

	Hours.		Hours.
Mathematics 2	5	Surveying	6
Physics 1	3	French 2* *or*	2
Physics 6	5	German 2*	3
Chemistry 4	7	*Engineering Camp.*	
Geology 1	6		

* Only required for the degree of Bachelor of Engineering with Distinction (p. 48).

Third Year.

	Hours.		Hours.
Physics 2	2	Metallurgy 1	4
Chemistry 4	10	Metallurgy 2	3
Geology 3	6	Mining 1	2
Geology 6	3	Mining 4, (Summer Session.)	
Mineralogy 1	6		

Fourth Year.

	Hours.		Hours.
Physics 7	5	Metallurgy 4	12
Geology 6	3	Mining 2	2
Hydraulics	2	Mining 3	2
Applied Mechanics	3	Engineering Law	1
Metallurgy 3	2	Thesis.	

B. E. with Distinction.—Candidates for the degree of Bachelor of Engineering who have shown special excellence in the classes prescribed for their course, including either French or German, will be declared to have obtained the degree With Distinction, or With Great Distinction, according to the standard of excellence they have reached.

COURSE FOR THE B. MUS. DEGREE.

This course of study 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 mentioned below.

The classes in the above subjects need not be taken in any one definite order and may be extended over more than three

years, but students are recommended to take them in the following order :—

First Year.

1. Harmony in not more than four parts.
2. History of music from 1600 to 1750.
3. Acoustics in so far as concerned with the Theory of Music (in Physics 1.)
4. English 1.

Second Year.

1. Harmony in not more than five parts.
2. Simple counterpoint in two or three parts.
3. Canon in two parts, Imitation and Fugue in not more than three parts.
4. Form: Elementary Forms, Phrases, Periods, Open and Closed Forms.
5. Elements of Instrumentation.
6. History of music from 1750 to the present time.
7. English 2.

Third Year.

1. Single and Double Counterpoint in not more than five parts.
2. Strict and Free Fugue in not more than five parts.
3. Form: Binary Form, Ternary Form, Rondo and Sonata.
4. 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 (Waldstein) ..... *Beethoven.*
A ♭ major Polonaise ..... *Chopin.*
D ♭ major Nocturne ..... *Chopin.*
Concerte-Etude No. 1 (Waldesrauschen) ..... *Liszt.*
Rhapsodie No. 12 ..... *Liszt.*

FOR THE ORGAN.

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

SHORT COURSES.

Short courses in mining have been arranged for the benefit of students who may be unable to spend four full years at the University, but may be able to give full attendance for shorter periods.

Students entering on these courses shall not be required to pass a preliminary examination, but they shall be required to satisfy the Faculty that they have a fair general education. The order in which the classes of a course may be taken is subject to the regulation regarding Order of Classes, (p. 40). The details of the subjects studied in the classes named will be found under Courses of Instruction.

Short Course in Colliery Management.—The following course is intended for men who have already passed the examination of the Provincial Board as Underground Managers, and is designed to supplement their practical knowledge with the theoretical training desirable for Colliery Managers. The course may be completed in two Winter Sessions.

Mathematics 1.
Physics 1.
Chemistry 1.
Geology 1.
Mechanical Drawing.
Surveying.
English 10.
Hydraulics.
Hydraulic Engineering.
Mining 1.
Mining 3.
Engineering Law.
Engineering Camp.

Short Course in Prospecting.—The following course may usually be completed in two Winter Sessions and one Summer Session.

Trigonometry (Mathematics 1).
Chemistry 1.
Chemistry 4.
Geology 1.
Geology 3.
Mineralogy.
Mechanical Drawing.
Metallurgy 1.
Mining 1.
Engineering Law.
Surveying.
English 10.
Mining 4 (Summer Session).

Elective Courses.—General students in mining, not being candidates for one of the mining Certificates, are free to select any class or group of classes which may suit their purpose, subject to the regulations regarding order of classes and the provisions of the time-table. Encouragement is given to persons engaged in general mining to attend the

College and take such classes as may enable them to conduct their work to greater advantage and safe-guard their property. A student who has entered upon one of the above courses may, with the approval of the Faculty, take classes in addition to those prescribed in the course he is following.

CERTIFICATES.

Certificates in Mining.—Students who satisfactorily complete either of the short courses in mining subjects outlined above, shall be entitled to a Certificate of Proficiency, which shall indicate the character of the course they have followed, and the degree of success attained in it. Candidates for a Certificate shall not be required to pass a Matriculation, but they shall be required to satisfy the Faculty that they have a fair general education.

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 favourably reported upon by a recognized authority, or who have taken a course in a Normal School, will not be required to take the 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.*
Fitch : *Lectures on Teaching*
Adams : *Primer on Teaching*
Laurie : *Language and Linguistic Method.*
Landon : *Principles and Practice of Teaching and School Management.*
Adams : *Herbartian Psychology.*
Plato : *Republic*, as in Bosanquet's Selections.

Burnet : *Aristotle on Education.*
Ascham : *Schoolmaster.*
Milton : *Tractate on Education.*
Locke : *Thoughts on Education.*
Spencer : *Education.*
Thring : *Theory and Practice of Teaching.*
Quick : *Educational Reformers.*
Williams : *Modern Education*
Russell : *German Secondary Schools.*
School Systems in Canada and United States.

They may, however, be exempted from such parts of the above examination as are included in the Class Examinations passed by them.

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, 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 both 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 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 a supplementary examination in such class at the beginning of the next session of his attendance, on the day appointed for that purpose in the University Almanac, (September 11th 1905). But no student shall be granted a supplementary examination until the prescribed class exercises have been completed.

A student wishing to appear as a candidate at a supplementary examination, or at a special examination as provided below, shall be required to give notice of his intention to the Secretary of the Faculty at least one week before the date of such examination, the fee to be remitted with such notice. For fees for supplementary examinations, see p. 12.

Special Examinations.—A student, not being in an engineering course, who fails either to appear or to pass at a supplementary examination, may on application to the Faculty be granted a special examination at the beginning of any subsequent session; but he shall not be allowed a special examination in the same session except by permission of the Faculty. For fees for special examinations, see op. 12.

Special Examinations in Engineering Classes.—Students in any course leading to a degree or certificate in Engineering who fail to appear or to pass at a supplementary examination in any class, may be required before being granted a special examination to attend such class again or to pursue, under the direction of the instructor, such part of the studies of the class as the Faculty may determine.

Students in any course leading to the B. E. degree, shall not be allowed to proceed to their final year of study for the degree until they have passed in all the classes of their previous years.

PRIZES AND SCHOLARSHIPS.

Matriculation Scholarships.—The Sir William Young Scholarshsp and the Mackenzie Bursary, offered for competition at the Junior Matriculation Examinations, are open to candidates for matriculation in this Faculty.

The Sir William Young Gold Medal, the University Medals, the Avery Prize, and the Waverley Prize, are open for competition to under graduates in any of the courses leading to the B. Sc. degree.

The Waverley Prize is also open for competition to undergraduates in Engineering.

The Cape Breton Alumni Bursary.—The Cape Breton Branch of the Alumni Association offers for competition, annually, to undergraduates from Cape Breton in the Third Year of the course in Mining Engineering a bursary of the value of Fifty Dollars. The bursary will be awarded to the undergraduate from Cape Breton who stands highest in the subjects of the Third Year, provided his standing is considered satisfactory by the Faculty.

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, they have placed the nomination to one of these Scholarships at the disposal of this University. A similar nomination has been placed at the disposal of the University for the year 1905.

The following have held scholarships :—

1894-6..... F. J. A. McKittrick, B Sc,
1896-9 ....D. McIntosh, B. Sc.
1898-1901.....E H. Archibald, M. Sc.
1900-3.....James Barnes, B A
1902-4..... T. C. Hebb, M. A., B. Sc.
1904- .....W. H Ross, M. Sc.

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 men.

The following were the conditions of nominations in 1904 :

(*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 ; though 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 renewa's being awarded to the most deserving of the candidates

The conditions for the exceptional renewal of scholarships for a third year are as follows :—

(1) The scholar shall have published in the proceedings of some Scientific Society, or in some Scientific Journal, an account, approved by the Scholarships Committee, of an adequate research.

(2) The scholar shall satisfy the Committee :—

That a continuance of the scholarship for a third year is likely to result in work of scientific importance.

That such work is not likely to recompense the scholar pecuniarily.

That the scholar is not in a position to continue the work without the help of the scholarship.

That the scholar intends, after the expiration of the scholarship, to adopt a pursuit in which his studies during his tenure of the scholarship will find useful practical application.

(3) The scholar shall undertake to make a detailed report to the Commissioners, of his work during the third year.

(4) The condition on which the scholarship was originally granted shall apply in all respects to its continuance during the third year.

The scholarship is payable half-yearly in advance (through the Treasurer of this University, if the scholar study in America); but £25 will be reserved from the last payment until the scholar has made a satisfactory final report.

The candidate nominated is required by the Commissioners to sign the following declaration :

I, the undersigned, hereby declare that the particulars concerning me mentioned in the foregoing form are correct, and I undertake that, if a Science Research Scholarship is awarded to me, I will hold it subject to the conditions laid down by Her Majesty's Commissioners for the Exhibition of 1851 with reference thereto, and I will during its continuance, wholly devote myself to the objects of the scholarship, and I will not during such continuance hold any position of emolument

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 Probationary Bursary. The following are the regulations under which such Bursaries are tenable :

1. A Bursary is intended for the maintenance for one year of a Student who proposes to become a Science Research Scholar under the scheme of the Commissioners at the expiration of the period covered by the Bursary, in order to afford him an opportunity of proving his power to carry on independent research The authorities of an institution recommending a Student for a Bursary will be presumed to have satisfied themselves that he *bona fide* intends to accept a Scholarship if subsequently appointed to one.

2. An applicant for a Bursary must, except as to evidence of capacity for original research, fulfil all the conditions for the time being laid down for appointment to a Science Research Scholarship. He must have passed a B. Sc examination (or the equivalent) with Honours before the commencement of a period covered by the Bursary. His age must not exceed 25, except under special circumstances.

3 A Bursary is tenable for one year, and is of the value of £70. payable by half-yearly instalments in advance, the second instalment being payable on receipt of a certificate from the Professor under whom the holder has been working that he has faithfully performed his duties.

5. A Bursary will be awarded on condition that the nominating institution undertakes to provide for the holder facilities for conducting research, and the requisite supervision, free from charge and incidental expenses.

5. The holder of a Bursary shall devote himself exclusively to research, and work preparatory to research, and none of his time shall be spent in assisting a teacher in his duties. The holder of a Bursary must not hold any other Bursary, Scholarship, or position of emolument.

6. The holder of a Bursary shall on or before May 1st in the year of tenure send to the office of the Commissioners an account of the research work performed by him, together with an application for appointment to a Science Research Scholarship The Commissioners will expect to receive from the Professor under whom the holder of the Bursary shall have worked, a confidential opinion as to his capacity and qualifications.

7. The Commissioners may either appoint the holder of a Bursary to a Science Research Scholarship, or at their absolute discretion decline to appoint him, and in the latter case, shall not be called upon to state any ground for their decision

8. A Science Research Scholarship, if granted, shall be held on the usual conditions attached to the Scholarships, or on any special conditions which the Commissioners may impose. But a scholar who previously to appointment has held a Bursary, shall not be eligible for exceptional renewal of his Scholarship for a third year.

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 so 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.

SUMMER SCHOOL OF MINING.

During the Summer Session classes for miners and others interested in mining or related subjects may be held at one or other of the more important mining centres in the Province. The object of these classes will in no case be to duplicate instruction now available in local schools for miners, but, in communities where such schools exist to offer those who have passed through them opportunities for further study. The subjects in which classes will be opened as well as the grade of instruction given will necessarily vary in different mining centres, and an effort will be made to adapt the classes as fully as possible to the needs of the community in which they are being held. During the Summer of 1903 classes in Geology, Mining and Chemistry were held in Sydney, Cape Breton, and in 1904 similar classes were held in Glace Bay. Detailed information is given in the Circular of the Summer School of Mining which may be obtained on application to the Secretary of the Faculty of Science.

COURSES OF INSTRUCTION.

Faculties of Arts and Science.

I —CLASSICS.

(McLeod Professorship.)

Professor .....HOWARD MURRAY, B. A.
Tutor.....A. C. JOHNSON, B. A.

Latin 1.

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

(The 12 o'clock class is conducted by the Tutor; the 11 o'clock class by the Professor during the first half of the session, after that by the Tutor.)

Cicero, *Orations against Catiline;* Vergil, *Aeneid,* Book VI; *Cicero, *Pro Lege Manilia;* *Vergil, *Aeneid,* Book IV. Latin Prose Composition. Exercises in Sight Translation. Roman History to the Battle of Actium.

Books recommended: Cicero, *Selected Orations and Letters.* (Kelsey's Allyn & Bacon, Boston, $1 25.) Vergil, *Aeneid,* Book VI, (Page's, Macmillan, N. Y., 40 cents). Vergil, *Aeneid.* Book IV. (Stephens n's. Macmillan, N. Y., 40 cents). Bradley's Arnold's *Latin Prose Composition.* Smith's *Smaller History of Rome,* (Harper's, N. Y.) Bennett's *Latin Grammar,* (Allyn & Bacon, Boston, 80 cents), or Allen & Greenough's, *New Latin Grammar,* (Ginn & Co., Boston, $1.20).

Latin .

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

Livy, Book I; Horace, *Odes,* Books I and II; *Cicero, *Pro Milone;* *Vergil, *Aeneid,* Book V. Latin Prose Composition. Exercises in Sight Translation. Grecian History to the death of Alexander.

Books recommended: Livy, Book I. (Rolfe's [text with indicated quantities] Allyn & Bacon, Boston, 25 cents). Horace, *Odes,* (Page's, Macmillan, each 40 cents). Cicero, *Pro Milone.* (Colson's, Macmillan 90 cents). Vergil, *Aeneid,* Book V, (Calvert's, Macmillan, 40 cents). Bradley's Arnold's *Latin Prose Composition.* Smith's *Smaller History of Greece,* (Harper's, N. Y.).

Latin 3.

Mondays and Wednesdays, 12 M—1 P. M.

Plautus, *Trinummus;* Juvenal, *Selected Satires;* Tacitus, *Germania.* *Cicero: *Pro Murena.* *Lucretius, Book V. Latin Prose Composition. Exercises in Sight Translation.

Books recommended: Plautus, *Trinummus,* (Freeman & Sloman's, Macmillan, 75 cents). Juvenal, (Hardy's, Macmillan, $1.25). Tacitus, *Germania,* (Church & Brodribb's, Macmillan, 55 cents). Cicero: *Pro Murena,* (Freese's, Macmillan, 60 cents). Lucretius, Book V, (Duff's, Macmillan's, 50 cents).

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*For private reading by students seeking First or Second Class Distinction. Passages for translation at sigh 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, *Cyropaedia*, Book I. Greek Prose Composition. Exercises in Sight Translation.

Books recommended : Xenophon, *Hellenica*, Books I and II, (Underhill's, Macmillan's, 85 cents). Xenophon *Cyropaedia*, Book I. (Biggs, Macmillan, 50 cents). Fletcher & Nicholson's *Greek Prose Composition*. Goodwin's *Greek Grammar*, (Ginn & Co., Boston, $1.50).

Greek 2.

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

Lucian, *Selected Dialogues ;* Homer, *Odyssey*, Book IX ; *Lucian, *Vera Historia*. Greek Prose Composition. Exercises in Sight Translation.

Books recommended : Lucian, *Selections*, (Inge & Macnaghten's, Longman's, 3s. 6d) Homer. *Odyssey*, Book IX. (Edward's, Macmillan, 6) cents); Lucian, *Vera Historia*, (Yates's, Bell & Sons, London, 1s. 6d). Fletcher & Nicholson's *Greek Prose Composition.*

Greek 3.

Tuesdays and Thursdays, 12 M—1 P. M.

Plato. *Apology* and *Crito ;* Aristophanes. *The Clouds ;* *Homer, *Iliad*, Books I-III. Greek Prose Composition. Exercises in Sight Translation.

Books recommended : Plato, *Apology* and *Crito*, Wagner's, Geo. Bell & Sons, London, 2s 6d) Aristophanes, *The Clouds*, (Merry's, Macmillan, 75 cents). Homer. *Iliad*, (Seymour's, College edition of Books I-III, (Ginn & Co., Boston, $1.50).

Advanced Class.

Professor.....HOWARD MURRAY, B. A.
Lecturers.....J. W. LOGAN, B. A.
G. K. BUTLER, M. A.

Four or five times a week.

In this class a portion of the Latin and Greek subjects prescribed for the special course in Classics is read, and Prose Composition is regularly practised

Beginners' Class in Greek.

Three 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 preparations in the elements of Greek accidence

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

and syntax to enable them to attend with profit the first undergraduate class. The book used in the first part of the session will be White's "First Greek Book"; afterwards Goodwin's Greek Grammar will be taken up, and a book of Xenophon's Anabasis will be read. 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. The fee for this class, when taken with another Greek class, is three dollars; when taken alone, is six dollars.

II.—NEW TESTAMENT GREEK.

The class and examinations in New Testament Greek, conducted by Professor R. A. FALCONER, B. D., D. LITT., 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.

Daily 12.30 P. M.

The work of this 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 in Greek*. Huck, *Synopse der drei ersten Evangelien*; Simcox, *Language of the New Testament*; Hammond, *Textual Criticism of the New Testament*; Matthew's, *A History of 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.*; *Expositor's Greek Testament*, vol. I; Swete, *Gospel of St. Mark*; Plummer, *Gospel of St. Luke*; Westcott, *Gospel of St. John*; Plummer, *Gospel of St. John*.

III.—HEBREW.

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.

Daily 8.45 to 9.30 A. M.

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

Text-book: Davidson's Introductory Hebrew Grammar, with Progressive Exercises in Reading and Writing, T. & T. Clark, Edinburgh, 7s 6d.)

Books recommended: Gesenius' Hebrew Grammar, revised edition, (Mitchell, Bradley & Woodruff, Boston, $3). Green's Hebrew Grammar, new edition unabridged (Wiley and Sons, New York, $3). Harper's Introductory Hebrew Method and Manual, latest edition, (American Publication Society of Hebrew, Chicago). Robinson's Gesenius' Hebrew Lexicon, (Houghton, Mifflin & Co., Boston, $6).

IV.—MODERN LANGUAGES.

(McLeod Professorship.)

Professor ..... JAMES LIECHTI, M. A.

French 1.

Tuesdays and Thursdays, 3—4 P. M.

Macmillan's *Progressive French Reader*, II year, (Fasnacht). Molière, *Le Bourgeois Gentilhomme*, (Macmillan & Co.); Eugène Scribe, *Valérie* (Macmillan & Co.). Exercises in Grammar and Composition, (Fasnacht's First Course by Macmillan & Co.).

Additional for Distinction: Saintine, *Picciola*, first ten chapters, or Octave Feuillet, *Le Roman d'un Jeune Homme Pauvre*; first fifteen chapters.

Text-books: Brachet, *Public School Elementary French Grammar.* Other text-books required will be announced at the opening of the Session.

French 2.

Tuesdays and Thursdays, 2—3 P. M.

For 1905-06.—Racine, *Esther.* Molière, *L'Avare.* Sight-reading: a comedy by Scribe. (Macmillan & Co.) Translation from English writers. Exercises in Syntax. Translation of unspecified passages from modern authors. French Composition.

For 1906-07. Racine, *Athalie* Molière, *Les Précieuses Ridicules* (Macmillan & Co.); Labiche et Martin, *Le Voyage de Monsieur Perrichon* (American Book Co.). Sight-reading: a comedy by Scribe. Translation from English writers. Exercises in Syntax Translation of unspecified passages from modern authors. French composition.

Molière, *Le Misanthrope*, (Macmillan & Co.), and either Madame de Staël, *L'Allemagne*, first twenty chapters, or Pierre Cœur, *L'Ame de Beethoven* (Macmillan & Co), are prescribed for private reading to candidates for Distinction.

Text Books: As in French 1. Saintsbury, *Primer of French Literature.*

French 3 and 4.

Tuesdays and Thursdays, 9—10 A. M.

For 1906-07. Molière, *Les Femmes Savantes.* Racine, *Iphigénie.* Corneille, *Le Cid* (Macmillan & Co.) Sight-reading: a comedy by Scribe, or *Les Français en voyage*, by Jetta T Wolff (Edward Arnold. London) Translation from English writers. French Composition second course, by Eugène Fasnacht (Macmillan & Co). Translation of unspecified passages from modern authors.

Molière, *Tartuffe*, Acts I II. (Macmillan & Co.) and either Victor Hugo, *Les Travailleurs de la Mer*, Chapters I to V. (incl.) Rivington's) or Madame de Staël, *Corinne ou l'Italie*, livres I to V. (incl.) are prescribed for private reading to candidates for Distinction.

1905-06. Corneille, *Horace*. Racine, *Phèdre*. Sight-reading : a comedy by Scribe. Translations from English writers. French composition, second course, by Eugène Fasnacht (Macmillan & Co).

Molière, *L'Ecole des Maris* and *L'Ecole des Femmes*, (I and II Acts of each).

Text-books : As in French 2. Masson : *Litterature française.*

French 5.

Lecturer..... ....PROFESSOR W. F. P. STOCKLEY, M. A.

Two hours a week.

Walter : *Classic French Writers* (Holt & Co.), Berthon : *Specimens of Modern French Prose* (Macmillan). Berthon : *Specimens of Modern French Verse* (Macmillan) Fontaine : *Historiettes Modernes*, I, (Heath & Co). Taine : *Les Origines de la France Contemporaine* (Selections, ed. Edgren ; Holt & Co).

Sainte Beuve, *Selected Essays* (ed. Effinger, Ginn & Co) Brunetiere's *Manual of French Literature*. Plass, *Selections of French Idioms*, (Macmillan). Composition. Sight translation.

For reference : Doumic, *Historie de la itterature francaise*, (1 vol) Longhaye, *La littèrature francaise au XIX Siecle*, (2 vols). L'Homme, *La comèdie d'aujourdhui*, (1 vol. Perr'n). Brunetiére, *La Roman Naturaliste*. Henry James, *French Poets and Novelists.*

For Distinction : Madame de Staël, *L'Allemagne*, (1 vol. Garnier). Victor Hugo, *Les Orientales*, *Les Feuilles d' Automne*, *Les Chants du Crèpuscule*, (1 vol. Hachette). Chateaubriand, *Le Gènie du Christianisme*, (2 vols. Didot).

German 1.

Mondays, Wednesdays and Fridays, 3—4 P. M.

Buchheim : *German Reader*, Part II. Groller ; *Inkognito*, (American Book Co.). Schiller : *Wilhelm Tell*, (Macmillan & Co.). Additional for Distinction : Helene Stökl : *Unter dem Christbaum*. (D C. Heath & Co). Exercises in Grammar and Composition. Elementary German Prose Composition, by E S. Buchheim, (Clarendon Press.)

Text-books : Joynes-Meissner's German Grammar, (D. C. Heath & Co.). Other text-books required will be announced at the opening of the Session.

German 2.

Mondays, Wednesdays and Fridays, 2—3 P. M.

For 1905-06. Goethe ; *Hermann und Dorothea*, (Clarendon Press). Lessing ; *Minna von Barnhelm*, (Macmillan & Co) Sight-reading from Helene Stökl ; *Unter dem Christbaum*, (D C. Heath & Co), or Groller, *Inkognito*. Translations from English writers. Original compositions. Translations of unspecified passages from modern authors.

For 1906-07. Goethe ; *Egmont*. Schiller ; *Maria Stuart*, (Macmillan & Co). Sight-reading from Helene Stökl ; *Unter dem Christ-*

baum, (D. C. Heath & Co.), or Groller, *Inkognito*. Trans'ation from English writers. Original compositions.—Translations of unspecified passages from modern authors. Bernhardt's *Course in German Composition* (Ginn & Co.).

Schiller ; *Die Jungfrau von Orleans*, Prolog and Act I, and either Heine ; *Die Harzreise* (Macmillan & Co.), or *Freudvoll und Leidvol l* (Ed. Dr. W. Bernhardt), (American Book Co), are prescribed for private reading to candidates for Distinction.

Text-books: As in German 1. Critical outline of the Literature of Germany by Alb. Selss, Ph. D. (Longmans, Green & Co.).

German 3.

Mondays, Wednesdays and Fridays, 9—10 A. M,

1905-06. Lessing ; *Minna von Barnhelm* (Macmillan & Co.). Gustav Freytag ; *Die Journalisten* (Macmillan & Co.) Goethe ; *Iphigenie auf Tauris*. Prose Composition. Translation of unspecified passages from modern authors. Sight-reading from Prehn. *Journalistic German* (American Book Co.)

1906-07. Lessing ; *Nathan der Weise* (Macmillan & Co.). Goethe ; *Götz von Berlichingen* (Macmillan & Co.) Prose composition. Translation of unspecified passages from modern authors. Sight-reading from Prehn's *Journalistic German* (American Book Co.).

Schiller ; *Wallensteins Tod*, Act I, 5th Scene ; Act II, 2nd and 3rd Scenes ; Act III, 18th Scene ; (George Bell & Sons) and either Goethe ; *Faust : Prolog im Himmel*, and first three scenes of Part I, (by Jane Lee (Macmillan & Co.), or Heine ; *Harzreise* (Macmillan & Co.) are prescribed for private reading to candidates for Distinction.

Text-books : As in German 2. Bernhardt's *Hauptfakta aus der Geschichte der deutschen Litteratur* (American Book Co.).

German 4.

Twice a week.

Schiller ; *Lyrische Gedichte*. Goethe ; *Faust*, Part I, by Jane Lee : (Macmillan & Co.). Prose composition. Translation of unspecified passages from modern authors. Selss's German Literature.

Private reading for Distinction : Schiller ; *Wallensteins Lager*, and Lessing ; *Sara Sampson*, or Schiller ; *Geisterseher*.

German 5.

Twice a week.

The subjects studied in this class will be those prescribed for the special course of English and German. The course will extend over two years.

1905 06. Middle High German : Grammar (Paul's Grammar). Selections from Wackernagel ; *Kleineres Altdeutsches Lesebuch*. Selections from Swiss and Plattdeutsch dialect literature. Selections from authors of 16th and 17th centuries. Prose composition.

1906-07. Middle High German: Grammar (Wright's Middle High German Primer). Selections from Wackernagel; *Kleineres Altdeutsches Lesebuch.* Selections from authors of the 18th century. Prose composition.

Other text-books will be announced at the opening of the Session.

V.—ENGLISH LANGUAGE AND LITERATURE.

(George Munro 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 widen his knowledge of Elizabethan literature.

English 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."* Johnson. *Life of Pope.* (Macaulay; *Samuel Johnson*). Poetry. Dryden; *MacFlecknoe, St. Cecilia's Day. Alexander's Feast.* Pope; *Rape of the Lock* Gray; *Elegy in a Country Churchyard,* Goldsmith; *Traveller, Deserted Village.* Burns; *Two 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; *Absalmon and Achitophel.* Pope; *Essay on Man.* Johnson; *Lives 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*

Humorists, Congress and Addison, The History of Henry Esmond (bk. ii, cap. xi, at least). Macaulay, *The Comic Dramatists of the Restoration, Addison.*

English 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 read in class.

LITERATURE.—Elizabethan. Shakspere ; *Henry V, Twelfth Night, Coriolanus.* Milton ; *Comus, L'Allegro, Il Penseroso, Lycidas, Sonnets, Paradise Lost, Bks 1, 11.* Lectures.

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

For reference. Sydney Lee ; *A Life of William Shakspeare* ; Dowden ; *Shakspere Primer.* Saintsbury ; *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 IV. Pt. I, A Midsummer Night's Dream, King Lear.*

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

English 3. (C).

(*Not given in 1905-06.*)

Tuesdays and Thursday, 10—11 A. M.

LITERATURE. Middle English and Pre-Shakesperean. Chaucer ; *Prologue, Knight's Tale, Nun's Priest's Tale.* Sweet's *Middle English Primer II.* Spenser, *Fœrie Queene*, bks. I, II. Marlowe ; *Dr. Faustus.* Lectures.

History of Literature. Pollard ; *Chaucer Primer.* For reference. Lounsbury ; Ten Brink. Morley ; *English Writers, V.*

For Distinction. Chaucer ; *The Prioress's Tale, Sir Topas, The Monk's Tale, The Squire's Tale.*

English 4. (D).

Tuesdays and Thursdays, 4—5 P. M.

LITERATURE. Nineteenth Century. Lectures ; the historical and social back-ground, the influence of the French Revolution, the predecessors of Wordsworth, Cowper, Crabbe, Blake, Burns, Chatterton. Scott ; *The Heart of Mid Lothian, Marmion.* Byron ; *Poems* edited by Matthew Arnold. Wordsworth ; *Poems*, edited by Dowden. Coleridge ; *The Rime of the Ancient Mariner, Christabel, Kubla Khan.*

Shelley; *Alastor, The Sensitive Plant, Adonais, The Cloud, The Skylark, Ode to Liberty.* Keats; *Sleep and Poetry, Odes, Sonnets, Hyperion, Eve of St. Agnes, La Belle Dame Sans Merci.*

Composition. Eight 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 ass gned 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 "Tristram Shandy" 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.

English 5 (E.)

(*Not given in 1905-06.*)

Tuesdays and Thursdays, 4—5 P. M.

LITERATURE.—Nineteenth Century. Tennyson, *The Lady of Shalott, Œnone, Lotus Eaters, Dream of Fair Women, Morte Darthur, Dora, Sir Galahad, Lord of Burleigh, Ulysses, The Revenge, Rizpah.* Browning, *Andrea del Sarto, Epistle of Karshish, Memorabilia, Evelyn Hope, A Toccata of Galuppis, The Statue and the Bust, In a Balcony, The Last Ride Together.* Arnold, *Democracy, Sohrab and Rustum, The Sick King in Bokhara, The Strayed Reveller. Rugby Chapel, Heine's Grave, Stanzas from the Grande Chartreuse.* Dickens, *David Copperfield.* Thackeray, *Vanity Fair.* Ruskin, *Sesame and Lilies.* Carlyle, *Sartor Resartus: ed* MacMechan, (*Athenæum Press* Series.)

COMPOSITION: eight themes on subjects of the course.

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

For Distinction, as in English 4 (D).

English 6 (F.) (Advanced.)

Mondays and Fridays, 9— A. M.

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

English 7 (G.) (Advanced).

(*Not given in 1905-06.*)

ELIZABETHAN DRAMA.—Marlowe; *Tamburlaine, Edward II., The Jew of Malta.* Greene; *Friar Bacon and Friar Bungay.* Johnson; *The Alchemist, Every Man in His Humour.* Beaumont and Fletcher

Philaster, The Knight of the Burning Pestle. Massinger ; *A New Way to Pay Old Debts.* Webster ; *The Duchess of Malfi.* Shakspere ; the Tragedies, *Two Noble Kinsmen.*

This course is conducted as a Seminary.

Books recommended: History of Literature: Ten Brink, Saintsbury, Brooke. Texts: Clarendon Press, The *Belles Lettres* series, "Mermaid," "Temple Dramatists," Thayer; "Best Elizabethan Plays."

English 10.

Three times a week.

This class is intended for Engineering Students. It includes the work of English 1 ; and in addition the writing of twenty themes, descriptive and narrative, the writing of letters, reports, etc

Elocution.

Lecturer.....REV. JAMES CARRUTHERS.

This course begins early in January and continues for about three months. 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. The students are required to pass in Elocution, and credit will be given for it in the determination of their standing in English. The fee for the course is three dollars.

The subjects treated are :

1. Vocal Training—Elements, Breathing, Natural use of Voice, Faults of the Voice, Principles of training, Vocal instruments and their use, Voice Production.

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

3. Vocal Expression—Elements, Principles of Inflection, Modulation, Emphasis, Verbal Grouping, Pausing, Expressive Reading.

VI.—BIBLICAL LITERATURE.

Lecturer.....PRINCIPAL R. A. FALCONER, D. LITT.

Wednesdays and Fridays, 4—5 P. M.

There are three courses in the Old Testament, and two in the New Testament, one course in each being given every session. The work of any one session will be accepted as an elective in the Third or Fourth Year.

During session 1905-06, the *third* course on the Old Testament, and the *first* course on the New Testament will form the subject of study.

OLD TESTAMENT.

First Course. The Historical books of the Old Testament as a basis for the history of Israel from its origins 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 Modern Reader's Bible ;* Kent's *History of the Hebrew People ;* Weymouth's *The New Testament in Modern Speech.* Stevens & Burton's *Harmony of the Gospels ;* Burton & Mathews' *Constructive Studies in the Life of Christ.*

FOR DISTINCTION ; Books prescribed during the session.

FOR READING : McCurdy's *History, Prophecy and the Monuments* ; Robertson Smith's *The Prophets of Israel ;* Moulton's *The Literary Study of the Bible ;* Sanday's *Bampton Lectures ; The Messages of the Bible,* edited by Sanders & Kent ; relevant articles in Hastings' *Dictionary of the Bible.*

VII.—HISTORY AND POLITICAL ECONOMY.

(George Munro Professorship)

Professor.....PRESIDENT FORREST.

History 1.

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

Mediæval 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 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. Gibbon ; *Decline and fall of the Roman Empire* Hallam ; *Middle Ages.* Bryce ; *Holy Roman Empire.* Irving ; *Mahomet and his Successors.* Guizot ; *History of Civilization.* Michaud ; *History of the Crusades.* Robertson ; *Charles V.* Stubbs ; *Constitutional History of England.* Labberton ; *Historical Atlas.*

History 2.

Tuesdays and Thursdays, 11. A. M.—12 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 select 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 on Green and Guizot, and a few chapters to be specified in other works.

Books recommended. Green; *England, Vol. IV.* Guizot; *France (Masson's Abridgment).* Menzel; *Germany* Morley; *Dutch Republic.* Bancroft; *United States.* McMaster; *History of the People of the United States.* Parkman; *France and England in North America. Labberton; Historical Atlas.*

History 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 Special course in English and English History.

Political Economy 1.

Tuesdays and Thursday 10—11 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 arrangements 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, Populatiou, and their relations to each other. 3.—DISTRIBUTION OF WEALTH: Wages, Profits, Rent, Socialism, Labor Unions, Land Tenure. 4.—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 the 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.*

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 leading writers on the subject.

VIII—CONSTITUTIONAL HISTORY AND LAW.

The Classes in Constitutioual 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.*

IX.—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.

X.—PHILOSOPHY.

(George Munro Professorship.)

Professor .....WALTER C. MURRAY, M. A., LL. D

Philosophy 1.

Tuesdays and Thursdays, 12—1 P. M., Wednesdays, 4—5 P. 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.

The work in the course on Logic will be selected so as to afford the best possible mental training. In the Psychological course, experiments will be introduced as much as possible to supply a basis for the theory and for the purpose of illustration. Especial attention will also be given to the connection between Psychology and Educational methods.

Text-books. Creighton, *Introductory Logic*; Titchener, *Primer of Psychology.*

Books recommended: Mill, *Logic*; Titchener, *Outlines of Psychology*; James, *Psychology*; Stout; *Manual of Psychology.*

Philosophy 2.

Tuesdays and Thursdays, 10—11 A. M.

For 1905-6. This course of lectures will attempt a more thorough treatment of Psychology than was possible in Philosophy 1. Stout's *Manual* and Calkin's *Introduction to Psychology* will be made the basis of the discussions.

Books recommended: Ward, *Psychology* (Encyc. Brit); Stout, *Analytic Psychology*; Wundt, *Outlines*; Hoffding *Outlines*; James, *Principles*; Baldwin, *Hand-book*; Royce, *Outline*; Kulpe, *Outline*, Titchener, *Outlines*, Spencer's *Principles*; Bain's *Emotions and Will*; Villa, *Contemporary Psychology*; Adamson, *Lectures.*

Philosophy 3.

Mondays and Wednesdays, 10—11 A. M.

For 1906-7. After a preliminary sketch of the principal problems of Metaphysics, the development of Modern Philosophy from Locke will be studied in 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: Seth (A), *Scottish Philosophy*; Locke, *Essay*; Berkeley, *Selections* by Fraser; Hume, *Treatise* and *Enquiry*; Reid, *Works* (ed. by Hamilton), *and Inquiry* (Sneath's Edition;) Kant, *Prolegomena*, translated by Mahaffy & Bernard; Wenley, *Outlines of Kant's Critique*; Mill, *Selections* (Watson); Douglas, *John Stuart Mill*; Blackwood's Philosophical Classics; Hoffding's or Falckenberg's or Weber's *History of Philosophy*; Open Court Editions of *Berkeley*, *Hume* and *Kant.*

Philosophy 4.

Mondays and Wednesdays, 3—4 P. M.

For 1906-7. 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, Phædo, Republic,* and *Theætetus* ; and Aristotle's *Ethics (Muirhead's Edition).*

Books recommended : Ferrier. *Lectures on Early Greek Philosophy ;* Church's *Translation of Apology, Crito and Phædo* (Golden Treasury Series) : Davis and Vaughan's *Translation of Republic,* (G. T. S.) Dyde's *Translation of Thætetus ;* Aristotle's *Ethics* (The Scott Library or Peter's Translation) ; Zeller, *Greek Philosophy* ; Burnet, *Early Greek Philosophy ;* Bosanquet, *Companion to Plato's Republic ;* Nettleship. *Philosophical Lectures and Remains ;* Essay in *Hellenica ;* Muirhead, *Chapters from Aristotle's Ethics ;* Jowett's *Translation of Plato's Dialogues ;* Pater, *Plato and Platonism.* Wallace, *Epicureanism ;* Hegel, *History of Philosophy ;* Caird, *Evolution of Greek Theology.*

Philosophy 5.

Mondays and Wednesdays, 10—11 A. M.

For 1905-06. 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 : Tyndall, *Fragments,* Vol. I : Huxley, *Essays ;* Haeckel, *Monism, Riddle of the Universe ;* James, *Psychology, Vol. I ;* Clifford, *Essays ;* Spencer, *First Principles ;* Darwin, *Origin of Species ;* Helmholtz, *Popular Lectures Ser. I ;* Martineau, *Essay Vol. IV :* Watson, *Outline of Philosophy ;* Paulsen, *Introduction to Philosophy ;* Balfour, *Foundations of Belief ;* Ward, *Naturalism and Agnosticism ;* Mackenzie, *Metaphysics.*

Philosophy 6.

Lecturer... . .....PROFESSOR R. MAGILL, PH. D.

Tuesdays and Wednesdays, 3—4 P. M.

For 1905-06. This course of lectures attempts a systematic presentation of the Principles of Moral Philosophy. Sidgwick's *Methods of Ethics* may be used as a text-book.

Books recommended : Seth, *Ethical Principles ;* Muirhead, *Elements of Ethics ;* Green, *Prolegomena to Ethics ;* Dewey, *Outline of Ethics, Study of Ethics ;* Mackenzie, *Manual of Ethics ;* Mill, *Utilitarianism ;* Spencer, *Data of Ethics ;* Paulsen, *Ethics ;* Watson, *Hedonistic Theories ;* Wundt, *Ethics.*

Philosophy 7.

Two hours a week.

For 1905-06. The subject of this course is Kant's Philosophy. The *Prolegomena, Critiques of Pure Reason, of Practical Reason,* and *of Judgment,* will be studied.

Translations recommended : Watson's *Selections ;* Mahaffy and Bernard, *Prolegomena ;* Max Muller, *Critique of Pure Reason ;* Abbott, *Theory of Ethics ;* Bernard, *Critique of Judgment ;* Kant, *Prolegomena* (Open Court Edition).

Commentaries and Expositions Recommended : Stirling, *Text-Book to Kant ;* Wallace, *Kant ;* Fischer, *Kan ;* Caird, *Critical Philosophy ;*

Watson, *Kant and his English Critics;* and *Comte Mill and Spencer* or *An Outline of Philosophy.* Adamson, *Philosophy of Kant;* Mahaffy and Bernard, *Kritik of Pure Reason Defended and Explained;* Green, *Philosophical Works, Vol. II;* Paulsen, *Kant.*

XI—EDUCATION.

Lecturer..... .. PROFESSOR WALTER MURRAY.

Education 1.

Two hours a week.

The work of this class consists of two concurrent courses of lectures. In one course, an attempt will be made to trace the mental development of the child to the close of the period of youth. This course will also include lectures on the application of psychology to educational problems. The other course of lectures will trace the development of educational theory since the Renaissance, more particularly in England, and will include a critical study of Ascham's *Scholemaster*, Milton's *Tractate*, Locke's *Thoughts*, Spencer's *Education* and Thrings' *Theory and Practice of Teaching* [The course on Greek Philosophy gives considerable attention to Plato's Theory of Education]

Books recommended: James: *Talks to Teachers (Eng. Edit);* Hall, *Adolescence;* Chamberlain: *The Child;* Perez, Preyer's, Shinn's, Moore's, Sully's, Drummond's, Murray's, and Forbush's books on Child Psychology; Quick: *Educational Reformers;* Browning: *Educational Theories;* Fitch: *Lectures on Teaching.*

Education 2.

This class consists of a course in Practice of Teaching under the Supervision of Mr. Alexander McKay; School Management and School Law by Principal Kennedy; History by Principal Miller.

(A.) PRACTICE OF TEACHING.

Lecturer..... ....SUPERVISOR A. MCKAY.

At least 75 hours must be spent in observation, discussion, and actual practice in good schools under supervision.

(B.) SCHOOL MANAGEMENT AND SCHOOL LAW.

Lecturer..... .PRINCIPAL W. T. KENNEDY.

Six or eight lectures are given on School Management and the School Law of Nova Scotia.

(C.) HISTORY OF EDUCATION.

Lecturer ....PRINCIPAL G. J. MILLER.

This course traces Educational theory and practice from earliest times in non-European countries and in Europe during the Middle Ages.

Books: Williams, *Modern Education;* Quick, *Educational Reformers;* Painter, *History of Education;* McMurry, *General Method;* Baldwin, *School Management;* N. S. School Law.

XII.—MATHEMATICS.

Professor.....DANIEL A. MURRAY, PH. D.

Mathematics 1 is prescribed for regular first year students in Arts and Science *Mathematics 2* is elective for students who have taken Mathematics 1. Each of the *Advanced Classes* is elective for any student who has passed in Mathematics 2.

Mathematics 1.

Mondays, Wednesdays and Fridays, 10—11 A. M., Tuesdays and Thursdays, 11 A. M.—12 M.

The work of this class includes :

ALGEBRA :—Indices, Theory of Quadratic Equations, Irrational quantities, Quantities involving $\sqrt{-1}$. Proportion, Variation, Progressions, Permutations, and Combinations, Binomial Theorem, revised. Properties of Logarithms Interest and Annuities. Horner's method of approximating to the roots of an equation. Elementary discussions on Functions, Limits, and Series Selected propositions in the Theory of Equations. Graphical representation of Functions, and plotting of Loci of equations. Elements of Determinants, with applications to elimination and the solution of simultaneous equations.

Indeterminate coefficients. Partial Fractions. Simple exercises in Probability, if there be time for these topics.

GEOMETRY :—Euclid, Book VI revised, and Book XI Theorems and problems, with drawing exercises, on Harmonic Ranges and Pencils, Poles and Polars, and Transversals. Geometry of the Sphere. Elementary propositions in the geometrical treatment of the Parabola and the Ellipse.

TRIGONOMETRY :—The solution of plane triangles. Measurement of heights and distances. Elementary angular analysis.

Books recommended : Hall & Knight, *Higher Algebra* (Macmillan & Co.), Hall and Steven, edition of *Euclid* (Macmillan & Co.). Holgate, *Geometry* (Macmillan and Co.). Cockshott and Walter, *Geometrical Treatment of Conics* (Macmillan and Co.), Murray, *Plane Trigonometry and Tables* (Longmans, Green & Co).

Mathematics 2.

Mondays, Wednesdays and Fridays, 11 A. M.—12 M., Tuesdays and Thursdays, 10—11 A. M.

An elementary course in ANALYTIC GEOMETRY and DIFFERENTIAL AND INTEGRAL CALCULUS.

This course is intended for those who wish to become familiar with the fundamental principles of analytic geometry and the infinitesimal calculus, and to acquire the ability to apply these principles easily and accurately in the solution of simple practical problems. The course provides mathematical preparation sufficient for beginning the study of engineering, physics and other mathematical sciences. It is recommended as the minimum mathematical equipment for those intending to teach mathematics in the high schools.

SPHERICAL TRIGONOMETRY is prescribed for private reading for those who are trying for Distinction in Mathematics 2.

Books recommended : Tanner and Allen, *Analytic Geometry* (American Book Co.). Murray, *Infinitesimal Calculus* (Longmans, Green & Co.), Murray, *Spherical Trigonometry*, (Longmans Green & Co.)

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.

N. B.—Two of these courses will be given during each year. The same course will not be given in two consecutive years.

(3.) ADVANCED CALCULUS.—Topics in the treatises of Todhunter, Williamson, Harnack, Lamb, and Gibs n.

(4.) PLANE AND SOLID ANALYTIC GEOMETRY.—Based on the treatises of Salmon and C. Smith.

(5) DIFFERENTIAL EQUATIONS.—Murray's *Differential Equations*, with supplementary lectures. (Two hours weekly thoughout the year) This course will be given in 1905-06.

(6) ALGEBRA.—Topics in Determinants, Theory of Equations, Quantics, Invariants, with lectures on Series and Functions of a real variable (Two hours weekly throughout the year.) This course will be given in 1905-06.

(7.) PROJECTIVE GEOMETRY.—(Two hours weekly throughout the year.)

XIII.—PHYSICS.

(George Munro Professorship.)

Professor.....

Physics 1.

Mondays, 4—5 P. M., Tuesdays and Thursdays, 11 A. M.—12 M.

The work of this Class is treated in two Courses of Lectures. In the first a rapid survey of the whole subject of Experimental Physics is taken, the subjects treated being : Dynamics, Properties of Solids and Fluids, Sound, Heat, Electricity and Magnetism, Light, and other forms of Radiation. In the second the subject of Dynamics is discussed more fully. Both courses are fully illustrated by experiments, and in the second special attention is paid to the solution of problems, all students being required to hand in papers for correction and criticism.

Engineering Students will be required to pass a Separate Examination in Dynamics.

Members of the Class who aim at passing merely, will be examined in those subjects only which are fully discussed in class. Those who aim at Distinction will be expected to give considerable attention to Dynamics, and to consult the works recommended by the Professor on all subjects that may be referred to in class.

Books recommended: Minchin, *Students' Dynamics;* Garnett, *Elementary Dynamics;* Magnus, *Hydrostatics;* Cumming, *Mechanics Treated Experimentally;* Jones *Heat, Light and Sound;* Cumming *Electricity Treated Experimentally;* Daniell, *Principles of Physics;* Deschanell, *Natural Philosophy;* Watson, *Physics;* Anthony and Bracket, *Physics;* Nichols, *Physics;* Glazebrook, *Heat and Light;* Glazebrook, *Electricity.*

Physics 2.

Mondays and Wednesdays, 10—11 A. M.

In the work of this class it is assumed that the students have already studied Differential and Integral Calculus in Mathematics 2, and have also taken Physics 1 and 6.

The subjects studied will be Heat, Electricity, and Magnetism. The Kinetic Theory of Gases will form a Special Course for Students aiming at Distinction.

Engineering Students will be required to study particularly the Theory of the Steam Engine and Dynamo Electric Machinery.

Physics 3.

This course is only given in alternate years.

Students who intend taking this class must have studied Calculus in Mathematics 2, and have also taken Physics 1 and 6.

The subjects treated in 1906-07 will be Light and Sound. The Wave theory of Light will form a Special Course for Students aiming at Distinction.

Physics 4.

Mondays and Wednesdays, 11 A. M.—12 M.

In this class a short course in Mathematical Physics will be given. It is intended for Candidates for Honours in Pure and Applied Mathematics and in Mathematics and Physics.

It is assumed that students in this class have a knowledge of Analytical Geometry and Differential and Integral Calculus.

Books recommended: MacGregor, *Kinematics and Dynamics;* Williamson and Tarleton *Dynamics;* Todhunter, *Analytical Statics;* Routh, *Rigid Dynamics;* Minchin, *Statics;* Greenhill, *Hydrostatics;* Besant, *Hydromechanics.*

Physics 5.

At least once a week.

The subjects studied are (*a*) physical experimental methods and the elimination of errors, this section of the class work being conducted mainly by private reading, under the Professor's supervision, of original papers by Faraday, Joule, and Kelvin; (*b*) the treatment of observations, including graphical methods and the method of least squares,

and the influence of errors of observation on results ; (c) the relation of theory to experimental research illustrated by sketches of one or more of the following :—the kinetic theory of gases, the theory of solutions and of electrolysis, the wave theory of light.

Books of reference : Faraday's Experimental Researches in Electricity, Vol. I. (Quaritch) ; Joule's Scientific Papers, Vol. I. (Taylor & Francis) ; Lord Kelvin's Mathematical and Physical Papers, Vol. II. (Camb. Univ. Press) ; Merriman's Text-Book of Least Squares (John Wiley & Sons) ; Johnson's Theory of Errors and Method of Least Squares (J Wiley & Sons) ; Holman's Precision of Measurements (J. Wiley & Sons) ; Meyer's Kinetic Theory of Gases, tr. Baynes (Longmans & Co.) ; Whetham's Solution and Electrolysis (Camb. Univ. Press) ; Lehfeldt's Text-book of Physical Chemistry (Arnold) Preston's Theory of Light.

Physics 6.

Laboratory work at least five hours a week.

The work of the class will consist of the experimental investigation of simple physical laws, constants such as density, specific heat, etc., being determined incidentally. Students are required to prepare reports on the investigations made, describing in outline the methods used, and discussing in detail the results obtained and their degree of precision.

Physics 7.

Five hours a week.

This class is intended for Engineering Students who have already completed the work of Physics 3. The work consists fo an extensive series of measurements in Magnetism and Electricity. The Laboratory has been recently supplied with special direct and alternating current circuits and a dark-room has been arranged for photometric work. As in Physics 3, students will be required to hand in written reports of their experiments.

Outline of the Course.—Magnetic fields Elements of Earth's Magnetism. Magnetic qualities of iron. Use and Calibrat on of Galvanometers Voltameters. Measurements of Resistance, Electromotive force, Capacity, Self-Induction, Power. Management of Storage Batteries. Photometry.

Books of reference : Those specified in Physics 3, together with Stewart & Gee's *Elementary Practical Physics*, and Ayrton's *Practical Electricity*.

Physics 8.

Laboratory work at least five hours a week.

The work of this class will consist 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 prescribed time.

Members of the class are required to prepare reports on the investigations conducted, to attend the lectures of the Advanced Experimental Physics Class on physical measurement generally, as described, *e. g.*, in Glazebrook & Shaw's Practical Physics, and to study discussions of the methods they may use in the works recommended by the Professor.

Books of reference: Those specified above, together with Stewart & Gee's Elementary Practical Physics (Macmillan); Ayrton's Practical Electricity (Cassell); Nichols' Laboratory Manual of Physics and Applied Electricity (Macmillan); Ostwald's Physico-chemical Measurements (Macmillan); Wiedemann's, Physikalisches Prakticum; and Threlfall's Laboratory Arts (Macmillan).

Physics 9.

Laboratory at least ten hours a week.

The work will consist of new investigations conducted by students who show sufficient ability.

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.

Reports which are of sufficient value will be communicated to the N. S. Institute of Science. If, though the subject may have been suggested by the Professor, the investigation has been concluded practically independently by the student, the report will be communicated in his name. If the student has been assisted by the Professor to such an extent that the investigation has not been conducted practically independently by himself, the report will be communicated as by the Professor and the student jointly.

Only a very limited number of students can be admitted to this class

XIV.—CHEMISTRY.

(*McLeod Professorship.*)

Professor..... .....E. MACKAY, PH. D.

Chemistry 1.

Mondays, Wednesdays and Fridays, 9—10 A. M.

The lectures in this class deal in an elementary way with the principles of general chemistry. At first the preparation and the characteristic properties of common acids and bases are studied, and then the chemistry of fire, of water and of air, the order of historical development being followed as nearly as possible. When some acquaintance with chemical facts has thus been gained, the fundamental laws of combination are taken up and the atomic theory and chemical formulae are introduced. Chlorine, nitrogen, carbon and some of their typical compounds are then studied and thereafter the principal remaining elements, each in connection with the group of elements in the periodic system to which it belongs. The lectures are fully illustrated by experiments.

Students in Arts aiming at Distinction and all students in Science, Engineering and Medicine are required to devote from three to five hours a week 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 substance are prepared and studied; simple quantitative experiments are performed; and some time is devoted to elementary work in qualitative analysis.

Books recommended; Remsen, *Introduction to the Study of Chemistry*, 6th edition (H. Holt & Co.) for both class and laboratory work; Torrey, *Studies in Chemistry* (H. Holt & Co.)

Chemistry 2.

Tuesdays and Thursdays, 9—10 A. M.

The lectures in this class during the Autumn term are devoted to a fuller treatement of chemical theory and the chemistry of the metals than is given in Chemistry 1. During the Spring term the subject is organic chemistry.

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

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

Books recommended; Roscoe and Harden, *Inorganic Chemistry for Advanced Students* (Macmillan & Co.); Noyes, *Qualitative Chemical Analysis.* (The Macmillan & Co.). Remsen, *Compounds of Carbon*, 4th edition, (D. C. Heath & Co.).

Chemistry 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.

CLASS WORK.—The subjects of study in this class include pure chemistry and the applications of chemistry to medicine.

The subjects of study in pure chemistry are: 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.

The subjects of study in medical chemistry are: 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. In the course in qualitative analysis practice is given in the identification of the chief inorganic compounds of the following elements: arsenic, antimony, tin, bismuth, copper, mercury, lead, silver, iron, chromium, aluminium, manganese, zinc, magnesium, barium, calcium, potassium, sodium, chlorine, bromine, iodine, sulphur, nitrogen, phosphorus, carbon, boron; and in the identification of the following organic compounds: acetic, tartaric, oxalic, hydrocyanic, salicylic and citric acids and their salts, alcohol, chloroform, chloral, glucose, cane sugar, starch, phenol, quinine, morphine, strychnine.

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

Books recommended: For class use:—Roscoe and Harden, *Inorganic Chemistry for Advanced Students* (Macmillan & Co.); Remsen, *Compounds of Carbon, 4th edition* (D. C. Heath & Co.); Platt, *Qualitative Analysis and Medical Chemistry* (J. J. M'Vey); Halliburton, *Essentials of Chemical Physiology* (Longmans.) For reference:—Remsen, *Inorganic Chemistry, Advanced Course* (H Holt & Co.); Hammarsten, *Text-book of Physiological Chemistry*, translated by Mandel (Wiley & Sons).

Chemistry 4.—Engineering Chemistry.

Autumn term : Tuesdays and Thursdays, 9—10 A M.
Spring term : Mondays, 12 M —1 P. M.
Laboratory : Mondays and Wednesdays, 3—6 P. M.

During the Autumn term the lectures in this class are the same as in Chemistry 2. For the Spring term the subjects of study are : the chemical properties of iron and steel, cements asphalt, lubricating oils ; and the examination of water for city supply or for industrial purposes. Students of mining study also the properties of coal-mine gases and of blasting explosives.

Five hours a week are devoted to laboratory work. This includes a thorough course in qualitative analysis. Students of Civil Engineering also carry out a few quantitative exercises illustrating subjects treated of in the lectures during the Spring term. Students of Mining are given additional work in the analysis of minerals.

For admission to this class Chemistry 1 with laboratory work, or an equivalent class is required.

Books recommended : Roscoe and Harden, *Inorganic Chemistry for Advanced Students* (Macmillan & Co.) ; A. A. Noyes, *Qualitative Analysis* (The Macmillan Co.) For reference : Remsen, *Inorganic Chemistry* Advanced Course (H. Holt & Co.) ; Newth, *Inorganic Chemistry* (Longmans & Co.) ; Stillman, *Engineering Chemistry* (Chemical Publishing Co.) ; Clowes, *Detection of Inflammable Gases and Vapours*, (Crosby, Lockwood & Co.).

Chemistry 5.—Advanced Chemistry.

One hour a week.

The subjects of study in this class are (*a*) History of chemical theory ; (*b*) Special topics in inorganic and organic chemistry in connection with the reading prescribed for the Special Course in Chemistry and Chemical Physics.

Chemistry 6.—Practical Inorganic Chemistry.

At least ten hours a week.

The work of this class consists of quantitive 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 preparations 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, silcon, silver, copper, iron, manganese, calcium and magnesium, volumetric as well as gravimetric methods being emp'oyed wherever applicable.

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

Books recommended : Renouf, *Inorganic Preparations* (John Hopkins Press) ; Talbot, *Quantitative Analysis*, (The Macmillan Co.) ; Clowes and Coleman, *Quantitative Analysis*, (J. & A. Churchill) ; Blair, *Chemical Analysis of Iron*, (J. B. Lippincott & Co.) ; Mason, *Examination of Water* (Wiley & Sons)

Chemistry 7.—Practical Organic Chemistry.

At least ten hours a week.

The work of this 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

Students are permitted to substitute for the analytical work an equivalent amount of work in other branches of analysis, or in physiological chemistry

Candidates for Distinction are required either to do additional work of the kind outlined above or to carry out a short original investigation.

Books recommended: Remsen, *Compounds of Carbon*, 4th edition (D. C. Heath & Co.); Cohen, *Practical Organic Chemistry for Advanced Students* (Macmillan & Co.); Clowes and Coleman, *Quantitative Analysis* (J. & A. Churchill).

Chemistry 8.

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 synthetical chemistry in continuation of the work of either Chemistry 6 or 7.

CHEMICAL LABORATORY.

The general laboratory accommodates about eighty students, the quantitative laboratory about sixteen. A reference library is placed in the laboratory for students doing advanced work.

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 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.

The general laboratory is open to students in Arts, Science and Engineering on Mondays and Wednesdays from 3 to 6 P. M., and to students in Medicine from 10 to 11 A. M., on Mondays, Tuesdays, Wednesdays and Thursdays and from 10 A M., to 12 M., on Fridays. The quantitative laboratory is open daily, except Saturdays, from 9 A. M to 6 P. M.

XV.—GEOLOGY.

Assistant Professor.....J. EDMUND WOODMAN, A. M., S. D.

Geology 1—General Geology.

Lectures, field and laboratory work, with reading. Tu. and Th., 12 M.—1 P. M.; laboratory, Mon and Wed., 9—11 A. M.; field on Saturdays (mornings or whole days) throughout the autumn. During the field season, laboratory only one day a week.

The course attempts a general survey of the science. Chemistry 1 or its equivalent must have been passed, and Physics 1 is recommended. No text-books are required; but a course of reading is followed, embracing citations from general works and original papers, and practice is given in abstracting literature. The excursions, about nine in number, deal with existing phenomena, and with the structural features of the region. No member of the class will be allowed to pass who has not satisfactorily completed the field and laboratory work. Students aiming at Distinction will be assigned special tasks

The course may be counted for the degree of B. A. without field work; but no student electing this alternative shall be admitted to any other courses in this department except 2 and 5, until such field work shall have been taken with a subsequent class.

Geology 2—Physiography.

Lectures, laboratory work and reading. Tu and Th., 4—5 P. M.; laboratory, Tu. and Th., 2—4 P. M.; first half-year.

Course 2 aims to give a general knowledge of the changes which the surface of the earth undergoes, from the standpoint of Physical Geography, and to help especially those who look forward to teaching science. The essential feature of this aim is the replacement of the usual empirical treatment of descriptive geography by a rational physiographic method, the understanding forming the basis for memory work. *The course may be elected without any previous courses in the department.*

The lectures will cover the following general divisions, the second constituting the main part of the work:—(1) general distribution of land and water; (2) geography of the lands; (3) mathematical geography; (4) meteorology; (5) oceanography; (6) geographic controls of plant and animal distribution; (7) geographic factors in human history.

Distinction will be based upon the fulfillment of special tasks, as well as upon merit of class work

See also course 5.

Geology 3—Geology of Canada.

Lectures, field, library and laboratory work. Mon., Wed. and Fri., 4—5 P. M.; field work one day or two half-days per week during the open season; library and laboratory work during the winter.

The field studies are in the nature of advanced geological surveying and problems in dynamical history; and their successful pursuit is essential to the completion of the course. The lectures and reading during the first term cover methods of geological surveying, and fundamental problems in dynamical geology. The second term is occupied with the geology of Canada; and upon this as a framework are laid studies of many of the large general problems of genesis and history. A short period of laboratory work is upon paleontology. During the second term also, the field work of the autumn is plotted upon large scale base maps, and elaborated into a report. In addition, a thesis is prepared, embodying the results of library work upon original literature. Course 1 is required in preparation. Candidates for Distinction will be assigned problems involving additional work or greater difficulty.

Geology 4—Engineering Geology.

Lectures, field work and reading. Fri., 10 –11 A. M.; field work as in course 3.

This course is designed to meet the requirements of Engineers for a knowledge (a) of field work beyond that of the elementary course, and (b) of the economic geology of engineering materials. It is required of candidates for a degree in Civil Engineering ; but it is not open to candidates for the degree of B. A. or B. Sc. Geology 1 is pre-requisite.

The field work is identical with that in course 3. The lectures are upon the following general subjects : methods of surveying ; geology of engineering structures ; weathering and soils ; stones for building and decoration ; cements ; abrasives ; fuels ; lubricants ; water supply ; harbors and coasts.

Geology 5—Advanced Physiography.

Conferences or lectures, and library work. Tu. and Th., 2 –5 P. M.; econd half-year.

Geology 5 is open to any who obtain a satisfactory grade in course 2, and will occupy approximately the same hours. Reading and a thesis may, however, require the expenditure of some additional time. A special problem will be chosen by each member; and these problems and others will be discussed at weekly conferences with the instructor. Opportunity will be found for the publication of any papers upon Canadian physiography, which are of sufficient merit and interest.

Geology 6—Mining Geology.

Lectures, field and library work. Mon , Wed. and Fri., 11 A. M. —12 M.; field and library work by appointment.

Courses 6 and 7 are complimentary, and after 1906-07 will be given in alternate years During the academic year 1905-06 they will be combined, two hours per week being assigned to 6 and one hour to 7.

Course 6 concerns itself with the geological relations and genesis of ore deposits. Much reading of original papers is done, and a thesis must be prepared during the second term, upon a topic studied especially in the field or library. Geology 1 is pre-requisite, and Mineralogy 1 is recommended. Distinction will be based largely upon the reading and thesis.

[Not to be given in 1906-07].

Geology 7—Economic Geology.

Lectures and library work, with field work if possible. Mon., Wed. and Fri., 11 A. M.—12 M.

The course deals with the non-metalliferous deposits and water supply. Special emphasis is laid upon coal. In both 6 and 7, the deposits of Nova Scotia will be treated in detail. The general conduct and requirements are similar to those of course 6.

[Not given as a separate course in 1905-06 ; to be given in 1906-07.]

Geology 8—Summer Field Geology.

Course 8 occupies six weeks at the close of the college year, the time being spent in visiting and studying selected areas throughout the province. About ten days are spent at the beginning, in detailed structural studies in a limited field. It is open to any one who has passed a satisfactory grade in Geology 1, although course 3 is recommended ; and counts as a single course towards the degree of B A or B. Sc. All the time will be spent in field work ; and before Oct. 15th a report upon all the work or such parts as may have been designated, must be handed to the instructor, together with the field note books. The course offers exceptional opportunities to become acquainted with the geology of the province.

Data regarding program, cost, etc., may be obtained from the instructor.

Geology 9—Research Course.

Course 9 is designed to afford opportunity for original research. No lectures are held, their place being taken by conferences, at which members will report upon the progress of their field work and reading, and discuss with the instructor problems connected with or growing out of their studies.

Only students who have attained a high grade in Geology 3, 5 (with 1), 6, 7, or 8 will be admitted. One subject will be chosen by each member, to be followed throughout the year ; and miscellaneous study will not be accepted. The course requires a minimum of ten hours per week.

Opportunity will be afforded to publish the results of any study which adds to existing knowledge, especially in problems presented by the geology of adjacent regions.

XVI.—MINERALOGY.

Assistant Professor.....J. EDMUND WOODMAN, A. M., S. D.

Mineralogy 1.

Lectures and Laboratory work, Tu. and Th., 10—11 A. M.; laboratory, Wed. and Fri., 2—4 P. M.

The course opens with a study of crystallography, by means of models, diagrams and crystal specimens. Optical mineralogy is presented in part by mineral and rock sections under the polarizing microscope ; and is followed by physical mineralogy in some detail. Special collections are used to illustrate the different physical characters.

A short time is spent in introductory blowpipe practice, and the remainder of the course, nearly half, is concerned with determinative mineralogy. Blowpipe tests are used ; but stress is laid also upon the identification of species by field methods. About 130 species are studied in the laboratory, and the lectures cover a larger number, and include a study of the chemical relationships of minerals.

Chemistry 1, including laboratory work, is pre-requisite. Distinction will be given for high grade in special work.

Text-books : Dana, E. S., *Text-book of Mineralogy*, 1902 ; Brush, G. J. and Penfield, S. L., *Determinative Mineralogy and Blowpipe Analysis*.

XVII—BIOLOGY.

Lecturer.....

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 (Schizophyceæ), the Phycophyta (Chlorophyceæ and Phæophyceæ), the Carpophyta (Rhodophyceæ, Ascomyceteæ and Basidiomyceteæ specially), the Bryophta (Mosses and Liverworts), the Pteridophyta (Ferns, Horsetails and Club-mosses), the Anthophyta (specially the Coniferæ, Gramineæ, Orchidaceæ, Liliaceæ, Uticaceæ, Labiatæ, Compositæ, Umbelliferæ, Rosaceæ, Cruciferæ, Leguminosæ, Ranunculaceæ). 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 on Botany as indicated in Grade IX of the Public School Course, and especially the information 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 microscope 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 of some district, to present a collection of the said flora properly classified and mounted, and an oral and practical examination on the same at the beginning of their next session.

Text-Books; Bessey, *Essentials of Botany.*

Manua's for the practical work prescribed for the summer will be recommended by the Lecturer.

For reference special text-books will be recommended in each subdivision 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 Shipley and MacBride's Elementary Text-Book, 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, Flagel-

lata, Choanoflagellata, Dinoflagellata, Paramoecium, Vorticella, Sporozoa ; 3. Three species of marine, and three of Fresh-water Sponges ; 4 One species each of Hydra ; the Campanularidae, Plumularidae, and Sertularidae ; Aurelia, Metridium ; and the skeletons of Zoantharia and Alcyonaria ; 5. A species each of the Platyhelminths and of the Nemathelminths ; 6. Five species of local freshwater and marine Polyzoa 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 16).

(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).

NOTE.—For first or second class honors the candidate must make at least 70 or 55% respectively on the regular paper on the above course ; then pass another examination on supplementary texts to be named after the opening of the course ; or present a paper showing practical, original, or local exploratory work in some zoological subdivision ; or present a collection made and determined, proving the ability of the candidate to deal with practical zoological problems.

XVIII.—ASTRONOMY.

Lecturers..... { PROFESSOR D. A. MURRAY, PH. D.
{ PROFESSOR STEPHEN M DIXON, M. A.

Astronomy 1. Descriptive Astronomy.

(This course will not be given in 1905-06).

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.*

Astronomy 2.

Lectures and observations, two hours a week, one term.

Observations for the determination of Time, Latitude, Longitude, and Azimuth.

Books recommended : Chauvinet, *Astronomy* ; Doolittle, *Practical Astronomy* ; Nautical Almanac.

XIX.—DRAWING AND DESCRIPTIVE GEOMETRY.

Lecturer..... PROFESSOR STEPHEN M. DIXON, M. A.

Drawing.

Lectures, 2 hours a week and drawing 14 hours

All students in Engineering are required to take this course in the First year. This work includes geometrical exercises, construction of scales, lettering and colouring, perspective, elementary projections, mechanical drawing, preparations of tracing and blue printing.

Topographical Drawing.

Drawing two hours a week.

Topographical symbols, colouring, shading. Copying, enlarging and reducing maps.

Descriptive Geometry.

Lectures two hours a week and drawing four hours.

Problems in the straight line and plane ; projections of lines, planes and solids ; intersections and developments ; shades and shadows

Books recommended : Low, *Machine Drawing* ; Low & Bevis, *Machine Drawing and Design* ; Unwin, *Machine Design* ; Angel, *Practical Plane Geometry* ; Millar, *Descriptive Geometry* ; Hill, *Shades, Shadows and Perspective.*

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 forms of certificate may be had from the Dean or the Secretary of the Faculty of Science. Information regarding 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.—CIVIL ENGINEERING AND SURVEYING.

Professor..... STEPHEN M. DIXON, M. A., B. A. I.

Special Lecturers..... C. E. W. DODWELL, B. A., M. I. C. E.
R. MCCOLL, M. C. S. C. E.
F. W. DOANE, C. E.
H. W. JOHNSTONE, M. C. S. C. E.

Surveying.

Lectures, Mondays, 2—3, Fridays, 10—11. Field or office work four hours.

The class in surveying is taken by all students in Engineering in the second year The use and adjustment of the instruments are first taken up, and then land, topographical, and underground surveying are discussed, various problems worked out, and small surveys made throughout the year, the surveys being plotted in the drawing office.

ENGINEERING CAMP.

Besides completing incidental field-work during the year, all students in the Civil Engineering Course are required to attend the Engineering Camp in their First, Second and Third years. Students in the Mining Engineering are required to attend the Camp in their Second Year. The nature of the work varies from year to year,

railway, topographical, and mining surveying being carried out. In each case the survey is made under strict supervision, and the time devoted to the work is at least 10 hours a day for three weeks, while the instrument men are required in addition to plot maps and profiles of each day's progress. The notes of the survey are divided amongst the students of the fourth year, and from each is required a complete record of the work done accompanied by blue prints of the whole survey.

Books recommended: Johnson, *Surveying*; Raymond, *Surveying*.

Geodesy.

Lectures and field work five hours a week, one term.

Instruction is given in the fourth year, on instruments, reduction of observations, triangulation, measurements of base lines, precise levelling.

Railway and Highway Engineering.

Lectures two hours a week and field or office work six hours.

The course in Railway Engineering includes preliminary and location surveys, construction and equipment. In the drawing office are made plans and profiles of the line, designs of various structures, and estimates of cost Track-work, railway appliances, tunnels and stations are treated both in the lecture room and drawing office. Under Highway Engineering are discussed location, construction and maintenance of roads and pavements, and materials used in their construction; and in the field surveys are made for the location of highway bridges.

Reference Books: Searles, *Field Engineering*; Wellington, *Economic Theory of Railway Location*; Tratman, *Track Work*; Byrne, *Highway Construction*.

Masonry Construction.

Lectures one hour a week and drawing five hours throughout the year. Laboratory work two and a half hours a week one term, fourth year.

Buildings materials Location and foundation of Bridge Piers. Piles, Caissons. Arches and arch centres. Concrete and steel arches. Detailed drawings are made of a masonry arch and the cost estimated.

Books recommended: Baker, *Masonry Construction*; Engineering periodicals.

Hydraulic Engineering.

A two years' course. Lectures one hour per week and drawing two hours.

Sanitary Engineering. Water supply. River improvements. Canals. Dams Harbours. Docks. The lectures will be supplemented by work in the drawing office and by visits to various engineering works of interest, of which notes and drawings will be required.

Books recommended: Merriman, *Sanitary Engineering*; Folwell, *Sewerage*; Boulnois, *Municipal and Sanitary Engineer's Hand-Book*; Harcourt, *Rivers and Canals, Harbours and Docks*. Minutes of Proc. of Inst. of C. E. and Engineering Periodicals.

Applied Mechanics.

Mondays, Wednesdays and Fridays, 12 M.—1 P. M.

Determination of the stresses in framed structures. Investigation of Bending Moments and Shearing Forces. Moments of Inertia. Kinematics and Dynamics of Machines.

Books recommended: Church Mechanics of Engineering; Alexander & Thomson, *Elementary Applied Mechanics;* Cotterill, *Applied Mechanics;* Kennedy, *Mechanics of Machinery.*

Designing.

Lectures three hours a week and drawing twelve hours.

Strength and stiffness of materials. Design of beams and columns. Framework structures. Roofs, wooden and metallic. Stresses in bridges. Uniform loads. Wheel loads Bending moment diagrams. Riveted and pin girders, plate girders. Continuous girders. Cantilevers. Metallic arches with and without hinges. Blockwork structures. Retaining walls. Piers. Buttresses. Masonry archs. Hydrostatic and Geostatic arches. Design from the transformed catenary.

In all examples particular attention is paid to graphical methods, a complete course in graphic statics being included. Students are required to make finished drawings and prepare working drawings.

Reference Books: Merriman & Jacoby, *Roofs and Bridges*; Alexander & Thomson, *Applied Mechanics*; Dubois, *Framed Structures*; Fidler, *Bridge Designing*; Johnson, *Bridge Designing.*

XXI.—HYDRAULICS.

Lecturers..... STEPHEN M. DIXON, M. A.
FREDERIC H. SEXTON, S. B.

Tuesdays, 10-11, A. M. Wednesdays 3-4 P. M.

Principles of hydraulics, including hydrostatics. Laws of flow through orifices, over weirs, in open and closed channels Gauging of streams. Dams. Hydraulic motors. Impulse and Reaction Wheels. Theory of Turbines. Water power installaion Elementary principles of dynamo-electric machinery and high voltage transmission. Typical water power p'ants for the generation of electricity.

Books recommended. Merriman, *Hydraulics;* Church, *Mechanics of Engineering;* Frizzel, *Waterpower*; Wood, *Theory of Turbines.*

XXII.—METALLURGY.

Assistant Professor ..... FREDERIC H. SEXTON, S. B.
Lecturer in Assaying.....F. H. MASON, F. C. S.

Metallurgy 1.—Assaying.

Tuesday and Thursdays, 2—6 P. M., during second Term.

This course consists of six lectures by Mr. Mason at the beginning of the second term, and of laboratory work during the remainder of the term Special methods are given for the assay of ores peculiar to Nova Scotia The aim in the wet methods is to make the student familiar, after his training in exact gravimetric and volumetric

analysis, with quick commercial processes such as are universally employed in the laboratories of industrial works. He is also thoroughly instructed in sampling and in the use of the gold pan and vanning shovel.

The following work is required.

DRY METHODS:—Fire assay of lead ores Scorification and crucible assay for gold and silver. Fire assay of base and Dore bullion. Evaporating power of coal

WET METHODS:—Volumetric analysis for lead, copper, arsenic, antimony and zinc in their ores. Rapid method for analysis of sulphur in ores or mattes and in coal or coke. Approximate analysis of coal or coke.

As many of the following as time permits, are carried out:

Crucible assay for copper and tin. Rapid method for blast furnace slags. Volumetric determination of silver in silver bullion, and of manganese, phosphorous, iron in ores and metallurgical products. Rock analysis.

Text Books. R. W. Lodge, *Notes on Assaying*; Furman, *A Manual of Practical Assaying.*

Metallurgy 2—Non-ferrous Metallurgy

This course consists entirely of lectures and readings. The introduction consists of a limited consideration of metallurgical machinery and processes.

The following metals are taken up in order:—Copper, Lead, Arsenic, Antimony, Gold and Silver The metallurgy of copper is entered upon in much detail especially the principles and practice of pyritic smelting The students are referred to the common trade catalogues for modern metallurgical machines and are required to abstract articles of interest in the standard periodicals. More stress is laid upon gold than any other metal because of its local importance. The aim of the course is to thoroughly acquaint the student with the important metallurgical processes that are in actual use to-day, and abandoned methods are considered only when necessary to trace the development of a modern process.

Books for reference:—Schnabel, *Hand-book of Metallurgy*; H. O. Hofman, *Metallurgy of Lead*; E. D. Peters, *Modern Copper Smelting*; T. K. Rose, *Metallurgy of Gold*; H. F. Collins, *Metallurgy of Silver*; *Mineral Industry.*

Metallugy 3—Metallurgy of Iron and Steel.

Tuesdays and Fridays, 9—10 A. M.

This course consists chiefly of lectures and reading. Every other year special attention will be given to this subject in the summer school. The aim in this course is to give the student a very thorough foundation in the chemistry and calorific equation of the different metallurgical processes employed in the iron and steel industry, as well as a detailed knowledge of the practical operation of each process. Considerable time is spent upon the structure of steel, segregation, influence of foreign elements and of heat treatment. The practical as-

pects of welding, tempering, working and casting of steel are fully considered. The student is required to abstract articles of interest in this branch of metallurgy as they appear in the Trans. A. I. M. E., Jour. I. and S. Inst., and the Iron and Steel Magazine.

Books for reference. H. H. Campbell, *The Manufacture and Properties of Iron and Steel*; H. O. Hofman *Notes on Iron and Steel*; F. W. Harbord, *The Metallurgy of Steel*; H. M. Howe, *Metallurgy of Steel*; A. H. Sexton, *An Outline of the Metallurgy of Iron and Steel.*

Metallurgy 4—Metallurgical Laboratory.

Thursdays, 9 A. M.—6 P. M. Fridays, 2—6 P. M.

This course consists entirely of laboratory work of a practical nature. The student duplicates metallurgical and ore dressing operations on a small scale. In the laboratory the student becomes accustomed to handling machinery and to the use of ordinary tools. The student is drilled just as much as possible in the methods of simple scientific research. The laboratory work will always be in the direction of solving some Mining or Metallurgical problem that occurs in this province, and the individual theses of this department will have the same end.

Table concentration, jigging, and hydraulic classification tests are made on lead, copper and gold ores. Some sort of heavy sulphide ore, such as concentrates, chalcopyrite, etc., is roasted in the reverberatory roasting furnace.

A careful detailed stamp mill run is made upon some local gold ore. Comparative crushing tests are made with crushers and Cornish rolls on different ores.

The following metallurgical laboratory tests are required:—Barrel process of chlorination; cyanide process; free milling test upon a gold ore: chloridizing roast. In all these tests the student is taught explicitly the principles of testing for a process. He will be required to assay all the original ores and all products, and to hand in correct, neat reports made out according to approved forms.

Metallurgy 5—Metallography.

This course consists of a few lectures and an extended amount of laboratory work. The course is entirely voluntary, and the lectures by appointment. The nature of the instruction is primarily for research students. The scope of the course is very broad, and could include any branch of this science, but the natural trend of the work will be in the direction of the iron and steel industry.

Metallurgy 6—Elementary Metallurgy of Steel.

This course is intended for students in Engineering in departments other than Mining. The theory and practical operations in the manufacture of steel are not entered upon more fully than is absolutely necessary to give the student a clear knowledge of the production of steel. The major part of the time will be spent upon the structure, homogeneity specifications, and heat treatment of steels and the influence of foreign elements upon steel, and the physical testing of steels.

XXIII.—MINING.

Assistant Professor.....FREDERIC H. SEXTON, S. B.
Lecturers on Coal Mining.....H. S. POOLE, D. Sc. F. R. S. C.; J. G. HUDSON, M. E.
Specia Lecturers.....C. ARCHIBALD, M. E.; E. GILPIN, JR., LL D., F. R. S. C

Mining 1.---General Mining.

Mondays and Wednesdays, 9--10 A. M.

This course consists chiefly of lectures and reading with illustrative practical problems wherever these are possible. The ground covered is very broad and is treated under the general heads of Prospecting, Boring, Breaking Ground, Blasting, Timbering, Tunneling, Sinking, Examples of Working, Hoisting, Haulage, Pumping and Ventilation.

The most that the course can do is to acquaint the student with the theory of general mining, and it in no way prepares him for practical mining, except to give him variety and breadth of information. Current periodicals are reviewed and abstracted and much effort is spent in trying to arouse in the student a keen interest in up-to-date operations in other parts of the world. Special stress is laid upon the methods of Mining employed in Nova Scotia. All students are strongly urged to engage in practical work during the long summer vacation.

Books for study: C. LeNeve Foster, *Ore and Stone Mining;* Ihlseng, *Manual of Mining.*

Mining 2. Ore Dressing and Concentration.

Mondays, 3--4 P. M., Tuesdays, 11—12 A. M.

This course consists chiefly of lectures and reading, in direct conjunction with the students' work in the metallurgical laboratory, and of thesis work in the fourth year. The aim of the course is to acquaint the student in as thorough a manner as possible with concentrating machinery, the laws of crushing, screen sizing, classifying, jigging, amalgamating, etc , and the cost, p'anning and construction of mills. Great stress is laid upon the testing of an ore for a process, i. e. the obtaining of some combination of different dressing operations which shall make the mill treatment of a given ore a financial success. This course is directly connected with Metallurgy 4, where the important types of machinery are available for practice.

Books for Study: R. H. Richards, *Ore Dressing*; Henry Louis, *Hand book of Gold Milling.*

Mining 3. Coal Mining.

Lecturer.....H. S. POOLE, D. Sc., F. R. S. C.

Mondays and Wednesdays, 10—11 A. M., during one term.

The work of the course consists of lectures by Dr. Poole and supplementary reading. Special attention is paid to Nova Scotia practice and to the small details of equipment, which are of such immense importance in coal mining. Dr. Poole's long experience with extremely fiery coal mines makes his lectures and practical examples on ventilation and lighting in gasy mines of great value.

Books for study: Hughes, *A Text-book of Coal Mining*; W. Galloway, *Lectures on Mining.*

Mining 4. Field Work in Mining and Geology.

The session of this class will continue for about six weeks continuously, commencing shortly after the Spring Convocation. In 1905, the class will meet on Thursday, April 27, at Bear River, N. S., and will disband about June 1st.

The class will first make a detailed structural study of a limited area, to gain independence in field work. The remainder of the time will be spent in visiting mining districts in various parts of the Province, and studying the economic conditions and operations. The studies will, at various times, cover gold, iron and some of the minor classes of economic deposits. Methods of mining, milling and metallurgical treatment will be considered, and special attention will be paid to constructive criticism of mining and milling practice, and to the relations between these and the geology of the district. Each student must hand to the Professor of Mining, on or before October 15th, in his fourth year, a detailed written report of the mining studies made in this class, together with his field note-book, and any maps or sketches which he may have, bearing upon the problems.

XXIV.—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. The Senior Class meets on Tuesdays and Thursdays 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—5 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 having, during their attendance on such class, carefully dissected at least three "parts" of the body.

Underg aduates 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.

XXV.—HISTOLOGY.

The University provides no instruction in this subject, but the class conducted by Professor G. M Campbell, B. A , M D., and H. D. Weaver, M. D , 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.

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.

XXVI.—PHYSIOLOGY.

The University provides no instruction in this subject, but the class conducted in the Halifax Medical College by Professor L. M.

Silver, M. B , 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.

The regulations as to examinations are the same as in the case of Histology.

XXVII.—THEORY AND HISTORY OF MUSIC.

The classes in the Theory of Music, conducted in the Halifax Conservatory of Music by Mr P rcy Gordon, Director, and other members of the staff, and those in the History of Music conducted by Rev. R Laing M. A , 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.

XXVIII —ENGINEERING LAW.

Lecturer.....———————.

The Lectures will deal with the law of Contracts and, for students of Mining. with such topics as license to search for minerals, liability of owners for negligence of miners, etc.

Faculty of Law.

R. C. WELDON, PH. D., K. C.
B. RUSSELL, D. C. L., J. S. C.
H. McINNES, LL. B.
W. B. WALLACE, LL. B., J. C. C.
J. A. CHISHOLM, LL. B.

Courses of Lectures.

The following Courses of Lectures to be given in the Session of 1905-06, will begin on the 6th of September, 1905, and end on the 23rd February, 1906.

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 Right. *Habeas Corpus.*

Text-book : Taswell-Langmead'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 eternal. 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-book: The Canadian Criminal Code, 1892.

SHIPPING.

Lecturer ..... PROFESSOR WELDON.

Subjects of lectures:

Registration of Shipping. Transfer. Mortgage. Bottomry and Respondentia Charter party. Bills of Lading. Collision. Damage. Salvage. Freight. Towage. General Average.

CONTRACTS.

Professor ..... B. 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.

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.

[1906-7.]

Subjects of lectures :

Capacity to buy and sell. Executed and executory contracts of sale Statute of Frands. 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.

[1905-6.]

Subjects of Lectures :

Formal Requisites, Consideration. Indorsement and Transfer. Real and Personal Defences. Over-due Paper. Notice of Dishonor. Protest.

Text-book: McLaren on Bills.

EVIDENCE.

Lecturer.....

One lecture per week.

[1906-7.]

Subjects of lectures :

Nature of proof Production and Effect of Evidence. Relevancy. nstruments of Evidence.

Text-book: Greenleaf on Evidence ; Judicature Act and Rules.

PARTNERSHIP AND COMPANIES.

Lecturer .....

One lecture per week.

[1905-6.]

Subjects of lectures :

Constitution. Liability of partners *inter se* and to third persons. Change of firm. Retirement of partners. Dissolution. Mining ventures. Joint stock Companies. Canada Joint-stock Companies Act.

Text-book : Lindley on Partnership.

PRACTICE AND PROCEDURE.

Lecturer .....MR. HECTOR MCINNIS, 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.....PROF. WELDON.

One lecture per week.

Subjects of lectures :

Definitions. Torts considered with reference to Crimes and Contracts. Deceit. Slander and Libel. Malicious Prosecution Conspiracy. Assault and Battery. False Imprisonment. Enticement and Seduction. Trespass to Property. Conversion. Violation of Water Rights and Rights of Support. Nuisance. Negligence.

Text-book : Bigelow, or Pollok.

REAL PROPERTY.

Lecturer.....MR. JOSEPH A CHISHOLM, LL B.

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 that 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.

(2.) Graduates and undergraduates in Arts of any recognized College or University, and articled clerks or law stu-

dents who have passed the preliminary law examinations in any of the Provinces of the Dominion of Canada, in Newfoundland, or in any of the British West India Islands, shall be admitted to the standing of Undergraduates of the First Year in the Faculty of Law, without passing any examination.

(3.) Candidates for the Degree of LL. B, must be presented at the Convocation in which their degrees are given.

Students presenting themselves for the first time to registration 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.

(3.) Undergraduates of other Law Schools may, on producing satisfactory certificates of standing, be admitted to similar standing in this Law School 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 course on which they enter in the University, they may be required to take extra classes.

Courses of Study for the Degree of LL. B.

First Year.

1. Real Property.
2. Crimes.
3. Contracts.
4. Torts.
5. Constitutional History.

Second Year.

1. Equity.
2. Partnership and Companies.
3. Negotiable Instruments.
4. Constitutional Law.
5. Shipping
6. Wills.

Third Year.

1. International Law.
2. Conflict of Law.
3. Evidence.
4. Equity.
5. Sales of Personal Property.

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 22nd 1906.

(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 two subjects at the Sessional Examinations, 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 28th, 1905.

(6.) The Supplementary Examinations for the present year will begin September 6th 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 tho Faculty in recommending a candidate for his degree.

Faculty of Medicine.

THE PRESIDENT, *(ex officio)*.

GEORGE L. SINCLAIR, M. D.
DONALD A. CAMPBELL, M. D., C. M.
A. W. H. LINDSAY, M. D., C. M.
DANIEL MCNEIL PARKER, M. D.
ANDREW J. COWIE, M. D.
JOHN F. BLACK, M. D.
ALEXANDER P. REID, M. D.
MATTHEW A. CURRY, M. D.
MURRAY MCLAREN, M. D.
WILLIAM TOBIN, F. R. C. S., Ire.
HON. MR. JUSTICE HENRY.
LOUIS M. SILVER, M. B., C. M.
FRED. W. GOODWIN, M. D., C. M.
F. U. ANDERSON, M. R. C. S., Eng.
EBENEZER MACKAY, Ph. D.
WILLIAM H. HATTIE, M. D.
GEORGE M. CAMPBELL, M. D.
NORMAN E. MACKAY, M. D.
H. H. MACKAY, M. D.
MURDOCH CHISHOLM. M. D.
NORMAN F. CUNNINGHAM, M. D.
JOHN W. MACKAY, M. D.
A. STANLEY MCKENZIE, PH.D.

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 :—

I —CHEMISTRY.

(McLeod Professor.)

Professor.....E. MACKAY, PH. D.

Chemistry 1.—Junior Chemistry.

Mondays, Wednesdays and Fridays, 9—10 A. M.

Laboratory : Mondays, Wednesdays and Fridays, 10—11 A.M.

CLASS WORK.—The lectures in this class deal in an elementary way with the principles of general chemistry. In the earlier part of the course the preparation and characteristic properties of common acids and bases are studied, and then the chemistry of fire, of water and of air, the order of historical development being followed as nearly

*It is to be distinctly understood that the program and regulations regarding courses of study and examinations contained in this Calendar hold good for year ending April 30, 1906 only, and that the Faculty, while fully sensible of its obligations towards the students, does not hold itself bound to adhere absolutely for the whole four years of a student's course to the conditions now laid down.

as possible. When some acquaintance with chemical facts has thus been gained, the fundamental laws of combination are taken up and the atomic theory and chemical formulæ are introduced. Chlorine, nitrogen, carbon and some of their typical compounds are then studied, and thereafter the principal remaining elements, each in connection with the group of elements in the periodic system to which it belongs. The lectures are fully illustrated by experiments.

LABORATORY WORK.—Every student is required to devote at least three hours a week to laboratory work. The laboratory course 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 are performed; and some time is devoted to elementary work in qualitative analysis.

Books recommended: Remsen, *Introduction to the Study of Chemistry* 6th edition, (H. Holt & Co.), for both class and laboratory work; Torrey *Studies in Chemistry*, (H. Holt & Co.)

Chemistry 3.—Senior 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.

CLASS WORK.—The subjects of study in this class include pure chemistry and the applications of chemistry to medicine.

The subjects of study in pure chemistry are: 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.

The subjects of study in medical chemistry are: 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. In the course in qualitative analysis practice is given in the identification of the chief inorganic compounds of the following elements; arsenic, antimony, tin, bismuth, copper, mercury, lead, silver, iron, chromium, aluminium, manganese, zinc, magnesium, barium, calcium, potassium, sodium, chlorine, bromine, iodine, sulphur, nitrogen, phosphorus, carbon, boron; and in the identification of the following organic compounds: acetic, tartaric, oxalic, hydrocyanic, salicylic and citric acids and their salts, alcohol, chloroform, chloral, glucose, cane sugar, starch, phenol, quinine, morphine, strychnine

Books recommended: For class use:—Roscoe and Harden, *Inorganic Chemistry for Advanced Students* (Macmillan & Co.); Remsen, *Compounds of Carbon*, 4th edition, (D. C. Heath & Co.); Platt, *Qualitative Analysis and Medical Chemistry* (J. J. M'Vey); Halliburton, *Essentials of Chemical Physiology* (Longmans). For reference:—Remsen, *Inorganic Coemistry, Advanced Course* (H. Holt & Co.); Hammarsten, *Text-book of Physiological Chemistry*, translated by Mandel (Wiley & Sons).

Chemical Laboratory.

The general chemical laboratory accommodates about eighty students. A reference library is placed in the laboratory for the use of students doing analytical work.

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 apparatus they have broken or injured.

Students are required to keep a detailed record of their laboratory work. The character of this record is a factor in determining a student's position in the class lists.

II —ELEMENTARY BIOLOGY.

(A.) - Botany.

Lecturer.....

Saturdays, 11 A. M.—1 P. M.

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 (Schizophyceæ), the Phycophyta (Chlorophyceæ and Phæophyceæ), the Carpophyta (Rhodophyceæ, Ascomyceteæ and Basidiomyceteæ specially), the Bryophyta (Mosses and Liverworts), the Pteridophyta (Ferns, Horsetails and Club-mosses), the Anthophyta (specially the Coniferæ, Gramineæ, Orchidaceæ, Liliaceæ, Urticaceæ, Labiatæ, Compositæ, Umbelliferæ, Rosaceæ, Cruciferæ. Leguminosæ, Ranunculaceæ), 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 of 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, and will be considered in estimatingthe candidate's final standing.

Practical instruction will be given in the collecting, drying and mounting of specimens, the use of the microscope, the preparing of microscope 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, razors, pipettes and other apparatus or books necessary should be supplied by each student. Collections, notes, class-work and drawings of students will be estimated for incorporation into final class standing

Text-Books : Bessey, *Essentials of Botany ;* Spotton, *Botany and Flora.*

For reference special text-books will be recommended in each subdivision of the subject during the course of the lectures and demonstrations.

(B.)—ZOOLOGY.

Lecturer.....

Thursdays, 2—4 P. M.

The course in Zoology will consist of readings and lectures supplemented by practical work.

The student will be expected to master the system of Zoology as contained in Shipley and MacBride's Elementary Text Book, 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, Paramœcium, Vorticella, Sporozoa ; 3. Three species of marine, and three of Fresh-water Sponges ; 4. One species each of Hydra : the Campanularidae, Plumularidae, and Sertularidae ; Aurelia, Metridium ; and the skeletons of Zoantharia and Alcyonaria ; 5. A species each of the Platyhelminths and of the Nemathelminths ; 6. Five species of local freshwater and marine Polyzoa 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 13, 14, 15 and 16).

(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).

The same general principles with respect to apparatus, etc , will apply to zoological students as to botanical students.

III.—MEDICAL PHYSICS.

Professor ....A. STANLEY MCKENZIE, PH.D.

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

In this class an attempt will be made to cover the ground demanded of candidates seeking the license of the Provincial Medical Board. This includes the following subjects : Elementary Kinematics and dynamics, the properties of solids and fluids, heat, sound, light, and electrlcity and magnetism. The lectures, as far as time will allow, will be illustrated by experiments and the amount of mathematical knowledge assumed will be no greater than is demanded for Grade XI. of the Public Schools. Students will be expected to be thoroughly acquainted with the apparatus used in the experiments and will be examined only on the subjects treated in class. References to the subject matter will be given with the lectures.

Books recommended for reference : Daniell, *Physics for Students of Medicine* (Macmillan & Co.) ; Robertson, *Physiological Physics* (Cassell & Co.) ; Jones, *Heat, Light and Sound* (Macmillan & Co.) ; Thompson, *Lessons in Electricity and Magnetism.*

2. Students wishing to attend the above courses may do so either as General 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. By reference to pps. 19 and 21, 41 and 42, Undergraduates in Arts and Science will see how they at the same time may be registered with the Medical Faculty and so secure the benefit of certain classes of the Arts and Science Courses, as regular Undergraduates in Medicine.

3 In other subjects the necessary classes may be attended at any other University or College recognized by the Senate.

4. Attendance on classes by those registered as General Medical Students will not qualify for Degree Examinations in this Faculty.

5. 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 1905—1906 will begin on Thursday, August 31st, 1905, and end on Tuesday, April 24th, 1906.

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.*

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

*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, 241 Pleasant Street. Halifax.

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.

Degree Examinations.—1. Candidates for the degrees of M. D. and C. M. shall be required to pass two main examinations—the Primary and the Final M. D., C. M. Examinations- and to have satisfied at the dates of the examinations certain conditions as to fees, attendance on classes, etc. Tickets of admission will be issued to all candidates who have satisfied these requirements of the Faculty, which tickets shall be produced at each examination.

2. The Regular Degree Examinations will be held during the second and third weeks in April of each year.

3. At all examinations a minimum of 50% in each subject* will be required to obtain a "*Pass*," except under the conditions specified on p. 109, sub. sec. 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 simple alphabetical order.

4. Should the 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.

5. 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 for the supplementary examinations, and the fee shall be $5.00 for each subject of examination.

6. Candidates are not permitted to present themselves for examination in selected subjects, but are required to take

*In Chemistry and in Physics the same percentage will be required of Students in Medicine as of other professional students in these subjects viz.: 40%.

each section as hereafter defined (pps. 99, 100, 102, 105) as a whole, except(*a*) Candidates obtaining the special permission of the Faculty ; (*b*) Students taking one of the affiliated courses (p. 104, sub. sec. 2).

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.

7. 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.

Primary M. D., C. M. Examination.*—1. This examination shall consist of two parts as follows :—

(A.) PRIMARY EXAMINATION, SECT. A.

(1.) 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 of the Junior Chemistry Class, outlined on pp. 101, 102.

Elementary 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. 103, 104.

Medical Physics.

A written examination on the subject matter included under this heading at p. 104.

(2) Candidates for this examination shall be required to produce certificates to the following effect :

(*a*) Of having passed the Preliminary Examination of the Provincial Medical Board of Nova Scotia ; the Junior

*See foot note, p. 101.

Matriculation Examination of this University with Latin; or other examination recognized as sufficient, at least one academic year previously, and of having completed their sixteenth year before the passing of said examination.

(*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.

(*c*) 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; *Elementary Biology*, a course of at least 100 hours of lectures and laboratory work; *Medical Physics*, a course of at least 50 lectures.

(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 *viva voce*. The paper may include questions in Descriptive and Regional Anatomy Surgical and Medical Anatomy At t e 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.

Chemistry.

Inorganic, organic and medical chemistry as in the course of the Senior Chemistry Class, outlined on page 102 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 shall 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, and of having completed their sixteenth year before the passing of said examination.

(*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. 107), 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 75 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 in 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 are

*On completion of their courses in Practical Anatomy candidates will be required to show by certificate that they have satisfactorily dissected each of the " parts " of the body twice.

†In Chemistry, exemption from further attendance or from further examiuation may be allowed although the Preliminary Examination may not have been taken previous to the attendance or the passing of the examination in that subject.

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 at least fourteen days before the date of the examination, 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 Sect. A, and one-third of the graduation fee in the case of candidates for Sect. B.*

Final M. D., C. M. Examination.†—1. 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.

Materia 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 Pharmacopœial drugs, named in the annexed Schedule.

(*b*) The composition of the Pharmacopœial 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 *italics* in the annexed Schedule:

Calx Chlorinata: Liquor Sodæ Chlorinatæ.
Ammonii Bromidum; *Potassii Bromidum;* Sodii Bromidum.
Iodum; Potassii Iodidum; Sodii Iodidum; Plumbi Iodidum.
Sulphur Sublimatum; Sulphur Præcipitatum; Calx Sulphurata; Potassa Sulphurata
Phosphorus; Calcii Phosphas; Sodii Phosphas; *Ferri Phosphas;* Calcii Hypophosphis; Sodii Hypophosphis.
Acidum Hydrochloricum; Acidum Nitricum; Acidum Sulphuricum.
Acidum Aceticum; Acidum Citricum; Acidum Tartaricum.
Acidum Boricum; Acidum Sulphurosum.
Acidum Hydrocyanicum Dilutum.
Liquor Ammoniæ; Liquor Potassæ; Potassa Caustica.
Ammonii Carbonas; Ammonii Chloridum; Liquor Ammonii Acetatis.
Potassii Bicarbonas; Potasii Sulphas; Potasii Chloras; Potasii Tartras Acidus; *Potassii Permanganas.*

*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.

†See foot-note, page 101.

Sodii Bicarbonas ; Sodii Sulphas ; Sodii Nitris ; Borax.
Calx ; Calcii Hydras ; Creta Præparata ; Calcii Carbonas Præcipitatus.
Magnesia ; Magnesii Carbonas ; *Magnesii Sulphas.*
Alumen ; *Alumen Exsiccatum*
Zinci Oxidum ; Zinci Chloridum ; *Zinci Sulphas.*
Cupri Sulphas.
Argenti Nitras.
Hydrargyrum ; Hydrargi Oxidum Flavum ; Hydrargyri Oxidum Rubrum ; Hydrargyri Subchloridum ; Hydrargyri Perchloridum Hydrargyri Iodidum Rubrum ; Hydrargyrum Ammoniatum ; Hydrargyri Oleas ; Liquor Hydrargyri Nitratis Acidus
Plumbi Oxidum ; *Plumbi Acetas* ; Liquor Plumbi Subacetatis Fortis.
Antimonium Tartaratum.
Acidum Arseniosum ; *Ferri Arsenias ;* Sodii Arsenias ; Arsenii Iodidum ; Liquor Arsenii et Hydrargyri Iodidi.
Bismuthi Subnitras ; Bismuthi Carbonas ; Bismuthi Salicylas.
Ferrum ; *Ferri Sulphas ;* Ferri Sulphas Exsiccatus ; *Ferri Carbonas ; Saccharatus ;* Syrupus Ferri Iodidi ; Liquor Ferri Acetatis ; Liquor Ferri Perchloridi ; Liquor Ferri Pernitratis ; Liquor Ferri Persulphatis ; *Ferri et Ammonii Citras ; Ferri et Quininæ Citras ; Ferrum Tartaratum* ; *Ferrum Redactum.*
Alcohol Absolutum ; *Spiritus Rectificatus-*
Æther ; Chloroformum ; Iodoformum.
Chloral Hydras : Butyl Chloral Hydras ; *Paraldehydum* ; Sulphonal.
Amyl Nitris ; Tabellæ Trinitini ; Liquor Trinitini ; *Spiritus Ætheris Nitrosi*
Acetanilidum ; Phenacetin ; Phenazonum.
Collodium.
Creosotum ; *Acidum Carbolicum* ; *Acidum Salicylicum* ; Sodii Salicylas; Salol.
Aconiti Radix ; Aconitina.
Opium ; Morphinæ Hydrochloridum ; Morphinæ Acetas ; Morphinæ Tartras ; Apomorphinæ Hydrochloridum ; Codeina ; Codeinæ Phosphas.
Cocæ Folia ; Cocaina ; Cocainæ Hydrochloras.
Jaborandi Folia ; Pilocarpinæ Nitras.
Quassiæ Lignum ; Calumbæ Radix ; Gentianæ Radix.
Physostigmatis Semina ; Physostigminæ Sulphas.
Caffeina ; Caffeinæ Citras.
Conii Fructus et Folia.
Asafœtida ; *Ammoniacum ; Myrrha ; Guaiaci Resina.*
Cinchonæ Rubræ Cortex ; Quininæ Sulphas ; Quininæ Hydrochloridum ; Quininæ Hydrochloridum Acidum.
Salicinum.
Ipecacuanhæ Radix ; Senegæ Radix.
Glycerinum.
Nux Vomica ; Strychnina ; Strychninæ Hydrochloridum
Belladonnæ Radix et Folia ; Atropina ; Atropinæ Sulphas ; Hyoscyami Folia ; *Stramonii Semina* et Folia ; Homatropinæ Hydrobromidum.
Cannabis Indica.
Digitalis Folia ; Strophanthi Semina.
Oleum Ricini ; Oleum Crotonis ; *Aloe Barbadensis ; Aloe Socotrina ; Aloinum ; Cascara Sagrada ; Colocynthidis Pulpa, Elaterium ;* Elaterinum ; *Jalapa* ; Podophylli Rhizoma ; *Rhei Radix ; Senna Alexandrina et Indica ; Camphora ; Oleum Terebinthinæ.*
Acidum Tannicum ; Acidum Gallicum ; Kino ; Catechu ; Hamamelidis Cortex et Folia.
Acidum Benzoicum.
Copaiba; *Cubebæ Fructus.*
Colchici Cormus et Semina.

Scilla.
Filix Mas. *Santoninum.*
Ergota.
Oleum Morrhuæ.
Cantharis.

Pathology and Bacteriology.

The Examination will be partly written, partly *viva voce.* 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 diseases, 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, Inoculation.

(2) Candidates for this examination shall 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, and of having completed their sixteenth year before the passing of said examination.

(*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. 108, 109), viz.: —*Materia Medica*, a course of at least 75 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. Examinations 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 fol owing agents :—Inorganic—Mineral Acids ; Solutions of Alkalis ; 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.

IV. Medico-legal points in connection with :—Pregnancy, Delivery, Rape, Criminal Abortion, Infanticide, Assaults and Homicide, Wounds and other external Injuries ; Mental Capacity in relation to Criminal Responsibility, Contracts, and Wills ; Malpractice, 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 *viva voce*. 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. 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 Treatmeut. 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 :—

(*a*) The Anatomy and the Physiology of the Female Organs of Reproduction.

(*b*) The Physiology, Pathology and Therapeutics of Pregnancy.

(*c*) Parturition, natural and morbid.

(*d*) Hygiene, Pathology and Therapeutics of the Puerperal State.

(*e*) Hygiene, Pathology and Therapeutics of Infancy and Childhood.

(*f*) Special Pathology and Therapeutics of the Female Organs of Reproduction.

At the oral Examination, candidates may also be questioned on Gynæcological Operations and the use of Instruments and Appliances.

(2) Candidates for this examination will be required to furnish certificates to the following effect, viz. :—

(*a*) 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.

(b) Of having passed the Preliminary Examination, or other equivalent examination, at least four academic years previously, and of having completed their sixteenth year before the passing of said examination ;

(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. 108, 109, 112), 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 in *Ophthalmology, Otology and Laryngology.*

β. Attended at some University or College recognized by the Senate, a course in Operative Surgery, and of having performed operations on the dead body to the satisfaction of the Teacher* ;

*Blank certificates will be issued to candidates which must be filled out and signed by the proper authorities.

γ. 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 ;

δ. 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 ;

ϵ. 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 of having done other equivalent practical work in Surgery and Medicine* ;

ζ. Attended at least four cases of midwifery, under a recognized practitioner* ;

η. Attended the Post Mortem Examinations in a recognized Hospital for a period of at least six months, during which they have 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.

θ. 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

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*Blank certificates will be issued to candidates, which must be filled out and signed by the proper authorities

the case may be, to the Secretary of the Faculty, at least fourteen days before the date of the examination, 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 the 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. 109, Sub. Sec. (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 Sect. 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.

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.

THE SIMSON PRIZE.—An Annual Prize of Twenty-five dollars is offered by Frank C. Simson, Esq., to be awarded to the student who, at the end of his third year, has during his course, passed the best examinations in Chemistry, Practical Chemistry, Materia Medica and Therapeutics.

Sponsio Academica.—Before receiving his degree, the candidate will be required to sign the following oath or affirmation :—

SPONSIO ACADEMICA.

In facultate Medicinæ Universitatis Dalhousianæ.

Ego, Doctoratus in Arte Medica titulo jam donandus, sancto coram Deo cordium scrutatore, spondeo :—me in omni grati animi officio erga Universitatem Dalhousianam ad extremum vitæ halitum, presevera-

turum. Tum porro Artem Medicam caute, caste, probeque exercitaturum et quoad potero, omnia ad ægrotorum corporum salutem conducentia, cum fide procuraturum. Quæ denique, inter medendum, visa vel audita silere conveniat, non sine gravi causa vulgaturum. Ita praesens mihi spondenti adsit 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	$ 2 00
Junior Chemistry Class Fee (including Laboratory Fee)*	10 00
Senior " " " "	12 00
Elementary Biology Class Fee (including use of microscopes and reagents)	12 00
Physics	6 00
Graduation Fee†	30 00
Gymnasium Fee, by all male students attending the University.	1 50

*All students taking classes in the chemical laboratory are required to make a deposit of Three Dollars on entering the class. This amount, or if charges 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.

†Students who have paid $30.00 or upwards as Examination Fees are not required to pay an additional Graduation Fee.

Institutions.

THE UNIVERSITY LIBRARIES.*

The Arts Library was instituted in 1867, as the result of an appeal made by the Rev. George M. Grant, at Convocation in 1867. Until 1888 the number of volumes did not exceed 3,000; to-day there are about 12,400 volumes and 3,000 pamphlets.

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 Mr. Bulmer. To-day the number of volumes exceeds 7,200.

The Arts 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 a course of Lectures on Shakspere; 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; also the following Class Memorial Collections:

Class of 1894: Classical Dictionaries.
Class of 1895: Sophocles' Plays and Bacon's Works.
Class of 1896: Jesuits' Relations.
Class of 1897: Dryden's Works, and Economics.
Class of 1898: Standard Editions of Plato and of Aristotle.

*Students have access, subject to certain conditions, to the Citizens' Free Library, the Legislative Library, and the Libraries of the N. S. Institute of Science and of the Mining Society. Of the other Libraries in the city, the Garrison Library and the Law Library of the Barristers' Society should be mentioned.

Class of 1899 : New English Dictionary, General Literature.
Class of 1900 : Dictionary of National Biography.
Class of 1901 : Supplementary volumes of the Encyclopædia Britannica, Mathematical and Physical Books.
Class of 1902 : Works on Geology, Metallurgy, and Civil Engineering.
Class of 1903 : Darwin's Works, Stevenson's Works, Works on Civil Engineering.

The Class memorials are the most important contributions to the Library. The gift of the Class of 1902 is devoted to the purchase of works on Geology, Metallurgy, and Civil Engineering. Complete sets of the works of Darwin and Stevenson have been obtained with part of the gift of the Class of 1903. The Class of 1904 has given $179.34. The Class of 1905 has promised as much. These gifts reflect the greatest credit both on the givers and on the College that has such generous students.

The Accession book shows that 481 book and pamphlets were received by the Library during the session 1904-05.

Books have been received from :—Various funds, 171 ; MacMillan & Co., 22 ; Rev. Thomas Fowler, M. A., 14 ; Miss E. Ritchie, Ph. D., 8 ; Prof. A. MacMechan, 6 ; D. A. Murray, 2 ; Lady Geddes, President Forrest, Eugene Haanel, Robert Jenkins, W. L. Saunders, Prof. B. G. Wilder, St. Andrew's University, 1 each.

Reports, memoirs, and bulletins have been received from : —Dominion Government, 39 ; U. S. Government, 14 ; American Museum of Natural History, N. S. Institute of Science, Royal Society of Canada, British Columbia Government, Ontario Government, Smithsonian Institution, University of Michigan, University of the State of New York, Historical Society of Manitoba, N. S. Government, Lowell Observatory, Y. M. C. A., N. Y. State Museum, Natural History Society of N. B., Toronto Public Library, Governments of Manitoba, North-West Territory, New Brunswick, Quebec, Prince Edward Island.

Calendars and Reports have been received from the following Universities and Colleges :—Edinburgh, Glasgow, Aberdeen, St. Andrews, Birmingham, Bristol, Dublin, Dundee, Trinity College (Dublin), Sydney, Adelaide, Manitoba, Melbourne, Toronto, Trinity (Toronto), Toronto School of Practical Science, Queen's, Ottawa, McGill, Laval, (Montreal),

Bishop's, Mount Allison, St. Joseph, Acadia, Kings, St. Francis Xavier, Presbyterian College (Halifax), Presbyterian College (Montreal), Prince of Wales, Royal Military College, Montpelier, New York, Harvard, Cornell, Columbia, Princeton, Pennsylvania, Johns Hopkins, Chicago, Northwestern, Michigan, Nebraska, Wisconsin, Georgetown, Brown, Vassar, Bryn Mawr, Wycliffe, Massachusetts Institute of Technology, Union Theological Seminary, McCormick Theological Seminary.

Periodicals have been regularly placed on the reading tables and in many cases given to the library by the following:—Professor W. C. Murray: *Nation, International Journal of Ethics, Psychological Review, Philosophical Review, Educational Review (N. Y.)*; Professor E. Mackay: *Weekly Times, Popular Science Monthly,*; Professor J. E. Woodman: *The World's Work, Outlook, Harvard Graduates' Magazine*; Professor H. Murray: *American Review of Reviews, McClure*; Professor Weldon: *Nineteenth Century*; Professor MacMechan: *Monthly Review, Queen's Quarterly*; Professor D. A. Murray: *Fortnightly, Science*; Professor Dixon: *Nature*; A. H. R. Fraser, Esq., LL. B.: *American Historical Review, Economic Studies, Publications of American Economic Association.*

The Library has been open five days each week of the Session from 10 to 1 and from 3 to 5 p. m. Between fifty and sixty readers per day made use of the Library. Students have free access to all catalogued books. At the end of April thirty-nine books were unaccounted for.

The duties of Assistant to the Librarian were efficiently discharged by Mr. John Barnett.

Abstract of Current Class Memorial Accounts:—

CLASS OF 1901.

Receipts.

1904, May 10.	Reported to date	$125 84

Expenditures.

1904, May 10.	Reported to date	120 75
1905	By History	5 00
		$125 75

CLASS OF 1902.

Receipts.

1904, May 10.	Reported to date	$107 00
1905, Jan. 18.	Interest	2 29
		$109 29

Expenditures.

1904, May 10.	Reported to date	$ 46 61
1904-5	By works on Metallurgy and Civil Engineering	62 75
		$109 36

CLASS OF 1903.

Receipts.

1904, May 10.	Reported to date	$107 00

Expenditures.

1904, May 10.	Reported to date	$ 84 00
1904-05	By works on Civil Engineering	23 00
		$107 00

CLASS OF 1904.

Receipts.

1904, May 10.	Reported to date	$179 34

The Library Committee for the Session 1905-06 consists of the Librarian and Professors MacMechan and Walter C. Murray.

THE ALUMNI ASSOCIATION.

(Incorporated 1876.)

ABSTRACT OF MINUTES OF ANNUAL MEETING.

The Thirty-third Annual Meeting of the Association was held in the College, Monday, April 24th, at 8 p. m., the President, Mr. J. H. Trefry, M. A., in the chair.

The reports of the Executive Committee, the Secretary Treasurer, and the Dean of the Science Faculty were read and adopted.

The membership is now 294, an increase of 79 during the year.

The Treasurer's statement is as below :—

THE ALUMNI ASSOCIATION OF DALHOUSIE COLLEGE AND UNIVERSITY *in account with* S. A. MORTON, *Treasurer.*

Receipts.

1904.		
April 24.	Balance	$265 76
June 30.	Interest, Government Savings Bank	3 35
1905.		
April 22.	Members' Dues during the year	321 00
		$590 11

Disbursements.

1904.		
April 26.	A. & W. MacKinlay, Stationery	7 70
" 27.	Prof. MacKay, Grant to the Science Faculty	200 00
July 11.	T. C. Allen & Co., Annual Report, etc	25 05
Sept. 28.	H. D. Brunt, B. A.	50 00
1905.		
Mar. 18.	Prof. MacKay, Grant to the Science Faculty	150 00
April 20.	" " " " "	100 00
" 21.	Postage during the year	29 00
" "	Sundry Expenses during the year	9 58
" "	Balance	21 78
		$590 11

Dr. E. Mackay, Dean of the Science Faculty, reported that he had expended $294.51 from the sum granted by the Association. This expenditure was in the departments of Physics, Mining and Civil Engineering. The department of Physics received $105.21, which was devoted to the purchase of an air pump. The expenditure of $32.09 in the Mining department was for a thermo-electric pyrometer to measure the high temperatures of the furnaces. In the department Civil Engineering $125 was contributed to the support of the recently established Chair of Civil Engineering and $32.21 was spent for field instruments. It is proposed that also $65.17, the unexpended balance of the Alumni grant, shall be spent upon field instruments for engineering classes.

The Cape Breton branch of the Association voted $50 fo the Geological department and $20 for the common fund of the Association.

It was agreed to continue the aid to the Science Faculty, the amount of the grant to be determined by the Executive Committee.

The officers of the Association are :—

President ..... J. H. TREFRY, M. A.
1st Vice-President ..... G. M. J. MACKAY, B. A.
2nd Vice-President ..... W. J. LEAHY, LL. B.
Secretary-Treasurer ..... S. A. MORTON, M. A.
Other Members of the Executive Committee ..... G. K. BUTLER, M. A.; E. D. FARRELL, M. D.; J. W. LOGAN, B. A.; PROF. E. Mackay, PH. D.; " D. A. MURRAY, PH. D.
Auditors ..... J. M. GELDERT, LL. B.; J. F. PUTNAM, B. A.

The officers of the C B. Branch are :—

Honorary President ..... CHAS. S. CAMERON, M. A.
President ..... H. P. DUCHEMIN, B. A.
Vice-President for Cape Breton Co... C. J. BURCHELL, M. A., LL. B.
" *Inverness Co* .... W. F. CARROLL, B. A., LL. B.
" *Victoria Co*..... GEORGE MACRAE, ESQ.
" *Richmond Co*..... M. G. MCNEIL.
Treasurer ..... J. E. A. MCLEOD, B. A., LL. B.
Secretary ..... C. D. LIVINGSTONE, LL. B.
Other Members of Executive Committee ..... D. MCD. CAMPBELL, B. SC., M. A.; A. D. GUNN, B. L., LL. B.; REV. W. H. SMITH, M. A., PH. D.; G. A. R. ROWLINGS, B. A., LL. B., and R. F. PHALEN, LL. B.

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..... J. H. CHARMAN, B. A.
Vice-Presidents..... J. C. BALLEM, B. A.; W. S. LINDSAY.; F. G. WICKWIRE.
Secretary-Treasurer ..... A. F. MATTHEWS.
Executive Committee .....
Reading Room Committee ..... H. S. PATTERSON.; E. C. MCKENZIE.; D. H. MCKENZIE.

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 Arts and Science Faculties as Editors for 1904-05 :—

A. MOXON, (Arts, '06).
H. C. FRASER, (Arts, '06).
G. D. FINLAYSON, (Arts, '07).
J. A. MACKEIGAN, (Arts, '08).
BLANCHE MURPHY (Arts, '06).
CASSIE GOURLEY, (Arts, '07.
W. F. BOUDREAU, (Med. '06).
W. W. WOODBURY, (Med. '07).

Financial Editor..... E. W. NICHOLS.

Others will be appointed at the opening of the Session by the Lady Students, and the Students of the Faculties of Law and Medicine.

Art 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 ..... H. S. PATTERSON.
Vice-President ..... W. H. SWEET.
Secretary-Treasurer ..... J. H. PROWSE.
Executive Committee ..... RONALD MCLEOD. A. F. MATTHEWS. F. P. H. LAYTON.

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 ..... DANIEL MCLELLAN.
Vice-President ..... M. W. EAGER.
Secretary-Treasurer ..... W. K. POWER, B. A.
Executive Committee ..... J. WOOD. B. GRAHAM. R. B. H. ROBERTSON.

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 ..... C. L. SANDERSON, B. A.
Deputy Speaker ..... ALLAN MCDONALD, B. A.
Clerk ..... W. K. POWER, B. A.

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 Sociaty are held weekly throughout the session. Topics of general interest are discussed, and papers on medical subjects are read.

OFFICERS.

President ..... E. BLACKADAR, M. A.
Vice-President ..... MISS A. HENNIGAR.
Secretary ..... R. O. SHATFORD.
Treasurer ..... R. MCLELLAN.
Executive Committee ..... W. H. COFFIN, B. A.; J. A. FERGUSON, B. Sc.

The Sodales Debating Club.

The Sodales Debating Club meets fortnightly during the session, subjects of general interest being discussed. A series of lectures by prominent public men will be given under the auspices of the club.

OFFICERS

Honorary President ..... DEAN WELDON.
President ..... ARTHUR MOXON.
Vice-President ..... J. A. MCKEIGAN.
Secretary-Treasurer ..... H. S. PATTERSON.
Executive Committee ..... J. H. CHARMAN, B. A.; W. H. COFFIN, B. A.; A. C. HARLOW; W. P. GRANT.
Lecture Course Committee ..... W. K. POWER, B A.; G. M. J. MACKAY, B. A.; R. MCLEOD.

Young Men s Christian Association.

Meetings of the Association are held every Saturday evening at the College.

OFFICERS.

President ..... J. A. MCLELLAN.
Vice-President ..... J. A. MCKEIGAN.
Recording Secretary ..... H. F. MCRAE.
Corresponding Secretary ..... A. A. MCLEOD.
Treasurer ..... GEO. FARQUHAR.

Young Women's Christian Association.

Meetings of the Association are held every Monday afternoon at 5 o'clock.

OFFICERS.

President ..... ANNA E. MCLEOD.
Vice-President ..... STELLA KERR.
Treasurer .....
Recording Secretary ..... DORA G. FAULKNER.
Corresponding Secretary ..... B. LOIS MACKAY.

The Dalhousie Amateur Athletic Club.

Honorary President ..... PRESIDENT FORREST.
President ..... G. M. J. MACKAY, B. A
Vice-President ..... J. C. BALLEM, B. A.
Secretary ..... W. K. POWER, B. A.
Treasurer ..... W. C. ROSS.
Executive Committee ..... DR. GEO. J. CAMPBELL. D. R. MACRAE. M. A. LINDSAY, B. SC. J. W. HUDSON. PROF. F. H. SEXTON.
Captain .....
Trophy Committee ..... G. M. J. MACKAY, B. A. C. T. BAILLIE.
Grounds Committee ..... J. A. MACKINNON, B. A., LL.B. R. T. MACILREITH, LL B. J. C. O'MULLIN, LL. B.
Auditors ..... H. S. PATTERSON. F. ARCHIBALD.

The Glee Club.

The Club meets once a week for practice of glees and choruses.

OFFICERS

Honorary President ..... PROF. S. M. DIXON.
President .....
Vice-President .....
Secretary-Treasurer .....
Executive Committee .....
Conductor ..... C B. WIKEL
Accompanist ..... G. ISABELLA WOOD.

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 ..... EDNA P. SINNOTT.
Vice-President ..... DORA G. FAULKNER.
Secretary ..... B. LOIS MACKAY.
Treasurer ..... NORA N. POWER.

AFFILIATED COLLEGES.

The Prince of Wales College.

(Founded in 1860.)

STAFF.

S. N Robertson, M. A., (Dal.), Principal, *Latin, Greek and School Management.*
H. H. Shaw, B. Sc (McGill), Vice-Principal, *Chemistry, Physics and Psychology.*
E. E. Jordan, M. A. (Dal), *Mathematics and Book-keeping.*
C. J. MacMillan, M. A. (McGill), *English and History. Agriculture and Botany.*
J. D. Collier, *Drawing and Manual Training.*
J. A. Macdonald, B. A. (Laval), *French and Latin.*

Prince of Wales College, Charlottetown, was amalgamated with the Provincial Normal School of Prince Edward Island in 1879. The institution, as at present conducted, 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 be 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 local 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 their 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.

Conferred September, 1904.

BACHELOR OF ARTS.

THURSTON STANLEY BEGIN.....Lunenburg.
THOMAS GEORGE MACKENZIE .....River John.
JOHN MCMILLAN TRUEMAN.....St. John, N. B.

BACHELOR OF LAWS.

RICHARD UPHAM SCHURMAN .....Truro.

Conferred April 25th, 1905.

MASTER OF ARTS.

RICHARD WILFRED ALLIN, B. A.—*By Thesis: "The Romantic Movement in English Literature."*

GEORGE ARCHIBALD CHRISTIE, B. A.—*By Examination in Philosophy of Morals and Religion.*

HENRY ARNOLD KENT, B. A.—*By Examination in Psychology and Modern Philosophy.*

THOMAS GEORGE MACKENZIE, B. A.—*By Examination in History.*

EDWIN BYRON ROSS, B. A.—*By Thesis: "Basis and Functions of the State."*

ROBERT HENSLEY STAVERT, B. A.—*By Examination in Modern Ethics and Metaphysics.*

BACHELOR OF ARTS.

LOUISE FRANCES GERRARD.....Hazel Hill.
ALICE PEARSON GLADWIN.....Truro.
EUPHEMIA MCINNIS .....West Bay, C. B.
ETHEL MARGARET MUNRO .....Pictou.
ELLA MABEL MURRAY .....Sussex, N. B.
LULU MARION MURRAY.....Upper Musquodoboit.
SARAH ISABELLE PEPPARD .....Colchester.
MINNIE GRACE SPENCER .....Halifax.
CHRISTINA JANE TURNER.....Truro.
CHARLES TUPPER BAILLIE .....Halifax.
JOHN BARNETT .....Hartland, N. B.
CHARLES PRESCOTT BLANCHARD .....Truro.
JAMES HARRY CHARMAN.....Wallace.
CHARLES GORDON CUMMING.....Westville.

WILFRED ALAN CURRY ..... Halifax.
CHARLES JAMES DAVIS ..... Guysboro.
ROBERT BELL FORSYTHE ..... Alberton, P. E. I.
WILLIAM IRA GREEN ..... Clifton, P. E. I.
WILLIAM ERNEST HAVERSTOCK ..... Halifax.
GEORGE LEONARD MCCAIN ..... Sussex, N. B.
RODERICK AUGUSTUS MACDONALD ..... Halifax.
ROBERT JOHN MCINNIS ..... West Bay, C. B.
DANIEL ALEXANDER MCKAY, B. Sc. ..... River John.
GEORGE MOIR JOHNSTONE MACKAY ..... Halifax
JAMES ALEXANDER MACKFAN ..... Lunenburg.
MURDOCH CAMPBELL MCLEAN ..... North Ainslie.
HUGH MILLER ..... Garden of Eden.
CHARLES WISWELL NEISH ..... Halifax.
ARTHUR SILVER PAYZANT ..... Halifax.
DANIEL KEITH ROSS ..... Lorne.
WILLIAM MCMILLAN ROSS ..... Earltown.
FRANK FRIEZE SMITH ..... Musquodoboit.
WILLIAM DUNLOP TAIT ..... Hopewell.
HARVEY THORNE ..... Dartmouth.
HERBERT WESLEY TOOMBS ..... North Rustico, P.E.I.
ANDREW DANIEL WATSON ..... Baddeck.

BACHELOR OF SCIENCE.

LAURIE LORNE BURGESS ..... Kinsman's Corner.
MILTON DELANCY DAVIDSON ..... Aylesford.
WILLIAM CLARKE STAPLETON ..... Economy.
WILLIAM WEATHERSPOON WOODBURY ..... Halifax.

BACHELOR OF ENGINEERING.

(*In Mining.*)

THOMAS TRUMAN FULTON, B. A ..... Bass River.

BACHELOR OF LAWS.

BERTON STONE COREY ..... Petitcodiac.
HORACE ARTHUR DICKEY ..... Halifax.
PERCIVAL ST. CLAIR ELLIOTT, B. A ..... Paradise.
LLOYD HAMILTON FENERTY ..... Halifax.
WILLIAM GORE FOSTER ..... Dartmouth.
IRA ALLEN MACKAY, PH. D. ..... Pictou.
RODERICK GEDDIE MACKAY ..... East River, Pictou.
DONALD MCLENNAN ..... Margaree, C. B.
JAMES ARCHIBALD MCLEOD, B. A ..... Brooklyn.
CLAUDE LOVITT SANDERSON, B. A ..... Yarmouth.
VERNON HASTINGS SHAW ..... Brackley Pt., P. E. I.
JOHN WOOD ..... Halifax.

DOCTOR OF MEDICINE AND MASTER OF SURGERY.

MARY MACKENZIE.....Waterside, Pictou.
EDWARD BLACKADDER, M A. (Acad.).....Wolfville.
JOHN ARCHIBALD FERGUSON, B. Sc. (Dal.) .... Port Morien, C. B.
DANIEL ROBERT MCDONALD..... Saltsprings.
THOMAS GLADSTONE MACDONALD .....Thorburn.
GEORGE ARTHUR MCINTOSH..... .....Guysboro.
VICTOR NEIL MACKAY.....Earltown.
ALEXANDER W. MILLER, B. A. (St. F. Xav) ..Margaree Forks, C. B.
JAMES ALEXANDER MURRAY .... West River, Pictou.
JOHN IGNATIUS O'CONNELL, B. A., (St F. Xav.).Sydney.
JAMES ADAM PROUDFOOT.....Saltsprings.
PETER JAMES WALLACE .....Chatham, N. B.

BACHELOR OF ARTS.

(Ad eundem gradum.)

R W. ALLIN, B. A. (Toronto) .....Rothesay, N. B.
SIDNEY GUNN, B. A. (Harvard).....British Columbia.

HONOURS, MEDALS, Etc, 1904-5.

HONOURS.

Classics.

MURDOCH CAMPRELL MCLEAN.. .... Honours.
CHARLES WISWELL NEISH ....Honours.

English and History.

JOHN BARNETT.....High Honours.
JAMES HARRY CHARMAN .....Honours.
ROBERT BELL FORSYTHE .....Honours.

Philosophy.

WILLIAM DUNLOP TAIT ....High Honours.

Pure and Applied Mathematics.

ROBERT JOHN MCINNIS .....High Honours.
ANDREW DANIEL WATSON.....Honours.

Chemistry and Chemical Physics.

GEORGE MOIR JOHNSTONE MACKAY ...High Honours.

DIPLOMA OF GENERAL DISTINCTION.

CHARLES GORDON CUMMING .....Distinction.

GRADUATE PRIZE AND MEDAL.

VICTOR NEIL MACKAY .....Medical Faculty Medal.
CHARLES GORDON CUMMING .....Avery Prize.

UNDERGRADUATE SCHOLARSHIPS AND PRIZES.

Junior Entrance Scholarships

NORA NEILL POWER ..... MacKenzie Bursary.
WILLIAM KEIR READ ..... Professors' Scholarship.
JEAN GORDON BAYER ..... Professors' Scholarship.

Special Prizes.

CECIL L BLOIS ..... Waverley Prize (Mathematics).
Not awarded ..... Dr. Lindsay Prize (Primary M D C. M.
GEORGE A. DUNN ..... Frank C. Simson Prize (Chemistry and Materia Medica).

EXAMINATIONS, 1904-1905.

FACULTIES OF ARTS AND SCIENCE.

MATRICULATION.

BY EXAMINATION.

SENIOR.—*Passed in all subjects except Chemistry.*—Crowell, S. W.; Wood, J.; *Passed in French*—Burns, R. C.; Thorne, H.; Peppard, Sarah I.; in *Latin*—Peppard, Sarah I.; in *English*—Fielding, R. W.; in *Algebra*—Sinclair, F. D.; Munro, Ethel M.; in *Geometry and Trigonometry*—Turner, Christina J.; in *Chemistry*—Barnett, J.

JUNIOR.—*First Class Distinction*: Power, Nora Neill. *Second Class Distinction*: Read, W. K.; Bayer, Jean G. *Passed*: Tolson, Harry S.

Passed in certain subjects: McLellan, J. A., in *Greek;* McLellan, R. A., Hudson, J. W., in *Geometry;* Hills, W., Flemming, H. W., in *English, History* and *Geography*, and *Mathematics;* Macleod, R., in *Latin, Greek, English*, and *History* and *Geography;* Miller, H., in *Latin;* Ross, D. K., Mackean, J. A., in *Greek;* Snook, J. S., Burris, M. G., in *French;* MacIntosh, C. R., in *German;* Logan, J. H., in *History* and *Geography* and *Algebra;* Bruce, J. G., in *Arithmetic* and *Algebra.*

BY CERTIFICATE.

SENIOR.—*Passed*—Finlayson, G. D.

Passed in certain subjects: Patterson, Grace, H., and Morrison, J. L., *in all except one foreign language*; Archibald, J. T., *in all except Algebra and one foreign language;* Kerr, M. Estella, and Rettie S., *in all except Mathematics and Botany*; McInnes, C. J., *in all except Botany*; Hopkins, Marion, J., *in all except one foreign language, Trig. and Botany*; McLeod, F. T., *in Latin, English, Hist., and Geom.;* Rettie, A., *in all except Alg. and Bot.*; Payson, Mary P., *in English, Hist., Geom. and Trig.*; Davis, C. J., *in Latin.*

JUNIOR.—*Passed*—Brown, Laurie; Dawson, F. J.; Goudge, Mabel E.; Grant, Francis H.; Hardy, T. W.; McKeigan, J. A.; Munroe, A. E.; O'Hearn, Bernard; Stairs, G. W.; Sweet, H.

Passed in certain subjects: Peppard, Sarah I.; Murphy, Ethel; McLeod, B. F.; McMillan, J.; McKay, M.; McKay, J. F.; Manuel, Murray H.; Hines, Nora G.; Ferguson, A.; Collie, J. R. M.; Bethune, R. O.; Archibald, J. T., *in all except foreign languages;* Drysdale, J. R.; McKinnon, Jas.; Marshall, Helen; Nicholson, M.; Webber, Kathleen J., *in all except one foreign language;* Gaul, T. F., *in all except Hist.* and *Geog.;* Bent, L. L., *in all except Algebra;* Irvine, G. W., *in Latin, French, English and Algebra*; McRae, H. F., *in Greek.*

SUPPLEMENTARY EXAMINATIONS.

LATIN 1.—(*Dec. Exam.*): Dickie, H. T.; Ross, D. K.; (*April Exam.*): Cox, R. L.

LATIN 2.—McCain, G. L.; Weir, A. S.; Peppard, Sarah L.; (*Dec. Exam.*): Macaloney, C. W.; Mackenzie, E. C.; Murray, Mabel; Thorne, H.

GREEK 1.—Miller, J. R.; Mackean, J. A.

GREEK 2.—(*Dec. Exam.*): Ross, D. K. (*April Exam.*): Mackean, J. A.

GREEK 3.—Miller, H.

FRENCH 2.—(*April Exam.*): Cox, R. L.

FRENCH 3.—(*Dec. Exam.*): Pennington, Amy K.

GERMAN 2.—Watson, A. D.

ENGLISH 1.—Cox, R. L.; Burns, R. C.

ENGLISH 2.—Turner, Christina J.

BIBLICAL LITERATURE.—McCain, G. L.

HISTORY 1.—McCain, G. L.

POLITICAL ECONOMY 1.—Fraser, A.

PHILOSOPHY 2.—Begin, T. S.; Trueman, J. M.

PHILOSOPHY 4.—Mackean, G. A. R.

MATHEMATICS 1.—Trueman, J. M. (*Algebra and Trigonometry*): Munro, Ethel M.; Turner, Christina J. (*Algebra 1*): McIntosh, C. R.

MATHEMATICS 2.—MacBain, A. R. (*Analy. Geometry*); Thorne, H.; Mackenzie, T. G.; (*Calculus*): Barnes, A. J.; Burton, C. F.; MacKay, G. M. J.

PHYSICS 1.—Munro, Ethel M.; Smith, F. F.; Murray, Lulu M.; Gerrard, Louise F.; Trueman, J. M.

PHYSICS 6.—Mackenzie, T. G.

CHEMISTRY 1.—McRae, H. F.; Murphy, Blanche E.

CHEMISTRY 2.—McLaren, F. H.

DEGREE EXAMINATIONS.

CLASS LISTS.

Names in Classes I and II are in Alphabetical Order. Names in Pass List in order of Merit.

LATIN.

LATIN 1.—*Class I.*—Bayer, Jean G.; Dennis, Agnes; Goudge, Mabel E.; *Murphy, Ethel; *Power, Nora. *Passed*—Patterson, Grace H.; Hamilton, J. H.; (MacLeod, R.; Read, W. K.); Layton, F.; Stairs, G. W.; Grant, Frances H.; MacKeigan, J. A.; Tolson, H. S.;) Browne, Laurie B.; O'Hearn, Bernard; (Cox, F. A.; Irvine, G.); Webber, Kathleen; Gourley, Cassie M. Bentley, T. P.

LATIN 2.—*Class I.*—Matthews, A. F. *Class II.*—Finlayson, G. D.; Kerr, Stella M.; Read, J. E.; Ross, W. C.; Sweet, W. H. *Passed*—MacInnes, C. J.; Crowell, S. W.; Burris, M. G.; Rettie, S.; Payson, Mary P.; (Cunningham, F. Muriel; MacLeod, F. T.; Rettie, A.;) Prowse, J. H.; (Grant, W. P.; MacLellan, R. W.; MacRae, H. F.;) (Burns, W. F.; Dickie, H. T.;) MacPherson, W. *Passed the December Exam.*—Fraser, W. K.

LATIN 3.—*Class I.*—Cumming, C. G.; MacLean, M. C.; *Moxon, A.; Neish, C. W.; Nichols, E. W. *Class II.*—Layton, F. P. H.; Munro, Ethel M.; Murphy, Blanche E. *Passed*—Haverstock, W. E.; Lindsay, W. S.; Smith, F. F.; Swanson, P. I.; MacKenzie, H. H.; MacKenzie, Mary L.; Barnstead, Winifred G.; MacLeod, Anna E.; (Mackay, D. A.; Turner, Christina J.;) (Faulkner, Dora G.; Lawrence, M. Gladys; Sinnott, Edna P.;) (Archibald, J. R.; Dickie, C. G.;) (Gerrard, Louise F.; Sinclair, F. D.;) (Bauld, W. A. G.; MacKenzie, E. C.; Stewart, J. M.;) (Burns, R. C.; Davis, C. J.;) MacAloney, C. W.; Murray, E. Mabel; (McCain, G. L.; Peppard, Sadie; Thorne, H.; *Passed the April Exam.*—Fraser E.; Pennington, Amy K.

GREEK.—*Beginners' Class.—Class 1.*—Murphy, Ethel; Nichols, E. W. *Class II.*—Manuel, M. H.; Webber, Kathleen. *Passed*—King, L. J.; MacLeod, B. F.; Kirker, E. A.; Browne, Laurie B.; Irvine, G.

GREEK 1.—*Class I.*—*Goudge, Mabel E.; Power, Nora. *Passed*—Grant, Frances H.; Read, W. K.; Nichols, E. W.; Murphy, Ethel; Layton, F.; (Bayer, Jean G.; MacLeod, R.;) Hamilton, J. H.; Wood, J.; MacKeigan, J. A.; (Manuel, M. H.; Webber, Kathleen).

---

*High First.

GREEK 2.—*Class I.*—Read, J. E. *Class II.*—Kerr, Stella M.; Ross, W. C. *Passed*—MacInnes, C. J.; MacLellan, J. A.; Rettie, A.; Sweet, W. H.; Grant, W. P.; (Rettie, S.; Stewart, J. M.;) MacRae, H. F.; Dickie, H. T.; Watson, R. A. *Passed the December Exam.*—Baillie, C. T. *Passed the April Exam.*—Burns, W. F;. Kirker, E. A.

GREEK 3.—*Class I.*—MacLean, M. C.; *Moxon, A.; Neish, C. W. *Passed*—Payzant, A. S.; (Fraser, H. C.; MacKenzie, H. H.)

FRENCH 1.—*Class I.*—Strickland, Winifred C.; Patterson, Grace H.; Marshall, Helen A. *Class II.*—O'Hearn, Bernard; Tolson, A. S. *Passed*—Bent, Lionel L.; Bigelow, H. C.; Collie, J. R.; Cox, F. A.; Flemming, H. W.; Gaul, F F.; Hardy, Thomas.; McCunn, G. B.; McMillan, J. R.; Munro, A. E.; Payson, Mary P.; Sweet, H. K.; *Passed (Dec. Exam.)*: Murphy, Ethel.

FRENCH 2.—*Class I.*—Stairs, G. W. *Class II.*—Finlayson, G. D.; Hopkins, Marion J. *Passed*—Bentley, T. P.; Blois, C. L.; Burris, G.; Dickie, R. E.; Gourley, Cassie T.; MacAloney, C. W.; McAulay, A. G.; McIntosh, C. W.; McKinnon, J.; McLeod, F. L.; Marchant, D. H.; Morrison, J. L.; Thorne, H.; Wickwire, D. S.; Yeoman, E. M. *Passed (Dec. Exam.* : Bethune, R. J. *Passed (April Exam.)*: Harlow, A. C.

FRENCH 3.—*Class I.*—McLeod, Anna. *Class II.*—Pennington, Amy K. *Passed*—Hill, Olive M. Buckley, Roy C.; Peppard, Sadie; Prowse, J. H.; Sinclair, F. D.; Turner, Christine.

FRENCH 4.—*Class II.*—Barnstead, Winifred G.; Sinnott, Edna P. *Passed*—Gerrard, Louise F.; McKenzie, Mary L.;

FRENCH 5.—*Class II.*—Fraser, Muriel. *Passed*—Murray, Lulu M.; Smith, F. F.; Faulkner, Dora G.

GERMAN 1.—*Class I.*—Marshall, Helen A. *Class II.*—Barnstead, Winifred G. *Passed*—Dawson, F. J.; Ferguson, Alex.; Gourley, Cassie I.; Hill. Olive M.; Keay, A.; Lindsay, W. S.; McKenzie, Mary E.; Manuel, M. H.; Matthews, A. F.; Nicholson, N. *Passed (Dec. Exam.)*; Bent, Lionel L.

GERMAN 2.—*Class I.*—McLeod, Anna; Fraser, H. C.; Patterson, Grace H. *Class II.*—Sullivan, C. T.; Crowell, S. W.; Murray, Ella M.; Layton, F. P. H. *Passed*—Archibald, J T.; Gerrard, Louise F.; Gordon, H. L.; Kerr, Mary E.; Murray, Lulu M.

GERMAN 3.—*Class I.*— Haverstock, W. E.; Swanson, P. J.; Bruce, J. G.; McInnis, Euphemia M. *Passed*—Barnes, J.; Burgess, L. L.; Davidson, Milton; Creighton, H. J.; Forsythe, R. B.; McKay, D. A.; McIntosh, C. R.; Woodbury, W. W.

GERMAN 4.— *Class 1.*—Haverstock, W. E.; Turner, Christine.

ENGLISH 1. *Class 1.*—Browne, Laurie B. W.; MacKeigan, J.A. *Class II.*—Bayer, Jean; Goudge, Mabel E.; Grant, Frances M.; Hamilton, J. H.; Marshall, Helen A. B.; MacLeod, A.; Webber, Kathleen J. *Without additional work*—Daviss, Beatrice E.; Power, Nora N. *Passed*—McCunn, G. B.; McLean, A. S.; Stairs, G. W.; Read, W. K.; Hattie, D. E.; McLeod, B. F.; Cox, F. A.;

Dawson, F. J.; Harris, Zadee A.; Bent, L. L.; King, L. J.; O'Hearn, Annie B.; Chase, H. M.; Manuel, M. H.; McMillan, J. P.; Mackay, M.; Layton, F.; Wall, A. S.; Collie, J. R.; Drysdale, J. R.; Mackay, J. F.; Hills, B. W.; Cameron, D. A.; Hardy, T. W.; Bigelow, H. C.; Fraser, J. A.; Munro, A. E.; Tolson, H. S.; Flemming, H. W.

ENGLISH 2.—*Class I.*—Maclellan, R. W.; Matthews, A. F.; Murphy, Ethel; Patterson, Grace Harris. *Class II.*—Burris, M. G.; Crowell, S. W.; Finlayson, G. D.; Hopkins, Marion J.; Prowse, J. H.; Seeley, Lily. *Passed*—Grant, W. P.; Kerr, Mary E.; Bettie S.; Wood, J.; Gourley, Cassie I.; Payson, Mary; Read, J. E.; Bentley, T. P.; McInnis, C. J.; McLeod, F. T.; Rettie, A.; MacKay, Barbara L.; Sweet, W. H.; Hines, Nora G.; McLennan, Mary E.; Miller, J. R.; Morrison, J. L.; Fielding, R. W.; Fraser, Muriel; Foster, E.; Archibald, J. T.; Cunningham, Frances M.; Dickie, R. E.; Ross, W. C.; MacRae, H. F., Murphy, G.; Curry, W. A.; Fraser, W. K.; McKinnon, J.; Watson, R. A.; Weir, A. S.; Dickie, H. T.; MacRitchie, J. J.; Dennis, Agnes; Yeoman, E.; Wickwire, D. W.; Blois, C. L.; Crichton, Josephine A.; Marchant, H. H. M.; MacAulay, A. G.; Snook, J. S.

ENGLISH 3—*Class I*—Barnett, J.; Charman, J. H.; Cumming, C. G.; Fraser, H C; Moxon, A; Murphy, Blanche E; Robertson, R. B. H. *Class II.*—Baillie, C. T.; Forsythe, R. B; Lawrence, Gladys; Patterson, H S.; Sinnott, Edna P. *Passed*—Haverstock, W E; Barnstead, Winifred; Woodbury, W. W.; Murray, Lulu M; Faulkner, Dora G; Dickie, C G.; Murray, Mabel E.; Stewart, J; Corey, B S.; Davidson, M.; Munro, Ethel M; Fraser, A; Sinclair, F. D.; Burgess, L L.; Gladwin, Alice P.; Archibald, J. R.; MacKenzie, Mary L.; Gerrard, Louise; MacKenzie, E C.; MacPherson, W. M.; Buckley, R C.; Peppard, Sadie

ENGLISH 6.—*Class II.*—Haverstock, W. E. *Passed*—Baillie, C. T.

BIBLICAL LITERATURE.—*Class I.*—Burns, W. F.; Cumming, C. G. *Class II.*—Noble, M. E.; McCain, G. L.; McDonald, R. A.; Payzant, A. S. *Passed*—Kirker, E. A.; Murray, Lulu M.; Turner, Christina J.; Ross, W. M.; Thorne, H.; Buckley, R. C.; McKenzie, D. H.

HISTORY 1.—*Class I.*—Fraser, H. C.; McLeod, Anna; Murphy, Blanche; Nichols, Edward; Robertson, R. B. H.; Swanson, P. I.; Class II.—Bruce, Jas. G.; Cumming, C. G.; McKenzie, E. C.; Sinnott, Edna; Tait, W. D. *Passed*—Grant, W. P.; McKenzie, H. H.; Lindsay, W. S.; Miller, H.; Burns, R. C.; Buckley, Roy; McKenzie, Mary; MacLellan, W. R.; Matthews, A. F.; Sweet, W.; Faulkner, Dora; Pennington, Amy; Barnstead, Winifred; Green, W.! Sinclair, F. D.; Smith, Frank; Miller, J. R.; McInnes, C. J.; McLellan, J. A.; McLeod, A. A.; Bauld, W. G.; Archibald, J. T.; Chase, H. M.; Haverstock, W. E.; Davis, C. J.; Fraser, Everett; McDougall, Ewen; Dickie, C. G.; Munro, Ethel; Fraser, W. K.; McRae, H. F.; Ross, W. M., Ross, W. C.; Stewart, J. M.; Peppard, Sarah; Fraser, Alister.

HISTORY 2.—*Class I.*—Barnett, John; Charman, J. H.; Forsythe, R. B.; McInnes, Euphemia; Murray, Ella Mabel. *Class II.*—Blanchard, C. P. *Passed*—Corey, B. S.; Peppard, Sarah;

Hill, Olive; Gerrard, Louise; Gladwin, Agnes; McCain, G. L.; McBain, A. R.; Thorne, Harvey.

POLITICAL ECONOMY 1.—*Class I.*—McDonald, R. A.; Miller, Hugh; McInnes, Euphemia. *Passed*—Payzant, A. S.; Swanson, P. I.; Blanchard, C. P.; Smith, F. F.; Burns, Ralph C.; Burns, W. F.; Chase, H. M.; Curry, W. A.; Gourley, Cassie I.; Hill, Olive M.; McLellan, J. A.; McKenzie, D. H.; Harlow, A. C.; Pennington, Amy; Thorne, H.; McCain, G. L.; Wier, A. S.

POLITICAL ECONOMY 2.—*Passed*—Stapleton, W. C.

PHILOSOPHY 1.—*Class I.*—Finlayson, G. D.; Grant, W. P.; Patterson, Grace H. *Class II.*—Mackay, B. Lois; Matthews, A. F.; Watson, R. A. *Passed*—Hopkins, Marion; Creighton, H. J.; Sweet, W. H.; Burgess, L. L.; Archibald, J. T.; Yeomans, Eris; Read, J. E.; Kerr, Mary E.; Prowse, J. H.; McInnes, C. J.; MacLellan, R. W.; Hines, Nora G.; Haverstock, W. E.; Mackinnon, J.; Rettie, S.; Ross, W. C.; Bentley, T. P.; Dickie, H. T.; Gourley, Cassie I.; Morrison, J. L.; MacAloney, C. W.; Payson, Mary P.; Dickie, R. E.; Crowell, S. W.; Fraser, W. K.; Rettie, A.; Cunningham, F. Muriel; MacRae, H. F.; Cahan, C. H. S.;

PHILOSOPHY 3.—*Class I.*—Cumming, C. G.; Layton, F. P.; Macdougall, E.; Moxon, A.; Nichols, E. W.; Patterson, H. S.; Tait, W. D. *Class II.*—Faulkner, Dora G.; Lawrence, Gladys; Macdonald, R. A.; McInnis, Euphemia; Miller, H.; Wallis, Bessie. *Passed*—Wood, J.; McLeod, Anna E.; Blanchard, C. P.; Baillie, C. T.; Gladwin, Alice P.; Burns, R. C.; Payzant, A. S.; McLeod, A. A.; Munro, Ethel; Barnstead, Winifred; Swanson, P. I.; Mackenzie, E. C.; McLellan, J. A.; Archibald, J. R.; Mackenzie, Mary L.; Sinclair, F. D.; Smith, F. F.; Hill, O. Muriel.

PHILOSOPHY 4.—*Class I.*—Cumming, C. G.; Nichols, E. W.; Patterson, H. S.; Tait, W. D.; Wallis, Bessie. *Class II.*—Baillie, C. T.; Layton, F. P.; Macdonald, R. A.; Miller, H. *Passed*—Davidson, M. D.; Wood, J.; Payzant, A. S.; Nelsh, C. W.; Burns, W. F.; Dickie, C. G.; Lawrence, M. Gladys; Kirker, E. A.; Fraser, A.; Munro, Ethel; Ross, W. M.; McCain, G. L.; McPherson, W.; McKenzie, D. H.; Weir, A. S.

PHILOSOPHY 7.—*Class I.*—Kent, H. A., B. A.; Christie, G. A., B. A.; Crowdis, C. J., B. A.; *Class II.*—Tait, W. D.; Stavert, R. H., B. A.; Layton, F. P.; Ferguson, A., B. A.

PHILOSOPHY 8.—*Class I.*—Tait, W. D. *Class II.*—Kent, H. A. *Passed*—Ferguson, A., B. A.

EDUCATION 1.—*Class I.*—Macdonald, R. A. *Class II.*—Gladwin, Alice P.; McLeod, A. A.; Watson, R. A. *Passed*—Green, W. I.; Toombs, H. W.; Burns, W. F.; Burns, R. C.; Ross, D. K.; Murray, E. Mabel; Murray, Lulu M.; Kirker, E. A.; Miller, H.; McCain, G. L.; Mackinnon, A.; Ross, W. M.; Weir, A. S.; Mackenzie, D. H.; Hudson, J. W. *In Psychology*—Seeley, Lily S.

MATHEMATICS 1.—*Class I.*—Goudge, Mabel; McLean, A. S.; Read, W. K.; *Stairs, G. W. *Class II.*—Cox, F. A.; Dawson, F. J.; Flemming, H. W.; Hamilton, J. H.; Hills, B. W.; King, L. J.; McMillan, J. P.; Power, Nora. *Passed*—MacKeigan, J. A.; Manuel, M. H.; Wall, A. S.; O'Hearn, Bernard; McLeod, B. F.;

Mackay, J. F.; Bayer, Jean; Layton, F.; Grant, Frances; Mackenzie, H. H. *Passed in Trigonometry and Geometry*—Bigelow, H. C.; Drysdale, J. R.; Keay, A.; Mackay, M.; McLennan, K. J.; Nicholson, M.; Sweet, H. K. *Passed in Trigonometry and Algebra*—Murphy, Blanche; Sinnott, Edna. *Passed in Geometry*—Hall, W. G.; Mackenzie, E. C.; Tolson, H. S. *Passed in Trigonometry*—Collie, J. R.; Gaul, T. F.; McCunn, G. B.

MATHEMATICS 2.—*Class I.*—*Blois, C. L.; Finlayson, G. D. *Class II.*—Archibald, J. T.; Macleod, F. T.; Wickwire, D. S. *Passed*—Snook, J.; Murphy, G. F.; McRitchie, J. J.; McBain, A. R.; MacKay, G. M. J. *Passed in Analytic Geometry*—Bethune, R. J.; Knight, F. C.; Marchant, D. H.; Morrow, J. B.; Read, J. E.

PHYSICS 1.—*Class I.*—Lindsay, W. S.; Sullivan, C. *Passed*—Macdougall, E.; Prowse, J. H.; Wood, J.; Curry, W. A.; Payson, Mary; Burris, M. G.; Mackinnon, J.; Fraser, A.; Archibald, J. R.; Morrison, J. L.; McLeod, A. A.; Ross, W. M.; Crowell, S. W.; Bauld, W. A. G.; MacKay, Lois; Bentley, T. P.; Dickie, R. E.; Lawrence, Gladys Turner, Christina; Green, W. I.; McRitchie, J. J.; Fraser, W. K.; Maclellan, R. W.; Weir, A. S.; McCain, G. L.; Bruce, J. G.; Murray, Lulu M.

PHYSICS 1—(*Engineering*)—*Passed*—Blois, C. L.; Snook, J. S.; Murphy, G. F.; Wickwire, D. W.; Marchant, D. H. M.

PHYSICS 2.—*Class I.*—McInnis, R. J.; Sullivan, C. *Class II.*—Burgess, L. L.; Watson, A. D. *Passed*—Harlow, A. C.; Creighton, J.; Barnes, A. J;. Thorne, H.; MacAloney, C. W.

PHYSICS 6.—*Class I.*—Creighton, J.; Harlow, A. C. *Class II.* Barnes, A. J.; Grant, F. A.; Lindsay, W. S.; McInnis, R. J.; Snook, J. S.; Sullivan, C. *Passed*—Stapleton, W. C.; Davidson, M. D.

PHYSICS 7.—*Class II.*—Burgess, L. L.

CHEMISTRY 1 (*Arts.*)—*Class I.*—Finlayson, G. D. *Class II.*—Cox, F. A.; Murphy, Ethel; Stairs, G. W. *Passed*—Hines, Nora G.; Hopkins, Marion J.; Crowell, S. W.: Read, W. K.; Patterson, Grace; Manuel, M. H.; (Goudge, Mabel; MacKeigan, J. A.; King, L. J.; (Power, Nora; Turner, Christina;) McLeod, B. F.; Macleod, F. T.; Mackay, J. F.; Archibald, J. T.; Smith, F. F.; Rettie, S.; Bayer, Jean; Layton, F. J.; Drysdale J. R.; Fraser, W. K.; (O'Hearn, Bernard; Payson, Mary;) (Browne, Laurie; Webber, Kathleen;) Irvine, G. W.; Bigelow, H. C.; Keay, A.

CHEMISTRY 1 (*Engineering*).—*Class II.*—McMillan, J. P. *Passed*—Dawson, F. J.; Hills, B. W.; Reid, J. W.; Flemming, H. W.; Fielding R. W.; McCunn, G. B.; McLean, A. S.

CHEMISTRY 2.—(*Arts and Science.*)—*Passed*—Lindsay, W. S.; MacKay, Lois.

CHEMISTRY 2.—(*Engineering.*)—*Class I.*—Blois, C. L. *Class II.*—Snook, J. S. *Passed*—Wickwire, D. S.; McAulay, A. G.; Marchant, D. H. M...*Passed* (*Additional Paper*).—Grant, F. A.

CHEMISTRY 4.—*Class I.*—Burgess, L. L.; Creighton, H. J.; Harlow, A. C. *Class II.*—Stapleton, W. C.

GEOLOGY 1.—*Passed*—Grant, F. A.; Millar, J. M.; Stapleton, W. C.; Burton, C. F.; Snook, J. S.

GEOLOGY 2.—*Passed*—McLearn, F. H.; McKenzie, T. G.

GEOLOGY 3.—*Passed*—Fulton, T. T.

GEOLOGY 4.—*Passed*—Macdonald, C.

MINERALOGY 1.—*Passed*—McLearn, F. H.; McKenzie, T. G.; Stapleton, W. C.

ASTRONOMY.—*Class I.*—Blanchard, P. *Class II.*—Bauld, W. A. G. *Passed*—Thorne, Harvey; Curry, W. A.; Turner, Christina; Gladwin, Alice; Peppard, Sarah; McBain, A. R.

MECHANICAL DRAWING.—*Class II.*—Dawson, F.; Gaul, T. F.; Murphy, G. F. *Passed*—McCunn, G. B.; McMillan, J. P.; Ferguson, A.; Flemming, H. W.; Wall, A. S.; Barnes, A. J.; Grant, F. A.; Gray, B. L.

DESCRIPTIVE GEOMETRY.—*Class I.*—Blois, C. L. *Class II.*—Murphy, G. F.; Wickwire, D. S. *Passed*—Archibald, F. R.

SURVEYING.—*Class I.*—Blois, C. L.; Grant, F. A. *Class II.*—Barnes, A. J; Knight, F. C.; Macdonald, C.; Wickwire, D. S. *Passed*—Snook, J. S.; McLearn, F. H.; Millar, J. M.

APPLIED MECHANICS.—*Passed*—Macdonald, C.

HYDRAULICS.—*Class 11.*—Barnes, A. J.; Fulton, T. T.; Macdonald, C.

HYDRAULIC ENGINEERING.—*Class I.*—Macdonald, C. *Class II.*—Millar, J. M.

RAILWAY WORK.—*Passed*—Macdonald, C.; Millar, J. M.

STRUCTURES.—*Class I.*—Macdonald, C. *Passed*—Millar, J .M.

METALLURGY 2.—*Passed*—McLearn, F. H.; McKenzie, T. G.; Morrow, J. B.

METALLURGY 3.—*Passed*—Fulton, T. T.

METALLURGY 4.—*Passed*—Fulton, T. T.

MINING 1.—*Passed*—McKenzie, T. G.; McLearn, F. H.; Macleod, C. G.

MINING 2.—*Passed*—Fulton, T. T.

BOTANY.—*Class I.*—Spencer, Minnie G. *Class II.*—Bruce, J G.. *Passed*—Stewart, J. M.; Bauld, W. A. G.; Curry, W. A.; Sinclair, F. D.

ZOOLOGY.—*Class I.*—McInnis, Euphemia; Spencer, Minnie G. *Class II.*—Bruce, J. G. *Passed*—Bauld, W. A. G.; Sinclair, F. D.; Stewart, J. M.

HISTOLOGY.—*Passed*—Spencer, Minnie G.

FACULTY OF LAW.

DEGREE EXAMINATIONS.

CLASS LISTS.

NOTE.—The names in Class I are placed in order of merit; the pass list is arranged in alphabetical order, and gives no indication of the relative merits of the candidates.

CONTRACTS.

Class I.—Power, W K.; Robinson, W. C.; Morine, A, N.; Murphy, R. C.

Class II.—Corbett, W. M.; Morse, C. L.

Passed—Brehaut, F.; Patterson, H. S; Blanchard, C. P.

CRIMES.

Class I.—Corbett, W. M.; Power, W. K.; Morine, A. N.

Class II.—Macdonald, Allen; MacIntosh, A. D.; Robinson, W. C.; Murphy, R. C

Passed—Thibault, H. C.; Morse, C. L.

REAL PROPERTY.

Class I.—Robinson, W. C.; Morine, A. N.; Barnett, T.; Murphy, R. C.

Class II.—Power, W. K.; MacIntosh, A. D; Corbett, W. M.; Thibault, H. C

Passed.—Morse, C. L; Macdonald, Allen; Sanderson, C. L.; Sterne, G. H.

CONFLICT OF LAWS.

Class I.—McKay, R. G; Shaw, V. H.; McLeod, J. A.; Mackay, Ira.

Class II.—Locke, E. C.; McLennan, D; Elliott, P. St. C; Corey, B. S.

Passed.—Church, E.; Dickey, H. A; Eagar, M W; Fenerty, L. H.; Foster, W. G.; Landry, A. F; Sanderson, C. L; Sterne, G. H.

EVIDENCE.

Class I.—Mackay, R. G; Mackay, Ira A.; McLennan, D.; Elliott, P. St C.; Shaw, V. H.

Class II.—McLeod, J. A.; Dickey, H A.; Corey, B. S.; Elliott, M.; Locke, E. C.

Passed—Chisholm, J E.; Eagar, M. W; Fenerty, L H; Foster, W G; Graham, B. T.; Landry, A F.; Lyons, J. B.; Macdonald, A.; MacGillivray, A. A.; MacIntosh, A. D.; Morrisey, W. S; Sanderson, C. L.; Seller, L. A; Sterne, G H; Wood, John.

EQUITY.

Class I.—Mackay, Ira; McLennan, D.; Shaw, V. H.; Corbett, W M; Locke, E C.; Fenerty, L H.; McIntosh, A. D.

Class II.—Sanderson, C L; Elliott, M.; Corey, B. S.; Wood, J.; McKay, R. G.; MacGillivray, A A; Morrisey, W. S.

Passed—Chisholm, J. E.; Dickey, H. A.; Eagar, M. W.; Elliott, P. St. C.; Foster, W. G.; Graham, B. T; Landry, A. F; Lyons, J. B.; McDonald, A.; McDonald, B. D.; McLeod, J. A; Seller, L. A.; Sterne, G. H.

SALES.

Class I.—McLennan. D.; Shaw, V. H.; Mackay, R. G.; Barnett, J.; Mackay, Ira; McLeod, J. A.; Locke, E. C; Fenerty, L. H.; Corey, B. S; MacIntosh, A. D.

Class II.—Morrisey, W. S; Sanderson, C. L.; Elliott, M.; Charman, J. H.; Wood, J.

Passed.—Chisholm, J E.; Dickey, H A.; Eagar, M. W.; Elliott, P. St. C.; Foster, W. G.; Graham, B. T.; Landry, A. F.; Lyons, J B.; Macdonald, A.; Macdonald, B D.; MacGillivray, A. A.; Seller, L. A; Sterne, G. H.

CONSTITUTIONAL LAW.

Class I.—Locke, E. C.; Corbett, W. M.

Class II.—Morrisey, W. S; MacIntosh, A D.

Passed.—Baillie, C T; Barnett, J.; Charman, J. H; Chisholm, J. E.; Dickey, H. A.; Elliott, M.; Lyons, J. B.; Macdonald, B. D.; Macdonald, Allen; McLeod, J. A.; Seller, L. C.; Sterne, G. H.

SHIPPING.

Class I.—Morrisey, W. S.; Elliott, P. St. C.; McLeod, J. A.

Class II.—Sterne, G. H.; Elliott, M.

Passed—Chisholm, J. E; Graham, B. T.; Lyons, J. B.; Macdonald, A.; MacGillivray, A. A; Sanderson, C. L.; Seller, L. C.

INTERNATIONAL LAW.

Class I.—Corey, B. S; Mackay, R. G; Shaw, V. H.

Class II.—Fenerty, L. H.; McLennan, D.; Landry, A. F.; Dickey, H. A.

Passed.—Foster, W. G.; Eagar, M. W.

TORTS.

Class I.—Charman, J. H.; Robinson, W. C; Morine, A. N.

Class II.—Murphy, R. C; Corbett, W. M; Power, W. K.

Passed.—Macdonald, Allen; MacIntosh, A. D.; Mackenzie, E. C.; Morse, C. L.; Thibault, H. C.

CONSTITUTIONAL HISTORY.

Class I.—Power, W. K.; Layton, F. P. H.

Class II.—Mackenzie, E. C.; Barnett, J.; Patterson, H. S; McKay, D. A.; Morine, A. N.; Nichols, E. W.; Archibald J. R.

Passed.—Blanchard, C. P.; Cahan, C. H. S.; Chase, H.; Curry, W. A.; Davis, C. J.; Dickie, C. G.; Eagar, M. W.; McBain, A. R.; McKenzie, H. H.; McLellan, R. W.; Murphy, R. C.; Robinson, W. C.; Robertson, R. B. H.; Smith, F. F.; Thibault, H. C.; Thorne, H.

FACULTY OF MEDICINE

GENERAL PASS LIST.

(Alphabetical Order.)

PRIMARY M. D., C. M. EXAMINATION.

Section "A"—First Year.

Brown, S. R.; Bruce, J. G.; †*Chisholm, H. D.; McGarry, M. E.; *MacIntosh, C. R.; Maclean, W. L; MacLellan, R. A.; Mosher, B. W.; Patton, W.; Spencer, Minnie G.; Thomas, Alice T.

Section "B"—Second Year.

Ballem, J. C.; Carter, P. McF.; Chisholm, H. D.; Goodwin, J. C.; LeBlanc, B. A.; Macdonald, J.; *MacDonald, N.; Shatford, R. O.; Woodbury, W. W.

FINAL M. D., C. M. EXAMINATION

Section "A"—Third Year.

Boudreau, F. E.; Coffin, H. W.; DeVine, M. E.; Donovan, O. G. Dunn, G. A; Goodwin, J. C.; Hennigar, Annie; Killam, H. E.; McKay, D. A.; McRae, D. R.; Melanson, A. R.

Section "B"—Fourth Year.

Blackadder, E.; Ferguson, J. A.; McDonald, D. R.; MacDonald, T. G.; McIntosh, G. A.; MacKay, V. N.; MacKenzie, Mary; Miller, A. W.; Murray, J. A.; O'Connell, J. I.; Proudfoot, J. A.; *Wallace, P. J.

DEGREE EXAMINATIONS.

CLASS LISTS.

(Alphabetical Order.)

MEDICAL PHYSICS.

Distinction—Brown, S. R.; Maclean, W. L.; MacLellan, R. A.

Passed—Bruce, J. G.; McGarry, M. E.; Mosher, B. W.; Patton, W.; Thibault, S. H.; Thomas, Alice T.

Supplementary, April, 1905—Chisholm, H. D.

JUNIOR CHEMISTRY.

Distinction—Brown, S. R.

Passed—McGarry, M. E.; Maclean, W. L.; MacLellan, R. A.; McNiece, J. A.; Mosher, W. B; Patton, W.; Thomas, Miss A. T.

Supplementary, Sept., 1904—Chisholm, H. D.

Supplementary, April, 1905—MacIntosh, C. R.

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*Supplementary, April, 1905.
†Supplementary, September, 1904.

Biology.

Distinction—Maclean, W. L.; Spencer, Minnie G.

Passed—Brown, S. R.; Bruce, J. G.; McGarry, M. E; McGarry, M. R.; MacLellan R. A.; McNiece, J. A.; Mosher, B. W.; Patton, W.; Reid, F. H.; Thibault, S. H.; Thomas, Alice T.

Junior Anatomy.

Distinction—Brown, S. R.; McGarry, M. R.; Maclean W. L.; Patton, W.; Spencer, Minnie G.; Thibault S. H.

Passed—Bruce, J. G.; McGarry, M. E; MacLellan, R A.; McNiece, J. A.; Mosher, B. W.; Reid, F. H.; Thomas, Alice T.

Physiology and Histology.

Distinction—Woodbury, W. W.

Passed—Carter, P. McF.; Chisholm, H. D.; LeBlanc, B. A.; MacDonald J.; Shatford, R. O.

Supplementary, Sept., 1904—Goodwin, J. C.

Supplementary, April, 1905—MacDonald, N.

Senior Chemistry.

Distinction—Ballem, J. C.

Passed—Carter, P. McF.; Chisholm, H. D.; LeBlanc, B. A.; MacDonald, J.; Shatford, R. O.

Supplementary, Sept., 1904—Goodwin, J. C.

Supplementary, April, 1905—MacDonald, N.

Senior Anatomy.

Distinction—Ballem, J. C.; LeBlanc, B. A.; Woodbury, W. W.

Passed—Carter, P. McF.; Chisholm, H. D.; MacDonald, J.; Shatford, R. O.

Supplementary, April, 1905—MacDonald, N.

Materia Medica and Therapeutics.

Distinction—Boudreau, F. E.; Coffin, H. W.; Donovan, O. G.; Dunn, G. A.; McKay, D. A.

Passed—DeVine, M. E.; Goodwin, J. G.; Hennigar, Annie; Killam, H. E, McRae, R. D.; Melanson, A. R.

Pathology and Bacteriology.

Distinction—Boudreau, F. E.; Donovan, O. G.; Dunn, G. A.; McKay, D. A.; Melanson, A. R.

Passed—Coffin, H. W; Devine, M. E; Goodwin, J. G.; Hennigar, Annie; Killam, H. E.; McRae, D. R.

Surgery.

Distinction—Miller, A. W.

Passed—Blackadder E.; Ferguson, J. A.; McDonald, D. R.; MacDonald, T. G.; MacIntosh, G. A.; MacKay, V. N.; MacKenzie, Mary; Murray, J. A.; O'Connell, J. I; Proudfoot, J. A.

Supplementary, April, 1905—Wallace, P. J.

Medicine.

Distinction—MacKay, V. N, O Connell, J. I.

Passed—Blackadder E.; Ferguson, J. A.; McDonald, D. R.; MacDonald, T. G.; McIntosh, G. A.; MacKenzie, Mary; Miller, A. W.; Murray, J. A.; Proudfoot, J. A.

Supplementary, April, 1905—Wallace, P. J.

Obstetrics and Diseases of Women and Children.

Passed—Blackadder E.; Ferguson, J. A.; McDonald, D. R.; MacDonald, T. G.; McIntosh, G. A.; MacKay, V. N.; MacKenzie, Mary; Miller, A. W.; Murray, J. A.; O'Connell, J. I.; Proudfood, J. A.

Supplementary, April, 1905—Wallace, P. J.

Clinical Medicine.

Distinction—McIntosh, G. A.; MacKay, V. N.; Murray, J. A.

Passed—Blackadder, E; Ferguson, J. A.; McDonald, D. R.; MacDonald, T. G.; MacKenzie, Mary; Miller, A. W.; O'Connell, J. I.; Proudfoot, J. A.

Supplementary, April, 1905—Wallace, P. J.

Clinical Surgery.

Distinction—MacKay, V. N.

Passed—Blackadder, E.; Ferguson, J. A.; McDonald, D. R.; MacDonald, T. G.; McIntosh, G. A.; MacKenzie, Mary; Miller, A. W., Murray, J. A.; O'Connell, J. I.; Proudfoot, J. A.

Supplementary, April, 1905—Wallace, P. J.

STUDENTS, 1904-1905.

FACULTY OF ARTS.

(The number following the name indicates the year of the course of the student.)

Allin, Richard Wilfrid, B. A. ..... Rothesay, N. B.
Archibald, James Ross, 3 ..... Truro.
Archibald, John Thomas, 2 ..... New Town, Guysboro.
Archibald, Sadie ..... Halifax.
Baillie, Charles Tupper, 4 ..... Halifax.
Barnett, John, 4 ..... Hartland, N. B.
Barnstead, Winifred Glen, 3 ..... Halifax.
Bauld, William Alfred Gordon, 3 ..... Halifax.
Bayer, Harriet Muir, B. A. ..... Halifax.
Bayer, Jean Gordon, 1 ..... Halifax.
Begin, Thurston Stanley, 4 ..... Lunenburg.
Bentley, Thomas Percy, 2 ..... Truro.
Bigelow, Henry Carl, 1 ..... Glace Bay, C. B.
Blanchard, Charles Prescott, 4 ..... Truro.
Blethen, Ethel Llewellyn ..... Halifax.
Boak Lillie May ..... Halifax.
Browne, Laurie Browne Ward, 1 ..... Springhill.
Buckley Roy Clifford, 3 ..... Halifax.
Burns, Ralph Chester, 3 ..... Milltown, N. B.
Burris, William Forsyth, 3 ..... Milltown, N. B.
Burris, Matthew George, 2 ..... Upper Musquodoboit.
Cahan, Charles Hazlitt, 2 ..... Halifax.
Cameron, Donald Alexander, 1 ..... Sutherland's River.
Campbell, Duncan George Joseph, M. D... Halifax.
Charman, James Harry, 4 ..... Wallace.
Chase, Harold Munro, 1 ..... Sheffield Mills.
Chisholm, Mary Maud Ethel ..... Halifax.
Christie, George Archibald, B. A. ..... Halifax.
Corey, Burton Stone, 3 ..... Petitcodiac, N. B.
Cox, Frederick, Austin, 1 ..... Upper Stewiacke.
Cox, Rupert Leslie, 2 ..... Maitland.
Creighton, Graham, B. A. ..... Halifax.
Creighton, Henry Jermain, 3..... Dartmouth.
Crichton, Josephine Adele, 2 ..... Halifax.
Crowell, Marion Alberta ..... Halifax.
Crowell, Seth Wilson, 2 ..... Yarmouth.
Cumming, Charles Gordon, 4 ..... Westville.
Cunningham, Frances Muriel, 2 ..... Dartmouth.
Curry, Wilfred Alans, 4 ..... Halifax.
Davis, Charles James, 4 ..... Guysboro.
Daviss, Beatrice Eleanor ..... Dartmouth.
Dennis, Agnes Miller, 1 ..... Halifax.
Dickie, Clarence Gordon, 3 ..... Truro.
Dickie, Rufus Edward, 2 ..... Lower Stewiacke.
Dickie, Harold Tupper, 2 ..... Lower Stewiacke.
Drysdale, James Roy, 1 ..... East New Annan.

Faulkner, Dora Guille, 3 ..... Halifax.
Ferguson, Alexander, B. A. ..... Port Morien.
Finlayson, George Daniel, 2 ..... Merigomish.
Forsythe, Robert Bell, 4 ..... Alberton, P. E. I.
Fraser, Alister, 3 ..... New Glasgow.
Fraser, Andrew, 1 ..... Garden of Eden.
Fraser, Everett, 2 ..... North Lake, P. E. I.
Fraser, Harry Clement, 3 ..... York, N. B.
Fraser, James A., Jr., 1 ..... New Glasgow.
Fraser, Muriel ..... Halifax.
Fraser, William Kenneth, 2 ..... Halifax.
Gerrard, Frances Louise, 4 ..... Hazel Hill.
Gladwin, Alice Pearson, 4 ..... Truro.
Goodwin, Jessie Lord ..... Halifax.
Goudge, Mabel Ensworth, 1 ..... Halifax.
Gourley, Cassie Isabelle, 2 ..... Sheet Harbour.
Grant, Frances Havergal, 1 ..... Grand River, C. B.
Grant, William P. ..... Sunny Brae.
Green, William Ira, 4 ..... Clifton, P. E. I.
Gunn, Sidney E., B. A. ..... British Columbia.
Hamilton, James Henry, 1 ..... Burnside.
Harris, Zaidee Alberta ..... Halifax.
Hattie, Daniel, 1 ..... Caledonia.
Haverstock, William Ernest, 4 ..... Halifax.
Hill, Amy, B. A. ..... Halifax.
Hill, Olive Muriel, 4 ..... Halifax.
Hines, Nora Geneva ..... Pubnico.
Hopkins, Marion Jane ..... Yarmouth.
Hudson, John William, 4 ..... Eureka.
Irvine, George Wilmot, 1 ..... St. John, N. B.
Keay, Arnold, 1 ..... New Glasgow.
Kent, Harry Arnold, B. A. ..... Truro.
Kerr, Mary Estelle, 2 ..... Eureka.
King, Lewis Jack, 1 ..... Buctouche, N. B.
Kirker, Elbridge Archibald, 3 ..... Quoddy.
Kirker, Mary Jeanetta ..... Quoddy.
Lawrence, Mary Gladys, 3 ..... Hantsport.
Layton, Francis, 1 ..... Truro.
Layton, Francis Paul Hamilton, 3 ..... Truro.
Layton, Robert Blackwood, B. A. ..... Truro.
Leslie, Rebecca B. ..... Halifax.
Lethbridge, O. ..... Halifax.
Lindsay, Walker Stewart, 3 ..... Halifax.
MacAloney, Charles William, 3 ..... Halifax.
McBain, Alexander Ross, 4 ..... Meadowville.
McCain, George Leonard, 4 ..... Sussex, N. B.
Macdonald, Catherine Breckin ..... Halifax.
Macdonald, Roderick Augustus, 4 ..... Halifax.
Macdonald, Zillah ..... Halifax.
McDougall, Ewen, 3 ..... Bangor, P. E. I.
McInnis, Charles John, 2 ..... North Ainslie, C. B.
McInnis, Euphemia, 4 ..... West Bay, C. B.
McInnis, Robert John, 4 ..... West Bay, C. B.
MacKay, Barbara Lois, 2 ..... Dartmouth.
MacKay, Daniel Alexander, B.Sc., 4 ..... River John.
MacKay, George Moir Johnstone, 4 ..... Dartmouth.
McKay, Jamieson Fraser, 1 ..... New Glasgow.
MacKay, Malcolm, 1 ..... North Earltown.

MacKean, George Angus Ross, 4 ..... Lunenburg.
MacKean, James Alexander, 4 ..... Lunenburg.
MacKeigan, John Angus, 1 ..... Sydney, C. B.
McKenzie, Daniel Hector, 3 ..... Sydney, C. B.
MacKenzie, Ewen Cameron, 3 ..... Flat River, P. E. I.
MacKenzie, Harry Havelock, 3 ..... New Glasgow.
MacKenzie, Mary Elizabeth, 3 ..... Flat River, P. E. I.
MacKinnon, Duncan Hugh, M. A. ..... North-West Arm.
McLean, Murdoch Campbell, 4 ..... North Ainslie, C. B.
McLellan, John Archibald, 3 ..... Kempt Road, C. B.
Maclellan, Robert William, 2 ..... Halifax.
McLennan, Kenneth John, 2 ..... Grand River, C. B.
McLennan Mary Elliot ..... Dartmouth.
McLeod, Angus Alexander, 3 ..... Baddeck.
McLeod, Anna Elizabeth, 3 ..... Scotsburn.
McLeod, Beverley L., 1 ..... Penobsquis, N. B.
McLeod, Frank Thomas, 2 ..... Burnside.
MacLeod, Ronald, 1 ..... Scotland.
McPherson, William, 3 ..... Springhill.
MacQueen, Norman ..... Cape Breton.
MacRae, Hector Francis, 2 ..... Up. Middle River,, C. B.
Manuel, Murray Hayward, 1 ..... Hawkshaw, N. B.
Matthews, Allan Fraser, 2 ..... Alberton, P. E. I.
Miller, Hugh, 4 ..... Garden of Eden.
Miller, John Robert, 2 ..... Tangier.
Milner, Horatio Smith, 1 ..... Halifax.
Moore, Miriam ..... Halifax.
Morrison, Katie, 1 ..... Dartmouth.
Moxon, Arthur, 3 ..... Truro.
Munro, Allister Edward, 1 ..... Westville.
Munro, Ethel Margaret, 4 ..... Pictou.
Murphy, Blanche Eunice, 3 ..... Moncton, N. B.
Murphy, Ethel, 1 ..... Moncton, N. B.
Murray, Ella Mabel, 4 ..... Sussex, N. B.
Murray, Lulu Marion, 4 ..... Upper Musquodoboit.
Murray Thomas Watson ..... Earltown.
Neish, Charles Wiswell, 4 ..... Halifax.
Nichols, Edward Wilber, 4 ..... Digby.
Nicholson, Malcolm, 1 ..... Halifax.
Noble, Mary Eliza ..... Hardwicke, N. B.
O'Hearn, Anne Bernard, 1 ..... Halifax.
Patterson, Grace Harris, 2 ..... Truro.
Patterson, Harry Stuart, 3 ..... Tatamagouche.
Payson, Mary Phoebe, 2 ..... Digby Co.
Payzant, Arthur Silver, 4 ..... Halifax.
Pearson, Ethel M. ..... Halifax.
Pennington, Amy Kingsland, 3 ..... Halifax.
Peppard, Sarah Isabel, 4 ..... Halifax.
Power, Nora Neill, 1 ..... Halifax.
Prowse, James Harper, 2 ..... Halifax.
Read, Emily Abigail ..... Halifax.
Read, John Erskine, 2 ..... Halifax.
Read, William Keir, 1 ..... Athole.
Rettie, Alexander, 2 ..... Stillman.
Rettie, Samuel, 2 ..... Stillman.
Robertson, Robert Burnley Hume, 3 ..... Barrington.
Ross, Edwin Byron, B. A. ..... Peel, N. B.
Ross, Daniel Keith, 4 ..... Lorne.

Ross, William Charles, 2 ..... Halifax.
Ross, William McMillan, 4 ..... Earltown.
Seeley, Lily Stathern ..... Halifax.
Sexton, Mrs F. H. ..... Halifax.
Sinclair, Frederick Douglas, 3 ..... St. Stephen, N. B.
Sinnott, Edna Pearl, 3 ..... New York.
Smith, Frank Frieze, 4 ..... Middle Musquodoboit.
Spencer, Minnie G., 4 ..... Halifax.
Stairs, George William, 1 ..... Halifax.
Stavert, Robert Hensley, B. A. ..... Summerside, P. E. I.
Sterns, Eunice Coleman, 1 ..... Dartmouth.
Stewart, John Murdoch, 3 ..... Pictou.
Strickland, Winifred Claire ..... Halifax.
Sullivan, Charles Thompson, 3 ..... Truro.
Swanson, Peter Innes, 3 ..... Kentville.
Sweet, William Henry, 2 ..... St. Anthony, P. E. I.
Tait, William Dunlop, 4 ..... Hopewell.
Thorne, Harvey, 4 ..... Dartmouth.
Tolson, Harry Stanislaus, 1 ..... Bedford.
Toombs, Herbert Wesley, 4 ..... Rustico, P. E. I.
Trueman, John McMillan, 4 ..... St. John, N. B.
Turner, Christina Jane, 4 ..... Truro.
Wallis, Bessie ..... Halifax.
Watson, Andrew Daniel, 4 ..... Baddeck Forks, C. B.
Watson, Robert Anderson, 2 ..... Baddeck Forks, C. B.
Webber, Kathleen Jackson, 1 ..... Sackville, N. S.
Weir, Andrew Stewart, 4 ..... Coalburn.
Wier, Lily A. ..... Prince's Lodge.
Wier, Olive M. ..... Prince's Lodge.
Wood, John, 3 ..... Halifax.
Yeoman, Eric Mackay, 2 ..... Halifax.

FACULTY OF SCIENCE.

Archibald, Frank Rogers, 3 ..... Halifax.
Barnes, Albert Johnson, 3 ..... Halifax.
Bayne, Andrew N ..... Halifax.
Bent, Lionel Lorraine, 1 ..... Halifax.
Bethune, Robert Anderson, 2 ..... Baddeck.
Bethune, Roderick Owen, 1 ..... Baddeck.
Blois, Cecil Leroy, 2 ..... Halifax.
Burgess, Laurie Lorne, 4 ..... Kinsman's Corner.
Burton Charles Forgan, 3 ..... Middleton.
Collie, John Robert, 1 ..... River John.
Davidson, Milton DeLancy, 4 ..... Aylesford.
Dawson, Frederick James, 1 ..... Truro.
Elliot, Laurie Benjamin, B. Sc. ..... Halifax.
Ferguson, Alexander, 1 ..... Halifax.
Fielding, Ralph Watson, 2 ..... Dartmouth.
Forrest, John Prescott ..... Halifax.
Foster, Edward, 2 ..... Bedford.
Flemming, Horace Waldo, 1 ..... Halifax.
Fulton, Thomas Truman, B. A., 4 ..... Bass River.
Gaul, Thomas Francis, 1 ..... Halifax.
Grant, Francis Alpin, 3 ..... Halifax.
Gray, Bernard L., 1 ..... Halifax.

Gordon, Murray Herbert Lawson, 1.....River John.
Hall, W. Edwin Gilpin.....Springhill.
Hardy, Thomas Woodburne, 1.....Halifax.
Harlow, Arthur Cornelius, 3.....Somerville, Mass.
Hills, Benjamin Wesley, 1.....Halifax.
Knight, Frederic Carr, 2.....Bedford.
Logan, J. Herbert, 3.....Halifax.
McAulay, Angus Gillis, 2.....Glace Bay, C. B.
McCunn, George Basil, 1.....River John.
Macdonald, Campbell, B. A., 3.....North Sydney, C. B.
MacIntosh, Cyrus Ross, 4.....Sunny Brae.
MacKenzie, Thomas George, B. A., 3.....River John.
MacKinnon, James, 2.....Whycocomagh, C. B.
McLaren, Frank Harris, 3.....Dartmouth.
McLean, Alexander Stirling, 1.....West Bay, C. B.
McLeod, Charles Gordon, 2.....Thorburn.
McMillan, John P., 1.....Ainslie Glen.
McRitchie, John James, 2.....Englishtown.
Marchant, David Harold M., 2.....Lakeville.
Marshall, Helen Annie Blanche, 1.....Halifax.
Millar, John McIntosh, 2.....Yarmouth.
Morrison, John Laughlin, 2.....St. Peter's.
Morrow James Bain, 3.....Halifax.
Murphy, Gerald Francis, 1.....Halifax.
Poole, Eric Skeffington.....Halifax.
Reid, James William, 2.....Middleton.
Roberts, George Edgar, 2.....Halifax.
Snook, John Stuart, 2.....Truro.
Stapleton, William Clarke, 4.....Economy.
Sweet, Harold Kinsman, 1.....Goldboro.
Temple, Berton Henry, 1.....Waverley.
Temple, Thomas Alexander.....Waverley.
Wall, Arthur Stanford, 1.....Truro.
Weir, John J.....New Glasgow.
Wickwire Dwight Stanley, 2.....Halifax.
Woodbury William Weatherspoon.....Halifax.

SUMMER SCHOOL OF MINING, GLACE BAY.

Beaton, Absalom, (Overman).....Dominion No. 1.
Campbell, Joseph, (Overman).....“ No. 2.
Casey, John, (Underground Manager).....“ No. 4.
Christianson, Peter, (Asst. Superintendent)..Glace Bay.
Corwell, John, (Overman).....Dominion No. 1.
Crosby, Robert, (Overman).....“ No. 8.
Derison, John, (Manager).....“ No. 8.
Ferguson, D. H., (Overman).....“ No. 4.
McDonald, Alexander, (Manager).....“ No. 4.
McEachern, Alexander, (Manager).....“ No. 2.
McInnes, Michael, (Manager).....“ No. 3.
McKay, Daniel L., (Underground Manager)..“ No. 7.
McKenzie, Norman, (Manager).....“ No. 1.
McLean, D H., (Overman).....“ No. 1.
McLean, John James, (Surveyor).....“ No. 4.
McLean, S. Clifford, (Surveyor).....“ No. 2.
McNeil, Alexander S , (Underground Mangr.)“ No. 8.
McNeil, John J (Underground Manager).....“ No. 2.
McPherson, Joseph, (Overman).....“ No. 1.

McSevern, John, (Supt. Wash Plant) ..... Glace Bay.
Munro, John, (Underground Manager) ..... Dominion No. 1.
Nicholson, John, (Overman) ..... " No. 7.
Sutherland, E. S., (Overman) ..... " No. 2.
Weir, Martin, (Overman) ..... " No. 2.

FACULTY OF LAW.

UNDERGRADUATES.

THIRD YEAR.

Corey, Berton Stone ..... Petitcodiac, N. B.
Dickey, Horace Arthur ..... Halifax.
Eagar, Martin Wingate ..... Dartmouth.
Elliott, Percival St. Clair, B. A. ..... Paradise.
Fenerty, Lloyd Hamilton ..... Halifax.
Foster, William Gore ..... Dartmouth.
MacKay, Ira Allen, PH. D ..... Millsville, Pictou.
Mackay, Roderick Geddie ..... East River, Pictou.
McLennan, Donald ..... Margaree, C. B.
McLeod, James Archibald, B. A ..... Brooklyn, Queens.
Sanderson, Claude Lovitt, B. A ..... Yarmouth
Shaw, Vernon Hastings ..... Brackley Pt., P. E. I.
Wood, John ..... Halifax.

SECOND YEAR.

Church, Eustache ..... Milltown, N. B.
Elliott, Murray ..... Middleton.
Graham, Bruce Thompson, B. A ..... Halifax.
Locke, Enos Charles, B A ..... Lockeport.
Lyons, John Baptist ..... Halifax.
McDonald, Bernard Donald ..... Mt. Stewart, P. E. I.
Macdonald, Allen, B. A ..... Antigonish.
McGillivray, Alexander Andrew ..... Richmond, Quebec.
McNeill, James Patrick, B. A ..... Antigonish.
Morrisey, William Stoker ..... Halifax.
Seller, Lemuel Arthur ..... Charlottetown, P.E.I.

FIRST YEAR.

Corbett, William Melville, B. A ..... Rockburn, Quebec.
Morine, Alfred Nevill ..... St. John's, N. F. L.
Morse, Clifford Russell, B. A ..... Amherst.
Murphy, Roy Clarke, B. A ..... Andover, N. B.
Power, William Kent, B. A ..... Halifax.
Robinson, William Charles, B. A ..... Windsor.
Thibault, Hilary C, B. A ..... Salmon River, Digby.

GENERAL STUDENTS.

Archibald, James Ross ..... Truro.
Baillie, Charles Tupper ..... Halifax.
Barnett, John ..... Hartland, N. B.
Bezanger, Gilbert ..... Halifax.
Blanchard, Charles Prescott ..... Truro.
Brehaut, Frederick ..... Charlottetown, P.E.I.
Cahan, Charles Hazlitt Scott ..... Halifax.

Charman, James Harry.....Wallace.
Chase, Harold Munro.....Sheffield Mills.
Chisholm, John Edwin.....Dartmouth.
Curry, Wilfred Alan.....Halifax.
Davis, Charles James.....Guysboro.
Dickie, Clarence Gordon.....Truro.
Landry, Adolphe Frank.....Amherst.
Layton, Francis.....Truro
McBain, Alexander Ross.....Meadowville.
MacIntosh, Alexander Daniel, B. A.....Lismore.
McKay, Daniel Alexander.....River John.
Maclellan, Robert William.....Halifax.
Mackenzie, Ewen Cameron.....Flat River, P. E. I.
MacKenzie, Henry Havelock.....New Glasgow.
Nichols, Edward Wilber.....Digby.
Patterson, Henry Stuart.....Tatamagouche.
Robertson, Robert Burnley Hume.....Barrington Passage.
Smith, Frank Freize.....Middle Musquodoboit.
Sterne, George Hibbard.....Amherst
Temple, Thomas Alexander.....Waverley.
Thorne, Harvey.....Dartmouth.

FACULTY OF MEDICINE.

UNDERGRADUATES.

FOURTH YEAR.

Blackaddar, Edward, *M. A.*, (Acad.).....Wolfville
Ferguson, John Archibald, *B. Sc*, (Dal).....Port Morien, C. B.
McDonald, Daniel Robert.....Saltsprings Pictou.
MacDonald, Thomas Gladstone.....Thorburn, Pictou.
McIntosh, George Arthur.....Argyle, Guysboro.
MacKay, Victor Neil.....Earltown, Col.
MacKenzie, Mary.....Waterside, Pictou.
Miller, Alexander W., *B. A.*, (St. F. X.).....Margaree Forks, C. B.
Murray, James Alexander.....West River, Pictou.
O'Connell, John Ignatius, *B. A.*, (St. F. X.)..Sydney.
Proudfoot, James Adam.....Saltsprings, Pictou.
Wallace, Peter James.....Chatham, N. B.

THIRD YEAR.

Boudreau, Francis Edmund, *B. A.*, (Ste Anne).Arichat, C B.
Coffin, Wesley Herbert.....Bristol, P. E. I.
Devine, Matthew Edward.....Arcadia, Yarmouth.
Donovan, Oscar Glennie.....Truro, Colchester.
Dunn, George Alexander.....Lyons' Brook, Pictou.
Goodwin, James Clifford.....Weymouth Bdg, Digby.
Hennigar, Annie.....Noel, Hants.
Killam, Harold Edwin.....Woodville, Kings.
McKay, Daniel Alexander.....W. Br., R. John. Pictou.
McRae, Duncan Roderick.....S S. Boularderie, C. B.
Melanson, Amedée Raymond, *B.A.*, (Ste Anne) Corberrie, Digby.

SECOND YEAR.

Ballem, John Cedric.....Mt Albion, P. E. I.
Carter, Peter McFarlane.....Antigonish.
Chisholm, Hugh Dan.....Springville, Pictou

LeBlanc, Benjamin Amedée, *B. A.*, (Ste Anne).Arichat.
Macdonald, John .....Huntington, C. B.
MacDonald, Nathaniel.....Sydney Mines, C B.
MacIntosh, Cyrus Ross .....Sunny Brae, Pictou.
Shatford, Ralph Owen.....Indian Harbor, Halifax.
Woodbury, William Weatherspoon .....Halifax.

FIRST YEAR.

Brown, Samuel Ritty .....Shelburne
Bruce, James Garfield .....Barney's River, Pictou.
Johnston, Stephen Reginald .....Dartmouth.
McGarry, Michael Richard, *B. A.*, (St. F. X.).Margaree, Inv.
McGarry, Moses Elijah..... " "
Maclean, Walter Leonard .....Halifax.
MacLellan, Robert A.....Goldboro, Guysb.
McNiece, John Albert .....Halifax.
Mosher, Byard William .....Kempt Shore, Hants.
Patton, Weldon.....Roslin.
Reid, Frank Henry ... .Nictaux.
Spencer, Minnie Grace.....Halifax.
Thibault, Siffroi Henry .....Salmon River, Digby.
Thomas, Alice Tuttle..... .....Dartmouth.

DONATIONS TO THE UNIVERSITY.

1864.

Endowment of Chair of Mathematics by Church of Scotland, N. S...$ 20,000

1878-84.

Endowment of Chairs of Physics, History, Law, English and Philosophy by George Munro $220,000
Salaries of Tutors, and Exhibitions from George Munro. 103,150

1887.

Endowment of Chairs of Classics, Modern Language and Chemistry by Alexander McLeod $100,000

1887.

Donation to New Building by Sir William Young .....$ 20,000

1890.

Bequest of J. P. Mott..... .....$ 10,000

1901.

Bequest of Professor Macdonald .....$ 2,000

1902.

MEMORIAL GIFTS.

In memory of the late Hon. J. W. Carmichael .....$ 1,000
In memory of Miss Bessie Mott 1,000

ENDOWMENTS FOR PRIZES.

1887.

Waverley Prize.....$ 1,000
North British Bursary, by North British Society (Annual Value).... 60
Young Medal and Scholarship, by Sir Wm. Young.... 4,000
Mackenzie Bursary, by Mrs. Mackenzie of Stornoway .....£ 1,000
Avery Prize, by Dr. J. F. Avery .....$ 500

UNIVERSITY LIBRARY, 1867.

The Lieutenant Governor . . .$	400	J. A. Sinclair .....$	100
John Tobin, M. P. P.	200	W. A. Henry.....	100
Dr. C. Tupper.....	100	J. Stairs	100
James Thomson.....	100	Smaller sums.....	474
Rev. G. M. Grant	100		
Dr. Avery.....	100	Total .....$	1775

FIVE YEARS' FUND, 1870-75.

Rev. G. M. Grant .....$	200	John S. Maclean .....$	100
John Doull.....	200	James Thompson	100
W. J. Stairs.....	200	R. Morrow.....	100
Sandford Fleming.....	200	J. Stairs	100
Sir Wm Young	160	Hon. J. Northup.....	100
Medical Faculty	160	B. H. Collins	100
Robert Boak	160	Alex. McLeod	100
Dr. Avery.....	150	J. Donaldson.....	100
Adam Burns.....	125	A. K. Mackinlay.....	100
Sir Charles Tupper.....	100	T. A. Ritchie	100
Principal Ross.....	100	E. Smith.....	100
Prof. Lawson.....	100	R. H. Skimmings	100
Prof. Johnson	100	Smaller sums.....	379
Prof. DeMille.....	100		
Prof. Liechti	100	Total ....$	5734

ENDOWMENT FUND, 1879.

Sir William Young ... .$	1000	Adam Burns .....$	500
W. J. Stairs.....	1000	Peter Jack.....	500
Hon. Stayley Brown.....	1000	Hon. J. Northup	500
John Gibson.....	1000	Prof. Lawson.....	500
John P. Mott	1000	Alex. McLeod	500
William P. West.....	1000		
Thomas A. Ritchie	1000	Total.....$	10,500
Hon. Robert Boak	1000		

LABORATORIES AND MUSEUM.

1880.

Sir William Young	$ 500	Hon. J. Northup	$ 100
Prof. MacGregor	200	W. J. Stairs	100
Dr. Avery	100	W. P. West	100
Thos. Bayne	100	Smaller sums	1195
Hon. R. Boak	100		
Alex. McLeod	100	Total	$ 2695
John Macnab	100		

1883.

Dr. William McCulloch for maintenance of McCulloch Collection . . $1400

GYMNASIUM FUND, 1881.

F. B. Chambers	$ 50 00
Smaller sums	164 00
Total	$214 00

CURRENT EXPENSES, 1882-86.

Sir William Young	$ 400	Geo. Thomson	$ 100
John Doull	200	James Scott	100
J. S. Maclean	200	A. K. Mackinlay	80
Thos Bayne	200	Dr. Avery	50
J. Gibson	200	J. J. Bremner	40
Rev. J. McMillan	200	Smaller sums	60
John Macnab	200		
President Forrest	150	Total	$ 2330
A. G. Jones	150		

LAW LIBRARY, FROM 1883.

John Y. Payzant	$ 650	Sir William Young	$ 200
Robert Sedgewick	600	Robert Boak	100
Wallace Graham	500	Doull and Boak	100
Prof. Weldon	500	R. I. Hart	100
Prof. Russell	420	Prof MacGregor	100
S. L. Shannon	525	J. Norman Ritchie	100
C. S. Harrington	320	W. J. Stairs	100
J. S. D. Thompson	300	J. J Stewart	100
Jas. Thomson	225	Smaller sums	1215
Charles J. Townshend	225		
H. McD. Henry	225	Total	$ 6605

BUILDING FUND, 1886.

Rev. L. H. Jordan	$ 1000	Mr. Justice Graham	$ 200
John Doull	750	James Scott	150
J. S. Maclean	750	R. B Seeton	150
R Sedgewick	750	Rev J McMillan	150
Thos. Bayne	500	William Robertson	150
John McNab	500	J C Mackintosh	150
Adam Burns	500	H. McD. Henry	150
Hon R Boak	500	J Y Payzant	150
Dr. Avery	500	Pearson, Morrison & Forbes	150
President Forrest	375	J. J. Stewart	120
James Forrest	300	Rev. E. Scott	100
Professor Johnson	250	Peter Ross	100
Peter Jack	250	H. W. C. Boak	100
William Miller	250	Pictou Academy	100
Professor Macdonald	250	Smaller sums	640
Professor MacGregor	225		
A. & W. Mackinlay	225	Total	$10635
Professor Alexander	200		

ENDOWMENT FUND, 1892.

T. E. Fraser	$ 600	C. H. Cahan	$ 200
J W Carmichael	500	J. F. McLean	150
Prof. Lawson	500	I. Longworth	100
Prof. Macdonald	500	R. J. Turner	100
Prof. Weldon	500	Geo. Campbell	100
J. D. MacGregor	400	Mrs J. R. Dickie	100
D. C. Fraser	250	J. C. Mahon	100
J. M. Carmichael	250	H. T. Sutherland	100
G. Forrest McKay	250	Hon T. McKay	100
Prof. H. Murray	250	Smaller sum	1665
Sinclair & Patterson	240		
H. Mackenzie	200	Total	$ 7155

FIVE YEAR FUND—CURRENT EXPENSES, 1892-97.

John Doull	$ 2500	Rev. John McMillan	$ 25 0
Adam Burns	2500	J. C. Mackintosh	250
W. J. Stairs	1250	J. A. Turnbull	200
Hon R. Boak	1250	Dr. A. H. McKay	200
Donald Keith	1000	Prof. Liechti	200
W. B. Ross	800	Dr. G. M. Campbell	150
President Forrest	750	W. Dennis	125
Prof. Johnson	500	H. W. Barnes	125
Prof. Russell	500	W. J. McDonald	125
T. Ritchie	500	James Thomson	100
Farquhar & Forrest	500	J. McG. Stewart	100
Prof. W. Murray	500	J. H. McKenzie	100
Class of 1903	500	A. K. McLean	100
Prof. MacGregor	400	W. D. Cameron	100
Drysdale & McInnis	300	Smaller sums	1420
Dr. D. A. Campbell	300		
Dr. D. A. Murray	300	Total	$18145
R. L. Borden	250		

LABORATORIES—SINCE 1891.

Alumni Association	$1794 83
Dr. A. H. MacKay	1258 00
Professor E. Mackay	764 14
Medical Faculty	173 30
Cape Breton Alumni	50 00

UNIVERSITY LIBRARY—SINCE 1892.

Alumni Association	$ 756 75	Class of 1894	$ 40 00
Prof. MacMechan (course of Lectures)	573 00	" 1895	50 00
Prof. Seth (course of Lectures)	245 00	" 1896	210 09
The Misses Mott	300 00	" 1897	53 00
Faculty of Arts	220 00	" 1898	65 09
A. D. Gunn, B L	100 00	" 1899	256 60
Adam Burns	75 00	" 1900	123 70
English Class	60 44	" 1901	125 84
Alex McKay	50 00	" 1902	107 00
Prof. W. Murray	50 00	" 1903	107 00
H. McInnes	40 00	" 1904	179 34
Mrs C. Archibald	24 00	" 1905	
Medical Faculty	22 70		$1317 64
R. H. Graham	20 00		
Smaller amount	36 00		
Total	$2572 89		

SCHOOL OF MINES, 1902-3.

J. F. Stairs	$ 5000	H. G. Bauld	$ 1000
Hon. D. MacKeen	2500	Alfred Putnam	1000
Hon. W. J. Stairs	2500	Forrest McKay	1000
Harvey Graham	2500	Raymond Dand	1000
T. Ritchie	2000	Daughters of late Hon. J. W. Carmichael	1000
G. S. Campbell	2000	George Stairs	1000
T. Cantley	1500	Bequest of Miss E. J. Mott	1000
W. T. Allen	1000	Mr. and Mrs. H. McInnes	1000
W. B. Ross	1000	Smaller amounts over	23000
J. C. Mackintosh	1000		
John MacNab	1000		

A complete list will be published later.

CHAIR OF CIVIL ENGINEERING—FIVE YEAR FUND, 1904.

Kelley & Glassey	$ 750	W. M. Aitken	$ 125
Alumni Association	625	Hon. David McPherson	125
Prof. D. A. Murray	500	D. A. Campbell, M. D	125
W. B. Ross	500	James Farquhar	125
B. F. Pearson	500	Henry Sanders	125
W. H. Wickwire, M. D.	500	H. W. Cameron	100
H. Hesslein & Sons	500	A. Hobrecker	100
C. H. Cahan	375	D. R. Clarke	100
F. B. McCurdy	250	H. L. Chipman	75
J. J. Stewart	250	J. A. Turnbull	50
Geoffrey Morrow	125	A. B. Crosby	25
J. A. Johnson	125	J. W. G. Thomson	25
Rod. Macdonald	125		
C. H. Porter	125	Total	$ 6350

MACDONALD MEMORIAL, 1902.

Subscribed to May 1st, 1905	$25,010 00
Paid in	9,207 97

GIFTS OF APPARATUS.

To the Physical Laboratory :

From the Canadian General Electric Co., through F. Nichols, Esq :

A motor-generator set, consisting of a 2 H. P. induction motor with a direct current generator; a switch board with one astatic voltameter, two astatic ammeters, rheostat, automatic cut-outs, etc.

From Dr. A. P. Reid :

A motor storage cell.

To the Geological Laboratory :

From John Moffatt, Esq., Glace Bay :

A fine collection of local fossils.

From the relatives of the late Dr. Honeyman :

A collection of specimens.

To the Mining Laboratory :

From the Massachusetts Institute of Technology :

A Collom jig ; an experimental Bartlett Table. Valued at $150.

From the Canadian Rand Drill Co. :

A Compressor, valued at $450.

From the Truro Foundry Co. :

A Wilfley Table, valued at $400.

From the Baltimore Nova Scotia Co. :

A Gold Clean-Up Barrel, valued at $100.

To the Museum

From the late Rev. Dr. Wm. McCulloch :

A collection of native birds.

From the late Rev. Dr. G. Patterson :

An Archæological collection.

*TIME TABLE—FACULTY OF LAW.

Hours.	*Monday.*	*Tuesday.*	*Wednesday.*	*Thursday.*	*Friday.*
9 to 10	Shipping	Const. History	Const. Law	Const. History	Const. Law
10 to 11	Conflict of Laws	Torts			International Law
11 to 12			Bill and Notes	Moot Court	Equity.
12 to 1			Contracts		Contracts.
4.30 to 5.30	Real Property		Procedure	Companies	
8 to 9					

*Subject to alteration.