

## TIME TABLE-FACULTIES OF ARTS AND SCIENCE.


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

Practical Chemistry (in Laboratory) daily (except Saturdays and holidays) from 9 A.M, to 1 P.M.

## CALENDAR

OF

## DALH0USIE COLLEGE

UNIVERSITY.

IIAIIFAス, NOOVA SOOIIA.

$$
1893-9 \leq
$$



HALIFAX :
Printed for the University by the Nova Scotia Printing Company. 1893.

## ERRATA.

Page 33, lines 14 and 15, read: Anabasis, Book I, or II, or III.

Page 79, § L. (2), read: (see pages 54 and 74) instead of: (see page 62).

## CONTENTS.

University Almanac
PAGE ..... 4
Historical Sketch ..... 7
Benefactors ..... 10
Board of Governors ..... 14
Senatus Academicus ..... 14
Academic Staff ..... 15
Faculty of Arts:
Courses of Instruction. ..... 17
The Academic Year. ..... 27
Admission of Students ..... 32
Degrees ..... 32
Matriculation Examinations.. ..... 33
B. A. and B. L. Courses ..... 36
Special Courses. ..... 38
Attendance. ..... 44
Examinations ..... 44
Degrees with Distinction ..... 46
46
Short Courses ..... 46
Special Classes ..... 47
Medals. Prizes and Scholarships 48
Munro Exhibitions \& Bursaries 49 ..... 491851 ExhibitionScience Scholar-
ship. ..... 52
Residence ..... 52
Church Attendance. ..... 52
Discipline ..... 52
Degrees of M. A. \& M. L. ..... 52
Degrees of Lic. D ..... 53
Admission ad eundem Gradum ..... 54
Academic Costume. ..... 54
Fees. ..... 54
Fadulit of Pure and Applied Science :
Courses of Instruction. ..... 56
The Academic Year ..... 63
Admission of Students ..... 63
Degrees ..... 63
Matriculation Examinations. ..... 63
B. Sc. Courses ..... 64
Attendance ..... 68
Examinations ..... 69
General Distinction. ..... 69
Honours ..... 69
Short Courses ..... 69
Medals, Prizes and Scholarships ..... 70
Munro Exhibitions \& Bursaries ..... 70
1551 Exhibition Scholarship. ..... 71
Residence, etc ..... 73
B. E. \& M. Sc. Degrees. ..... 74
Admission ad eundem Gradum ..... 74
PAGE
PAGE
Academic Costume ..... 74
Fees ..... 74
Faculty of Law :
Courses of Lectures ..... 75
Academic Year ..... 79
Admission of Students ..... 79
Degree of LLu. B ..... 79
Matriculation Examination ..... 80
Course of Study for Ll. B ..... 81
Sessional Examinations ..... 81
Moot Courts ..... 82
Mock Parliament ..... 82
Academic Costume. ..... 82
Library ..... 82
Fees. ..... 84
Faculty of Medicine:
Courses of Instruction. ..... 85
Academic Year ..... 87
1 egrees. ..... 87
Matriculation Examination. ..... 88
Degree Examinations. ..... 89
Primary M. D., C. M. Exami- nation ..... 89
Final M. D., C. M. Examina- tion ..... 91
Acadernic Costume ..... 93
Fees' ..... 93
Institutions:
The University Library ..... 94
The University Museum ..... 95
The"Gymasium ..... 97
Alumni Association ..... 97
Students' Societies ..... 98
Universtty Lists:
Degrees conferred, 1893 ..... 101
General Pass List, 1893 ..... 102
Honours, \&c., 1892-93. ..... 104
Examinations, 1892-93 ..... 104
Graduates, 1892-93 ..... 112
Students, 1892-93. ..... 122
Appendix-Examination Papers,1892-93.
Matriculation and Junior Munro Exhibitions and Bursaries ..... i
Senior Munro Exhibitions and Bursaries. ..... xi

## University Almanac, 1893-94.

Aug. 21. M.-Last day for receiving notices of Supplementary and Matriculation Examinations (Faculty of Law).
29. Tu.-Session (Law Faculty) begins.-Matriculation and Supplementary Examinations (Law Faculty).-Registration and payment of class fees (Law Faculty).-Meeting of Law Faculty, 4 P. M.
Sept. 1. F.-Meeting of Faculty of Law, 4 P. M.
8. F.-Meeting of Senate, 11 A. M.
" " Meeting of Faculty of Arts, 11 A. m.
12. Tu.-3 p. M., Registration of Candidates for Matriculation, Bursary and Scholarship Examinations (Arts and Science Faculties).
13. W.-Session (Arts and Science Faculties) begins -Examinations begin for 1st and Ind year Matriculation (Arts and Science Faculties); for Munro Exhibitions and Bursaries; for Young and Professors' Scholarships, and N. B. Alumni Prize : 9.45 A. M., Latin-3 p. M., Greek.
14. Th. -10 A. M. Geometry.-3 P. M., Arithmetic and Algebra.
15. F. -10 A. M., History and Geography, Philosophy, Physics.-3 P. M., English.
16. Sa. -10 A. M., French.-3 p. M., German.
18. M. -10 A. м., Chemistry. -3 р. м., Botany.
"-Supplementary Examinations (Arts and Science Faculties) begin, 10 A . M.
19. Tu.-Intimation as to elective subjects to be made by undergraduates of 3rd and 4th years, Arts Faculty, on or before this day.
20. W.-Meetings of Faoulties of Arts and Science, 9 A. M.
"-Convocation, 3 p. mo-Opening address by Prof. Murray.
21. Th.-Matriculation, Registration and Gymnasium Tickets issued at hours specified in notice in College Hall (Arts aud Science Faculties.)
". "-Lectures begin (Arts and Science Facultie3).
Oct. 6. F.-Meeting of Faculty of Law, 4 Р. M.
11. W.-Last day for receiving applications for Medical Matriculation Examinations.
" "-Final MatriculationExaminations (Arts and Science Facnlties) begin: 3 р. M., English, History and Geography.
11. Th.- 3 p. M., Classics and Modern Languages.
13. F.- 3 р. M., Mathematies.
14. Sa. - 10 A. M., Chemistry.
17. Tu.-Meeting of Faculties of Arts and Science, 1 P. M.
20. F.-Meeting of Faculties of Arts and Science, 4 P. M.
" "-Returns as to residence and church attendance to be made on or before this day.
Oct. 25. W.-Session (Medical Faculty) begins.-Matriculation Examination (Medical Faculty) begins.
28. Sa.-Results of Medical Matriculation Examinations declared, aud certificates issued.
30. M.-Registration, payment of class fees, and beginning of lectures, (Medical Faculty).
Nov. 3. F.-Meeting of Faculty of Law, 4 p. M.
Th.-Thanksgiving Day.-No lectures. George Munro Day.-No. lectures.

Dec. 1. F.-Meeting of Faculty of Law, 4 P. M.
15. F.-Christmas Examinations (Arts and Science Faculties) begin:
8.45 А M., Latin.
11.15 A. M., French.
3.30 p. M., Botany, Junior Philosophy.
18. M. 9.00 A. M., German.
11.15 A M., Mathematics (1st and 2nd years), History (3rd year), Senior Physics.
3.30 p. M., English (1st year), Ethics.
19. Tu.- 9.00 A. M., Political Economy, Classical History and Geography.
11.15 A. M., English, (2nd, 3rd, and 4 th years).
3.30 p. M., Chemistry (1norganic and Organic).
20. W.- 9.00 A. M., Greek.
11.15 A. M., History (4th year), (Junior Physics Applied Mechanics,
3.30 P. M., Mathematies (1st and 2nd years, Senior Philosophy.
21. Th.-No lectures.-Christmas vacation begins.

## 189 壬

Jan. 9. Tu.-Lectures resumed.
12. F.-Meeting of Faculty of Law, 4 P. M.

Feb. 2. F.-Meeting of Senate, 4 P. M.
2. F.-Meeting of Faculty of Law, 4 P. M.
7. W.-Ash Wednesday. No lectures.
9. F.-Last day of Leetures (Law Faculty).
12. M.-Sessional Examinations (Law Faculty) begin :-
10.00 A. M.. Constitutional History, International Law
2.30 P. M., Constitutional Law, Shipping.
13. Tu. -10.00 A. m., Crimes, Equity.
2.30 P. M., Bills and Notes.
14. W.- 10.00 A. M., Torts, Confliet of Laws.
2.30 P. M., Real Property, 2nd year.
15. Th.- 10 A. M., Partnership. 2.30 P. M., Real Property, 1st year.
16. F. -10 A. M., Contracts.

March 1. Th.-Last day for receiving M. A. Theses.
23. F.-Good Friday No lectures.

April 2. M.-Last day for receiving applications for Primary and Final M.D., C.M. Examinations.
4. W.-Last day of Lectures (Arts and Science Faculties).-Last day for returning books to the University Library.-Meeting of Faculties of Arts and Science, 4 P. M.
6. F.-Last day of Lectures (Medieal Faculty).
6. F.-Spring Examinations (Arts and Science Faculties) begin : 10.00 A. M., Practical Chemistry.
7. Sa.-Certificates of class attendance (Medical Faculty) issued.
9. M. - 8.45 A. M., Latin.
11.15 A. M., French. 3.00 P. M., Jnnior Philosophy, Practical Physics.
10. Tu. - 9.00 A. M., English (2nd 3rd, and 4th years).
11.15 A. M., Additional French. 3.00 p. M., Senior Philosophy, Surveying.
11. W.- 9.00 A. M., Botany, (Arts, Science and Medical Faculties.)
11.15 A. M., Mathematics, History (3rd year), Senior Physics. 3.00 P. M., Additional Latin, Civil Engineering.
12. Th. - 9.00 A. M., English (1st year), Additional English (3rd and 4 th years).
11.15 A. M., Political Economy, Mineralogy. 3.00 P. M., Chemistry (Inorganic and Organic.)
13. F.- 9.00 A. M., Greek, Mining.
11.15 A. M., History (4th year), Junior Physics, Applied Mechanics: 3.00 P. M., Additional Greek (1st and 2nd years).
14. Sa.- 9.00 A. M., Mathematies, Additional Senior Pbysics.
11.15 A. M., Additional Junior Physics.
3.00 p. M., Additional Greek, (3rd and 4th years,) Additional English (1st and 2nd years).
16. M.- 9.00 A. м., German.
11.15 A. M., Additional Mathematies.
3.00 P. M., Ethics.
" "-M. D., C. M. Examinations begin :
10.00 A. M. -1.00 P M., Anatomy.
3.00 р. м. -6.00 P. M., Surgery.
17. Tu.- 9.00 A. M., Additional Ethics.
11.15 A. м., Additional German.
3.00 p. M., Additional Senior Philosophy.
10.00 А. м. -1.00 р. M., Materia Medica.
3.00 р. M. -6.00 р. M., Medicine.
18. W. -10.00 A. M. -1.00 P. M., Physiology.
3.00 р. M. 6.00 р. м., Histology, Obstetrics and Diseases of Women and Children.
19. Th. -10.00 A. M. -1.00 p. M., Medical Chemistry and Clinical Examinations.
3.00 P. M. -6.00 P. M., Medical Jurisprudence.
20. F.-Oral Examinations (Faculty of Medicine) begin.
21. Sa.-Meetings of Faculties of Arts and Science, 10 A. m.
23. M.-Meeting of Senate, 10.00 A. M.-Results of Examinations (Faculties of Arts, Science, and Medicine) declared.
24. Tu.-Convocation, 3.00 p. m.
N. B.-Dates for Examinations in Special Courses will be arranged by the Professors.

## HISTORICAL SKETCH•

Dalhousie College was founded by the Earl of Dalhousie in 1821, "for the education of youth in the highor branches of science and literature."

The original endowment was derived from funds collected at the port of Castine, in Maine, during its occupation in 1824 by Sir John C. Sherbrooke, then Lieutenant-Governor of Nova Scotia. These funds the British Government authorized the Earl of Dalhousie, Sir John's successor, to expend "in defraying the expenses of any improvement which it might seem expedient to undertake in the Province "; and the Earl, believing that "a Seminary for the higher branches of education is much needed in Halifax-the seat of the Legislature-of the courts of justice-of the military and mercantile Society," decided upon "founding a College or Academy on the same plan and principle of that at 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."

The original Board of Governors consisted of the Governor-General of British North America, the Lieutenant-Governor of Nova Scotia, the Bishop, the Chief Justice and President of Council, the Provincial Treasurer and the Speaker of the House of Assembly.

After unsuccessful efforts on the part of both the British Government and the Board of Governors to effect a union with King's College, the only other then existing in the Province, this College went into operation in 1838. under the Presidency of the Rev. Thomas McCulloch, D. D., and with a staff of three Professors.

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 such steps for rendering the institution useful and efficient as to His Excellency may seem fit." This Board, from 1849 to 1859, employed the funds of the University to support a High School.

In 1856, the Arts department of the Gorham College, Liverpool, N. S., was transferred to this College " with a view to the iurtherance of the establishment of a Provincial University," and an attempt was made to conduct the Institution as a University under the Act of 1841. This union, however, came to an end in 1857.

In 1863, the College was re-organized under the following Act :-

## An Act for the Regulation and Support of Dalhousie College.

(Passed the 20th day of April, A. D., 1863.)
Whereas, it is expedient to extend the basis on which the said College is established, and to alter the constitution thereof, so as the
benefits that may be fairly expected from its invested capital and its central position may, if possible, be realized, and the design of its original founders, as nearly as may be, carried out,

## Be it enacted by the Governor, Council, und Assembly as follows :-

1. The Board of Governors now appointed, consisting of the Hono:able William Young, the Honorable Joseph Howe. Charles Tupper, S. Leonard Shannon, John W. Ritchie, and James F. Avery, Esquires, shall be a body politic and corporate, by the name and style of the Governors of Dalhousie College at Halifax, and shall have and exercise all usual powers and authorities as such, and have the title, control and disposition of the buildings on the Parade, at Halifax, and of the property and funds belonging to the said College, and held for the use thereof, by the present Governors; and all vacancies at the Board shall be filled up on recommendations of the remaing members thereof by the Governor-in-Council ; nd any of the Governors shall be removable by the Governor-in-Council, at the instance of the Board of Governors.
2. Whenever any body of Christians, of any religious persuasion whatsoever, shall satisfy the Board that they are in a position to endow and support one or more chairs or professorships in the said Co'lege, for any branch of literature or science, approved of by the Board, such body in making such endowinent, to the extent of twelve handred dollars a year, shall have a right, fom time to time, for every chair endowed, to nominate a Governor to take his seat at the Board with the approval of the Board of Governors and of the Governor-in-Council, and shall also have a right, from time to tiwe to nominate a Professor for such chair, subject to the approval of the Board of Governors; and in the event of the death, removal, or resignation of any person n minated under this section, the body nominating shall have the power to supply the vacarcy thus created.
3. The same right of nominating a Professor from time to time shall belong to any individual or number of individuals, who shall endow to the same extent and support a chair or professorship, and to the nominee of any testator by whose will a chair or professorship may be so endowed.
4. The Governors shall have power to appoint, and to determine the duties and salaries of, the President, Professors, Lecturers, Tutors, and other officers of the College, and from time to time to make statutes and by-laws for the regulation and management thereof, and shall assemble together as often as they shall think fit, and upon such notice as to them shall seem meet, and for the execntion of the trust hereby reposed in them.
5. The said College shall te deemed and taken to be a University, with all the usual and necessary privileges of such institutions; and the students shall have liberty and faculty of taking the degrees of bachelor, master, and doctor, in the several arts and faculties at the appointed times; and shall have liberty within themselves of performing all scholastic exercises for the conferring of such degrees, and in such manner as shall be directed by the statutes and by-laws.
6. No religious tests or subscriptions shall be required of the professors, scholars, graduates, students, or officers of the College.
7. The internal regulation of the said College shall be committed to the Senatus Academicus, formed by the respective chairs or professorships thereof, subject in all cases to the approval of the Governors.
8. The Legislature shall have power, from time to time, to modify and control the powers conferred by this Act.
9. The Acts heretofore passed in relation to Dalhousie College are hereby repealed, except the Act passed in the fourth year of his late Majesty King George the Fourth, entitled, "An Act authorizing the lending of a sum of money to the Governors of Dalhousie College, and for securing the repayment thereof."

This Act was afterwards amended by the following Acts :-
An Act to amend the Act for the Regulation and Support of Dalhousie College.
(Passed the 6th day of May, A. D., 1875.)
Be it enacted by the Governor, Council, and Assembly, as follows :-

1. The present Board of Governors, consisting of nine persons, shall be increased to a number not exceeding fifteen; and the Board shall be filled up with new nominations made on the same principle as set forth in the first section of the Act hereby amended; and any of the Governors shall be removable, as heretofore, by the Governor-inCouncil.
2. The Governors shall have power to affiliate to Dalhousie College any other Colleges desirous of such affiliation, or any schools in arts, in theology, in law, or in medicine, and to make statutes for such affiliations, and for the regulation and management thereof, on the same principles as obtain in other Universities and to vary and amend such statutes from time to time. Provided always, that such statutes of atfiliation, before they go into effect, shall be submitted to and receive the sanction of the Governor-in Council.
3. So much of chapter 24 of the Acts of 1863, entitled, "An Act for the Regulation and Support of Dalhousie College," or of any other Act, as is inconsistent with this Act, is repealed.

An Act to provide for the Organization of a Law Faculty in connection with Dalhousie College, and for other purposes.
(Passed the 14th day of April, A. D., 1881.)

## Be it enacted by the Governor, Council, and Assembly, as follows :-

I. The Governors of Dalhousie College at Halifax, shall, in addition to the powers conferred on them by section 2 of chapter 27 of the Acts of 1875, entitled, "An Act to amend the Act for the Rrgulation and Support of Dalhousie College," have power to organize放 Faculty of Law in connection with such College ; and to appoint professors or lecturers in law, and out of the revenues of the College to provide for the maintenance and support of such Faculty, and to make rules for the regulation and management of such Faculty, and for the granting of degrees in law on the same principles as obtain in other universities, and to vary and amend such rules from time to time.

2 Section 3 of chapter 24 of the Acts of 1863 , entitled, "An Act for the regulation and support of Dalhousie College," is amended by adding the words "and governor" after the word "professor" in the said section, and any individual who has hitherto endowed a Chair or Chairs in the College shall have a right to nominate a governor for each Chair endowed, in the same way as if section 3 aforesaid had been originally passed as now amended.
3. Section 1 of the said chapter 27 of Acts of 1875 , is amended by adding the words "provided, however, that in the event of any body of Christians, individual, or number of individuals, endowing and supporting one or more Chairs or professorships in the said College, as provided by sections 2 and 3 of the Act hereby amended, and of such body of Christians or individuals nominating a professor or governor by virtue thereof, the number of Governors may be increased beyond fifteen, but such increase shall be limited to the number of such chairs or professorships as may after the passing of this Act be founded by virtue of said sections 2 and 3."

In pursuance of the Act of 1863, the Presbyterian Church of the Lower Provinces closed their College, and agreed to support two chairs in this University ; the Synod of the Maritime Provinces in connection with the Church of Scotland, founded one chair ; and the College opened in that year, under the Principalship of Rev. James Ross, D.D., and with an Arts Faculty of six Professors.

In 1868, a Faculty of Medicine was organized, which, in 1875, developed into the Halifax Medical College. In 1885 the Faculty was re-orgonized.

In 1883 the Faculty of Law, and, in 1891, the Faculty of Pure and Applied Science, were adder.

In 1879, George Munro, Esq., of New York, a native of this Provin ee, placed in the hands of the Governors the funds necessary for the endowment of a Professorship of Physics. In 1881 he established a Professorship of History and Political Economy. In 1882, he founded a chair of English Language and Literature. In 1883 he added to the staff of the College a Professor of Constitutional and International Law. In 1884 he founded a Professorship of Metaphysics. From I883 till 1890, he provided Tutors in Classics and Mathematics. Since 1880 he has provided the University with Exhibitions and Bursaries, to the amount of $\$ 78,298.61$, which, according to his own desire, have been so offered for competition as to stimulate to greater activity and efficiency the High Schools and Academies of Nova Scotia and the neighboring Provinces.

The Governors desire to place on permanent record their high sense of Mr. Munro's enlightened public spirit, and their gratitude to him for the munificent manner in which he has come to their help in the work of building up an unsectarian University in Nova Scotia.

To connect the donor's name for all time with the benefits thus conferred both on the University and on his native country, the chairs which he has founded shall be called the George Munro Chatrs of Phystcs, of History and Polttical Economy, of English Language and Literature, of Constifctional and International Law, and of Philosophy respectively.

In 1883, Alexander McLeod, Esq., of Halifax, bequeathed to the University the residue of his estate. The following is an extract from his will:-
" All the residue of my Estate I give and bequeath to the Governors of Dalhousie College or University in the City of Halifax in Trust, that the same shall be invested and form a fund to be called the McLeod University Fund, and the interest and income of which shall be applied to the endowment of three or more professorial chairs in said College as they may deem proper ; but this bequest is made upon these conditions, namely, that if at any time the said College or University
should cease to exist, or be closed for two years, or be made a sectarian college, then and in any such case, the said Fund and all accumulations thereof shall go to the said Synod of the Maritime Provinces of the Presbyterian Church in Canada to be used for the purposes of higher education in connection with said Synod, and it is further stipulated that no part of this Fund shall ever be used, either by said Governors of Dalhousie College or by the said Synod, as a collateral security under any circumstances whatever."

According to the provisions of the will, the McLeod Chatrs of Classics, Chemistry and Modern Languages were founded.

In 1886, Sir William Young one of the oldest and best friends of the College, subscribed $\$ 20,000$ to start a Building Fund. In 1887, Sir William Young bequeathed to the University half the residue of his estate, together with a Prize Fund of $\$ 4,000$, and the amount remaining unpaid of his subscription to the Building Fund. The following are extracts from his will :-
"I bequeath to the Governors of Dalhousie College at Halifax, the sum of $\$ 4,000$ to be kept continually invested by them, and that they shall apply the income derived therefrom in founding and maintaining a prize of a gold medal of the value of $\$ 50$, to be called Sir William Young's medal, and $t_{n}$ be annually awarded for scholastic eminerice, and to have the recipient's name engraved thereon, with the year of his attendance at College, and in founding and maintaining such other prizes for distribution among the students of said College as the Governors may from time to time approve.
"Having agreed and promised to the Governors of Dalhousie College to pay them the sum of $\$ 20,000$ to aid in the erection of their building now in progress, I direct my executors to piy the said sum from time to time as it may be required by the said Governors.
"All the rest and residue of my estate I direct my executors to divide into two even and equal parts or shares, and to pay over one such part or share to ${ }^{*} *^{*}$, and the other part or share to the Governors of Dalhousie College at Halifax, for the general purposes of said College.
"In the event of my having paid to Dalhousie College during my life-time any part of said sum of $\$ 20,000$ hereinbefore mentioned, as agreed to be paid to them to aid in the erection of the college buildings, 1 do direct my executors to pay to said Governors the balance only, if any, that may be due on said sum at the time of my disease.

In 1887, by the will of the late J. F. Averx, M. D., of Halifax, the following bequest was made to the College :-
"I give and bequeath the sum of $\$ 500$ to Dalhousie College in the City of Halifax, to be at the disposal of the senatus of the said College, and the interest thereof to be appropriated for an annual prize.

In 1887, by the will of the late Mrs Harriet Elizabeth Madkenzie, or Morrison, of Stornoway, Scotland, formerly of Pictou, N. S., the following bequest was made to the College :-
"To Nalhousie College, $£ 1,000$ for founding a bursary for students attending said College, subject to such conditions and regulations as the governing body of said College may appoint, but with this proviso that said bursary shall be called the 'Mackenzie Bursary,' and that students of the name of Mackenzie, Maclean and Fraser shall have a preference in the selection of beneficiaries therefor."

In 1890, by the will of the late Jonn P. Мотt, Esq., of Halifax, the following bequest was made to the College :--
"I give and bequeath to the Board of Governors of Dalhousie College, or to such individuals or organization in whom or in which the control of such college shall be legally vested, the sum of ten thousand dollars, to be legally invested by the said Governors, individuals, or organization, and the proceeds applied for the benefit of such College, so long as it shall remain and continue to be a non-sectarian institution as at present."

The following donations have been made to the Endowment Fund:
Hon. Sir Willlam Young, W. J. Stairs, Esq., Hon. Stayley Brown, John Gibson, Esq., John P. Mott, Esq., Wm. P. West, Esq., Thomas A. Ritchie, Esq., and Hon. Robert Boak, $\$ 1,000$ each ; Adam Burns, Esq., Peter Jack, Esq., Hon. Jeremiah Northup, Prof. Lawson, and Alex. McLeod, Esq., $\$ 500$ each.

The following subscriptions have been made to the Building Fund :
Rev. Louis H. Jordan, $\$ 1,000$; John Doull, John S. Maclean, R. Sedgewick, $\$ 750$ each ; Thomas Bayne, John MeNab, Adam Burns, Hon. R. Boak, Dr. Avery, $\$ 500$ each ; President Forrest, $\$ 375$; James Fortest, $\$ 300$; Prof. John Johnson, Peter Jack. William Miller, Prof. Macdonald, $\$ 250$ each; Prof. MacGregor, A. \& IV. Mackinlay, $\$ 225$ each ; Prof. Alexander, Judge Graham, \$200 each ; James Scott, R. B. Seeton, Rev. John McMillan, Wm. Robertson, J. C. Mackintosh, H. McD. Menry, John Y. Payzant, Pearson, Morrison \& Forbes, $\$ 150$ each ; J. J. Stewart, $\$ 120$; Rev. E. Scott, Peter Ross, H. W. C. Boak, Pictou Academy, $\$ 100$ each; Wm. B. Wallace, Arthur Drysdale, E. L. Newcombe, Alfred Costley, H. W. Barnes, Hugh McKenzie, $\$ 75$ each; W. C. Silver, Graham Fraser, $\$ 50$ each ; E. McKay, $\$ 30$; J. M. Stewart, $\$ 25$; Rev. A. Falconer, $\$ 20$; J. H. Sinclair, Dr. J. Stewart, $\$ 10$ each. In all, $\$ 10,640$.

The folllowing donations have been made from time to time to meet current exponses :-

Hon. Sir William Young, \$500; John Doull, Esq., \$400; J. S. Maclean, Esq., 8300 ; J. F. Avery, Esq., M. D., s. Fleming, Esq., C. M. U., Rev. Principal Grant, D. D., W. J. Stairs, Esq., Thos. Bayne, Esq., John Gibson, Esq., Rev. J. MeMillan, B. D, and John MeNab, Esq., $\$ 200$ each ; James Scott, Esq., and A. K. Mackinlay, Esq., $\$ 180$ each; H.n. R. Boak, and the Medisal Faculty, $\$ 160$ each; Rev. President Forrest. D. D., Hon. A. G. Jones, and Geo. Thomson, Esq., $\$ 150$ each ; A. Burns, Esq., $\$ 125$; J. J. Bremner, Esq., $\$ 120$; B. H. Collins, Esq., J. Donaldson, Esq., Prof. J. DeMill, Prof. J. Jòhnson, Prof. G. Lawson, Prof. J. Liechti, Alex. McLeod, Fsq., Robt. Morrow, Esq., Hon. Jeremiah Northup, Joseph Northup, Esq., T. A. Ritchie, Esq., Rev. Principal Ross, D. D., Ed. Smith, Esq., R. H. Skimmings, Esq., John Stairs, Esq., James Thomson, Esq., and Hon. Sir Charles Tupper, $\$ 100$ each ; J. W. Carmichael, Esq., C. D. Hunter, Esq., Major General Laurie, Messrs Lawson, Marrington \& Co, Prof. C. Macdonald, J. P. Mott, Esq.. and Hon. Judge Ritchie, $\$ 80$ each ; G. P. Mitchell, Esq, and Hon. S. L. Shannon, \$60 each; J. B. Duffus, Esq., R W. Fraser, Esq., Peter Jack, Esq., and W. H. Neal, Esq., \$50 each; with smaller sums amounting to $\$ 1,349$,

The following donations have been made from time to time for the purpose of providing scientific apparatus :

Hon. Sir William Young, $\$ 500$; Alumni Association, $\$ 275$; Prof. J. G. MacGregor, $\$ 200$; J. F. Avery, Esq., M. D., Thomas Bayne, Esq., Hon. R. Boak, Alex. McLeod, Esq., John MeNab, Esq., Hon. Jeremiah Northup, W. J. Stairs, Esq., and W. P. West, Esq., \$100 each ; Thos. A. Brown, Esq., Messrs. Doull \& Miller, Messrs. Esson \& Co., John Gibson, Esq., L'eter Jack, Eiq., Prof. G. Lawson, J. S. Maclean, Esq., Robert Morrow, Esq., Hon. J. W. Ritchie, James Thomson, Esq, and a Friend, $\$ 50$ each ; with smaller sums amounting to $\$ 645$.

Eor other benefactions, see under headings : Library, Museum, and Gymnasium.

In addition to the members of the present staff, the following have been Professors or Lecturers in the University :-
Rev. Thomas MoCollooh, D. D., 1838-43, President and Professor of Moral Philosophy, Logic and Rhetoric.
Rev. Alexander Romans, 1838-42, Professor of Classics.
Rev. James McIntosh, 1838-44, Professor of Mathematics and Natural Philosophy.
Rev. Fraderick Tompkins, M. A., LL. D. (Lond.), now Barrister, London, (i. B., 1856-7, Professor of Mathematics and Natural Philosophy.
Rev. Grorge Cornish, M. A., LL. D., now Professor of Classics, McGill College, 1856-7, Professor of Classics.
Thomas MoCulloch, 1863-5, Professor of Natural Philosophy.
John James MacKenzie, M. A., Ph. D., 1877-79, Professor of Physics.
Herbert A. Bayne, M. A., Ph. D., F. R. S. C., late Professor of Chemistry, Royal Military College, Kingston, Ont, 1877-79, Lecturer on Organic Chemistry and Chemical Analysis.
James Demile, A. M., 1866-80, Profersor of Rhetoric and History.
Rev. David Hunkyman, D. C. L., F. S. A., F. R. S. C., late Provincial Geologist, 1878-83, Prof. of Geology and Palæontology.
Rev. James Ross, D. D., 1863-85, Principal, and Professor of Ethics.
J. G. Schurman, M. A., D. Sc., now President of Cornell University, 1882-86, Professor of English Literature and Metaphysics.
Hon. Sir J. S. D. Thompson, LL. D., now Premier of Canada and Minister of Justice, 1883-88, Lecturer on Procedure and Evidence.
Robt. SEdgewiok, B. A., Q. C., now Judge of the Supreme Court of Canada, 1883-88, Lecturer on Equity Jurisprudence.
W. J. Alexander, B. A., Ph. D., now Professor of English in the University of Toronto, 1884-89, Professor of English Language and Literature.
Rev. Wm. Lyall, LL. D., F. R. S. C., 1863-90, Professor of Philosophy.
Hon. S. L. Shannon, D. C. L., Q. C., 1883-81, Judge of Probate, Lecturer on Real Property.
W. Graham, A. B., Judge of the Supreme Court, 1883-92, Lecturer on Insurance.
J. Y: Payzant, A. M., 1884-92, Lecturer on Torts.

Hon. C. J. Townshend, B. A., B. C. L., Judge of the Supreme Court, 1888-92, Lecturer ou Equity Jurisprudence.
A. H. Mackay, B. A., B. Sc., LL. D., F. R. S. C., Superintendent of Education, 1891-92, Lecturer on Zoology.
James Seth, M. A. (Edin.) ; George Munro, Prof. of Philosophy, now Prof. of Philosophy in Brown University.

## Bathomsir College \& Emibersity.

## BOARD OF GOVERNORS

John Douli, Ese., Chairman.
Adam Burns, Ese., Vice-Chairman.
Hon. Sir Charles Tupper, Bart., K. C. M. G., C. B., M. D., Ll. D.
Hon. S. L. Shannon, D. C. L., Q. C , Judge of Probate.
Rev. John McMillan, M. A., B. D.
Rev. Prestdent Forrest, D. 1), D. C. L.
Hon. Alfred G. Jones, P. C.
Rev. Robert Murray.
Wallace Graham, Ese., A. B., Judge of the Supreme Court.
A. H. Maokar, Esq., B. A., B. Sc., Ll. D., F. R. S. C., Superintendent of Elucation,
His Worship the Mayor of Halifax, ex officio.
D. A. Campbell, Ese., M. D.

Hon. Robert boak, M. L. C.
Hon. W. S. Fielding, M. E. C., M. P. P., Provincial Secretary.
Thomas A. Ritchie, Esq.
James Forrest, M. A.
John F. Stairs, Esq., M. P.
A. J. Trueman, M. A.

James Forrest, M. A., Treasurer.
Hector MoInnes, Ll. B., Secretary.

## SENATUS ACADEMICUS.

Rev. John Forrest, D. D., D. C. L , President. Charles Macdonald, M. A. John Johnson, M. A.<br>George Lawson, Ph. D., Lu. D., F. I. C., Secretary. J. G. MadGregor, M. A., D. Sc.<br>Richard C. Welinon, M. A., Ph. D., M. P.<br>James Liechti, M. A.<br>Benjamin Russell, M. A., Q. C.<br>Archibald MacMeghan, B. A., Ph. D.<br>Walter C. Murray, M. A.

## ACADEMIC STAFF.

Rev. President Forrest, D. D, D. C. L, F. S. Sc. L , George Munro Professor of History and Political Economy.
Charles Macnonald, M. A., (Aberd.), Professor of Mathematics.
John Johnson, M. A. (Dub.), McLeod Professor of Classics.
George Laifson, Ph. D., Ll. D., F. I. C., F. R. S. C., McLeod Professor of Chemistry and Mineralogy.
James Liechti, M. A. (Vind.), McLeod Professor of Modern Languages:
James Gordon MacGregor, M.A. (Dal.), D. Sc. (Lond.), F.R.SS.E. \& C., George Munro Professor of Physics, and Lecturer on Applied Mechanics.
Richard Chapman Weldon, A. M. (att. All.), Ph. D. (Yale), George Munro Professor of Constitutional and International Law, and Lecturer on Crimes.
Benjamin Russele, A. M. (Mt. All.), Professor of Contracts, and Lecturer. on Bills and Notes, Sales and Equity.
Archibald MacMechan, B. A. (Toronto), P̀. D. (J. H. U.), George Munro Professor of English Language and Literature.

- Walter C. Murray, M. A. (Edin.), George Munro Professor of Philosophy,
C. Sidney Harringtov, Q. U., Lecturer on Evidence, Partnership, Agency and Companies.
John Somers, M. D. (Bell. Hosp. Med. Coll., N. Y.), Examiner in Medicine.
George L. Sinclatr, M. D. (Coll. P. and S., N. Y.), M. D. (Univ. Hal.), Examiner in Anatomy and Practical Anatomy.
D. A. Campbell, M. D., C. M., (Dal.), Examiner in Materia, Medica and Therapeutics, and Pathology.
A. W. H. Lindsay, B. A. (Dal.), M. D. C. M. (Dal.), M. B., C. M. (Edin.), Examiner in Anatomy and Practical Anatomy.
John Stewart, M. B., C. M. (Edin.), Examinet in Surgery.
A. C. Page, M. D., (Harv.), President N. S. Medical Board, Examiner in Obstetrics and Diseases of Women and Children.
Hon. D. MoN. Parker, M. D. (Edin.), L. R. C. S. (Edin.), Examiner in Medicine.
Edward Farrell, M. D. (Coll. P. and S., N. Y.), Examiner in Surgery.
Andrew J. Cowie, M. D. (Univ. Penn.), M. R. C. P. Lond., Examiner in Clinical Medicine.
John F. Black, M. D. (Coll. P. and S., N. Y.), Fxaminer in Clinical Surgery.
Alexander P. Reid, M. D., C. M. (MeGill), L. R. C. S. (Edin.), L. C. P. and S. Can., Supt. Victoria Hospital, Examiner in Medical Jurisprudence.
Howard Murray, B. A. (Lond.), Lecturer on Classics.
M. A. Curry, M. D. (Univ. N. Y.), Examiner in Obstetrics and Diseases of Women and Children.
Murray Mclaren, M. D.,-Examiner in Physiology and Histology.
Martin Murphy, D. Sc. (Vind.), C. E , Provincial Government Engineer, Lecturer on Civil Engineering.
Edwin Gilpin, Jr., A. M. (Vind.), Le. D. (Dal.), F. G. S., F. R. ©S. C., Inspector of Mines, Lecturer on Mining.
F. W. W. Doane, C. E., Halifax City Engineer, Lecturer on Municipal Surveying.
C. E. W. Donwell, B. A., M. I. C. E., M. C. S. C. E, Resident Engineer Public Works of Canada, Lecturcr on Hydrautic Engineering.
Roderick McColl, C. E. (Roy. Mil. Coll.), Assistant Provincial Engineer, Lecturer on Surveying.
_-_ Lecturer on Marine Insurance.
Wm. B. Ross, Q. C., Lecturer on Torts.
George Ritchie, Ll. B. (Harv.) Lecturer on Real Property.
Wm. S. Muir, M. D., C. M. (1)d ) L. R. C. P. \& S. (Edin.), Examiner in Materia Medica and Therapeutics.
H. McD. Herny, Q. C., Judge of the Supreme Court, Examiner in Medical Jurisprudence,
Willidm Tobin, F. R. C. S. Irelaud, Examiner in Ophthalmology, Otology, and Laryngology.
Alex. McKay, Esq, Supervisor of Halifax Schools, Lecturer on History of Education.

Librarian : Professor Murray. Curator of the Museum: Professor Lawson.

Instructor in Gymnastics: Sergeant Kelly.
Janitor :
$\qquad$

## daculty of Axts.

The President.<br>Charles Macdonald, M. A.<br>John Johnson, M. A.<br>George Lawson, Ph. D., LL.D.<br>James Liechti, M. A.<br>J. Gordon MagGregor, D. Sc.<br>Archibald MacMechan, Ph. D.<br>Walter C. Murray, M. A.

Secretary of the Faculty-Profrssor MacMechan. Registrar of the Faculty-Professor Liechti.

Lecturer: H. Murray, B.A.

## § I.-Courses of Instruction.

I.-CLASSICS.
(McLeod Professorship.)
Professor John Johnson, M. A.

First Year Latin Class.
Mondays, Wednesdays, and Fridays, 10-11 A. M.
Subjects of study :
Cicero: Pro Milone, (Purton's, Macmillan, N. Y., \$0.60). *Pro Lege Manilia, (Wilkin's, Macmillan, N. Y., \$0.75). Virgil : Aneid, Book VI, (Page's, Macmillan, N. Y., $\$ 0.40$ ). Composition : Arnold's Latin Prose by Bradley, (English edition, Halifax booksellers; Canadian reprint, Gage \& Co., Toronto, $\$ 1.50$ ). Grammar: Syntax and Prosody, (Allen and Greenough's, Giinn. Boston, \$1.30). History : Roman History, (Smith's, Har'pers, N. Y.).
*Students seeking a First or Second Class Distinction are examined in this additiona! subject. An "unseen" passage will also be set for translation.

## Second Year Latin Class.

Mondays, Wednesdays, and Fridays, 11 A. M-12 M.
Subjects of study :
Horace : Odes, Bouks I, *II, *III, (Page's, Macmillan, N. Y., 40c. each ; Books I-IV, \$1.60). Livy : Book I., (Stephenson's, Macmillan, N. Y., \$0.40). Composition : Arnold's Latin Prose by Bradley : Easy pieces for Latin Prose, Second Series, (Champneys and Rundall's, Longmans, N. Y. \$0.50). History : Grecian History, (Smith's smaller ed., Harpers, N.Y.).

## Third and Fourth Years Latin Class.

$$
\text { Mondays and Wednesdays, } 12 \text { M.-1 P. M. }
$$

Subjects of study in alternate years:
For 1893-94.-Tacitus : Agricola, (Church \& Brodribb's, Macmillan, N. Y., \$0.55). Plautus : Captivi, (Lindsay's, Maemillan, N. Y., \$0.60). Juvenal : Satires III, X, XIII, (Hardy's, Macmillan, N. Y., \$1.25).Composition: Bennett's Second Latin Writer, (Longmans, N. Y., \$1.10) +Sallust: Catiline's Conspiracy, (Turner's, Longmans, N. Y., $\$ 0.60$ ). *Roman Provincial Administration, by Arnold, (Macmillan, N. Y., \$1.75).

For 1894-95.-Horace : Selected Satires, (Macleane's small ed., with notes, Whittaker, London). Tacitus : Annals, Book I (Furneaux', Macmillan, N. Y., \$0.50)--Composition: Bennett's Second Latin Writer, (Longmans, N. Y., \$1.10). †Tacitus: Annals, Bk. XIV. *Merivale's Hist. of the Romans, chaps. xxx, xxxi, xxxii, xxxix-xli.

## First Year Greek Class.

$$
\text { Tuesdays and Thursdays, } 10-11 \mathrm{~A} . M \text {. }
$$

Subjects of study :
Lucian : Vera Historia, (Jerram's, Macmillan, N. Y., \$0.40.)
*Xenophon : Cyropædia, Book I, (Bigg's, Macmillan, N. Y., \$0.50). Composition : Elementary Greek Prose Composition, by Fletcher \& Nicholson, pub. by W. Bailie, Kingston, Ont., \$1.00), introductory rules ; oral and *written exercises.-Grammar : Accidence, (Goodwin's, Ginn \& Co., Boston, \$1.65).

Second Year Greek Class.
Tuesdays and Thursdays, 11 A. M.-12 M.
Subjects of study :
Homer : Odyssey, Book IX, (Edward's, Macmillan, N. Y., \$0.60). Xenophon: Hellenica, Book I, (Underhill's, Macmillan, N. Y., \$0.75). ${ }^{*}$ Demosthenes : Olynthiacs. (Helsop's, Rivingtons, London, \$0.80).Composition: As in First Ye rr's Clàss; also Sidgwick's Introduction to Greek Prose Composition, (Longmans, N. Y., \$1.50).

[^0]
## Third and Fourth Years Greek Class.

Tuesdays and Thursdays, 12 M. -1 P. M.

## Subjects of study in alternate years :

For 1893-94.-Plato: Apologia Socratis, (Adam's, Macmillan, N. Y., $\$ 0.90$ ). Aeschylus : Prometheus Vinctus, (Prickard's, Macmillan, N. Y., $\$ 0.50$ )-Composition: Sidgwick's Introduction to Greek Prose Composition : introductory rules ; written exercises. *Philolngy : Müller's Science of Language, vol. I, chaps. 1-7. †Plato: Republic, Book I, (Warren's, Maemillan, N. Y., \$1.50).

For 1894-95.-Demosthenes: Philippics, I, II, III, (Tarbell's, Ginn \& Co., Boston, \$1.10). Euripides : Medea, (Verral's, Macmillan, N. Y., $\$ 090$ ).-Composition : Sidgwick's Introduction to Greek Prose Composition : introductory rules; written exercises. *Philology: Peile's Primer of Comparative Philology, (Macmillan, N. Y., \$0.35). $\dagger$ Euripides : Alcestis.

## Advanced Class.

```
Professor
```



```
    Lecturer
        ........................ Murray, B. A.
        Twice or three times a week.
```

In this class the Latin and Greek Subjects prescribed for the Special Course in Classics are read, and Prose Composition is regularly practised.

> II.-MODERN LANGUAGES.

> (McLeod Professorship.)

Professor...........................................James Liechti, M. A.
First French Class.
Tuesdays and Thursdays, 3-4 P. M.
Subjects of study :
Macmillan's Progressive French Reader. II. year, (Fasnacht). Molière: Le Bourgeois Gentilhomme, (Macmillan \& Co.). Scribe : Bataille de Dames (Maemillan \& Co.). Exereises in Grammar and Composition.

Additional for a First-Class position : Saintine, Picciola, or Scribe : Bertrand et Raton.

Text Books: Brachet's Public School Elencentary French Grammar. Other Text Books required will be announced at the cpening of the Session,

## Second French Class.

> Tuesdays and Thursdays, 2-3 P. M.

Subjects of study :
For 1893-94.-Molière's : Les-precieuses ridicules. Racine : Athatie, (Macmillan \& Co.). Corneille : Cinna. Translation from English writers. Exercises in Syntax. Translation of unspecified passages from modern authors.

[^1]For 1894-95. Molière : L'Avare. Racine: Esther. Ponsard : Charlotte Corday. (Macmillan \& Co.). Translation from English writers. Exercises in Syntax. Translation of unspecified passages from modern authors.

Molière's Misanthrope (Macmillan \& Co.), Madame de Staël's L'Allemagne and Molière's Bourgeois Gentilhomme. II, III., and IV. Acts, are prescribed for private reading to candidates for a First Class position.

Text Books: As in First Class. Outlines of the History of French Literature (Saintsbury's Primer).

## Third French Class.

Tuesdays and Thursdays, 9-10 A. M.

## Subjects of study :

For 1893-94.-Corneille : Polyeucte. Racine : Phèdre. Molière: Le Medscin malgyé lui. Translation from Englisb writers. Original essays. Translation of unspecified passages from modern authors.

For 1594-95.-Molière : Les femmes savantes. Racine : Iphigénie. Corneille: Le Cid. (Macmillan \& Co.). Translations from English writers. Original essays. Translation of unspecified passages from modern authors.

Molière's Tartufe (Macmillan \& Co., ) and either Victor Hugo's Les Travailleurs de la mer (Rivingtons) or Madame de Staël's Corinne ou l'Italie are prescribed for private reading to candidates for a First Class position.

Text Books : As in Second Class. Saintbury's Short History of French Literature,

## First German Class.

Mondays, Wednestays, and Fridays, 3-4 P. M.
Subjects of study:
Buchheim: German Reauler, Part II. Schiller: Withelm Tell (Macmillan \& Co.). Additional for a First Class position. Gustav Freytag: Die Journalisten, (Xiacmillan \& Co.), or Von Hillern: Höher als die Kirche, (Heath \& Co.) Exercises in Grammar and Composition.

Text Books: Whitney's German Grammar (Macmillan \& Co.).
-

## Second Cerman Class.

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

Subjects of study :
For 1893-94.-Goethe : Hermann und Dorothea (Clarendon Press). Lessing : Minna von Barnhelm (Macmillan \& Co.). Translations from English writers. Original Compositions. Translation of unspecified passages from modern authors.

For 1894-95. Goethe : Egmont. Schiller: Marin Stuart. (Macmillan \& Co.). Translations from English writers. Original Compositions. Translation of unspecified passages from modern authors.

Schiller's Jungfrau von Orleans, and either Heine's Prosa (Macmillan \& Co.), or Schiller's Historische Skizzen (Clarendon Press), are prescribed for private reading to candidates for a First Class position.

Text Books: As in First Class. Critical outline of the Literature of Germany by Alb. Selss, Ph.D. (Longmans, Green \& Co).

## Third German Class.

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

Subjects of study :
For 1893-94.-Lessing: Nathan der Wrise. Goethe: Iphigenia. Prose composition. Translation of unspecified passages from modern authors.

For 1894-95.-Lessing : Minna von Barnhelm (Macmillan \& Co.). Goethe: Götz von Berlichingen (Macmillan \& Co.). Prose composition. Translation of unspecified passages from modern authors.

Schiller's Wallenstems Tod, (George Bell \& Sons) and either Goethe's Faust, Part I (by Jane Lee: Macmillan \& Co.), or Heine's Harzeise (Macmillan \& Co.) are prescribed for private reading to candidates for a First Class position.

Text Books: As in Second Class.

## Advanced German Class.*

Twice a week.
The subjects studied in this class will be those prescribed for the special course of English and German (§ viii (8) ). The course will extend over two years.

In 1893-94.-Middle High German: Grammar (Paul's Grammar). Selections from Wackernagel: Kleineres Altdeutsches Lesebuch. Selections from Swiss and Plattdeutsch dialect literature. Selections from authors of 16 th and 17 th centuries. Prose composition.

In 1894-95. - 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.

## III.-ENGLISH LANGUAGE \& LITERATURE. <br> (Ǧeorge Munro Professorship.) <br> Professor. <br> Archibald MacMbchan, Ph. D.

The course in English is mainly literary ; the method pursued is the 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 ambitions students. The

[^2]essential facts of Historical English Grammar are taught by means of lectures in the Sezon 1 Year. In Composition, practice precedes theory, and exercises in the class-room take the place of "essays "compiled at. home ; the writing of reports forms part of this work. In the Advanced Class the aim of the instructor is to acquaint the student with the grammar of Old and Middle English, and to widen his knowledge of Elizabethan literature.

First Year Class.
Mondays and Thursdays, 9-10 A. M.
Composition.--Imitative exercises in construction of paragraphs, Narration and Description.

Literature.-Eighteenth Century : Prose. Addison: Papersicontributed to the Spectator. Johnson: Life of Pope. (Macaulay: Samuel Johnson). Poetry : Dryden: Mac Flecknoe, St. Cecilia's Day, Alexander's Feast. Pope: Rape of the Lock. Graz: Elegy in a Country Churchyard. Goldsmith: Traveller, Deserted Village. Burns: Twa Dogs, Cotter's Saturday Night.

For reference. Gosse : History of Eighteenth Century Literature.
Candidates for Class Distinction will be examined these additional works, which are not read in class. Dryden: Absalom 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: Clarendon Press edition of Dryden: Hale's Longer English Poems (containing all the poetry read in class) : Addison; ed. T. Arnold ; Clarendon Press Series) : Johnson's Six Chief Lives ; ed. M. Arnold.

> Second Year Class.
> Mondays, Wednesdays, and Fridays, 12-1 P. M.

Composition.--Lectures on the principles of Narration, Description and Exposition.

Literature. - Elizabethan. Shakespeare: Midsummer Night's Dream, Merchant of Venice, Taming of the Shrew, Twelfth Night. Milton: Comus, L'Allegro, Il Penseroso, Sonnets, Paradise Lost, Lost, Bks. I. -II. Lectures.

English Language.-A short course of lectures on the History of the English Language, at the end of the Spring Term.

For reference. Saintsbury : History of 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.
${ }^{\circ}$ Candidates for Class Distinction will be examined in the following. plays, which are not read in class: Coriolanus, Julius Cæsar, Antony and Cleopatra.

Senior Class.
Twice a Week.
The object of this part of the course is to complete the study of Eighteenth Century and Elizabethan Literature, by linking it, on the one hand with Chaucer, and, on the other, with the literature of our. own day.

## Literature. - Nineteenth Century.

1893-94. - Lectures on The Poetry of the Revolution, The History of the English Novel, Wordsworth's Theory of Poetry, The Sonnet, The Metrical Romance, The Ballad, The So-called "Lake School," The Lecture, The History of English Prose. Scott: Heart of Midlothian, Marmion. Byron: Poems selected and edited by Matthew Arnold. Wordsworth: Poems selected and edited by Matthew Arnold. Tennyson: The Lady of Shalctt, Oenone, Lotus Eaters, A Dream of Fair Women, Morte d'Arthur, Dora. Sir Galahad, The Lord of Burleigh, Ulysses, Ode on the Duke of Wellington. Browning: My Last Duchess, Lost Leader, Andrea del Sarto, The Bishop Orders his Tomb, Epistle of Karshish, The Italian in England. Ruskin: Crown of Wild Olive. Carlyle: Sartor Resartus.

## History of Literature : Oliphant.

For Distinction. A thesis on a subject assigned by the instructor.
Literature.-Middle English and Pre-Shakesperean.
1894-5.-Chaucer: Prologue, Knightes Tales and Nonne Prestes Tale. Sweet's Middle English Primer, II. Spenser : Faerie Queene, Bks. I., II. Marlowe : Dr. Faustus. Lectures.

History of Literature: Morley : English Writers, V.
For Pistinction. Chaucer: Minor Poems. (ed. Skeat;) The Prioress's Tale, Sir Thopas, The Monk's Tale, The Clerkes Tale, The Squire's Tale.

## Advanced Class. <br> Three times a week.

Development of English Language and Literature to the year 1300, with special study of select works ( $\S$ viii, 6.)

## Extra Class.

## Poetry of the Revolution.

Lectures on The Precursors of the Revolution, The Revolution in History and in Literature, Lyrical Ballads, The Wordsworthian Controversy, Coleridge, Scott, Byron, Shelley, Keats. Examination of representative works. Readings.
N. B.-This course does not lead to a degree. It is intended for general students, and will be similar to the course on Shakespeare, given in the School for the Blind in 1892-93. It will be given only in case a sufficient number of students offer themselves. Further announcements may be made at the beginning of the session.

## IV.--HISTORY AND POLITICAL ECONOMY. <br> (George Munro Professorship.)

Professor.
Rev. President Forrest.
Third Year History Class.
Mondays and Wednesdays, 11 A.M.-12 M., and Fridays, $10-11$ A.M.
Subjects of study :
Mediæval History and Modern History to 1555.
The class work will be conducted by means of lectures and examinations on prescribed reading.

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.

Text Book: Gibbon's Decline and Fall of the Roman Empire (Student's Edition).
Books recommended: Hallam's Middle Ages ; Brvce's Holy Roman Empire; Irving's Mahomet and his successors: Guizot's History of Civilization; Michaud's History of the Crusades ; Robertson's Charles V. ; Stubb's Constitutional History of England.

Fourth Year History Class.
Tuesdays and Thursdays, 11 A. M.-12 M.
Subjects of study :

## Modern History from 1555.

The elass 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.

Candidates for First Class Distinction will be examined on Green and Guizot, and a few chapters to be specified in the others.


#### Abstract

Books recommended : Greene's England, vol. iv.; Guizot's France (Masson's Abridgement) ; Menzel's Germany ; Motley's Dutch Republic; Bancroft's United States; McMaster's History of the People of the United States ; Parkman's France and England in North America.


## Advanced History Class.

Once a week.
Subjects of study :
English History from 1603 to 1688.
The work of this class will be conducted by means of lectures and examinations on reading prescribed from Clarendon, Gardiner, Green, Hallam, Ranke, and other authorities.

This class is intended especially for undergraduates taking the Special Course in English and English History.

## Political Economy Class.

Tuesdays and Thursdays, $10-11$ A.M.
The work of this class will be conducted by means of lectures and examinations on prescribed reading.

Candidates for First Class Distinction will be examined on Cossa's "Guide to study of Political Economy " and other works prescribed during the session.

Text Book: Mill's Principles of Politieal Economy.

## Advanced Political Economy Class.

## Tivice 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.

> V.-PHILOSOPHY. (George Munro Professorship.)

Professor
Walter C. Murray, M.A.

## Junior Philosophy.

Mondays, 9-10 A.M., Tuesdays and Thursdays, 4-5 P.M.
The work of this class will consist of two parallel courses of lectures, one on Logic, the other on Psychology, with essays, discussions, and oral examinations.

The lectures on Psychology will be delivered on Tuesdays and Thursdays, 4-5 P. M. Especial attention will be given to the application of Psychology to Educational Methods.

Mondays will be reserved for the lectures on Logic, Deductive and Inductive. The work of this course will be selected so as to afford the best possible mental training.

Text Books: Fowler's Deductive and Inductive Logic, (or) Jevons' Elementary Lessons in Logic ; James' Psychology (Briefer Course). Students especially interested in Education are recommended to read Sully's Teacher's Hand-Book to Psychology.

## Senior Philosophy.

Tuestays, Thursdays 3-4 P.M

This course extends over two years, and consists of a series of lectures varied by oral examinations, essays, and discussions, on the History of Philosophy.

For 1893-4 the History of Philosophy from DesCartes to Kant, with a critical study of Locke's Essay on the Human Enderstanding, and of Fraser's Selections from Berkeley will constitute the work of this course.

## Book recommended: Seth's Scottish Philosophy.

For 1894-5, the subjects of this course will be the History of Greek Philosophy, and a critical study of Plato's Republic.

Book recommended: Ferrier's Lectures on Greek Philosophy.

## Ethics.

## (Two lectures per week.)

The outline of this course is as follows :-
A. Introduction: Psycholegy of Volition; Moral and NonMoral ; The Person ; A sketch of the Problems of the Ethical Ideal, (1) Its Content, (i. e., the Good or Ethical End, including its relation to the Ethical Criterion), (2) 1ts Authority, (3) Its Metaphysical Presuppositions.
B. A critical discussion of the Hedonistic, Ascetic, and Eudæmonistic theories of the Good, of Obligation, and of Freedom.
C. An account of the problems of the Moral Life of the Individual, -Conscience, Conduct, Character, or Virtue.
D. Moral Institutions, with especial consideration of the State,Its Nature, Its End, Its Relation to the Individual, Punishment, Education.

Text Book: Dewey's Outlines of Ethics, (Inland Press; Ann Arbor, Mich.).

## Advanced Class.

(Two lectures per week.)
In this Course, which is intended primarily for Undergraduates taking the Special Course in Philosophy, a careful study will be madeof the following of Kant's works:-Prolegomena, Critiques of Pure Reason, of Practical Reason, and of Judgment.

> VI.-MATHEMATICS.

Professor...................................... Macdonald, M. A.

## First Year Class.

$$
\text { Daily } 11 \text { A. M. }-12 \text { M. }
$$

Subjects of study :
Algebra.-Involution, Evolution, Theory of Indices, Equations of the First and of the Second Degree, Discussion of Imaginary Quantities and of $\sqrt{ }-1$; Elements of Determinants, Proportion, Inequalities, Indeterminate Equations, V ariation, Progressions, Theory of Notation; Selected Propositions in the Theory of Equation, with Horner's method of approximating the roots of an Equation of a Degree higher than the Second.

Geometry. - First, Second, and Third Books of Euclid Revised, Fourth Book, Definitions of the Fifth, and the Sixth Book, with Geometrical Exercises and Practical applications.

After the beginning of January, attendance at the Class on Thursdays, will be optional, except for those who are trying for First or Second Class distinctions. But the Professor reserves to himself the right of excluding any whom he may have judged unequal to the work of his. Thursday class.

> Booles recommended: Colenso's or Todhunter's or Deighton's (George Bell \& Sons), Elements of Euclid, Hall \& Knight's Elementary Algebra, Todhunter's Algebra, or Hall \& Knight's Higher Algebra. (The latter book is recommended to those who wish to pursue advanced work. Todhunter's small School Algebra is scarcely sufficient for the course.)

## Second Year Class.

$$
\text { Daily } 10-11 \mathrm{~A} . \mathrm{M} \text {. }
$$

The daily meeting of the Class is subject to the following explanations :

After the Christmas Examinations, the Class will be resolved into two divisions, a Lower and a Higher.

The Lower or Ordinary Division will meet on four or three days a week, according as the general progress of the Class may demand. The Higher Division will meet on the remainder of the five days a week. Fitness to enter the Higher Division is determined by the Professor, according to the general standing and previous record of the student.
In the Lower or Ordinary Division of the Class, the subjects of study are--
Geometry.-Sixth Book of Euclid revised; Cockshott \& Walter's. Conic Sections; the Parabola; Easy Geometrical Exercises, with practical applications; 21 Propositions of the Eleventh Book of Euclid.

Trigonometry.-Analytical Plane, as far as, but exclusive of, DeMoivre's Theorem. The use of Logarithms, and of the chief Mathematical Tables. Solution of Plane Triangles; Mensuration of Heights and Distances; Elementary Problems in Navigation.

Algebra. - Permutations and Combinations ; use of the Binomial Theorem ; Properties of Logarithms ; Compound Interest ; Elements of the Dectrine of Chances.

In the Higher Division the subjects are :-
Geometry.-Parabola, Ellipse, and Moderir Extensions of Euclid.
Trigonometry.-As in the Lower Division, with Extensions; DeMoivre's Theorem, with Higher Angular Analysis; Spherical Trigonometry, as far as the soletion of Right-angled Triangles, with applications to easy Astronomical proble:ns.

Algebra.-Investigations connected with the subjects studied in the Ordinary Division, with illustrations and examples of a more difficult kind. For First or Second Class at the Examinations, acquaintance with the subjects treated in this Division is necessary.

Books recommended: Algebras-Todhunter's or Hall and Knight's (best.) $\ddagger$ Lock's Plane Trigonometry ; Cockshott and Walter's Geometrical Conics (Macmillan \& Co.) ; Chamber's Logarithmic, \&c., Tables. For Higher Division-Todhunter's Spherical Trigonometry , Casey's Sequel to First Six Books of Euclid, (Longmans, Green \& Co., London.)

## Advanced Class.

There are two Divisions in this Class :
The First Division meets three times a week.* Subjects: Analytical Trigonometry, commencing with the application of DeMoivre's Theorem; Analytical Geometry ; Spherical Trigonometry ; Theory of Equations; Differential Calculut.

Books reconmended-Lock's Plane Trigonometry ; C. Smith's, and Todhunter's Conic Sections; Todhunter's Theory of Equations; Williamson's Differential Calculus; Williamson's Integral Calculus; Todhunter's Spherical Trigonometry. Any standard works on the subjects treated may, however, be used.

The Second Division meets twice a week. $\dagger$ Subjects : Spherical Trigonometry; Theory of Equations; Differential Calculus; Integral Calculus, with Differential Equations; Application of these to Physics, Physical Astronomy, \&e.

Books recommended-The same as for the First Division. Also, Tait \& Steele's Dynamica of a Particle ; Todhunter's Analytical Statics; Boole's Differtntial Equations, (MacMillan \& Co.).

> VII.-PHYSICS.
> (George Munro Professorship.)
> Professor........................................................
> Junior Physics Class.

Tuesdays, Thursdays, and Fridays, 11 A. M.-12 M.*
The subjects of the lectures will be :-
The Elements of Dynamics ; the properties of solid and fluid bodies ; Heat ; Electricity and Magnetism; Light and Radiant Heat; and Sound. These subjects will be treated in an elementary manner, the

[^3]mathematical knowledge assumed being no greater than may be acquired in the First Year Class.

Books recommended :-Students who aim at Distinction will be expected to read in connection with the lectures the foll wing books: Lodge's Elementary Mechanics (W. \& R. Chambers), Garnett's Elementary Treatise on Heat (Deighton, Bell \& Co.). Cumming's Electricity Treated Experimentally (Rivingtons), and Deschanel's Natural Philosophy, E f. Everett, Part IV-Sound and Light (Blackie \& Son.) Other students are recommended to read Lodge's Mechanics and Stewart's Lessons in Elementary Physics (Macmillan \& Co.).

## Sentor Physics Class. <br> Mondays and Wednesdays, 10 15 A.M.

The subjects studied in this class will be treated in a less elementary manner than in the Junior Class, a knowledge of the Mathematics of the Second Year being assumed. As the course is too extensive to be completed in one session, different departmeats of it will be taken up in alternate years, as follows :

In 1893-4:-Heat, including a discussion of heat engines, and Electricity and Magnetism, including a discussion of dynamo-electric machines. Maxwe l's Theory of Heat (Longmans \& Co.), and Cumming's Thenry of Electricity (Macmillan \& Co ), will be used as text-books, and candidates for Distinction will be expected to be familiarowith specified portions not treared in class. On th subject of heat engines and dynamo-electric machinery, students will be referred to various works.

In 1894-5:-Kinematics, Dynamics, and the properties of elastic solids and fluids. The Professor's Kinematics and Dynamics, (Marmillan \& Co.) will be used as a text-book, and candidates for Distinction will be expected, no: only to acquire considerable power of solving problems, but also to read portions of the text book not treated iu class.

## Advanced Mathematical Physics Class.

$$
\text { Mondays and Wednesdays, } 11 \text { A. M. } 12 \mathrm{M} .
$$

The subjects studied will include various departments of Physics. The mode of treatinent will be such as to give students an introduction to the application of the higher Mathematics to the study of physical problems They will therefore be assu ned to have a sufficient knowledge of Analytical Geometry and of the Differential and Integral Calculus. As the course is too extensive to be completed in a single session, different portions will be taken up in alternate sessions, viz :-

In 1893-4 the subjects treated will be : - Kinematics of a point, of a rigid system, and of deformable systems; Dynamics (including Statics) of a particle, of systems of particles (including strings), of extended bodies, of rigid bodies, of elastic solids, and of fluids ; Wave Motion, with application to Sound and Ligh .

In 1894-5 the subjects treated will be:--Dynamics, the portions bearing on the doctrine of Energy : Thermodynamics ; Electrodynamies (including Electrostatics).

Books recommended: Students will be referred by the Professor to various works during the course. Those most frequentlv referred to wi!l be: Tait and Steele's Dynamics of a Particle (Macmillan \& Co.), Todhunter's Analytical Statics (Macmillan \& Co.), Aldis's Rigid Dynamies, (Deighton, Bell \& C ).), Besant's Hydromechanies (Deighton, Bell \& Co.), Baynes's Thermodynamies (Clarendon Press). Emtage's Mathenatical Theory of Electricity and Magnetism (Clarendon Press), Mascart and Joubert's Electricity and Magnetism (De la Rue \& Co., London), vol. I, and Preston's Theory of Light (Macmillan \& Co.).

## Advanced Experimental Physics Class.

Once or twice a week.
The subjects studied will be those portions of the work prescribed in the Special Course in Experimental Physics and Chemistry, which present special difficulty.

Lectures will also be given on physical experimental methods, errors of observation and their influence on results, the treatment of corrections, graphical methods, the method of least squares, \&c.


#### Abstract

Books of reference:-The works most frequently referred to will be: Tait's Properties of Matter (A. \& C. Black), Peddie's Manual of Physics (Bailliere, Tindall \& Co.) Glazebrook's Physical Optics (Longmans, Green \& Co.), Stewart's Treatise on Heat Clarendon Press), Thompson's Electricity and Magnetism (Macnillan \& Co.), Holman's Precision of Measurements (John Wiley \& Sons), and various original memoirs.


## Practical Physics Class.

## (At least five hours a week.)

The work of this class will consist of the determination of physical constants, such as density, specific heat, electromotive force, electrical resistance, \&c., and of the investigation of simple physical laws.

Students will be required to prepare formal papers on the determinations made, describing the methods used and the results obtained, and discussing the degree of accuracy of the results. Their standing in the Pass and Distinction lists will depend mainly on these papers.

Members of the class who wish to become science teachers will be allowed to devote part of their time to acquiring facility in devising and executing illustrative experiments.

Books recommended :-Hor ordinary use-Glazebrook and Shaw's Practical Physic- (Longmans, Green \& Co.). For reference-stewart \& Gee's Elementary Practical Physies (Macmillan \& Co.), Ayrton's Practical Electricity (Cassell \& Co.), Gray's Absolute Measurements in Electricity and Magnetism (Macmillan \& Co.), Kohlrausch's Physical Measurements (J.\&A. Churehill), and Wiedemann and Ebert s Physikalisches Praktikum (Vieweg \& Sohn, Braunschweig.)

## VIII.-CHEMISTRY.

## (McLeal Professorship)

Professor ........................................George Lawsoy, Ph.D., Ll. D.

## Inorganic Chemistry Class.

Tuesdays, Wednesdays and Fridays, 9-10 A. M.

## Subjects of lectures :

General Principles. Chemical Affinity. Laws of Combination, by weight. Equivalents. Law of Combination, by volume. The Elements. Compounds. Atomicity. Nomenclature; Notation; Formulæ, Equations. The non-metallic Elements considered in detiil ; their modes of occurrence in nature; preparation in the free state; their compounds; natural phenomena and artificial processes in which they take part; useful manufactures to which they are related.

The Metals considered in regard to their physical and chemical characters and modes of occurrence in nature; Classification of the Metals. Alloys. Amalgams; Constitution of Salts; Bases, Acids,

Radicals. Discussion of the more important Metallic Elements in detail, their Salts and other compounds; Metallurgical processes ; Chemical Manufactures.

Text Book.-Greene's edition of Wurtz's Elements of Modern Chemistry-the whole of the Inorganic part. (Lippincott, Philadelphia.)

## Organic Chemistry Class.

Mondays and Thursdays, 9-10 A. M.

## Subjects of lectures:

Mode of formation of Organic Compounds in the Plant; their transformation by natural and artificial processes. The Method of Organic Chemistry. The Atomicity of Carbon. Saturation. Substitution. Principles of Classification. Elementary Analysis. Methane and its Homologues, and the Substitution Compounds. The Monatomic Alcohols, and related Compounds and Derivatives of the Fatty Series; Aldehydes, Ethers, \&c. The Fatty Acids. Compound Ethers. Polyatomic Alcohols, Ethers and Acids. Cyanogen and its Compounds. Glucosides. Carbohydrates. Diastase. Fermentation.

Aromatic Compounds. Benzene (Benzol) considered theoretically as the nucleus of the aromatic compounds. Oil of Turpentine and its Isomerides. Volatile Oils. Camphor. Substitution Compounds of Benzene. Phenol (carbolic acid) and its derivatives, Aniline, \&c. Banzoic and related Acids, Indigo, \&c. Natural Alkaloids. Albumen, Urea.

Students attending this class are allowed to work in the Laboratory in the preparation of organic compounds bearing upon the class work, and in experiments to determine their elementary composition, chemieal constitution, and properties.

Text Books.-Greene's Edition of Wurtz's Elements of Chemistry-the Organic part. Reference works: Roscoe \& Schorlemmer, Watt's Dictionary, \&e.

## Chemical Laboratory.

The Chemical Laboratory is open daily (except Saturdays, Sundays, and holidays) from $9 \mathrm{a} . \mathrm{m}$. to $1 \mathrm{p} . \mathrm{m}$. Students taking their first Laboratory course are required to attend at an hour when the Professor is not engaged in lecturing. Students experienced in Laboratory work who cannot attend at such hours may be allowed, by special permission, to work at other times, but such permission may be cancelled at any time.

Practical Chemistry. - A systematic course of Separation and Detection of the several Metallic Bases, and of the Inorganic and Organic Acids, and Preparation of the necessary Regents.

The above constitutes the course conventionally known as " Practical Chemistry," which ordinarily occupies a student for three months, working at least five hours a week, or from five to six months, working two hours a week. Where additional time can be given, students will also be exercised in the preparation of, and manipulation with, the more important elementary and compound gases. This extra work, which is entirely optional, is intended specially for the benefit of teachers and others who may be desirous of becoming familiar with gas
experimentation. Such extra work cannot be taken as a substitute for any part of the course of "Practical Chemistry" as above defined.

Laboratory Books.-One of the following: Macadam's Practical Chemistry; Fresenius's Qualitative Analysis, Goodwin's Text Book. The only book actually required by a student for his first course of Practical Chemistry is Macadam's.

Quantitative Analysis.-Instruction is provided in Quantitative Analysis, for Students taking the Special Course in Experimental Physics and Chemistry, and also for Students who, having taken Practical Chmistry in their Third Year, are desirous of taking it again in their Fourth Year. Other persons, having a sufficient practical training in Chemistry, will also be admitted. Instruction is offered, not only in General Quantitative Analysis, but also in special work, such as the Analysis of Metallic Ores, Coal, and other Mineral Substances, Fertilizers, Soils, Mineral Waters; Sanitary Examinations of Water, Air and Food; Detection and Quantitative Estimation of Poisons; Manufacturing Chemistry,-as laboratory processes related to Soap Making, Brewing, Malting, Distilling, Cultivation of the Soil, Agricultural Manufactures, \&c.

Laboratory students are allowed the use of the ordinary Laboratory apparatus and furnishings, and of inexpensive reagents, but are required to provide themselves with evaporating basins, test-tubes, platinum, gold and silver salts, and other expensive materials which they may require, and to replace apparatus which they may destroy. These who wish to work in special departments, or to engage in original research, will have to furnish themselves with the necessary apparatus.

The Chemical Laboratory is very large and airy, and is so arranged that every student has a separate set of reagents, and as much desk and table room as he can possibly use. There is a separate Balance Room, and a Stink Closet.

Text Book.-Fresenius's Quantitative Analysis. Special works in the College Library will be recommended when necessary. Books needed in actual work will be kept in the Balance Room for the use of Students, but are on no account to be taken out of the Laboratory.

> IX.-BOTANY.

Professor . . . . . ....................... George Lawson, Ph.D., Ll.D.

Tuesdays and Thursdays, 12-1 P. M.
The course in Botany embraces the subjects of Structural and Physiological Botany, special attention being given to Minute Structure and the Development of Tissues, the phenomena of Growth, Reproduction, Life History, and Plant Movements. Also Classification, as illustrated by the leading Natural Orders of North American Plants.

[^4]§ II.-The Academic Year. - The Academic Year consists of one Session. The Session of 1893-94 will begin on Wednesday, 13th September, 1893, and end on Tuesday, 24th April, 1894.
§ III.-Admission of Students.- (1.) Persons of either sex may become students of the College by (a) furnishing satisfactory references or certificates of good moral character (on first entering the College), (b) entering their names in the Register (annually), and (c) paying the annual Registration fee (§ xxv).
(2.) Registered students may, on presentation of their Registration Tickets, and on payment of the proper fees, ( $\$ \mathrm{xxy}$ ), enter any of the ordinary classes of the College, The Advanced Classes are open to students who have sufficient knowledge of the subjects taught in them.
(3.) Students who are candidates for degrees are known as Undergraduates, others as General Students.
§ IV.-Degrees.-(1.) Two baccalaureate degrees are conferred in the Faculty of Arts, those, viz., of Bachelor of Arts (B. A.), and Bachelor of Letters (B. L.).
(2.) Persons who wish to obtain University Degrees must become Undergraduates. Persons of either sex may become Undergraduates by (a) passing either one of the Matriculation Examinations or a recognized equivalent, ( $\$ 8 \mathrm{iv}, 4-5$; v. 4 ; and vi, $2-4$ ), and (b) matriculating, $i$.e., entering their names on the Matricula or Register as Undergraduates.
(3.) Two Matriculation Examinations are held, of lower and higher grade respectively. The First Year Matriculation Examination admits to the First Year of the various courses. The Second Year Matriculation Examination admits to the Second Year of the various courses, and thus enables those who pass it to obtain their degrees at the end of three academic years. For conditions of exemptions, see $\$ \$ \mathrm{v}$, vi.
(4.) Undergraduates of other Universities may, on producing satisfactory certificates, be admitted ad eundem statum in this University, if on examination 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 enter in this University, they may be required by the Faculty to take additional classes.
(5.) Undergraduates must pursue, at the College, specified courses of study, which vary with the degrees for which they are candidates, but in the case of all degrees extend over four years. They must also pass the prescribed examinations according to the regulations of § x.

## § V.-First Year Matriculation Examination.(1.) Ordinary.-The following are the subjects of this examination.

1 and 2.-Two of the following: Latin, Greek French, German. Candidates for B. A. must pass in Latin, and if they are to take Greek as one of the subjects of the First Year, must also pass in Greek. Candidates for B. L. may select any two.

Latin. - Translation : (For 1893), Ceesar-Gallic War, Books V and VI, or Virgil-Aneid, Book III. (For 1894), the same as for 1893.
Composition : Arnold's Composition by Bradley, Exx. 1-44: or an equivalent, Grammar : As in Elementary Grammars.
Greek.-Translation : (For 1893), Xenophon: Anabasis. Book II, or III, or IV.
(For 1894), the same as for 1893.
Grammar: As in Elementary Grammars.
French.-Voltaire : Charles X1I., Questions in Grammar limited to the Accidence, and based upon the passages selected. Easy English sentences for translation into French.

German.-Adler's German Reader, Dritter Abschnitt (Appleton \& Co.), or, Buchheim's German Reader, Part I., (Clarendon Press). Grammar limited to the Accidence, and based upon the passages selected.
3.-Arithmetic and Algebra. - Arithmetic. Algebra; Simple Rules. Equations of the First Degree, not involving Surds. Easy Quadratic Equations of one unknown quantity.
4. Geometry.-Euclid. Books I, II, III, or their equivalents.
5. Enclish-Language: Grammar, Analysis, Paraphrasing. Composition : Nothing but an essay will be required. More attention will be paid to the candidate's power of expression, than to his knowledge of fact. Legible writing, correct spelling and punctuation will be considered indispensable. The subjects of composition will be drawn from :-Macaulay : Warren Hastings. Hamlet. Evangeline.
6. History and Geography.-Outlines of English and Canadian History, and General Geography.
7. Optional Subject.-Inorganic Chemistry.-Nomenclature, Notation, Equivalent and Atomic numbers, General Principles of Inorganic Chemistry. The Non-metallic Elements, and their more important compounds. Candidates must be able to read chemical formule and equations, so as to explain their meaning in words, and to express in formulæ the composition of common salts, and, in form of equations, ordinary chemical reactions.
N. B.-Instead of the works prescribed above in Latin, Greek, French and German, candidates may offer equivalents. Such equivalents must have been previously approved by the President. The names of the languages and of the works selected (or the approved equivalents), must have been sent to the President, at least one week before the date of the Examination.
(2.) For Distinction and Scholarships :-Candidates reaching a certain standard on the Ordinary and the following subjects will be declared to have Passed with Distinction. These
subjects are also to be taken by candidates for Sir William Young and Professors' Scholarships. (See §xv.). In this examination the same two languages must be taken as in the Ordinary examinations.

Latin.-Translation: (a) Both Coesar and Virgil as prescribed for Ordinary Matriculation ; (b) A prose passage taken frorr a book not prescribed. Composition: Arnold's Composition by Bradley, Exx. 1-44.

Greek.-Translation : (a) All three books of Xenophon as prescribed for Ordinary Matriculation ; (b) A prose passage taken from a book not prescribed. Composition: Fletcher and Nicholson's Composition, Exx. 1-28.

French.-Octave Feuillet: Le roman d'un jeune homme pauvre, or, Scribe : Le verre d'eau (Macmillan \& Co.)

German.-Schiller : Der Neffe als Onkel, Act I., or, Hauff : Die Karavane (Macmillan \& Co.)

The above examination may be conducted partly vivâ voce.
(3). Candidates who hold Teachers' Licenses of Grades A or B, or certificates of having passed the Senior or Junior Leaving Examinations of the Hign School, issued by the Nova Scotian Education Office, and who also hold Teachers' Licenses of the First and Second Class issued by the Education Office of Prince Edward Island, shall be exempted from the above examination, in subjects which were included in the examinations by which such licenses or certificates were obtained. Candidates who hold Teachers' Licenses or Leaving Examination certificates issued by the Education Offices of other Provinces, may be exempted from parts of the above examination on application to the Faculty.
(4). 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 First Year Matriculation Examination and passed satisfactory examinations therein.
(5.) If persons, who have appeared as candidates at the First Year Matriculation Examination have failed in some subjects but not in others, they may be admitted as Undergraduates on passing in the former at the Final Matriculation Examination (October 11th-14th).
(6.) Candidates who fail in a portion of the above Examination may, nevertheless, by special permission of the Faculty, be allowed to matriculate conditionally ; but they will be required to pass in such portion at a subsequent date.
(7.) This examination will be held at the College on September of 12 th- 18 th, 1893 . For the benefit of candidates
unable to present themselves on these days, an opportunity will be granted of appearing for examination on October 11 th-14th. But no student will be admitted as an undergraduate at a later date without the special permission of the Faculty.

## § VI.-Second Year Matriculation Examination.

 -(1.) The following are the subjects of this examination :1 and 2. Two of the following: Latin, Greek, French, German. (Candidates for B. A. must pass in Latin ; if they are to take Greek as one of the subjects of the Second Year, they must also pass in Greek; if not, they may select Greek, or French, or German.-Candidates for B. L. must pass in two languages, of which one must be Franch or German.)

Latin.--The ordinary* subjects of the First Year Class, including Roman History, as specified in SI (I), together with one additional book.

Greek.-The ordinary* subjects of the First Year Class, as specified in § I ( I ), together with one additional book.

French. - The subjects of the First French Class, as specified in § I (II).

German.-The subjects of the First German Class, as specified in § I (II).
N. B. -Instead of the works prescribed above in Latin, Greek, French, and German, candidates may offer equivalents. Such equivalents must have been previously approved by the President.
3. Mathematics. - The subjects of the First Year Matriculation Examination and of the Eirst Year Class, as specified in § I (vi).
4. English.-In addition to the subjects of the First Year Matriculation Examination (in which special stress will be laid on Composition), candidates will be required to pass an examination on the literary subjects specified for the ordinary work of the First Year Class (§ I, III)-or the equivalents thereof.
5. History and Geggraphy.-The subjects of the First Year Matriculation Examination.
6. Inorganic Chemistry.- The subjects of the First Year Class ( $\S$ I, viii).-Candidates may omit this subject ; but in that event they must either pass the examination thereon on entering the Third Year, or take it instead of one of the elective subjects in the Third Year.

The above examination may be conducted partly viva voce.
(2.) Candidates who have previously passed in one or more of the above subjects, or in any portion thereof, either at the Matriculation Examination or at the Examinations of the First Year, shall be exempt from further examination therein.
(3.) Candidates who hold Teachers' Licenses of Grade A, or Certificates of having passed the Senior Leaving Examinations of the High School, issued by the Nova Scotian Education Office, shall be exempted from the above examination in subjects which were included in the examinations by which such licenses or certificates were obtained. The same privilege shall be granted to candidates who hold Teachers' Licenses of

[^5]the First Class, issued by the Education Office of Prince Edward Island, except in the subject of Greek.

Candidates who hold Teachers' Licenses of Grade B, or Certificates of having passed the Junior Leaving Examination of the High School, issued by the Nova Scotian Education Office, and those who hold Teachers' Licenses of the Second Class, issued by the Education Office of Prince Edward Island, shall be exempted from those parts of the above examination which are common to it, and the First Year Matriculation Examination (including the "additional book" in Latin and Greek), provided such parts were included in the examinations by which such Licenses or Certificates were obtained.

Candidates who hold Teachers' Licenses or Leaving Examination Certificates, issued by the Education Offices of other Provinces, may be exempted from the whole or from parts of the above examination, on application to the Faculty.
(4.) Candidates must give at least one fortnight's notice to the President, of their intention to appear at this examination ; and in giving such notice they must state in what Latin, Greek, French, German, and English books they intend to offer themselves for examination, whether or not they wish to be examined in Chemistry, and in what subjects they claim exemption from examination.
(5.) This examination will be held at the College on September 12 th- 18 th, 1893 . For the convenience of candidates unable to appear on these days, an opportunity will be granted of appearing for examination on October 11 th- 14 th. But no student will be allowed to enter as an undergraduate at a later date, without the special permission of the Faculty.
§ VII.-Ordinary Courses of Study for Degrees of B. A. and B. L.-The following is a list of the classes which undergraduates are required to attend in the four years of the ordinary courses of B. A. and B. L. The details of the subjects studied in these classes, will be found under Courses of Instruction (§ § I, xxvi, and xliv.)

## First Year.

1. For B. A.-Latin. For B. L.-German.
2. For B. A.-Greek, or French, or German. For B. L. -French.
3. Mathematics.
4. Inorganic Chemistry.
5. English.

Undergraduates taking French or German, enter the classes for which the Professors consider them fitted.

## Second Year.

1. For B. A.--Latin. For B. L.-German.
2. For B. A.-The language chosen as subject 2 in the 1 st year. For B. L.-French.
3. For B. A.-Mathematics. For B. L.-Mathematics or Junior Physics.
4. English.
5. Junior Philosophy or Junior Physics.

## Third Year.

1. For B. A.-Latin or Greek. The language selected must have been taken during the first two years. For B. L.German or French.
2. For B. A.-Junior Physics or Junior Philosophy. For B. L.-Junior Physics or any one of subjects 4-5. (Junior Physics must be taken either in the Second or Third Year.)
3. History.

4-5. Any two of the following*:
a. Greek.
b. Hebrew.
c. French.
d. German.
e. English.
f. Constitutional History.
(Law Faculty).
g. Political Economy.
h. Ethics.
$i$, Senior Philosophy.
$j$. Organic Chemistry, or Medical Chemistry.
k. Practical Chemistry.
l. Botany.
m. Practical Physics.
$n$. Education.

Undergraduates are required, on or before September 19th, to submit to the President for approval, the names of the two subjects, $4-5$, which they may wish to select.

Undergraduates selecting French or German for the first time, enter the classes fur which the Professor considers them fitted. Those selecting Greek for the first time, enter the First Year Class.

A certificate of attendance on a class of New Testament Greek in any recognized College, will exempt from subject 1 or from one of the two subjects 4-5, an undergraduate who has taken Greek in the first two years.

The University provides no instruction in Hebrew, but a certificate of attendance on a Hebrew Class in any recognized College will exempt an undergraduate from one of the two subjects, 4-5.

An undergraduate who takes subject $f$ in the Third Year and subjects $k$ and $l$ in the Fourth Year may complete his eourse in the Faculty of Law in two years.

An Undergraduate who has already passed the Matriculation Examination of the Faculty of Medicine (see Regulations of the Faculty of Medicine) may complete one Medical Academic Year in the third year of his Arts Course, by taking subjects $j$ (Medical Chemistry), $k$ and $l$. To complete his year in this Faculty he will require to take also subjects 1,2 and 3 . For fees payable for those classes, see sec. 1xii.

[^6]
## Fourth Year.

Any five of the following* :-
a. Latin.
b. Greek.
c. Hebrew.
d. French.
e. German.
f. English.
g. History.
h. Political Economy.
i. Ethics.
j. Senior Philosophy.
k. Constitutional Law
(Law Faculty).
l. Contracts
(Law Faculty).
m. Senior Physics.
n. Practical Physics.
o. Organic Chemistry, or

Medical Chemistry.
p. Practical Chemistry.
q. Botany.

## $r$. Education.

With the approval of the Faculty, any Advanced Class may be taken as an ordinary class, in the Fourth Year.

Undergraduates are required, on or before September 19th, to submit to the President for approval, the names of the subjects which they may wish to select.

Undergraduates taking the First Year Greek Class in the Third Year must take the Second Year Class in the Fourth. Those taking the First French or First German Class in the Thi, d Year must take the Second Class of the same subject in the Fourth. Neither the First Year Greek Class nor the First German or French Class can be taken in the Fourth Year without special permission.

A certificate of attendance on a New Testament Greek class in any recognized College, will exempt from one subject an undergraduate who has taken Greek during the first three years.

A certificate of attendance on a class in Hebrew in any recognized College will exempt from one subject. If the Hebrew class be one of five hours a week, attendance on it will exempt from two subjects.

An undergraduate who has already passed the Matriculation Examination of the Medical Faculty (see Regulations of that Faculty) may complete one Medical Academic Year by taking subjects, o, (Medical Chemistry), $p$ and $q$, in the Fourth Year. But he will not be allowed to take these subjects in this year if he have already taken them in the Third. For fees payable for the e classes, see § lxv.

No class in which the subjects studied are the same from year to year, can be taken twice as part of the course.
§ VIII.-Special Courses for Degrees.-(1.) An undergraduate shall be allowed, during his Third and Fourth Years, to restrict his attention to a more limited range of subjects than that of the ordinary course, by entering upon one of the Special Courses, provided he has either attained both a

[^7]First Class standing at the previous Examination in the subject corresponding to that of the Special Course selected, and a satisfactory standing in the other subjects, or received the special permission of the Faculty.
(2.) Special Courses are provided in the following departn:ents, viz., (1) Classics, (2) Latin and English, (3) Greek and English, (4) English and German, (5) English and English History, (6) Philosophy, (7) Mathematics and Mathematical Physics, (8) Experimental Physics and Chemistry. Undergraduates in Arts may take special courses in any one of the above departments ; undergraduates in Letters in any one of departments $4,5,6,7$, and 8 .
(3.) 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 departments ( $\S$ I), 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 to the approval of the Faculty.
(4.) The examinations in the subjects of the Special Course shall be held at the end of the Fourth Year.
(5.) Undergraduates taking the Special 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.
Virgil: Georgics, Books I., iv.
Horace: Epistles, Books I., II. ; Ars Poetica.
Juvenal: Satires, viI., viII., XIV.
Cicero: De Oratore, Books I., II., III.
Livy : Books XxI., XxiI.
Tacitus: Germania ; Annals, Book II.
II. Candidates will be required to shew a general knowledge of one prose and one verse subject, to be chosen by them from the following list:-

Plautus : Trinummus, Aulularia.
Terence : Andria, Heautontimorumenos.
Cicero: Select Letters, (Muirhead's edit., Rivingtons, London).
Tacitus: History, Books I., II., III.

## III. Composition.--Prose.

IV. Literatore.-Crutwell's History of Latin Literature, selected chapters.
V. Philology.-Peile's Introduction to Greek and Latin Etymology ; Comparative Philology by Papillon.

## Greek.

r. 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 ir.
Plato: Phaedo.
Demosthenes: De Corona.
Aristotle: Poetics.
II. Candidates will be required to shew a general knowledge of one prose and one verse subject, to be chosen by them from the following list :

Aeschylus: Acamemnon, Choephorae.
Sophocles: Oedipus Coloneus, Antigone.
Thucydides: First and Seventh Books.
f Aeschines: Contra Ctesiphontem
(Demosthenes: De Falsa Legatione.
III. Composition.-Prose.
IV. Philology.-Peile's Introduction to Greek and Latin Etymology ; Comparative Philology by Papillon.
V. Literature.-Mahaffy's History of Greek Literature, the portions bearing on the authors and subjects read by the candidate during his college course. Haigh's Theatre of the Greeks.
(6.) Undergraduates taking the Special 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, viz. :

## Latin.

The Latin subjects prescribed for the Special Course in Classics.

## Evglish.

The subjects of the Senior Enolish Class.
The historical development of the language and literature to the year 1300. Bright. Anglo-Saxon Reader, Sievers. O E. Grammar trans. by Cook, Part II., Morris, Specimens of Early English, I., and Lounsbury. Historv of the English Language.

History of the Elizabethan and Early Stuart Literature. Lectures, Sidney. Apoloyie for Poetrie. Hooler, Ecelesiastical Polity, Book I. Bacon, Advancement of Learning, Select Essays.

Marlowe, Edward II., The Jew of Malta, Tamburlaine. Webster, The Duchess of Malfi. Greene, Friar Bacon and Friar Bungay. Jonson, The Alchemist, Every Man in His Humol. Beaumont and Fletcher, Philaster, The Knight of the Burning Pestle. Massinger, A New Way to Pay Old Debts. Shakespeare, The Tragedies, Two Noble Kinsmen. Part of this course is conducted by means of a Seminary.

[^8](7.) Undergraduates taking the Special 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, viz. :

## Greek.

The Greek subjects prescribed for the Special Course in Classics.

## Evgilish.

The English subjects prescribed for the Special Course in Latin and English.
(8.) Undergraduates taking the Special Course in English and German must have taken (ierman 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 Special Course in Latin and English.

## German.

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

Selections from Swiss and Plattdeutsch dialect literature.
German Literature of the 16 th, 17 th and 18 th centuries, with selections from authors of that period.

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

Translation of unspecified passages from any Modern High German author.

Prose Composition.
(9.) Undergraduates taking the Special 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, viz. :

## Fnglish.

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

## English History.

A minute investigation of English History from A. D. 1603-1689.
Books reenmmended: Green's History of the English People, Vol. 3; Lingard's History of England, Vols. 7-10, Hallam's Constitutional History of England, Chap. VI.-XIV. ; Ranke's History of Eugland ; S. R. Gardiner's works on this period ; Clarendon's History of the Great Rebellion ; Masson's Life of Milton : Carlyle's Llfe of Cromwell ; Forster's Life of Elliott ; Bayne's Chief Actors in the Puritan Revolution.
(10.) Undergraduates taking the Special 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 Senior Philosophy, which must be taken in both the Third and Fourth Years, and Ethics, which must be taken in the Third Year. They shall be examined in the following subjects :
A. 1. History of Philosophy from Thales to Plotinus, and from Descartes to Reid and Kant.
Plato: Theætetus and Republic.
Aristotle: Nicomachean Ethics.
Locke: Essay on Human Understanding.
Fraser's Selections from Berkeley.
Hume : Treatise on Human Nature, Vol. I (with Green's Introduction).
Reid: Essays, vi.
Kant : Critique of Pure Reason, and Critique of Practical Reason.
2. James : Principles of Psychology.

Bradley : Principles of Logic.
Green : Prolegomena to Ethics.
Royce : Spirit of Modern Philosophy.
B. Any two of the following groups :-

1. Plato : Sophist, Parmenides, Protagoras, Gorgias, Phædo. Aristotle: Logic, Metaphysics, Psychology (trans. E. Wallace).
2. Descartes: Method, Meditations, Principles. Spinoza : Ethics. Caird : Cartesianism (Encyc. Brit.).
3. Hegel : Philosophy of History, Philosophy of State, Logic (trans. Wm. Wallace).
4. History of English Ethics (Sidgwick's History). Hobbes : Leviathan. Butler: Sermons. Mill: Utilitarianism. Sidgwick: Methods of Ethics, Book iII. Calderwood: Hand-book of Moral Philosophy, Pt. I, pp. 30-95, and Pt. III (14th ed..). Spencer : Data of Ethics.
5. Martineau : Study of Religion. Lotze : Philosophy of Religion. Sinyth : Christian Ethics.
6. Aristotle : Politics. Kant : Philosophy of Law. Sterling : Philosophy of Law. Green : Political Obligation : Pollock : History of Politics.
7. Ziehen : Physiological Psychology. Höffding: Psychology. Ward : Psychology (Encyc. Brit.). Ribot: Contemporary English Psychology.
8. Spencer: Data of Ethics. Stephen : Science of Ethics. Alexander: Moral Order and Progress. Williams: Evolutional Ethics (in part).
(11) Undergraduates taking the Special Course in Mathematics and Mathematical Physics may omit in the third year any two, and in the fourth year any three, of the subjects of those years, except Physics, must take the Senior Physics Class in both the third and fourth years, and are recommended to take Jnnior Physics in their Second Year. They shall be examined in the following subjects, viz. :

MATHEMATICS.
Trigonometry.-Angular Analysis : Solution of Spherical Triangles ; Napier's Analogies ; with application to Astronomical Problems.

Analytical Geometry. - The Conic Sections, and the Equation of the Second Degree between two variables; as far as set forth in any standard treatise on the subject.

Calculus.-Differential ahd Integral, as set forth in any standard treatises on these subjects (Woolsey Johnson's treatise on the subject recommended). Differential Equations (selected course), with practical applications to Physical Problems.

## MATHEMATICAL PHYSICS.

Either : Kinematics (a) of a point (b) of a rigid system, and (c) of a deformable system; Dynamics (including both Statics and Kinetics) ( $a$ ) of a particle, (b) of systems of particles (inclnding flexible strings), (c) of a rigid body, (d) of elastic solids, and ( $\epsilon$ ) of fluids; and Wave Motion, with application to Sound and Light.

Or: Dynamics, the portions bearing on the doctrine of Energy : Thermodynamics : and Electrodynamics (including Electrostatics).

These subjects are to be treated by the application of analytical Geometry and the Differential and Integral Calculus.
(12.) Undergraduates taking the Special Course in Experimental Physics and Chemistry may, in the third year, omit any one, and in the fourth year, any two of the subjects of those years, except Physics, Practical Physics, and Organic and Practical Chemistry. They must take the Senior Physics class in both the third and fourth years, and are recommended to take the Junior Physics Class in the Second Year. They shall be examined in the following subjects :

## EXPERIMENTAL PHYSICS.

Candidates shall be required to show a general knowledge of the Properties of Solids and Fluids. Heat, Electricity, and Magnetism, Light and Radiant Heat, and Sound, so far as these subjects can be treated by elementary methods. No set of books can be prescribed to shew the extent of knowledge required; but in the Advanced Experimental Physics Class, candidates will be advised as to the course of reading to be pursued.

They shall be required to have studied the experimental methods of the following original memoirs : Joule's papers on the determination of the Mechanical Equivalent of Heat, contained in his Scientific Papers (Taylor \& Francis), vol. 1, pp. 123, 172, 298, 542, 632 -Faraday's Experimental Researches in Electricity (Quaritch), vol. 1, Series III., iv., vi., vir., viII. Lord Kelvin (Sir W. Thomson)'s papers on the electrodynamic qualities of metals contained in his Mathematical and Physical papers (Camb. Univ. Press), vol. in., pp. 189-407.)

They shall be required also to show ability to determine practically important physical constants, such as Density, Specific Heat, Electrical Resistance, \&c., and to investigate simple physical laws; and they will be expected to prepare a thesis embodying the results of a short original research.

CHEMISTRY.
Organic Chemistry.-Principles of Elementary Analysis, Practical Estimation of Carbon, Hydrogen, Oxygen and Nitrogen. Principles of Classification, Hydrocarbons, Chlorides, \&c. Monatomic and Polyatomic Alcohols, Aldehydes, Volatile Fatty Acids. Compound Ethers, Ethers of Glycerine, Saponification, Organic Acids. Carbohydrates Fermentation. Transformations of the Alcohols, and Labotatory Determinations. Aromatic Gruup. Compound Ammonias. Alkaloids.

Books recommended : Wurtz's Chemistry, organic Part. Roscoe \& Schorlemmer's Chemistry.

For reference: Roscoe \& Schorlemmer: Watt's Dictionary of Chemistry, and other reference works in the Balance Room Library.

Practical Chemistry.-Candidates will be required to show familiarity with modes of Manipulation, Preparation of Gases, Preparation of Laborato:y Re-agents, Systematic Method of Testing for bases and for acids ; also proficiency in one of the following :-(1) Quanitative Estimation of Metallic Ores, (2) do. of Inorganic Poisons, (3) Soil Analysis, (4) Sanitary Analysis. Special work will be prescribed according to the department selected by the candidate, and suitable books suggested.

Books recommended for general work: Macadam's Practical Chemistry, Fresenius's Qualitative Analysis, Thorpe or Appleton. Woehler's Mineral Analysis.
§ IX.-Attendance.-(1.) Undergraduates are required to attend with regularity the classes of their respective years. Professors shall mark the presence or absence of students immediately before commencing the work of the class, and shall note as absent those who enter thereafter, unless satisfactory reasons be assigned. The number of times absent, as recorded in the class registers, which shall disqualify for the keeping of a Session, shall be determined by the Faculty.
(2.) With the exception of persons who have qualified for matriculation at the Final Matriculation Examination ( $8 s \mathrm{~S}_{\mathrm{s}}$ v. (4), and vi, (5).), no undergraduate shall be allowed to register, as such, more than ten days after the opening of classes, without the special permission of the Faculty.
(3.) Undergraduates of any year, who may have previously attended one or more of the classes of that year, and passed in the subjects of them, shall be exempted by the Faculty from attending those classes a second time.
§ X.-Examinations.-(1.) Undergraduates are required to appear as candidates at the various examinations held in connection with the classes which they may attend as parts of their course, and to prepare such theses, essays, reports, \&c., as may be prescribed by the Professor. In ail classes two examinations are held, one just before the Christmas vacation and the other after the close of lectures in the Spring. In some classes, other examinations are held at dates appointed by the Professor. In the determination of the Pass List and in the award of Class Distinctions, which may be of two gradesFirst and Second Class, the results of these various examinations and the degree of excellence shewn in theses, essays, reports, \&c., shall be taken into consideration.

General Students are admitted to the above Examiuations as well as undergraduates, so far as the dates of the Almanac may permit ; and their positions in the Pass and Distinction Lists are determined in the same way.

Certificates are issued to members of each class stating with what degree of regularity they have attended and what standing they attained.
(2.) Undergraduates who are exempted by §ix, (3), from attendance on one or more classes, shall be exempted also from passing the Examinations in the subjects of them.
(3.) Undergraduates of the Third and Fourth Years who are exempted from attendance on one or more classes, on presentation of certificates from recognized Colleges, shall be exempted from examination in the subjects of those classes on presentation of certificates of having passed examinations therein, in the said Colleges.
(4.) An undergraduate 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 subject or subjects at the beginning of any subsequent Session, on the day appointed for that purpose in the University Almanac, (Sept. 18th, 1893). Or, he may be allowed to present himself at the ordinary Christmas and Spring Examinations of a subsequent year.

The ordinary fee for a Supplementary Examination shall be Two Dollars. But, to restrain undergraduates from giving the Examiners unnecessary trouble, a fee of Six Dollars will be required in the following cases: (1) if the undergraduate have absented himself from the Examination for reasons considered insufficient by the Faculty ; (2) if his answers at the Examination have been reported by the Examiner as having no value ; (3) if he have failed to pass in more than two subjects.
(5.) An undergraduate who has failed to pass in any subject, will not be allowed to enter, as an undergraduate, a more advanced class in the same subject, or a class requiring a knowledge of the subject in which he has failed, until he has either passed the Supplementary Examination, or satisfied the Faculty that he is able to prosecute the work of the class with profit.
(6.) An undergraduate who fails either to appear, or to pass, at a Supplementary Examination, shall not be allowed a second Supplementary Examination in the same Session, except by special permission of the Faculty; and in cases in which a second Examination is granted, a fee of Three Dollars will be charged in addition to the Supplementary Examination fee.
(7.) Undergraduates 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.
(8.) Students are forbidden to take 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 may be summarily expelled from the Examination room, and he shall be subject to such other penalty as the Faculty may see fit to impose.
§ XI.-Degrees with Distinction.-Degrees with Distinction will be conferred on undergraduates for special excellence shewn at the Examinations of the Third and Fourth Years of any of the ordinary courses for degrees, the Mathematics of the Second Year being for the purposes of this rule regarded as a Third Year Class.

In awarding such Distinction the Faculty, while requiring that candidates shall attain a good standing in all their classes, will lay special stress on the attainment of a high standing in a few related subjects.

The terms used to designate the students' standing will be: With Distinction, With Great Distinction.
§ XII.- Degrees with Honours.- Degrees with Honours in any of the departments of study in which Special 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.

A candidate for Honours may defer his examinations in the subjects of his Special 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 Special Course.
§ XIII. - Short Courses of Study for General Students. - (1.) For the benefit of students who may not be able to spend four full years at the University, but may be able either to spend two full years or to give partial attendance for a longer period, short courses of siudy have been arranged, as specified below.

Students entering upon these courses are not required to pass any preliminary examination ; but they are recommended not to enter classes in which some knowledge of the subjects. studied is assumed, without first consulting the Professors as to their ability to enter with profit upon the work of the classes.

To students who attend the classes in these courses with regularity, show diligence in the class work, and are successful in passing the examinations, certiticates will be issued stating the nature of the course pursued and the degree of success attained.

The details of the subjects studied in the classes mentioned below, will be found under Courses of Instruction (§§i, xliv.).
(2.) Short Course of Liberal Studies.-The aim of this course is to give the student the same kind of training as that provided by the B. A. and B. L courses. It consists of ten classes. Of these, two must be in English, and the remainder may be selected by the student, subject to the provisions of the Time Table, from the other subjects mentioned in this paragraph, with the following restrictions:-(a.) One of the four subjects-Latin, Greek, French, German-must be taken during two years, and if another of these subjects be selected, it also must be taken during two years. (b.) At least two of the four subjects-Mathematics, Physics, Chemistry, Botany,-and at least two of the three subjects,-History, Political F.conomy and Philosophy,-must be taken for one year each; and any two of them, if subjects in which two classes are provided, may be taken during two years. The class in any subject which a student shall enter will be that for which he is fitted by his previous study.
(3.) Short Course in Subjects Bearing on Journalism. - The aim of this course is to enable a student to study as thoroughly as the time at his disposal will permit subjects which have a direct bearing on newspaper work in Canada. It consists of the following classes:-Erglish, (2nd year and Stnior Classes), French, (during two years), Junior Philosophy, Ethics, History, (3rd and 4th years Classes), Political Economy, Constitutional History and Constitutional Law. Persons who may already have acquired the requisite proficiency in some of the above subjects, may take other subjects in place of these or complete the course by attending the classes, and passing the examinations, in the remainder.
(4.) Short Course in Subjects Bearing on Com-merce.-This course is intended for young men who wish, before entering business offices to spend two years in studies bearing on their future work. It consists of ten classes, of which two must be in English, other two in one of the commercial languages-French, German,-the remaining six being selected from the followins:-French, German, Mathematics, Physics, Chemistry, Politieal Economy, Contracts, Sales of Personal Property, Negotiable Instruments, Partnership and Companies and Marine Insurance.

Students who take this course may supplement it by obtaining, during the summer racations, the practical training in business methods provided by a Business College.
§ XIV. - Extra Classes not Qualifying for a Degree.-From time to time classes have been organized for the benefit of persons not wishing to proceed to a degree.

During the session of 1892-93 the following courses of lectures were delivered to such classes. Prof. Lawson, bi-weekly lectures on Industrial Chemistry with laboratory work in the College ; Prof. W. C. Murray, thirteen lectures on Psychology to Kindergarten Teachers and pupils of the Halifax Academy; Prof. MacMechan, nineteen lectures on Shakespeare to two classes which met in the School for the Blind. Lists of students are given at the end of the Calendar. (See also § I., iii.) Other classes, if organized, will be announced at the beginning of the session.

## § XV.-Medals and Prizes.

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

The Governor-General's Gold Medal, which has been heretofore offered by His Excellency the Governor-General of the Dominion of Canada, will be awarded, if continued, to the undergraduate standing highest among those taking Honours in the Department of Classics, the winners of other medals 'being excluded. In the event of its not being awarded in this department, it may be awarded in the department of Latin and English, or in that of Greek and English, or in some other department.

The Governor-General's Silver Medal, which has been heretofore offered by His Excellency the Governor-General of the Dominion of Canada, will be awarded, if continued, to the undergraduate standing highest among those taking Honours in Philosophy, the winners of other medals being excluded. In the event of its not being awarded in this department, it may be awarded in some other department.

The Sir William Young Gold Medal, founded by bequest of the late Hon. Sir William Young, will be awarded to the undergraduate standing highest among those taking Honours in the department of Mathematics and Mathematical Physics, the winners of other medals being excluded.

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, to be members of the North British Society. The next competition will take place in April, 1894.

The Waverley Prize.-This Prize, the interest of an endowment of $\$ 1000$, will be awarded annually to the student.
of the Second Year Mathematical Class, who stands highest at the Examinations in the Mathematics of the year, the winner of the North British Society Bursary being excluded.

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 See §xi.

Scholarships. -The following scholarships are offered for competition at the First Year Matriculation Examination into the Faculties of Arts and Science. See § v.
(a.) Five Sir William Young Scholarships; of the value of Forty Dollars each, tenable for one year and payable in twoinstalments.
(b.) Two Professors' Scholarships ; entitling to exemption from fees throughout the entire course, in classes conducted by Professors in the Faculties of Arts and Science ; provided the Scholar make progress satisfactory to the Faculty.

They will be awarded to the seven candidates ranking highest at this Examination ; provided their standing is considered satisfactory by the Faculty. The successful candidates will beallowed to select, in order of their standing, the scholarships. which they shall hold.

The New Brunswick Alumni Prize, of the value of Fifty Dollars, which is offered by the N. B. Alumni Association of Dalhousie College, will be awarded to the student from New Brunswick who stands highest among those passing the Matriculation Examination, September, 1893-4, provided he (or she) has received the greater part of his (or her) education in N. B., and has not been at school outside of the province for more than a year previous to the date of the examination ; also, provided he (or she) has not been awarded one of the Sir W m. Young's or Professors' Scholarships.
§ XVI. - Munro Exhibitions and Bursaries. (1.) The following Exhibitions and Bursaries are offered by George Munro, Esq, of New York, to be competed for at the beginning of the Session of 1893-4.

Five Senior Exhibitions of $\$ 150$ a year, tenable for two years. Ten Senior Bursaries of $\$ 100$ a year, tenable for two years.
(2.) The Senior Exhibitions and Bursaries are offered for competition to undergraduates entering the Third Year of the B. A. and B Sc. Courses, Candidates must have completed the Second Year of their Course, either at this or at some other University; but they must not have entered upon the Third Year. They must also have matriculated ${ }_{n}^{*}$ within three years,

[^9]or within two years of the date of the competition, according as they may have entered upon their course as undergraduates of the First or of the Second Year respectively.
(3.) The Senior Exhibitions and Bursaries shall be held during the third and fourth years of the B. A. or B. Sc. Course, provided the holder (a) attend in consecutive years, to the satisfaction of the Faculty, the classes proper to the third and fourth years of his Course, (b) pass in all the subjects of the third year, and either obtain a Second Class standing in one of them or obtain the favourable report of a Professor on work done in one of the Special Courses, and (c) pass in the subjects of the fourth year.
(4.) The annual amounts of the above Exhibitions and Bursaries will be paid in three instalments, the first on the first Monday after the Autumn Convocation, the second on the first Monday after the Christmas vacation, and the third on the day of the Spring Convocation, the payment of each instalment being dependant upon the fulfilment of the conditions of tenure at the date at which it becomes due.
(5.) Candidates are required to make application for these Exhibitions and Bursaries by letter addressed to the President, and sent so as to reach him on or before September 1st, 1893. In making such application they must send (a) a statement signed by themselves to the effect that they are not precluded by any of the conditions of $\S \mathrm{xvi}(2)$ from competing for these Bursaries, and (b), if they have not already been students at this College, a certificate of good moral character signed by a clergymen or other person occupying a public official position.
(6.) A certain standard of answering at the Examinations, fixed by the Faculty, will be required for obtaining any of the above Exhibitions and Bursaries. A higher standard will be required for Exhibitions than for Bursaries.
(7.) The Faculty shall in all cases decide as to the fulfilment of the above rules and conditions.
(8.) The Examinations for the Senior Exhibitions and Bursaries will be held at the College on September 12th-18th, 1893.
(9.) The subjects of Examination for the Senior Exhibitions and Bursaries of 1893-94, shall be two of the following groups :-
A.-classics.

Latin : Horace, Odes, Book iv. Cicero, Selected Letters, (Prichard and Bernard's, sold by Macmillan, N. Y.) An "unseen" passage will also be set for translation. Composition: An easy piece of English to be turned into Latin Prose. (For models, see Champeney's and Rundall's Easy Pieces for Latin Prose, 2nd series, Rivingtons, Jondon.)

Greek : Herodotus, Book vi. (Shuckburgh's, sold by Macmillan, N. Y.) An "unseen "passage also will be set for translation. Composition : Translation of simpie passages. (For models, see Sidgwick's Introduction to Greek Prose Composition.)
B. - MATHEMATICS.

Algerra: As set forth in Colenso's, or Todhunter's, or Wood's Algebra, exclusive of Continued Fractions and Diophantine Analysis.

Trigonometry : Analytical Plane; as far as, and including, DeMoivre's Theorem, with its application to the measurement of Circular Arcs, and the solution of the equation $x^{n}= \pm 1$. Spherical; as far as, and including, Napier's Rules for the solution of Right-angled Triangles.

Geometry : The First, Second, Third, Fourth and Sixth Books of Euclid, with the definitions of the Fitth; the first 21 propositions of the Eleventh Book. Conic Sections : The Parabola and the Ellipse, as set forth in Drew's, or Cockshott and Walter's Conic Sections. (The equivalent of these will be accepted, if the candidate has used other Text Books; which, however, he must, at the examinations, specify.)

The examinations will not be confined to the text of the books mentioned, or of any others, but will include Exercises and Problems on the principles laid down in common by all standard treatises on the above subjects.
C. -english.

Lounsbury: History of the English Language, Pt. I; Webster ; The Duchess of Malfi ; Shakespeare: Othello, The Merchant of Venice, Keats: Hyperion, To a Nightingale, To a Grecian Urn; Keats (Eng. Men Let. Series).*
D. - Chemistry, $\triangle$ ND either philosophy or physics.

Chemistry. - The subjects of this Examination will be the same as those embraced in the Course of Lectures on Inorganic Chemistry, given under the heading "Inorganic Chemistry Class," on page 29 of this Calendar.

Philosophy.--Jevon's Elementary Lessons in Logic (Macmillan \& Co.), Fowler's Inductive Logic (Clarendon Press) ; James's Psychology: Briefer Course, (Henry Holt \& Co.).

Physics.-The subjects of examination will be the same as those studied in the Junior Physics Class. But the paper will consist largely of problems of a more difficult order than those taken up in the class.

Candidates are recommended to revise thoroughly the books prescribed for Distinction in the Junior Class, and in addition to work through Jones' Examples in Physics (Macmillan \& Co.).

Candidates shall be required to present themselves for examination in two, and two only, of the above groups, A, B, $\mathrm{C}, \mathrm{D}$. Of the two, one must be either A or B , and the other may be any other of the four. The relative values of the four groups will be the same.

Candidates must give notice to the President of the groups in which they intend to present themselves for Examination.

Texts : Webster, "Mermaid" series ; Vitzelly, London, or "Best Elizabethan Plays," Ginn, Boston. Keats, any good text. Only such questions asked as can be answered without the help of annotated editions.
§ XVII.-1851 Exhibition Science Scholarship.The scholarship offered by Her Majesty's Commissioners for the Exhibition of 1851 , which is of the annual value of $£ 150$ sterling, and is tenable for two yeare (see Faculty of Science, § xxxix), is open to students of the University.
§ XVIII.-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 20th).

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 satisfied this condition ; 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.

Lady undergraduates in any faculty are admitted, on certain conditions, as boarders to the Halifax Ladies College.
§ XIX.-Church Attendance.- All students under twenty-one years of age not residing with parents or guardians, are required to report to the President on or before the day appointed in the University Almanac, (October 20th), the churches they intend to make their places of worship during the Sessiou. Intimation will be made to the various clergymen of the city, of the names and addresses of the students who have chosen their respective churches as places of worship.
§ XX.-Discipline.-The Senate may use all means deemed necessary for maintaining discipline.
\$ XXI.-Degrees of Master of Arts and Master of Letters. -(1).-A Bachelor of Arts of at least one year's standing, maintaining meanwhile a good reputation, shall be entitled to the Degree of Master of Arts, on producing a satisfactory thesis, embodying the results of original work on some literary, philosophical, or scientific subject. The subject must have been previously approved by the Faculty. The thesis must be handed in on or before 1st March.

In order to encourage students to pursue special courses of adavanced study after graduation, the Degree of Master of Arts may be conferred on Bachelors of Arts fulfilling the following condition :-

Passing a satisfactory examination on a course of study approved by the Faculty ; such courses to be confined to one department, or to closely related departments; and to be equivalent in amount to the work of au academiç year.

The following courses have been recently prescribed for M A. Examinations :
(a.) English, English History and French.

English-Milton : Areopagitica, Paradise Lost. Herrick : Poems. Herbert : Poems. Milton : Garnett ; (Great Writers Series). Special attention to be paid to the following topics. (1) The Political Tendency of Paradise Lost. (2) Herrick, the Representative of the Cavalier Temper. (3) Herbert, the Churchman.

History.-(1640-1670). Clarendon. Bayne's Essay on Clarendon. Green and Lingard on the period. Ranke: History of England, vols. 1, 2, 3. Gardiner : Personal Government of Charles I. Bisset : Struggle for Parliamentary Government. Bayne: Chief Actors of Puritan Revolution. (Charles I., Sir Henry Vane, Oliver Cromwell, Clarendon). May: History of the Long Parliament. Carlyle : Cromwell. For consultation. Froude : Fnglish in Ireland. MacGeoghan's or McGee's History.

French.-Corneille Polyeucte. Geruzet (Nicholas Eugène) ; Histoire de la Littérature française jusqu'en 1789. Voltaire: Siècle de Loutis XIV. Villemain : Histoire de Cromwell. Guizot: Histoire de la Revolution d'Angleterre.

Translation into French. Charles Lamb. Tales from Shakespeare. "Macbeth."
(b). Old English Poetry.

Grein : Bibliothek der Angelsächsischen Poesie (entire). History of the People: Lappenberg: History of England under the AngloSaxon Kings (Bohn's Antiquarian Library). History of the Literature, Earle, Stopford Brooke, Ten Brink.
(c). Sсотт.

A general knowledge of the literature of the time. Oliphant. Litprary History of England, X VIII aud XIX Centuries. An exact knowledge of his life. Hutton : English Men of Letters Series. The Journal of Sir Walter Scott, N. Y., 1891. Lockhart's Life.

Poetry. A minute acquaintance with The Lay of the Last Minstrel, Marmion, The Lady of the Lake, The Minstrelsy of the Scottish Border.

History of the novel. S. Lanier. The English Novel. A minute arquaintance with Waverly, The Antiquary, Old Mortality, Rob Roy, Eeart of Midlothian, Ivanhoe, Kenilworth.

The intention of the Faculty is to adapt these special courses of study to the capacities and tastes of the individual students.

Examinations for M. A. and M. L, will be held at the time of the Spring examinations for B. A. In special circumstances an examination may be granted in the Autumn, but in that case a fee of Ten Dollars will be charged. In case of failure, the fee will not be returnable; but the candidate will be allowed a second examination without further fees.

Candidates must give at least a month's notice of their intention to appear at an M. A. or M. L. Examination. For fee see $\S x x v$.
§XXII.-Degree of Doctor of Laws.-The degree of Doctor of Laws may be conferrerl, causa honoris, for eminent literary, scientific or professional distinction.
§ XXIII.-Admission ad Eundem Gradum.Graduates of Universities approved by the Senate, who have received their degree in course, shall be admitted ad eundem gradum in this University, on producing satisfactory proof of character and academic standing. For fee see §xxv.
§ XXIV.-Academic Costume.-(1.) Bachelors and Masters of Arts, and Bachelors and Masters of Letters, 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 hood 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. L.-Black stuff, with a lining of white silk, bordered with light blue silk.
M. L.-Black stuff, with lining of light blue silk.

LL.D.-Doctors of Laws shall be entitled to wear gowns of black silk and hoods of black silk lined with purple silk.
(2.) Successful candidates for there degrees shall be required to appear at the Convocation in the proper academic costume, to have the degree conferred upon them. Degrees will be conferred in the absence of the candidate only by special permission of the Senate.
§ XXV.-Fees.-(1.) Fees are payable by students for Registration, for the use of the Gymnasium, for classes attended, and for certain examinations. They are payable in advance.

No student shall be allowed to enter a class until he has paid the proper fees.

The following is a statement of the fees payable by students generally, and of the special privileges granted to undergraduates :-
Registration Fee, payable annually by all students taking more than one class
$\$ 400$
Registration Fee, payable by students taking only one class.... 200
Gymnasium Fee, payable annually by all male students attending more than one class, except registered students of the Halifax Medical College.

150
Fee for each class attended, per Session $\dagger$ (except the Practical
Chemistry and Physics Classes)
Fee for each of the Practical Chemistry and Physics Classes for
every three months of practical work in Laboratory.... 600
Supplementary Examination Fee, payable on giving the notice
required by $\S$ x. (7) ............either $\$ 2.00$ (or $\S$ x. (4)) 600


Fee for Special certificate of Standing ........................... 500
$\dagger$ The Latin and Groek Classes of any one year shall be considered a single class.

Undergraduates after having attended as parts of the course, two of the ordinary classes conducted by any Professor, shall be allowed, without payment of tees, to attend as parts of their course, any other ordinary classes, not being practical experimental classes, conducted by said Professor.

Undergraduates taking special courses shall be required to pay to each Professor whose Advanced Class or Classes they may require to attend, one fee for the first of such classes attended, but they shall be allowed to attend the second Advanced Class without fee, provided it be not a practical experimental class.

Undergraduates taking Advanced Classes as part of the ordinary courses, shall be required to pay fees for such classes.

Undergraduates who entered previously to 1891-92, are referred to the Calendar of 1891-2 for scale of fees.

## (2.) The graduation fees shall be as follows :-

*Fee for the B. A. or B. L. Examination, which is payable by candidates before the Spring Examinations of the Fourth Year.

> *Fee for M. A. or M. L. Examination, which must accompany the Thesis, or intimation of intention to appear for examination................

Fee for B. A. or M. A., (ad eundem grudum) ................... 1000
*In case of failure in the examination, the fee will not be returned ; but a second examination will be allowed without further fees.

## datulty of flare amd Applied Stience.

The President (ex officio).<br>Charles Macdonald, M. A.<br>George Lawson, Ph. D., Ll. D. James Liechti, A. M.<br>J. Gordon MacGregor, D. Sc.<br>Archibald MacMechan, B. A., Ph. D.<br>Martin Murphy, D. Sc., C. E.<br>Edifin Gilpin, Jr., A. M., Ll. D., F. G. S.<br>F. W. W. Doane, C. E.<br>C. E. W. Dodwell, B. A., M. I. C. E.<br>Roderick McColl, C. E.<br>Walter C. Murray, M. A.<br>Alexander McKay, Esq.<br>Dean of the Faculty: Prof. MacGrkgor.<br>Registrar of the Faculty: Prof. Liechti.

§XXVI.-Courses of Instruction.
I.-MATHEMATICS.
or...................................... Macdonald, M. A.
First Year Class.
Daily, 11 A. M.-12 M.
As in the Faculty of Arts (see $\S$ I, vi.) -Undergraduates of this Faculty, taking Courses A, S, E, F, G, or H, (§XXXI.) will be expected both to qualify themselves by diligent study for taking, and to take, the additional work for Distinction.

## Second Year Class.

Daily, $10-11$ A. M.
As in the Faculty of Arts (see $\S$ I, vi.) - Undergraduates of this Faculty taking Courses A, B (if they are to enter the Special Course in Physics and Physical Chemistry, $\S$ XXXII.), E, F, G, or H, are required to qualify themselves by diligent study for entering, and to enter, the Higher Division of this C!ass. Only students who pass a satisfactory examination in the work of the Higher Division are admitted to the Advanced Class, which is one of the third year classes n the courses mentioned above.

## Advanced Class

As in the Faculty of Arts (see § I, vi.)--The work of the First Division of this class is taken up in the Third Year, that of the Second Division in the Fourth Year.

The "partial course" of study prescribed in the Third Year of some of the B. Sc. Courses ( $\S$ XXXI.) consists of a portion of the work of the First Division, viz., Analytical Trigonometry, Analytical Geometry, and Differential Calculus.

The "partial course" prescribed in the Fourth Year of such Courses, consists of a portion of the work of the Second Division, viz., Differential and Integral Calculus and Differential Equations,

> II.-PHYSICS.

## Professor

J. G. MacGregor, D. Sc.

## Junior Physics Class.

Tuesdays, Thursdays, and Fridays, 11 A. M.-12 M.
The subjects wlll be the same as in the Arts Faculty, (§l, vil). Candidates for the degree of B. Sc., in Courses E, F, G, and H, are recommended to gire special attention to Dynamics and Hydrodynamics.

## Senior Physics Class.

Mondays and Wednesdays, $10-11$ A. M.
The course of study will extend over two years, and will assume a knowledge of the Mathematics of the 2nd year class.

In 1893-94 the subjects will be: Heat, including the general principles of Thermodynamics, Air and Gas engines, and the Steam engine, Electricity and Magnetism, including dynamo-electric machines and electric motors. Shann's Elementary Treatise on Heat (Macmillan \& Co), Cumming's Theory of Electricity (Macmillan \& Co.), Ewing's article "Steam Engine" in the Encyclopædia Britannica (A. \& C. Black : the Part containing the article may be obtained separately from the publishers at 7/6), and Thompson's Dynamo-electric Machinery (E \& F. N. Spon), will be used as books of reference.

In 1894-95 the subjects studied will be Kinematics,' Dynamics (including Kinetics and Staties), Hydrodynamies (including Hydrostatics and Hydraulics) and Elasticity. 'The Pro essor's Kinematics and Dynamies (Macmillan \& Co.), will be u-ed as a text book, being supplemented by reference to other works, especially in the discussion of graphical methods, and of Hydraulics.

## Advanced Mathematical Plysics Class.

As in the Faculty of Arts, (§ I, VII).-The "partial course" of study in this class in the Fourth Year of some of the B. Sic. Courses, (§ XXXI), consists of the following subjects :-

For 1893-94 : Kinematies and Dynamics of a particle and of a rigid body.

For 1894.95: Dynamics, the portions bearing on the doctrine of Energy ; either Thernodynamics or Electrodynamics.

## Adranced Experimental Physics Class.

As in the Faculty of Arts, (§ I, vir).
Practical Physics Class.
As in the Faculty of Arts, ( $\mathbb{I}$, viI).

> III.-CHEMISTRY.

Professor...................................... Lawson, Ph. D., Ll. D.
Inorganic Chemistry Class.
Tuesdays, Wednesdays, and Fridays, 9-10 A. M.
As in the Faculty of Acts, (§ I, viII).

## Organic Chemistry Class.

Mondays and Thursdays, 9-10 A. M.
As in the Faculty of Arts, (§ I, viII).

## Practical Chemistry.

In addition to the work sketched in § I, viII, instruction will be given to students of this Faculty in the use of the Blow-Pipe for qualitative determinations of the constituents of Economic Minerals and Metallic Ores, and in wet processes for quantitative estimates ; also preliminary instruction in the practical examination by the microscope and experimentally, of the physical and chemical characters of sands, building stones, lime, brick clays, cements, and other building materials, \&c. The nature and extent of the work undertaken by the student, will, in each case, be determined and regulated by his special requirements. Should special training be desired in any chemical industry not ndicated, the necessary scientific instruction will be given as far as practicable.

$$
\begin{aligned}
& \text { IV.-MINERALOGY AND LITHOLOGY. } \\
& \text { Lecturer........................................................................... }
\end{aligned}
$$

## Systematic Class.

A course of systematic instruction in Mineralogy and Lithology will be conducted in the Museum, illustrated by the McCulloch Collection.

## Assaying.

The work of this class will be devoted to mineral analysis and the assaying of ores of Iron, Copper, Lead, Silver, Zinc, \&c., Gold Quartz, Plaster, Coal, Manganese, Baryta, Phosphatic Minerals, \&c.

## V.-APPLIED MECHANICS.

Lecturer................................ ....J. G. MacGrbgor, D. Sc.
Twice a week.
The object of this class is to study the practical application of Dynamics to the various branches of Engineering. The series of leetures will form a two years course, so arranged that students may
enter the class at the beginning of either year. The subjects studied will be as follows :

In 1893-4.-Resumé of the Principles of Dynamics.-The Mechanics of Machinery, including (a) Kinematics; relative velocities and accelerations ; velocity and acceleration diagrams; link-work, wheelteeth, belts, cams, the screw, conic mechanisms, bevel and skew gearing, parallel motions, \&c. (b.) Dynamics; equilibrium of mechanisms, force and work diagrams, inertia of moving parts, fly-wheels, governors, friction (c) Energetics: production, transmission and measurement of power, prime movers.-Kennedy's Mechanics of Machinery (Macmillan \& Co.), will be used as a text book, being supplemented by reference to other works.

In 1894-95. Resumé of the Principles of Statics; The Theory of Structures, including the equilibrium and stability of beams, frames, trusses and girders, of chains, cords, and ribs, and of abutments, arches and vaults, with straining actions due to loads ; the Strength of Materials, including the relation of stress to strain and resistance to stretching, shearing, crushing, bending, twisting, and wrenching. Graphical methods will be studied and practised in the Drawing-room. Hoskins' Elements of Statics (Macmillan \& Co.), being used as text book. Other books of reference will be announced at the opening of the class.

## VI.-DRAWING.

The University provides no instruction in this department; but the following classes of the Victoria School of Art and Design, Mr. 0. Dodge, Head Master, are recognised as qualifying for a degree :

Mr. Dodge's classes in the subjects of Free-hand Drawing, Geometrical Drawing, Shaded Drawing from the Round, Modelling in Clay, Principles and Practice of Decorative Design, Elements of Perspective and the History of Art. This course of instruction extends over three years and is the one to be taken by students preparing for Science Masterships in Schools.

Mr. Larkin's classes in Mechanical Drawing, including Practical Geometry, Descriptive Geometry, Projection of Lines, Planes and Solids, Sections by Planes. Developments, Penetrations, Curved Surfaces and Surfaces of Revolution, Preparation of Working Drawings of Machines to scale. This course of instruction extends over three years, and is the one to be taken by Engineering Students.

The class in Building Construction and Architecture may be taken by Civil Engineering Students instead of the third year of the Mechanical Drawing Class.

## VII.-CIVIL ENGINEERING.*

Lecturer... ......... M. Murphy, D. Sc., C. E., Provincial Engineer.

## Once a fortnight.

The subjects treated will be :-Materials and Constructions ; Earthwork ; Masonry; Carpentry ; Structures of Timber, Stone and Irrn; the Construction of Common Roads; Railways; Bridges; Water Supply for Towns; and Reclamation of land from the sea.

[^10]Such works as are named above are generally in operation in Nova Scotia, under the supervision of the Provincial Engineer, and advanced students in the Engineering Class will be afforded an opportunity of examining them under construction.

Text books and books of reference will be announced at the opening of the class.

## VIII.--SURVEYING.*

Lecturer . . . ............. R. McColl, C. E., Asst. Provincial Engineer.

## Once a fortnight.

The subjects treat ${ }^{d}$ will be : Chain Surveying ; Augular Surveying; Calculating Areas; Use and Adjustment of Transit, Theodolite, Level (Dumpy, I' ye, \&c.), Aneroid Barometer, Plane Table, and other field instruments ; Contour Surveying; Plotting; Typography ; Levelling (including indirect and barometric).

Practical operations will be carried on in the field and will include Chain and Compass Surveys, Measurement of Base Lines, Triangulation Survey, Preliminary and Location Survey of a line of road, setting out work, etc.

Students will be expected to keep complete notes and to prepare all drawings required from them.

Text books and books of reference will be announced at the opening of the class.
IX.-MINING.*

Lecturer....................................E. Gilpis, Jr., A. M., Li. D.

## A Course of Twelve Lectures.

The subjects of the lectures will be: Geology in relation to Mining ; Occurrence of Veins and Beds ; Preliminary Operations; Valuation of Properties; Shaft and Slope Sinking; Mining Operations ; Unstratified and Stratified Minerals ; Ventilation ; Pumping ; Hoisting ; Mining Appliances, Tools, \&c ; Cleaning of Ores and Coals.

Text Books (preliminary list): Smith's Coal Mining: Andre's Treatise on Coal Mining ; Chance's Coal Mining. Pennsylvania; D ne's Meta'liferout 3 nea; Merrivale's Notes and Formulæ ; Geikie's Outlines of Field Geology ; Ilhseng's Munual of Mining.
X.-HYDRAULIC ENGINEERING.*

Lecturer. ........................................... DODivell, B A , M.I.C.E.

## Once a Fortnight.

The subjects treated will be as follows :--
Flow of water through orifices and short tubes, and in pipes and open channels.

Water supply to cities and town; Quantity and quality necessary ; Rainfall, watershed. springs, wells. lakes, and rivers ; Storage of water in natural and artificial reservoirs ; Measuring weirs and stream

[^11]gauging; Filtration and other methods of treating impure waters; Construction of dams of stone, earth and timber; Details of construction of a town supply ; Mains and distribution pipes, thickness, weight, strength, methods of moulding, preserving and laying; Valves, hydrants, \&c.; Pumping engines.

Turbines and water-wheels.
River improvements.

## XI.-MUNICIPAL ENGINEERING.*

Lecturer.....................................F. W. W. Doane, C. E.

## Once a fortnight.

The subjects treated will be :-Streets,-laying out, opening, formation, sidewalks, paving, cleaning, sprinkling ; street railways, obstructions, \&c.; works of sewerage-grades, materials, foundations, sectional form, course, ventilation, flushing, subsoil drainage, intercepting sewers, sewage disposal, \&c.; house drainage and plumbing, roof water disposal, cesspits, disposal of garbage \&c.; building inspection ; water supply, plumbing-service pipes, stopcocks, effect and prevention of waste, \&c.

> XII.-BOTANY.
$\qquad$
In addition to the work laid down in the Faculty of Arts (§ I, Ix), practical instruction will be given in the use of the Microscope, Preparing of Sections, Mounting of Preparations, and Microscopical Analysis.

Students of the C or D course in the Faculty of Pure and Applied Science are required, during the summer vacation, to engage in practical botanical work, and to present on entering their second year's course, either a report upon Microscopical work in some special department during the summer, or a collection of specinens of native plants of the district of their residence, properly prepared and named, accompanied by a systematic catalogue.
XIII.-PHYSIOLOGY.

The University provides no instruction in this subject ; but the class conducted in the Halifax Medical College is recognized as qualifying for a degree. The class meets daily at $11-12 \mathrm{~A}$. M. The fee for the course is $\$ 12.00$, and for a certificate of examination, $\$ 3.00$.
XIV.-HISTOLOGY.

The University provides no instruction in this subject, but the class conducted by G. M. Campbell, B. A., M. D., in the Halifax Medical College, is recognised as qualifying for a degree. The class meets twice a week. The fee for the course is $\$ 400$, and for a certificate of examination, $\$ 2.00$.

[^12]
## XV.-ANATOMY.

The University provides no instruction in this subject, but the Systematic and Practical classes conducted in the Halifax Medical College by Prof. A. W. H. Lindsay, M. D., are recognised as qualifying for a degree. The Anatomy Class meets daily at $10-11$ A. M.; fee \$12.00. The Practîcal Anatomy Class meets daily, 3-5, and 8-10 P. M.; fee $\$ 12.00$. Examination fee, $\$ 3.00$.

## XVI.-MENTAL SCIENCE.

```
Professor
                                Walter C. Murray, M.a.
```

The class in Mental Science is that known in the Arts Faculty as Junior Philosophy.

Special attention will be given to the application of Psychology to the determination of Educational methods. Students especially interested in the educational bearings of this subject are recommended to read in addition to the text book (James' "Fsychology "-Briefer Course), Sully's "Teacher's Hand-book of Paychology," and McLellan's "Applied Psychology."
XVII.-EDUCATION.

The work of this class consists of three portions :-(1.) History of Education, with School Management and School Law ; (2) Theory of Education ; (3) Practice of Methods.

$$
\begin{aligned}
& \text { (1.)-History of Education, School Management and School Law. } \\
& \text { Lecturer.....................................ALEx. McKAY, Esq. }
\end{aligned}
$$

(Two hours per week for three or four months.)
This course consists of lectures and recitations on: (a) The History of Education in different ages and countries ; Comparison of Education systems ; Theories of writers on Education; Eminent educators. (b) School Management and School Law.

Text Books : Compayré : History of Pedagogy.-The following books are also recommended: Quick: Educational Reformers; Browning: Educational Theories.

## (2.)-Theory of Education.

Lecturer. Prof. W. C. Murray, M.A.
(One hour per week,-Saturday, 10 A. M.)
This course will consist of lectures, discussions, essays, \&c., on (1) the End of Education; the Relation of the School to the End; Materials and Methods, in their relation to the End ; and (2), Locke's "Thoughts on Education," and Spencer's "Education."

Book recommended: Laurie's Institutes of Education.

## (3.)-Special Methods and Practice of Education.

(Six hours, or more, per week, for three months.)
Short courses of lectures on methods of teaching, special subjects, with observation of teaching and practice in the public schools, wil! be provided for by Mr. Alex. McKay, Supervisor of Halifax Schools.

Text Book: Charles De Garmo's Essentials of Method; Recommended for reference: Thring's Theory and Practice of Teaching.

For Courses of Study for Teachers, see $\S \times x \times 1$ and xxxyir.


As in the Arts Faculty, (§ I, II).
§ XXVII.-The Academic Year consists of one session. The Session of 1893-94 will begin on the 13th September, 1893, and end on the 24th April, 1894.
§ XXVIII.-Admission of Students.-The regulations for the admission of students to the classes of this Faculty are the same as in the Faculty of Arts (§ III).
§ XXIX.-Degree of Bachelor of Science (B.Sc.). -(1.) The regulations for the admission of students to the courses of study leading to this degree are the same as in the case of the B. A. and B. L. degrees in the Faculty of Arts, (§ IV, 2-4).
(2.) Undergraduates who have completed a portion of their Arts or Science Courses either in this University or elsewhere, will be admitted to such advanced standing in the courses leading to the above degree, as the subjects which they have studied may seem to warrant, and arrangements will be made to enable them to complete the courses in as short a time as possible.
(3.) Candidates for the degree of B. Sc. are required to pay a fee of five dollars, before the final examinations for the degree. In the event of failure the fee will not be returned, but the candidate will be admitted to one subsequent examination without payment of this fee.
§ XXX.-Matriculation Examinations.-(1.) The examination by which a student may gain entrance to the first year of the various courses in this Faculty, is the same as that prescribed for candidates for entrance into the first year of the B. L. Course in the Faculty of Arts. The regulations as to distinction, exemptions, dates, \&c., are the same as in the case of the First Year Matriculation Examination of the Faculty of Arts (see § v).
(2.) The subjects of the examination by which a student may gain entrance to the Second Year of the various courses in
this Faculty, consist of the subjects of the First Year Matriculation Examination, and of the First Year of the course in which he wishes to enter (§XXXI.) The regulations as to exemptions, dates, \&c., are the same as in the case of the Second Year Matriculation Examination of the Faculty of Arts. (see § VI, 2-5).

## § XXXI.-Courses of Study for Degree of B. Sc.-

 Eight Courses of Study are provided, which lead to the Degree of B. Sc. They are as follows :-Course A has as main subjects Mathematics and Physics, and is suited to the requirements of students who wish to prepare themselves for higher teaching positions in these departments, or to obtain a thorough ground-work for a subsequent course in Engineering.

Course B has as main subjects Experimental Physies and Chemistry, and is intended to enable students to prepare themselves for higher teaching positions in these departments, or for engaging in chemical industries.

Course C includes a study of the various sciences, of English and other Modern Languages, of Drawing, and of Education, and is designed to prepare students to discharge the duties of Science Masters in High Schools.

Course D has as main subjects Chemistry and Biology, and is especially suitable for students who intend te enter upon the study of Medicine. It includes a sufficient number of the scientific subjects of the medical curriculum to enable the student to shorten his subsequent medical course by one year.

Courses E, F, G, H, are intended for students who aim at becoming Civil, Mechanical, Mining, or Electrical Engineers respectively. Their main subjects are Mathematics, Physics (including Dynamics and Applied Mechanics), and Drawing, and they include also courses of lectures on the practice of different departments of Engineering, kindly offered by leading engineers of the city of Halifax. Course $H$ includes the foundation of pure science, and the earlier stages of the practical study of electricity, which are necessary for the electrical engineer.

The following is a statement of the classes which must be attended in these various courses. Details as to the subjects studied in these classes will be found under Courses of Instruction ( $\S$ XXVI). Classes to which the letters A, B, \&c., are attached, are to be taken in the Courses indicated above by the same letters. Those to which no such letters are attached, are common to all the Courses.

## First Year.

(1.) Mathematics.
(2.) Inorganic Chemistry.
(3.) For A, B, E, F, G, H, Drawing. For C, D, Botany.
(4.) English.
(5.) French or German.

Practical work in Botany wiil be prescribed for students tahing Courses C, D, the work to be done during the summer vacation,

## Second Year.

(1.) Mathematics*.
(2.) Junior Physics.
(3.) Practical Chemistry.
(4.) Drawing.
(5.) English.
(6.) French or German.

## Third Year.

For A.-Advanced Mathematics; Senior Physics; Mental Science ; French or German.
For B.--Senior Physies ; Organic Chemistry ; Practical Chemistry ; Assaying, or Practical Physics; French or German.
For C.-Practical Physics ; Practical Chemistry; Mental Science ; French or German ; Drawing; Education (Theory and History).
For D.-Practical I'hysics; Organic Chemistry ; Practical Chemistry; Mental Science ; French or German.
For E.-Advanced Mathematics (partial course); Senior Physics; Applied Mechanics; Drawing; Surveying.
For F.-Advanced Mathematics (partial course) ; Senior Physics; Applied Mechanics; Assaying; Drawing; Surveying.
For G.-Advanced Mathematics (partial course); Senior Physics; Applied Mechanics; Assaying; Drawing ; Surveying.
For H.-Advanced Mathematics ; Senior Physics; Practical Physics ; Applied Mechanics (Mechanics of Machinery) or Drawing.

## Fourth Year.

For A.--Advanced Mathematics ; Senior Physics ; Advanced Mathematical Physics ; French or German or Practical Physics.

[^13]For B.-Senior Physics ; Practical Physics ; Practical Chemistry ; Mineralogy ; French or German.
For C.-Organic Chemistry ; Mineralogy ; Physiology ; Drawing ; French or German ; Education (Practice).
For D.-Practical Chemistry ; Physiology ; Anatomy; Practical Anatomy; Histology ; French or German. (An undergraduate taking Course D, who wishes his Fourth Year to qualify for a medical degree, must, previously to his entering upon it, have satisfied the requirements of the Medical Faculty with regard to Matriculation and must also satisfy its requirements as to the payment of fees.-See Faculty of Medicine).
For E.-Advanced Mathematics (partial course) ; Senior Physics ; Advanced Mathematical Physics (partial course) or Practical Physics; Applied Mechanics ; Mineralogy ; Civil Engineering ; Hydraulic Engineering.
For F.-Advanced Mathematics (partial course) ; Senior Physics ; Advanced Mathematical Physics (partial course) ; Practical Physics; Applied Mechanics; Civil Engineering; Hydraulic Engineering.
For G.-Advanced Mathematics (partial course) ; Senior Physics ; Applied Mechanics ; Mineralogy ; Mining; Civil Engineering ; Hydraulic Engineering.
For H.-Advanced Mathematics ; Advanced Mathematical Physics (partial course) ; Senior Physics ; Practical Physics ; Drawing or Applied Mechanics (Mechanics of Machinery).

## § XXXII.-Special Courses for Degree of B.Sc.

-(1.) An undergraduate shall be allowed during the third and fourth years of his B. Sc. course, to restrict his attention tn a more limited range of subjects than that of most of the above ordinary courses, provided his standing at the examinations of the First and Second Years, especially in the subjects corresponding to the Special Course on which he proposes to enter, seems to the Faculty to warrant such restriction.

Special Courses are provided in the following departments: -(1) Mathematics and Mathematical Physics ; (2) Physics and Physical Chemistry ; and (3) Chemistry and Chemical Physics.

An undergraduate taking a special course in any of these departments shall be required to attend the advanced classes provided in the subjects of such department (see § XXVI), to make progress satisfactory to the Professors who conduct such classes, and to pass at the end of the Fourth Year, an examination in the subjects of such department; and he shall in some cases be allowed to omit from the ordinary course he is pursuing, certain subjects specified below.
(2.) The Special Course in Mathematics and Mathematical Physics is open to undergraduates taking the ordinary courses A or H. Those taking course A may substitute Practical Physics for Mental Science in the Third Year. Those taking course H may omit one subject in the Fourth Year.

The subjects of examination are the same as in the corresponding course in the Faculty of Arts (see § VIII, 11).
(3.) The Special Course in Physics and Physical Chemistry is open to undergraduates taking the ordinary course B, provided the Faculty consider their standing in the First and Second Years, especially in Mathematics, Physics and Chemistry, to have been sufficiently high. In the Third Year they must take Practical Physics and Advanced Mathematics (partial course), and may omit French or German. In the Fourth Year they must take Advanced Mathematics (partial course), and Advanced Experimental Physics, and may omit Mineralogy and French or German.

The subjects of examination shall be as follows :-
(1.) General Physics.-As, e. $g$., in Peddie's Manual of Physics (Baillére, Tindall \& Co.)
(2.) Either (a) Heat and Electricity.-Stewart's Treatise on Heat (Clarendon Press), and Joule's Memoirs on the Determination of the Mechanical Equivalent of Heat,-Joule's Scientific Papers (Taylor and Francis), Vol. I, pp. 123, 172, 298, 542, 632; S. P. Thompson's Electricity and Magnetism (Marmillan \& Co.), with Murdock's Notes on Electricity and Magnetism (Macmillan \& Co.), and Sir W. Thomson (Lord Kelvin)'s papers on the Electrodynamic Qualities of Metals, -1 Thomson's Mathematical and Scientific Papers (Camb. Univ. Press), Vol. II, p. 189.

Or (b), Sound and Light.--Everett's Vibratory Motion and Sound (Longmans, Green \& Co.) ; Glazebrook's Physical Optics (Longman̂s, Green \& Co.) ; and Roscoe's Speetrum Analysis (Macmillan \& Co.). ${ }^{10}$
(3.) Practical Physics.-The determination of important physical constants, and the investigation of simple physical laws; the discussion of the accuracy of experimental results.
(4.) Physical Chemistry.-Experimental methods and general results, as in Ostwald's Outlines of General Chemistry (Macmillan \& Co.).
(5.) Practical Chemistry. - Preparation and purification re-agents; Qualitative analysis of salts; Quantitative analysis of inorganic solutions, including volumetric analysis.

Candidates will be assumed to have some knowledge of Analytical Geometry, and of the Differential and Integral Calculus.

Those who aim at High Honours, will be experted to prepare a thesis embodying the results of a short original investigation.
(4.) The Special Course in Chemistry and Chemical Physies is open to undergraduates taking the ordinary course
B. In the Third Year they must take Botany and Practical Physics, and must devote at least ten hours per week during the Session to advanced work in the Laboratory in Practical or Analytical Chemistry of inorganic compounds, and they may omit French or German. In the Fourth Year, at least ten hours per week must be devoted to Practical Chemistry, including elementary organic analysis, and proximate analysis of organic compounds, and French or German may be omitted.

## The subjects of examination shall be as follows:-

(1.) Inorganic Chemistry.-General Principles and Methods of Inorganic Analysis ; Systematic Course of testing for bases and acids, and separation of bases and of acids from each other, where several are present, as in Fresenius's Qualitative Analysis ; Spectroscopic Analysis.

Quantitive Analysis; General Principles and Methods in use, with examples selected from Fresenius's Quantitative Analysis, Wöhler's Mineral Analysis, or similar works, according to the special laboratory work done by the candidate ; Volumetric Analysis.
(2.) Organic Chemistry.-The Fatty Group. Fatty Series of Hydrocarbons and their Substitution Compounds (Haloids, Ethers, Alcohols, Aldehydes, Compound Ethers, Amines, Amides, \&c.), including Carbohydrates, and the processes of Fermentation, Acetitication, \&c., as in Wurtzs' Organic Chemistry, from page 398 to p. 590, first American edition, or from page 418 to page 646, third American edition, with amplifications from Roscoe \& Schorlemmer's Chemistry, part 1 and 2 of Vol. III, omitting the historical portions, and other special portions to be pointed out.

The Aromatic Series. Aromatic Hydrocarbons, and their Derivatives.: Orientation in the Aromatic Series. Constitution of Benzene. Its substitution and additive products, as in Part 3 of Vol. III, of Roscoe \& Schorlemmer (excluding historical details). Selections from Parts 4 and 5, of Vol. III, R. \& S., relating to the more commonly known compounds not fully treated in Wurtz. These selections will be made by the Professor in view of the special aim or ultimate object of the student in his Chemical studies.

The Natural Alkaloids, Albuminoids, or general Animal or Physiological Chemistry may, if thought desirable, be made to replace some of the subjects included in the foregoing prescribed course.

Organic Analysis and Preparation of Organic Compounds ; Methods of Organic Analysis in detection and separation of proximate Organic Compounds by chemical and by microscopical and other optical tests.

Elementary Quantitative Analysis of Non-nitrogenous and of Nitrogenous Organic Compounds.
(3.) Chemical Physics.-Experimental Methols and general results, as in Ostwald's Outlines of General Chemistry (Macmillan \& Co).-The practical application of the more important physical experimental methods employed in chemical research, including the discussion of the degree of accuracy of experimental results.
(4.) Candidates who aim at High Honours will be expected to prepare a thesis embodying the results of a short original investigation.
§ XXXIII. Attendance. The regulations as to attendance are the same as in the Faculty of Arts. (See § IX).
§ XXXIV. Examinations.-The regulations as to Examinations are the same as in the Faculty of Arts. (See §X).
§ XXXV. The Degree of B. Sc. with Distinction will be conferred on the same conditions as the corresponding degree in the Faculty of Arts, (§ XI).
§ XXXVI.-The Degree of B. Sc. with Honours in departments in which special courses are provided in this Faculty, will be conferred on the same conditions as the corresponding degree in the Faculty of Arts (§ XII).
§XXXVII. Short Courses of Study for General Students.-(1.) 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, or to attend a small number of classes for a series of years, short courses of study have been arranged.

Students entering on these courses are not required to pass any preliminary examination ; but they are recommended not to enter classes in which some knowledge of the subject is assumed, without first consulting the Professors as to their ability to enter with profit upon the work of the classes.

To students who attend the classes of these courses with regularity, shew diligence in the class work, and succeed in passing the Examinations, certificates will be issuel stating the nature of the course pursued, and the degree of success attained.

The details of the subjects studied in the classes mentioned below will be found under Courses of Instruction ( $\S$ XXVI).
(2). Short Courses for Science Teachers.-These courses are intended to prepare students for discharging the duties of Science Masters in High Schools. They include the more important of the subjects of examination for the Grade A (Scientific) License issued by the Nova Scotian Education Office.

Two Years' Course.-The following course extends over two years:-

First Year:-Mathematics (2nd Year Class) ; Junior Physics ; Inorganic Chemistry ; Botany ; Psychology ; Drawing.

Second Year:-Practical Physics ; Practical Chemistry; Mineralogy ; Education (History, Theory, and Practice); Drawing ; Physiology.

One Year Course.-For the advanced student already sufficiently familiar with Mathematics, Physics, and Chemistry, the following one-year Course is suggested:-Practical lhysics ; Practical Chemistry ; Psychology ; Education ; Two or more of Botany, Mineralogy, Physiology, Drawing.

Students who are already familiar with some of the subjects prescribed above, may substitute others for them with the approval of the Faculty.

Students taking these courses are recommended at the same time to obtain instruction in the Tonic Sol-Fa System of Musical Notation, and in Manual Training. Information as to available instruction in these subjects may be obtained from Mr. A. McKay, Lecturer on History of Education.
(3.) Short Course introductory to Medical Study. -This course includes the more difficult subjects of the Medical Matriculation Examination, together with a sufficient number of the subjects of the Medical Curriculum to constitute an annus medicus. It is as follows :

First Year:-Latin; English ; French ; Junior Philosophy (Logic and Psychology) ; Mathematics.

Second Year :-Junior Physics; Medical Chemistry; Practical Chemistry; Botany ; Anatomy.
(4.) Short Courses for Engineering Students.The following courses are intended for students who are unable to give full attendance, but can give partial attendance for a number of years:
(a) Civil Engineering.-Mathematics (1st and 2nd Year Classes); Drawing; Junior Physies; Senior Physics (Dynamics): Applied Mechanics (Theory of Structures and Strength of Materials); Surveying; Civil and Hydraulic Engineering.)
(b) Mechanical Engineering.-Mathematics (1st and 2nd Years Classes); Drawing; Junior Physics; Senior Physics; Applied Mechanics (Mechanies of Machinery.)
(c) Mining Engineering.-Mathematics (1st and 2nd Years Classes); Drawing; Junior Physics; Senior Physics ; Applied Mechanics; Chemistry ; Practical Chemistry ; Mineralogy; Mining.
(d) Electrical Engineering.-Mathematics (1st and 2nd Years Classes); Drawing; Junior Physies; Senior Physics; Practical Physics; Applied Mechanics (Mechanics of Machinery),
§XXXVIII.-Classes for Artizans.-Classes are organized from time to time for artizans and other persons who are engage! in forms of work involving the application of scientific knowledge. These classes are usually held in the evening. Announcements with regard to them are made at the beginning of the session.
§ XXXIX. - Medals, Prizes and Matriculation Scholarships.-The Sir William Young Gold Medal, the Governor General's (fold and Silver Medals (occasionally), and the Sir Wm. Young and Professors' Scholarships (awarded at matriculation) are open for competition to undergraduates of, or candidates for matriculation in, the Faculty of Science. See SSV, XV.
§ XL.-The Munro Exhibitions and Bursaries are open for competition to undergraduates entering the Third Year in this Faculty. For regulations see § XVI.

## § XLI.-1851 Exhibition Science Scholarship.-

Her Majesty's Commissioners for the Exhibition of 1851 have placed at the disposal of this University for the year 1894 the nomination to one of the scholarships, which are being offered by them, 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 advances, or in its industrial applications.

The Scholarship is of the annual value of one hundred and fifty pounds sterling, is tenable for two years, subject to the fulfilment of certain conditions mentioned below, and is open to women as well as men.

The following are the conditions of nomination :-
(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 bonâ 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 to be a student 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 of 1892-93, or during that of 1893-94; but in the event of his having ceased to be a student of Dalhousie College at the end of the year 1892.93 , he must have been engaged during the year 1893-94 solely in scientific study.
(d) He must have indizated 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 will also be taken into acoount,
(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 nomination 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 some 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 expected to spend at least one year of the term during which he holds the Scholarship, at 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 on the work done in the first year being satisfactory to the Scientific Committee appointed by the Commissioners.

The Scholarship is payable half-yearly in advance through the Treasurer of this University.

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 28th day of February, 1894. In making such application they must furnish a statement of the following particulars :-
(a) Name and address of candidate.
(b) Age of cendidate.
(c) Institution or institutions in which candidate's term of stuảy 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 tenure of Scholarship.
( $f$ ) Statement of the particular Scientific work, specifying the branch of a science, to which the candidate proposes more especially to devote himself.

As this 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 on the University's records. Thus age, attendance, and career at other Universities or Colleges, and accounts of original researches conducted elsewhere, must be properly attested.

The candidate nominated is required by the Commissiomers to sign the following declaration :-
"I, the undersigned, hereby declare that the particulars concerning me contained in the foregoing form are correct, and I undertake that, if a 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."

Students who, in view of the above Scholarship, wish to engage in original research in this College during the Session of 1893-94, are recommended to netify the Professors of the departments concerned, at as early a date as possible, of the
nature of the research selected by them in order that arrangements may be made for giving them accommodation in the Laboratories.
§ XLII. - Residence, Church Attendance, and Discipline. -The regulations as to residence, church attendance, and discipline, in this Faculty, are the same as in the Faculty of Arts. (See § xviII-xx.)
§ XLIII.-The Degree of Bachelor of Engineering (B. E.) will be conferred on a Bachelor of Science who has taken the Degree in one or other of the departments of Engineering, at any date not less than one year after graduation, provided he satisfy the following conditions:
(1.) He must furnish certificates from an engineer or engineers, approved for this purpose by the Faculty, shewing that he has been engaged in practical work in some one department of Engineering under their supervision for a period of at least two years, and that he has exhibited satisfactory diligence and progress. A part, or the whole, of this time may be spent in any approved Engineering School which possesses workshops or testing laboratories.
(2.) He must hand in to the Faculty designs for some constructive work, prescribed by the Faculty, in the department in which he has been engaged in practical work, the designs to be accompanied by complete working drawings giving full details, bills of materials and estimates. The designs must be accompanied by a declaration to the effect that he has received no assistance in preparing them, and he will be required to explain and defend his designs before the examiners.
(3.) Candidates for this degree must send their designs, \&c, to the Dean of the Faculty on or before the first of March, and must, at the same time, pay a fee of Twenty Dollars.

## § XLIV. - The Degree of Master of Science

 (M. Sc.).-The degree of Master of Science will be conferred, on a Bachelor of Science of at least one year's standing, 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 any other Universities, 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 Science, or to closely related departments.Theses must be sent to the Dean 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 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 Ten Dollars. In cases in which the degree is not granted, the fee will not be returned; but the candidate will be allowed to make a second application for the degree, either by thesis or by examination, without payment of fee. In cases in which an autumn examination is granted, an additional fee of Ten Dollars will be charged.
§ XLV.-Admission ad eundem gradum.-Graduates in Science of Universities approved by the Senate, who have received their degrees in course, shall be admitted ad eundem gradum in this University, on producing satisfactory proof of character and academic standing.
§ XLVI.-Academic Costume.-Bachelors of Science and of Engineering and Masters of Science shall be entitled to wear black stuff gowns and hoods. The distinctive part of the costume is the hood, which is to be as follows:

For B. Sc.-Black stuff, with a lining of white silk bordered with crimson silk.

For B. E.-Black stuff, with a lining of white silk bordered with purple silk.

For M. Sc.-Black stuff, with a lining of scarlet silk.
Successful candidates for these degrees must appear at Convocation in the proper academic costume, to have the degrees conferred upon them. Degrees will be conferred in the absence of candidates only by special permission of the Senate.
§ XLVII.-Fees.-The regulations as to fees payable by students shall be the same as in the Faculty of Arts. (See § XXV.)

The graduation fees are as follows :
Fee payable before the final Examinations for the B. Sc. ${ }^{5} 50$
Fee payable on application for the B. E. Degree.................. 2000
Fee payable on application for the M. Sc. Degree................ 1000
For an ad eundem Degree ....................... .............. 1000

## diaculty of dalu.

The President (ex officio.)<br>Richard C. Weldon, A. M., Ph. D.<br>Benjamin Russell, A. M., Q. C.<br>C. Sydney Harrington, Q. C.<br>William B. Ross, Q. C.<br>George Ritchie, Ll. B.<br>Dean of the Faculty-Professor Weldon.<br>Secretary of the Faculty-Professor Russell.

## § XLV III.-Course of Lectures.

The following Courses of Lectures to be given in the Session of 1893-4, will begin on the 29th of August, 1893, and end on the 9th February, 1894.

CONSTITUTIONAL AND INTERNATIONAL LAW.<br>(George Munro Professorship.)<br>Professor.<br>R. C. Weldon, M. A., Ph. D.<br>Constitutional Law.<br>Two lectures per week.

Subjects of lectures :
Law of Parliament. Select Cases in Constitutional Law. British North America Act.

Iext book: Cartwright's Cases.

## Constitutional History.

Two lectures per week.
Subjects of lectures:
Feudalisu in England. Origin aad Growth of the two Houses of Parliament. Origin and Development of Trial by Jury. Origin and Devel pment of the Courts of Law. The Royal Prerogative. History of the Law of Tieason. The Liberty of the Person. The Liberty of the Press. History of Party Government. Origin and Development
of the Cabinet System. History of the Reform Bills. The Written Code of the Constitution. Magna Charta. Petition of Right. Bill of Rights. Habeas Corpus.

Text book: Taswell-Langmead's Constitutional History of England.

## Conflict of Laws.

One lecture per week.

## Subject of lectures :

Leading rules as to (1) personal capacity, (2) rights of property, (3) rights of obligation, (4) rights of succession, (5) farnily rights, (6) forms of legal acts. The use of courts by strangers. The effects 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.

Text book: Hall's International Law.

## CRIMES.

Lecturer............................................Propbssor Wbldon.

## Subjects of lectures :

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

Text book: The Canadian Oriminal Code, 1892.

## REAL PROPERTY.

Lecturer. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .............. Mr. Ritchir, Ll. B.
One lecture per week.
Subjects of lectures:
Estates in Fee Simple; Estates for Life; Estates in Remainder and Reversion ; Joint-Tenancy and Tenancy in Common ; Estates for Years ; Landlord and Tenant; Easements; Devises; Descent of Real and Personal Property.

Text books : Leake's Digest of Property'in Land, Parts 1 and 2, and Gray's Leading Cases.

## CONTRACTS.

Professor.............................................. ......B. Russelu, A. M.
Two lectures per week.
Subjects of lectures :
Definition of terms ; agreement, consideration, proposal, acceptance, promise, \&c. Persons who may contract, principal and agent. Disabilities arising from infancy, coverture, lunacy, intoxication, \&c. Express and implied contracts. Verbal and written contracts. Specialties. Statutory requirements as to validity and authentication of contracts ; Statute of Frauds. Causes vitiating agreements; mistake, fraud, duress, \&c. Discharge of contracts, rescission, performance, payment, release, merger, \&c. Leading cases.

Text books : Finch's Cases, and Anson on Contracts.

## EQUITY JURISPRUDENCE.

## Lecturer

 Profrssor Russell.One lecture per week, extending over two years.
Subjects of lectures :
Trusts, Mortgages, Fraud, Mistake, Specific Performance of Contracts, Administration of Assets, Election, Account, Discovery, Injunction.

Text book: Smith, H. A.
MARINE INSURANCE.
Lecturer
One lecture per week.
[1894-95.]
Subjects of lectures :
Parties to and Agents for Marine Insurance ; The Policy: Duration ; Misrepresentation; Concealment; Warranties; General and Particular Average ; Total Loss; Abandonment.

Text book: Arnould.
TORTS.
Lecturer
Mr. Ross, Q. C.
One lecture per week.
Subjects of lectures:
Definitions. Torts considered with reference to Crimes and Contract. 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 books: Bigelow, or Pollock.

## PARTNERSHIP AND COMPANIES.


One lecture per week.
[1893-94.]
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.

## EVIDENCE.


One lecture per week.
[1894-95.]
Subjects of lectures:
Nature of Proof, Production and Effect of Evidence, Relevancy, Instruments of Evidence.

Text books: Greenleaf on Evidence ; Judicature Act and Rules.

## NEGOTIABLE INSTRUMENTS.

$\qquad$
[1893-94.]
One lecture per week.
Subjects of lectures:
Formal Requisities. Consideration. Indorsement and Transfer. Real and personal defenses. Over-due paper. Notice of Dishonor. Protest. Bill or note.

Text book: Chalmers on Bills.

## SALES OF PERSONAL PROPERTY.

Lecturer.
Professor Russella.
Two lectures per week.
[1894-95.]
Subjects of lectures:
Capacity to buy and sell. Executed and executory contracts of sale. Statute of Frauds. Lord Tenterden's Act. Rules as to passing of property., Reservation of jus disponendi. Stoppage in transitu. Condition. Warranty, express and implied. Remedies of seller and buyer.

Text book: Benjamin on Sales.

## SHIPPING.

Lecturer
Subjects of lectures :
Registration of Shipping. Transfer. Mortgage. Bottomry and Respondentia. Charter Party. Bills of Lading. Collision. Pilotage. Salvage. Admiralty Law.

Text book: McLachlan on Sbipping.

CONVEYANCING.

Lecturer
Subjects of lectures:
Real Estate. Contingent Remainders. Rule in Shelley's Case. Statute of Uses. Springing and Shifting Uses. Executory Devises. Statute 13 of Eliz., c. 5 and 27 of Eliz., c. 4. Statute of Limitations. Bargain and Sale. Lease and Release. Mortgage. Wills. Probate of Wills.

Text books: The text books needed will be announced at the commencemert of the lectures.
§ XLIX. -The Academic Year. - The academic year consists of one Session. The Session of 1893-94 will begin on the 29th of August, 1893, and end on the 24th of April, 1894.
§ L.-Admission of Students.-(1.) Students may enter the University by (a) furnishing satisfactory references of certificates of good moral character, (b) entering their names in the Register, and (c) paying the prescribed fees.
(2.) Registered students may, on payment of the proper fees, (see page 62) enter any of the classes of the University.
(3.) Students who wish to obtain University Degrees must become undergraduates. They may become undergraduates by (b) passing either one of the Matriculation Examinations or a recognised equivalent, and (b) matriculating, i. e., entering their names on the Matricula or Register as Undergraduates.
(4.) Students who are not undergraduates are known as General Students.
§ LI.-Degree of Bachelor of Laws.-(1.) Candidates for the Degree of LL. B. are required to pass the Matriculation Examination, or a recognized equivalent, to attend not less than five-sixths of the lectures given in each subject of the course of study and to pass the Sessional Examinations in the subjects of the three years course of study.
(2.) Undergraduates of other Law Schools may, on producing satisfactory certificates of standing, be admitted to similar standing in this Law School if, on examination, 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.
(3.) Graduates in Arts who have taken the classes of Constitutional History, Constitutional Law and Contracts, as parts of their Arts Course, shall be allowed to graduate in two years from the date of their entering upon the Law Course, provided they take in those years all the other classes specified.
§ LII.-Matriculation Examination.-(1.) Candidates for entrance into the First Year of the Course shall be examined in the following subjects, except in cases in which certain Examinations mentioned below shall have been already passed :

Latin.-First three books of Cæsar. First book of Virgil, or first book of Gaius or Justinian.

Greek.-First two books of Xenophon's Anabasis.
Candidates may substitute French or German for Greek.
The papers in the above subjects will contain questions on Grammar.
Mathematics.-Arithmetic, as in Hamblin Smith's ; Algebra, as in T'odhunter's Algebra for beginners; Geometry, Euclid, Books I, II, III and IV, with easy exercises.

English.-Grammar, Analysis, and Composition, as in Nova Scotia prescribed text buoks for the public schools. Critical stuly of Shakespeare's plays. Frr September, 1893, and February, 1894. The Merchant of Venice (Rolfe's edition recommended).

History and Geography.-British and Canadian History, as in Nova Scotia prescribed text books for the Public Schools ; General Geography, as in the prescribed text books.
(2.) Persons desirous of appearing as candidates at this examination must give notice to the Dean of the Faculty on or before August 21st, 1893 ; and they shall be required to pay a fee of $\$ 5.00$ on the morning of the day of Examination.-The Examination will be held next Session on Tuesday, August 29th, at 10 o'clock, A. m., in Examination Hall.
(3.) Graduates and Undergraduates in Arts of any recognized College or University, and articled clerks or law students who have passed the preliminary law examinations in any of the Provinces of the Dominion of Canada, or in Newfoundland, shall be admitted to the standing of Undergraduates of the First Year in the Faculty of Law, without passing any examination.

## § LIII.-Course 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. Conflict of Laws.
6. Conveyancing.

Third Year.

1. International Law.
2. Insurance.
3. Evidence.
4. Equity.
5. Sales of Personal Property.
6. Shipping.

Undergraduates are required to attend with regularity the classes of their respective years. The extent of absence from prescribed classes which shall disqualify for the keeping of a Session shall be determined by the Faculty.

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. The Course having been very considerably enlarged, the Faculty apprehend that students who are doing regular office work during Session, will find it quite impossible to pass with credit the required examinations.
§ LIV.-Sessional Examinations.-(1.) The Sessional Examinations will begin next Session on February 12th, 1894.
(2.) Students are forbidden to bring any book or manuscript into the Examination Hall, except by direction of the Examiner, or to give or receive assistance, or to hold any communication with one another at the Examinations. If a student violate this rule, he shall be excluded from the Sessional Examinations of the Session, and such other penalty shall be imposed as the Faculty may determine.
(3.) If an Undergraduate fail to pass in one or two subjects of 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 on 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 to the Dean of the Faculty on or before August 21st, 1893.
(6.) The Supplementary Examination for the present year will begin August 29th, at 10 o'clock, A. m. Fee, $\$ 5$, payable on the morning of the Examination.
§ LV.-Moot Courts.-Moot Courts will be held everyweek.

Hereafter the case to be argued will be stated by the Professor or Lecturer who is to preside, and shall be upon the subject of lectures then in progress. Every candidate for a degree shall be required to take part in arguments at the Moot Court. The senior counsel on either side shall be required to. file briefs with the J ean before noon of the day preceding that on which the case is argued. A record will be kept of the values assigned to the arguments made, and these values will be considered by the Faculty in recommending a candidate for his degree.

At each Moot Court the roll will be called and the attendance of students noted.

All undergraduates are required to attend the Moot Court.
In addition to the Moot Courts-formal instruction in the practice of the law will be given by the different lecturers.

It is believed that these practical exercises will be found helpful to students who are required to acquaint themselves with the Judicature Act.
§ LVI.-Mock Parliament.-The students have organized a Mock Parliament for the discussion of legal and constitutional questions. This Parliament is well attended, and is found to be of some utility.

The Faculty would strongly recommend that the students: of the First Year should organize voluntary Moot Courts to be presided over by students of the Third Year.
§ LVII.-Academic Costume.-Bachelors of Laws are. entitled to wear gowns and hoods. The gowns are similar to those worn by Barristers-at-Law. The hoods are of black silk stuff, with a lining of white silk bordered with gold coloured silk.
§ LVIII.-The Library.-The Library is in charge of a Librarian who will endeavour to make its resources available to the students and give them every possible assistance in the prosecution of their studies. Besides a good set of English and

Canadian Reports, the Library has a number of sets of the leading American Reports, and will be found to contain almost all the books an undergraduate will have reason to consult. The principal English, American and Canadian legal periodicals are regularly taken. The Library has been enriched during the year by the gift of the valuable Law Library of the late Sir Adams G. Archibald, K C. M. G. This collection contains a large number of valuable text books and many excellent reports. Much care is being taken to perfect our sets of Statutes. The generosity of many public men has enabled us to secure almost complete sets of the Statutes of the Provinces of Canada.

In addition to the above the following books have been presented :
By Hon. T. C. Casgrain, Attorney-General, Quebec: Statutes of Quebee, 1882-1890. 18 vols.
By Hon. Sir Oliver Mowat, K. C. M. G., Toronto: Statutes of Ontario, 1882-1891. 10 vols.
By Hon. Frederick Peters, Attorney-General, Charlottetown : Statutes and Sessional Papers of P. E. I. 10 vols.
By the Hon. John Robson, late Premier of British Columbia : Statutes and Sessional Papers of British Columbia. 9 vols.
By Hon. L. J. Tweedie, Sur-General, Chatham, N. B. : Statutes of New Brunswick. 18 vols.
By R. B. Gordon, Clerk of N. W. T. Assembly, Regina, N. W. T. : Ordinances of N. W. T., and Reports of Supreme Court. 6 vols.
By W. H. Wiswele, Esq., Halifax : N. S Statutes. 14 vols.

By H. W. C. Boak, Ll. B., Halifax : Patent Laws of the world. 11 vols.
By R. T. Murray, Queen's Printer.
N. S. Statutes and Journals. 10 vols.

By J. J. Stewart, Esq., Halifax : Parliamentary Companions and Year Books. 5 vols.
By Hon. J. R. McLean, M. E. C., Souris: Statutes of P. E. I. 3 vols,
By Rev. Dr. Forkest :
Statutes of Canada. 3 vols.
By Dr. Weldon:
Hansards of House of Commons and Senate, and Statutes of Canada. 8 vols.
By Joun A. McKinnon, B. A., Ll. B., Halifax : Law Times Journal Reports. 5 vols.
By D. A. McKinnon, Li. B., Georgetown, P. E. I. : Statutes of P. E. I. 2 vols.
By Hon. Robert Sedgewick, B. A., Ll. D., Judge of the Supreme Court of Canada: Cartwright's Cases on the B. N. Act. Vol. 4.
By John Montgomery, B. L., Ll. B., St. John, N. B. : Travis Canadian Constitution. I vol.
By T. T. Jean, Arichat, C. B. : 2 vols.
By F. A. Marsters, Barrister, Kentville, N. S. : Parliamentary Companion, 1882.
By Hon. W. E. Russell, Governor of Massachusetts : Acts and Resolves of Massachusetts, 1892. 1 vol.
By R. A. Irving, Buctouche:
Statutes of N. B., 1882.
§ LIX.-Fees.-The following are the fees payable by Students of the Faculty of Law. They are in all cases payable in advance.

Students are requested to pay their Class Fees and sign the University Register on Tuesday, 29th August, 1893, at 10 A. m., in the office of the Law School.
Registration Fee, payable only by General Students...........\$200 Fee for each class attended, per Session, payable by General Students
Fee for the classes of the First Year, payable by undergraduates. 4000 Fee for the classes of the Second Year, payable by undergraduates 4000 Fee for the classes of the Third Year, payable by undergraduates 4000 Fee for LL. B. diploma, which is payable before the final exami-
nation, and will be returned in case of failure..... ...;.... 1000
F'ee for the Matriculation Examination........................... 500 Fee for the Supplementary Examination......................... 500

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

The fees payable are those fixed by the Calendar of the year in which the students matriculated.

## faculty of detedicine.

The President, (ex officio). George Lawson, Ph. D., Ll. D., John Somers, M. D., Georer L. Sinclair, M. D., Donald A. Campbell, M. D., C. M., A. W. H. Lindsay, M. D., C. M., John Stewart, M. B., C. M., A. C. Page, M. D., Dantel MoNeil Parker, M. D., Edward Farrell, M. D., Andrew J. Cowie, M. D., John F. Black, M. D., Alexander P. Reid, M. D., Matteew A. Curry, M. D., Murray MoLaren, M. D., Wm. S. Muir, M. D., Wm. Tobin, F. R. C. S. Ire., Hugh McD. Henry, Q. C., Dean of the Faculty: Prof. Lawson. Secretary of the Faculty: Dr. Lindsay.

LX.-Courses of Instruction.--1. Instruction is provided by the University in the following subjects of the Medical Curriculum :

> I.-CHEMISTRY.

Professor $\qquad$ Gerger Lawson, Ph. D., Le.D.

Daily Lectures, 9 A. M.-10 A. M. With experimental demonstrations.
Part 1.-Inorganic.-General Principles. Chemical Affinity. Laws of Combination, by weight. Equivalents. Law of Combination, by volume. The Elements. Compounds. Atomicity. Nomenclature ; Notation ; Formulæ, Equations. The non-metallic Elements considered in detail; their modes of occurrence in nature; preparation in the free state; their compounds; natural phenomena and artificial processes in which they take part ; useful manufactures to which they are related. Special attention will be given to medicinal and poisonous substances ; to air and water analysis ; and to other subjects related to Medicine.

The Metals ; their physical and chemical characters; Classification. The Metals and their compounds considered in detail. In discussing the Metals, special attention is given to the Salts and other compounds of Mercury, Antimony, Arsenic, Bismuth, Silver, Copper, Lead, Tin, and the methods of testing for metallic poisons, their detection in organic mixtures and tissues, and their quantitative analysis.

Part II.-Organic.-Mode of formation of Organic Compounds in the Plant; their transformation by natural and artificial processes. The Method of Organic Chemistry. The Atomicity of Carbon. Saturation. Substitution. Principles of Classification. Elementary Analysis. Methane and its Homologues, and the Substitution Compounds. The Monatomic Alcohols, and related Compounds and Derivatives of the Fatty Series; Aldehydes, Ethers, \&c. The Fatty Acids. Compound Ethers. Polyatomic Alcohols, Ethers and Acids. Cyanogen and its Compounds. Glucosides. Carbohydrates. Diastase. Fermentation.

Aromatic Compounds. Benzene (Benzol) considered theoretically as the nucleous of the aromatic compounds. Orientation. Oil of Turpentine and its Isomerides. Volatile Oils. Camphor. Substitution Compounds of Benzene. Phenol (carbolic acid) and its derivatives. Aniline, \&c. Benzoic and related Acids, Indigo, \&c. Natural Alkaloids. Albumen, Urea.

Text Book: Greene's Edition of Wurtz's Elements, or any equivalent work may be used.

## Practical Chemistry.

## Monday, Wednesday and Friday, 12-1 o'clock.

Systernatic Courses of testing for Metallic Bases, and Inorganic and the more common Organic Acids, with special exercises. Where students can give the necessary time, this course will be followed by special processes for detection and quantitative estimation of Metallic Poisons; examination of urine for Glucose, Albumen; nature of Urinary Calculi and other deposits. Sanitary Analysis :-Atmospheric Air: Water. Mineral Waters.

Laboratory Book: Macadam's Practical Chemistry. Bowman's Medical Chemistry, and other special works are kept in the Laboratory Library for use of Students.

Laboratory students are allowed the use of the ordinary Laboratory apparatus and furnishings, and of inexpensive reagents, but are required to provide themselves with evaporating basins, test-tubes, platinum, gold and silver salts, and other expensive materials which they may require, and to replace apparatus which they may destroy.

The Chemical Laboratory is very large and airy, and is so arranged that every student has a separate set of reagents, and as much desk and table room as he can possibly use. There is a separate Balance Room and Ventilated Gas Chamber.

## II.-BOTANY.

Professor ...................................george Lawson, Ph. D., Ll. D.
Lectures Tuesdays, Thursdays and Fridays, 12 A. M.-1 P. M.
The Vegetable Cell: its structure and contents, with microscopic demonstrations. Typical and Transformed Cells; Tissues. Parenchyma, Prosenchyma. Minute Structure and Development of the Root, Stem and Leaf. Structure and Development of the Flower, Fruit and Seed. Vegetable Protoplasm: its structure, chemical character and movements ; effects upon it of Light, Electricity, Irritation,

Gravitation, Moisture, Gases. Plant Growth: Relations of the plant to the soil and atmosphere. Diffusion, Osmosis, Absorption, Transpiration, Assimilation. Production of organic matter in the plant ; Transmutation or Metastasis. Respiration. Vegetable Growth. Movements, of Clorophyll, of organs (Circumnutation), Nyctitropic. Reproduction: Fertilization. The Seed, Germination,-dependent upon moisture, free oxygen, temperature. Effects upon plants of extremes of temperature.

Classification of Plants: The Natural System of Classification. The distinctive structural characters and geographical distribution of the more important natural orders will be given, with special attention to those orders containing poisonous plants and plants used in medicine. This part of the course will be fully illustrated by specimens, drawings and preparations.

Text bookx: Goodale's Physiological Botany (being Vol. II. of Gray's Botanical Text Book) : Gray's How Plants Grow, with Lawson's Fern Flora.

Field Books for Summer Work: Gray's Manual of Botany of the Northern States, Macoun's Catalogue of Canadian Plants.
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 § § vil and xxxi Undergraduates in Arts or Science will see that 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 regu'ar Undergraduates in Medicine.
3. In other subjects the necessary classes may be attended at the Halifax Medical College or any other recognized School of Medicine.
4. Attendance on classes by those registered as General Medical Students will not qualify for Degree Examinations in this Faculty.
§ LXI.-The Academic Year.-The Academic Year consists of one session. The Session of 1893-94 will begin on Wednesday, September 27th, 1893, and end on Tuesday, April 24th, 1894.

In order to qualify for Degree Examinations, the Medical Academic Year must include attendance on at least two courses of 100 lectures each, or one such and two of 50 each. Certificates indicating less than 90 p . c. of attendance upon any class will not be accepted without valid reason for absence being shown.
§ LXII.-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.
§ LXIII.-Matriculation Examination.-1. Candidates for medical degrees must give evidence of having obtained a satisfactory general education, by passing before entering upon the course of study qualifying for the degrees, either the Matriculation Examination of this Faculty or some other examination recognized by the Senate as sufficient.
2. The following are the subjects of the Matriculation Examination :-
(1.) Evglish, including (a) writing a passage of English from. dictation.
(b) English Composition, with the correction of sentences of bad English.
(c) Questions in English Grammar with analysis of sentences and derivation and definition of some common English words.
(d) Questions in Geography and History, especially in the History of the British Islands and of English Literature.
(2.) Latin, including Grammar and Translation of an easy passage from a Latin prose author*, and re-translation into Latin of a single. passage of English (translated from a Latin author) the more difficult Latin words being given.
(3.) Arithmetic, the common rules including Vulgar and Decimal Fractions.
(4.) Elements of Mathematics, comprising (a) Geometry, Euclid, Books I, II, and III ; (b) Algebra, including Simple Equations.
(5.) Elements of Dynamics (Mechanics), comprising Elementary Kinematies, Statics, Kinetics and Hydrostatics, as treated in Blaikie's Elements of Lynamics (Thin, Edinburgh).
(6 and 7.) Any two of the following subjects :
(a) Greek, including Grammar, Translation from specified authors* and Translation of easy English sentences into Greek prose.
(b) French, including Grammar. Translation from specified authors*, and Translation of easy English sentences into French.
(c) German, including Grammar, Translation from specified authors*, and Translation of easy English sentences into German.
(d) Natural Philosophy, as in Balfour Stewart's Elementary Physicst (Macmillan \& Co.).
(e) Logic, as in Jevon's Elementary Lessons in Logic+ (Macmillan $\& C o$.$) .$

This Examination will begin on Wednesday, September27 th, 1893, in the College Hall, and will be conducted by instructors of the Arts Faculty.-Persons who wish to appear

[^14]as candidates are required to give notice to the Secretary of the Faculty at least forrteen days before the date of Examination (specifying in such notice the elective subjects in which they wish to be examined), to enter their names in the Register of Candidates, and to pay a fee of Ten Dollars.
4. This Examination satisfies the requirements of the General Medical Council of Great Britain as to the preliminary examination which must be passed by persons wishing to register as medical students; and also satisfies the requirements of the University of Edinburgh in the same respect.-Certificates will be issued to candidates showing the subjects in which they passed and the extent to which their knowledge of these subjects was tested.
5. A certificate of the possession of a University Degree in Arts, or of the Teacher's Grade " A" License of Nova Scotia, or of having passed the Matriculation Examination of the Provincial Medical Board of Nova Scotia, shall be considered by this University sufficient evidence of satisfactory general education.
6. The Matriculation and Sessional Examinations of any chartered University or College ; the First Class Teachers' License of Prince Edward Island; and also the preliminary Examination of any Medical Licensing Board in Her Majesty's dominions will be recognized pro tanto.
7. Candidates who may have passed in all subjects but one, either at the University or the Nova Scotia Medical Board Matriculation Examinations, may enter as undergraduates, and will be allowed after six months to pass a Supplementary Examination in the subject in which they previously failed.
§ LXIV.-Degree Examinations.-Candidates for the Degrees of M. D. and C. M. shall be required to pass two examinations - the Primary and Final M. D., C. M. examinations, and to have satisfied at the dates of the examinations certain conditions as to attendance on classes, etc.
§ LXV.-Primary M. D., C. M. Examination.1. Candidates for this examination shall be required to produce certificates to the following effect:-
(1.) Of having passed the Matriculation 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.
(2.) Of having, after passing the Matriculation or other equivalent examination, attended either in this University, in the Halifax Medical College, or in some other School of Medicine
approved by the Senate, two courses of 100 lectures each, in each of the following subjects, viz:-Anatomy, Chemistry, Materia Medica, and Physiology ; and two courses of instruction of the same duration in Practical Anatomy, in the course of which they shall have dissected the whole body (i.e., the head and neck and upper and lower extremities) at least twice.
(3.) Of having, after passing the Matriculation Examina ${ }^{-}$ tion, attended either in this University, in the Halifax Medical College, or in some other University or College, approved by the Senate, one course of instruction of fifty lessons each, in each of the following subjects, viz., Botany and Practical Chemistry, and one course of twenty-five demonstrations in Histology.
(4.) Either of having, after passing the Matriculation Examination, attended at the Halifax Medical College or at some College approved by the Senate, one course of instruction of thirty lessons in Practical Dispensing, or of having after passing the Matriculation Examination, had three months practice in the dispensing of drugs with a recognized apothecary or dispensing medical practitioner.
2. Candidates will be required to pass written and oral examinations in Chemistry, Botany, Anatomy, Physiology, Histology, and in Materia Medica and Therapeutics, and shall also be required to pass written and practical examinations in Practical Chemistry.
3. The Primary M. D., C. M. Examination will be held in the third week in April. Candidates are required to transmit the certificates specified above to the Secretary of the Faculty, at least fourteen 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-half of the amount of the graduation fee.
4. Candidates may appear for examination in Botany, and Histology, one academic year after passing the Matriculation Examination, on presentation of the certificates specified above, so far as they apply to these subjects.
5. If so disposed, candidates may, at the end of their second year, elect to appear for examination in any two (but not less than two) or more of the remaining subjects of the Primary Examination, provided always that Chemistry shall be one of such elected subjects.

Note.-In the application of this sub-section, Practical Chemistry is to be taken as well as Chemistry.
6. Candidates who appear for examination in Botany, etc., at the end of the first year, will be required to pay one-sixth of the amount of the graduation fee and the remainder of the half
fee at their next examination in other Primary subjects. Should the candidate fail to pass in any subject or subjects, the fee will not be returned to him, but he will be admitted to one subsequent Examination in such subject or subjects on payment of one-half the original fee.
§ LXVI.-Final M. D., C. M. Examination.-1. Candidates for this examination shall be required to furnish certificates to the following effect, viz, :
(1.) 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 :-

$$
\text { Halifax, } \longrightarrow, 18-
$$

I, the undersigned, being desirous of obtaining the Degrees of Doctor of Medicine and Master in 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, and that I am not (or shall not be at that time) under articles as a pupil or apprentice to any Physician, Surgeon or Apothecary.
(Signed),
A. B.
(2.) Of having passed the Primary M. D., C. M. Examination at this University, or of having subject to the regulations of § Lxv passed the same examination at the Halifax Medical College.
(3.) Of, after passing the Matriculation Examination, either (a) having attended during four academic years at least two courses of lectures per year in subjects of the Primary and Final M. D., C. M. Examinations, either in this University or at the Halifax Medical College, or at some other recognized Medical School ; or (b) having spent one calendar year in the study of Medicine in the office or offices of one or more registered medical practitioners, and having attended during three academic years courses of lectures as above.

Note.- The following shall be the form of certificate required of students who may wish to constitute one "annus medicus" by studying with a physician :

I hereby certify that Mr. $\longrightarrow$, of , studied medicine under my direction for a period of - months, viz., from to . ——, Preceptor.
"Preceptor to state his qualification, whether M. D. or otherwise."
The time included in the above certificate must in all cases be subsequent to the passing of a recognized Preliminary or Matriculation Examination.

Persons having begun the study of Medicine after Jan. 1st, 1892, shall not be allowed to constitute an annus medicus by studying in a physician's office. In all such cases at least four academic years will be required by this Faculty.
(4.) "Of having, after passing the Matriculation Examination attended at the Halifax Medical College, or at some other School of Medicine approved by the Senate, two courses of 100 lectures each, in each of the following subjects, viz, :-Principles and Practice of Surgery, Obstetrics and Diseases of Women and Children, and Principles and Practice of Medicine ; two courses of lectures of fifty lectures each, in each of the following subjects, viz. :-Clinical Medicine and Clinical Surgery; one course of fifty lectures in Medical Jurisprudence, including Hygiene and Insanity, one course of at least 25 demonstrations in Pathology, and one course of at least 20 lectures in Ophthalmology, Otology and Laryngology.
(5.) Of having, after passing the Matriculation Examination, attended during one calendar year the practice of the Victoria General Hospital, or that of some other Hospital approved by the Senate, and of having attended during at least six months the practice of a Dispensary or of the out-patient department of a general hospital.
(6.) Of having, after passing the Matriculation Examination, served at least six months as a dresser in the Surgical wards and six months as Clincal Clerk in the Medical wards of a recognized Hospital, or otherwise giving satisfactory evidence of practical work in Surgery and Medicine.
(7.) Of having, after passing the Matriculation Examination, attended for at least six months the practice of a lying-in hospital, approved by the Senate, or of having attended at least six cases of midwifery, under a recognized practitioner.
(8) Of having, after passing the Matriculation Examination, obtained proficiency in the practice of Vaccination under a recognized practitioner.
2. Candidates will be required to pass written and oral examinations in the following subjects :-Principles and Practice of Medicine,* Obstetrics and Diseases of Women and Children, Principles and Practice of Surgery, $\dagger$ and Medical Jurisprudence, (including Hygiene and Insanity). In Medicine and Surgery there shall also be practical clinical examinations conducted at the bedside, cases being submitted for diagnosis and treatment.
3. The final M. D., C. M., Examination will be held in the third week in April. Candidates are required to transmit the certificates specified above to the Secretary of Faculty at least fourteen days before the date of the Examination, 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-half of the amount of the graduation fee.

[^15]4. Candidates may appear for examination in Medical Jurisprudence (including Hygiene and Insanity) alone, three academic years after passing the Matriculation Examination, on presentation of the certificates specified above, so far as they apply to this subject.
5. Candidates who appear for examination in Medical Jurisprudence at the end of their 3rd year will be required to pay one-sixth of the amount of their graduation fee, and the remainder of the half at their final examination. Should the candidate fail to pass in any subject or subjects, the fee will not be returned to him, but he will be admitted to one subsequent examination in such subject or subjects, on payment of onehalf the original fee.
§ LXVII.-Academic Costume, etc.-1. Doctors of Medicine of this University shall be entitled to wear black stuff gowns and hoods. The hoods shall have a lining of scarlet silk bordered with white silk.
2. Successful candidates for this degree shall be required to appear at Convocation in academic costume to have the degree conferred upon them. Degrees shall not be conferred in the absence of the candidate, except by special permission of the Senate.
3. 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 ergo Universitatem Dalhousianam ad extremum vitæ halitum, perseveraturum ; tum porro artem medicam caute, caste, et probe 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 præsens mihi sponderti adsit Numen.
§ LXVIII.-Fees.-The following fees, payable by candidates for the degrees of M. D., C. M., are in all cases payable in advance :-

| egistration Fee | \$ 200 |
| :---: | :---: |
| Matriculation Examination Fee . | 1000 |
| Chemistry Class Fee | 1200 |
| Chemistry Laboratory Fee |  |
| Botany Class Fee | 600 |
| Graduation Fee | 30 |

## fnstitutions.

## THE UNIVERSITY LIBRARY.

The General Library consists of about 4,500 volumes, selected to meet the wants especially of students of the Faculties of Arts and Science.

It contains the Mackenzie Colleotion of works on Mathematical and Physical Science, which was presented to the College by the relatives of the late Professor J. J. Mackenzie ; and the Robert Morrow Collection of works on Northern Antiquities and Languages, presented by Mrs. Robert Morrow.

During the past year, 550 volumes and about 60 pamphlets, etc., have been added to the Library. Last year Prof. James Seth generously presented the Library with the proceeds of a course of Lectures on Psychology to Teachers. With part of this fund of $\$ 245.00,56$ volumes have already been purchased for the Philosophical Department.

This year, the Library has been presented with a memorial of the late Prof. DeMille, M. A., who from 1866-80 filled the chair of Rhetoric and History in this college. Dr. MacMechan generously expended the proceeds of a course of public lectures on Shakespere, delivered by him during the session now ended, on the purchase of a splendid collection of standard works of English Poetry and Fiction. This collection of 204 volumes, together with a portrait of Prof. DeMille, has been placed in the DeMille Press.

Through the kindness of Dr. Furnivall, the Library has been enriched with 41 volumes of the publications of the new Shakespere Society, and also with a very valuable collection of 23 volumes of the Transactions of the Philological Soeiety.

The Philomathic Society has recently begun what promises to be a very interesting and useful collection of Canadian works. Already 42 books and pamphlets have been added to the Canadian corner.

An interesting and excellent collection of 24 volumes on Missions has been made and presented to the Library by the Y. M. C. A. of the College.

To the generosity of one of our graduates, Mr. F. H. Bell, B. A., the Library is indebted for 25 useful volumes on Philosophy and Classics.

During the year, the Library has been supplied, through the kindness of John Doull, Esq., and Adam Burns, Esq., with the following periodicals :-Shakespeariana, Bookman, Poet Lore, and Modern Language Notes.

In addition to the above, the following presentations have been received :-MacMillan \& Co., 49 volumes ; Dalhousie Gazette, 33 volumes ; Alumni Association, 7 volumes ; President Forrest, 8 ; Dr. MacGregor, 4 ; Dr. A. H. McKay, 1 ; Alex. McKay, Esq., 1 ; Mrs. W. H. Harrington, 2 ; W. H. Johnston, 1 ; Miss McPhee, 1 ; Mr. J. Montgomery, B. L., 1 ; Angus Murray, Esq., 2 ; Dr. McNutt, 1 ; Prof. Chandler, 1 ; Prof. Murray, 6 ; Heath \& Co., 8 ; Ginn \& Co., 1.

The following scientific societies have sent valuable publications to the Library:-Royal Society of Canada, 1 volume ; Geological Survey of Canada, 4 ; Smithsonian Institution, 4 ; Mining Society of N. S., 2 ; Bridgeport Scientific Society, 1. From the N. S. Government, 6 publications have been received; from the Dominion Government, 4.

Calendars have been received from the following Universities, Colleges, \&c.:- The Universities of Aberdeen, Edinburgh, Glasgow, St. Andrews, London, Durham, College of Physicians and Surgeons, London; Universities of Melbourne, Sydney, Japan, Harvard, Yale, Cornell, Columbia, California, Michigan, Lehigh, Vassar, Bryn Mawr, University Colleges of Dundee, Bristol, Hartford Theological Seminary ; also the following Canadian Collegee and Universities, Toronto, Trinity (Toronto), Wycliffe, Manitoba, Queen's, Laval, McGill, New Brunswick, Mount Allison, Acadia, King's, St. Francis Xavier, St. Boniface, Ladies' College, Halifax ; Victoria College, Manchester.

## THE UNIVERSITY MUSEUM.

The Museum* consists chiefly of the Thomas McCulloch and the Patterson Collections.

The Thomas McCulloch Collection was presented to the University in 1884, by the Rev. William McCulloch, D. D., of Truro, with a fund of $\$ 1400$ for extending the collections. It formed the museum of Prof. Thomas McCulloch, who occupied the Chair of Natural Philosophy from 1863 to 1865 . It contaius a large and valuable collection of birds, especially of the native birds of the Maritime Provinces, many specimens of

[^16]minerals, especially of Nova Scotian species, also rock specimens, a set of Carboniferous fossils, chiefly NovaScotian, and a collection of European Cretaceous fossils, Indian implements, shells of recent Mollusca, native plants, \&c. These collections were made in part by Rev. Thomas McCulloch, D. D., the first President of the College. The McCulloch collection of birds has recently been increased by additions paid for out of the McCulloch Museum Fund. An arrangement has been made with Mr. T. .T. Egan, by which his valuable collection, containing about 30 cases of native birds, has also been added.

The Patterson Archeological Collection.-This collection of Indian Antiquities was made by Rev. George Patterson, D. D., F. R. S. C., while engaged during a number of years in researches regarding the history andmodes of life of the aborigines of Nova Scotia. The collection was presented by him to the College in 1889, on the condition that the Governors should make suitable "provision for the preservation and exhibition of the same, in such a manner as is usual in well-managed museums." It is kept as a separate collection. It contains 288 specimens, separately catalogued, and is arranged conveniently for reference. About 250 of the specimens have been obtained in Nova Scotia; they illustrate the stone age of its aboriginal inhabitants, and form an almost complete representation of the articles usually found among the remains of the native races of North America. There is also a number of similar articles from the United States, Scotland, the West Indies, and especially the New Hebrides. The classified catalogue of the collection, which is arranged according to the method adopted in the description of the archæological collections of the Smithsonian Institution, contains full particulars of the localities where the several specimens were obtained.

A Collection of Nova Scotian Plants, mounted and systematically arranged, is being formed by members of the Philomathic Society, who collect during the summer months.

Donations of Dried Plants from the Pacific Islands and Australia, have been made by Rev. Hugh Robertson and Rev. Joseph Annand, M. A., New Hebrides; and of Nova Scotian Plants by Mr. George G. Campbell, B. Sc., Truro.

A Collection of Carboniferous Fossils, from the coal measures at Spring Hill, has been presented by Mr. Swift, of the Spring Hill Mines, Cumberland County.

## THE GYMNASIUM.

The Gymnasium is provided with apparatus, which was purchased by funds contributed for the most part by former students.

Instruction is furnished by a competent Gymnast.
The following are the general regulations for the use of the Gymnasium :-
(1.) All male students, graduates, and members of the Alumni Association, shall, on paying the sessional fee, be entitled to the use of the Gymnasium.
(2.) Students shall be entitled to instruction in gymnastics without the payment of any additional fee.
(3.) Graduates and members of the Alumni Association shall be admitted to the classes, on payment of a fee of three dollars.

## THE ALUMNI ASSOCIATION.



```
EXTRAACT FROM THE LAWS.
```

1. The object of the Association shall be the promotion of the interests of the University.
2. The Association shall consist of Ordinary and Associate Members.
3. All Graduates of the University, all persons who, during at least one academic year, have been registered students, either of Dalhousie College or of Colleges which have been merged in or united with Dalhousie College, and all other persons who have at any time been educated by means of the funds of Dalhousie College, shall be eligible for ordinary membership. But no persons other than graduates shall become members until three years have elapsed from the date of their first entering the College, except by special permission of the Executive.
4. Persons not eligible for membership under Section 3 may be elected Associate members.

OFFICERS.


## STUDENTS' SOCIETIES.

## General Students' Meeting.

OFFICERS.
President. . ............... D. G. Mackay, '93, (Arts.)
Vice-Presidents f C. M. Woodworth, '93, (Law.) (F. E. Rice, '93, (Medicine.)

Secretary. . .................. J. 1). Mackay, '94, (Arts.)
Executive Committee ... $\left\{\begin{array}{l}\text { J. Montgomery, (Law.) } \\ \text { J. W. Logan, (Arts.) } \\ \text { E. J. Meyer, (Medicine.) }\end{array}\right.$
This meeting is 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.

The Dalholsie Gazette is published by the students of the University under the authority of the General Students' meeting. The Editors for 1893-4 are as follows :-H. McL. Fraser, F. S. Simpson, Miss Jennie Ross, G. K. Butler, J. C. Murray. Financial Manager, A. D. Archibald, '95, Arts; Assistant Manager's, A. F. McDonald, '94, Law; S. Williamson, '96, Med. Other editors will be appointed at the beginning of the session by the Students of the Faculties of Law and Medicine.

## Arts Students' Meeting.

This meeting is held regularly 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.


## The Sodales Debating Club.

The Sodales Debating Club meets weekly during the session, subjects of general interest being discussed.

OFFICERS.


## The Medical Debating Society.

Meetings of this Society are held weekly throughout the session. Topics of general interest are discussed, and papers on medical subjects are read by city doctors.

## The Mock Parliament.

The Mock Parliament meets weekly. All students of the University are welcome, but only students in law are allowed to take part in the debates, which are mostly of a political nature, on questions of the day. It is conducted strictly in accordance with parliamentary procedure.

## Young Men's Christian Association.

Meetings of the Association are held every Saturday evening at the College.

Prsident ....... .............P. M. McDonald.<br>Vice-President. . . . . . . . . . . . . . A. T. Rовв.<br>Recording Secretary. . . . . . . . . John Stirling, '93.<br>Corresponding Secretary...... W. H. Smith, '94.<br>Treasurer . . . . . . . . . . . . . . . . . Thomas Irving.

## 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 years standing are required to take part in at least one case during the session. (See Law Faculty.)

The Dalhousie Athletic Club.

| Honorary | esident Forrest. |
| :---: | :---: |
| President. | Willard Thompson. |
| Secretary. | Shaw. |
| Treasurer. | A. D. Archibald. |
|  | $\left(\begin{array}{l} \text { H. Graham, } \\ \text { E. Thompson, } \end{array}\right.$ |
| Executive Committe | G. Gordon, |
|  | J. McKinnon, |
|  | J. Mokinar |

## The Philomathic Society.

The objects of this Society are : (a) to stimulate interest in Literature, Science, and Philosophy ; (b) to encourage thorough study and independent investigation in special departments; (c) to give practice in the presentation of subjects, and in the experimental illustration of lectures ; $(d)$ to encourage the formation of collections in Botany, Zoology, Geology, Local History, \&c. Meetings are held fortnightly during the College Session.

## alnibersity lists.

DEGREES<br>Conferred April 25th, 1893.

## BACHELOR OF ARTS.

Annand, Edward Ernest ..............Truro.
Barnstead, Arthur Stanley ......... . Halifax.
Douglas, Ernest Augustus ............ . Maitland.
Finlayson, Duncan.......... . ......... (Arand River, C. B.
Forbes, Edgar William.... .......... Dartmouth, N. S.
Howatt, Cornelius Alfred ......... . . Summerside, P. E. I.
Keefler, Ralph Tupper.................Bridgewater.
Logan, John Daniel................... Pictou.
McArthur, Samuel Johnston . . . . . . . Tyne Valley, P. E. I.
McDonald, Ida Grace ................. Sherbrooke.
Mackay, Donald McGregor ........ . . Lorne.
McKay, Thomas Calvin .... ......... Dartmouth, N. S.
McLean, Charles Archibald .......... . Englishtown, C. B.
Macrae, Archibald Oswald........... St. John, N. B.
Martin, Albert John Daniel....... . Valleyfield, P. E. I.
Murray, Lucy Christine.............. . . Studlolm, N. B.
Putnam, Harold......................... Lower Onslow.
Robinson, David Magee ............. . . Sussex, N. B.
Ross, George Edward. . . . . . . . . . . . . . . Newport, Hants Co.
Ross, Hedley Duncan Vicars......... .Stanley Bridge, P. E. I.
Thompson, Willard Sutherland ..... New Glasgow.
MASTER OF LETTERS.
Muir, Ethel, B. L Halifax, N. S.

MASTER OF ARTS ( $a d$ eundem).
Murray, Walter Charles, M. A. (Edin.).
BACHELOR OF SCIENCE.
Arthur, \&゙eorge ........................... Alberton, P. E. I.
O'Brien, Robert Fadlikner ............ Noel, Hants.

## BACHELOR OF LAWS.

Doyle, Matthew Nicholas...... Halifax (conf'd Sept. 21, 1892).
Anderson, Albert Hunson, B. A. .... Lunenburg.
Bennett, Richard Bedford.......... Hopewell Cape, N. B.
Brown, Harry Whidden, B. A........ . Wolfville, N. S.
Cameron, Daniel Alexander .. ......Sydney, C. B.


DOCTOR OF MEDICINE AND MASTER IN SURGERY ( $a d$ eundem).
Arther Morrow, M. B., C. M , (Edin.)

DUCTOR EF LAWS (causa honoris).
Hon. Mr. Justice R. Sedgewick..... Ottawa.

## GENERAL PASS LIST.

(Containing the names, alphabetically arranged, of undergraduates who have pass in all the subjects proper to their years.)

## FACULTY OF ARTS.

For B. A. Degree.
Fourth Year.-Annand, Edward E. ; Barnstead A. S. ; Douglas, E. A.; Finlayson, D.; Forbes, E. W. ; Howatt, C. A.; Keefler, R. T. Logan, J. D. ; McArthur, S. J. ; McDonald, Ida G.; Mackay, D. McG. Macrae, A. O.; McKay, T. C. ; McLean, C. A. ; Martin, A. J. D. Murray, Lucy C. ; Putnam, H.; Robinson, D. M.; Ross, George E. Ross, H. D. V.; Thompson, Willard. S.

Third Year. - Bigelow, H. V. ; Brehaut, Ernest ; Fraser, H. M.; Grant, R. J.; Grant, M. D.; Grant, M. F.; Gray, W. S.; Hebb, Bertha B.; Hobreeker, Clara C.; Jrmieson, Harriet J.; Johnson, E. W.; Macdonald, Peter M. ; Mackintosh, John ; Mackay, A. W ; Mackay, J. D. ; McKenzie, Ellen; McPhee, Margaret; Putnam, J. F. ; Ross, Mary S. ; Simpson, F. S.; Smith, W. H. ; Tattrie, G. P. ; Yorston, Fred.

Second Year.--Archibald, Adams D.; Bent, Tillie A.; Butler, G. K.; Church, Nina E.; Doyle, J. J.; Duchemin, H. P. ; Foster, A. H.; Frame, D. A.; Fraser, D. A ; Hepburn, W. M ; Jorảan, E. E. ; Lawsoñ, T.; Layton, J. S. ; Macdonald, Blanche ; McDonald, D. ; Robins, E. P. ; Ross, Jennie W. ; Stirling, J.; Strathie, R. G.

First Year.-Baker, Elma; Cock, D. G.; Cummings, A. r.; Cumming, M.; Forbes, W. ; Grant, G. A.; Hood, G. ; Macneill, M. ; MeGregor, R. M. ; MeIntosh, D. ; Robb, A. F. ; Sedgwick, W. M.; Ross, W. D. ; Sutherland, G. A.

> For B. L. Degree.

Eirst Year.-Johnstone, J. R.

## FACULTY OF PURE AND APPLIED SCIENCE.

## For B. Sc. Degree.

Fourth Year.-Arthur, G. ; O'Brien, R. F.
Third Year.-McKittrick, F. J. A.
Second Year. - Lange, Kristian A. Ch.
First Year.-Macdonald, W. A. ; Dickie, G.

## FACULTY OF LAW.

For LL. B. Degree.
Third Year.-Anderson, A. H.; Bennett, R. B.; Brown, H. W., Cameron, D. A.; Fulton, J. A.; Graham, R B.; Grierson, J. A; Kemny, J. B.; MacCoy, W. B.; March, S. E.; Montgomery, J.; Munro, H. H.; Payzant, J. A.; Puddington, H. F. ; Rowlings, G. A. R. ; Stairs, H. B. ; Thompson, W. E.; Tilley, L. P. D. ; Woodworth, C. M.

Second Year.-Borden, H. C.; Copp, H. B. Graham, R. H.; Hill, W. A. G.; Irving, R. A.; McDonald, A. F.; Robertson, S. G.

First Year.-Crosby, L. B.; Fraser, T. M.; Fullerton, C. P.; Gerrior, E. L.; Gillis, R. M.; Grant, D. K.; King, H. W. D. W.; Lovett, L. A.; Mcllreith, R.; Outhit, J. F.; Pineo, H. V.; Ross, G. W.; Shaw, G. S.; Tremaine, C. F.; Vieking, J. H.

## FACULTY OF MEDICINE.

Final M. D., C. M. Examination.
Byers, David Walter; Coady, Patrick Francis ; McAulay, Murdoch William; McGeorge, Thomas; Meyer, Edward James; Rice, Frank Ernest.

Primary M. D., C. M. Examination.
Murphy, George Nelson ; Simpson, Henry Osmoná.

HONOURS, MEDALS, Etc., 1892-93.

## HONOURS

English and Greek:- Ross, Hedley Duncan Vicars, High Honours.

Philosophy :-Logan, John Daniel, High Honours. Murray, Lucy Christine, High Honours. Macrae, Archibald Oswald, Honours.

GENERAL DISTINCTION.
McKay, Thomas Calvin, With Distinction. Ross, George Edward, With Distinction.

## SPECIAL PRIZES.

Avery Prize: Ross, George Edward.
Waverley Prize: Mack, Edward Emmerson.
Special Prize in English: Butler, George Killam.
SENIOR MUNRO EXHIBITIONS.
(1) Brehaut, Ernest.
(3) Fraser, Hugh McLeod.
(2) McKittrick, Fred. James Alex. (4) Grant, Melville Finlay.
(5) MacIntosh, John.

## SENIOR MUNRO BURSARIES.

(1) Gray, William Smith.
(2) Mackay, Angus William,
(3) Bigelow, Harry Veeder.
(4) Grant, Robert J.
(5) Ross, Mary Sophia.
(6) Dickson, Henry Chase.
(7) Johnson, Ebenezer William.
(8) Hebb, Bertha Boyd.
(9) Grant, Milton Daniel.

SIR WILLIAM YOUNG AND PROFESSORS' SCHOLARSHIPS.
First Class Distinction : Church, Nina Elizabeth ; Maeneill, Murray.
Second Class Distinction: Baker, Elma; Forbes, William; Grant, George ; Hood, George.

## EXAMINATIONS, 1892-93.

## FACULTIES OF ARTS AND SCIENCE.

## MATRICULATION EXAMINATION

(The following list contains the names of those who either passed the Matriculation Examination, or were allowed to matriculate on report of the Examiners for Munro Bursaries. The names are in alphabetical order.)

First Year.-Baker, Elma; Church, Harold Ambrose ; Forbes, William; Grant, George Alexander; Hill, Allan Massie; Hood, George ; Macneill, Murray ; Mahon, Harry Edmund ; Murray, John Carey ; Ross, William Daniel.

## MATRICULATED BY CERTIFICATE

Bell, John; Chisholm, Winnifred B.; Cock, Daniel George ; Cummings, Alfred Graham; Cumming, Melville; Currie, William Douglas; Dickie, Gordon ; Hetherington, Eva F.; Johnston, James Robinson ; Macdonald, William Angus; Mitchell, Norman Cyril;

McGregor, Robert Malcolm ; McIntosh, Douglas ; McRae, Duncan Murdoch; Morrison, John Strople Metzler; Murray, L. Wilbur; Robb, Alexander Francis; Sedgwick, William Middleton; Stirling, Alexander Dinwoodie; Sutherland, George Adam.

Second Year.-Church, Nina E.; Foster, Arthur Hayward; Hepburn, William Murray ; Smith, Alexander ; Strathie, Ralph Grant.

## SUPPLEMENTARY EXAMINATION.

Third Year.-Latin, Physics, History and Political Economy.Douglas, Ernest Augustus. Physics.-Keefler, Ralph Tupper. Senior English.-Howatt, Cornelius Alfred. Greek.-McDonald, Ida Grace.

Second Year.-Algebra and Trigonometry.--MacDonald, Peter McLaren. Algebra and Trigonometry.-Murray, Robert Harper. Psychology.-Mackay, William Park.

First Year.-Algebra.-Forrest, William Duff. Geometry.Lange, Kristian Andrew. Latin and English.-Putnam, Harold. Mathematics, Chemistry and English.-Bent, Tillie Agatha. French.Logan, John Wilbert.

## degree examinations.

## CLASS LISTS.

(Containing the names, arranged in order of merit, of all students who have passed in the subjects of the various classes.)

## Latin.

Fourth Year: Class I-Logan, J. W. Passed-Mackay, D. G.
Third Year: Class I-Brehaut, E ; Bigelow, H. V. Class IIFraser, Hugh ; Gray, W. S. ; Grant, M. D. Passed-Putnam, Jas. ; Hebb, Bertha ; Robinson, D. M. ; McKenzie, Ellen ; Murray, R. H.

Second Year: Class I-(Butler, G. K. ; Rose, Jennie ; ) Duchemin, H. P. ; Church, Nina. Class II-Macdonald, Blanche ; Foster, A. H. ; Robins, Edwin ; Hepburn, W. M. Passed-Stirling, John; Archibald, Adams; Jordan, E. E. ; McDonald, D. ; Lawson, T.; Fraser, D. A. ; Strathie, R. G.; Layton, J. S. ; Rodgerson, J. A. C.; Bent, Tillie ; Doyle, J.; Frame, D. A. ; McNairn, W. W. ; Currier, F. A.

First Year: Class I-Grant, G. ; MacNeill, M. Class II-Ross, W.m. ; Hood, G. ; Baker, Elma ; MacGregor, R. M. Passed-Mitchell, G. F. ; Cumming, M. ; Robb, A. F. ; Fraser, A. L. ; Forbes, W.; Sutherland, G. A. ; Hill, A. M. ; Morrison, M. ; Cock, D. G. ; Sedgewick, Wm.; McKay, W. R.; Currie, W. D. ; Murray, J. C.; Murray, L. W. ; Stirling, A. D. ; Bell, J. ; McIntosh, D. ; Cummings, A. G.

## Greek.

Fourth Year: Class I-Logan, J. W. ; Passed-Ross, Hedley.
Third Year: Class I-Brehant, E.; Fraser, H. Class II-Gray, W. S. Passed-Hebb, Bertha; McPhee, Margaret; Tattrie, G. P.

Second Year: Class $I$-Ross, Jennie ; Butler, G. K. ; Duchemin, H. P. Class II-Church, Nina; Macdonald, Blanch. PassedRobins, Edwin ; Hepburn, W. M. ; Foster, A. H. ; Stirling, John ; Archibald, A. ; Jordan, E. E. ; Doyle, J. J.; Layton, J. S. ; Lawson, T. ; Fraser, D. A. ; Strathie, R. G. ; McDonald, D. ; McArthur, S. J. ; Frame, D. A. ; Bent, Tillie ; McNairn, W. W,

First Year: Class I-Grant, G. ; MacNeill, M. Class 11 Baker, Elma; Cumming, Melville; Fraser, A. L. Passed-Sutherland, G. A. ; Forbes. W. ; Ross, W. D. ; Robb, A. F. ; MacGregor, R. M. ; Murray, L. W. ; Hill, A. M. ; Cock, D. G. ; Murray, J. C.

## French.

Third Year.-Class I-Lange, Kris tian. Class 1I-Finlayson, D. Passed-Morris, C. H.

Second Yaar.-Class $I$-Forbes, E. W.; Mack, E. E. ; Hood, George. Class II-McLean, C. A. ; Logan, J. W. Passed-Johnston, James R.; Duchemin, H. P. ; Hobrecker, Lottie; Morrison, M.; McDonald, A. D. ; Rodgerson, J. A. C. ; Gunn, Alexander D.

First Year. - Class I-Ross, Mary S.; Ernst, Sophy. Class IIBigelow, H. V. ; Jamieson, Harriet ; Bell, John ; Marshall, Emily M. Passed-Mahon, H. ; Hill, Amy ; Hetherington, Eva F.; McIntosh, D. ; Chisholm, Winnifred B. ; Macdonald, W. A. ; McInnes, Harry ; Sedgewick, W. M. ; McKenzie, John ; Cummings, A. G.

## German.

Fourth Year.-Cluss I-Hobrecker, Clara.
Third Year.-Class 1 -Ernst, Sophy.
Second Year.-Class $I$-Hobrecker, Lottie; Ernst, Sophy. Class 1I-Barnstead, A. S. ; Ross, Hedley ; Forrest, W. D. PassedO'Brien, R. F. ; Currier, F. A.

First Year.-Class I-Johnston, James R.; Maxwell, Ella. Class II-Dickie, Gordon. Passed-Maxwell, G. H. ; Simpson, Frank S. ; McDonald, A. D. ; Yorston, Fred ; Hill, Amy.

## English.

Senior Englisie. -Class I-Hobrecker, C. C. ; Simpson, F. S. ; Mackintosh, John ; Yorston, Fred. Class II--Milligan, G. S.; McKenzie, Ellen ; Ross, H.; McKay, A. W. Passed-Jamieson, Harriet ; Hebb, Bertha B. ; Putnam, H. ; Liechti, Bertha.

Second year. Class I-Duchemin, H. P. ; Butler, G. K. Class II -Ross, Jennie W.; Church, Nina; Lange, K.; Archibald, A.; Frame, D.A. ; Doyle, J. J. Passed-(Robins, E. P. ; Bent, T.; Hepburn, W. A. ;) Foster, A. H. ; Strathie, R. G. ; (Fraser, D. A. ; Gunn, A. D. ; Jordan, E. E. ; Layton, J. S. ; Stirling, J. ;) (McDonald, Blanche ; McNairn, W. W. ; Fraser, A. L. ;) Mack, E. E.; (Hobrecker L. Miss ; Lawson T. ; Morton, R. F. ;) Currier, F. ; Parker, L. W. ; (McDonald, D. ; Forrest, W. D. ; Smith, A. ;) Maxwẹll, Ellen; Rodgerson, J. A. C.

First Year.-Classs I-Macgregor, R. M. Class II-Dickie, G.; McNeill, M. ; Hood, G. ; (Murray, J. C. Ross, W. D. ;) Morrison, M. ; Sedgewick, W.; Robb, A. F. Passed-Munroe, J.; Bell, J.; (Baker, Miss E.; Maxwell, Miss E. ;) (Cummings, A. G. Sutherland, G. A. ;) Forbes, W.; Mahon, H. ; (McKay, W. R. Irving, T. ;) Grant, G. ; Macdonald, W. A. ; Campbell, A. H. ; Mackintosh, D. ; Cock, D. G. ; Cumming M. ; Maxwell, G. H. ; Murray, L. W. ; Currie, W. D. ; Kennedy, A. G. ; (Hetherington, Miss E. F. ; Johnston, J. R. Stirling, A. D. ; Archibald, E. H. ; Farquharson, W. D. ; McRae, D. M.)

## History.

Fourth Year.--Class $I$-Ross, George ; (Barnstead, A. ; Finlayson, D.) Class II-Jamieson, Harriet; Keefler, R. T. ; Robinson, D. M. Martin, A. J. ; McDonald, Ida G. ; Morrison, J. S. M. ; Forbes, E. Passed-Thompson, W. S. ; Murray, Lucy ; Annand, E. ; Mitchell, G. F. ; Douglas, E. A. ; Puṭnam, H.

Third Year.-Class $I$-Yorston, Fred; (Simpson, F. S. ; Hebb, Bertha;) Fraser, H. M.; McKenzie, Ellen. Class II-Jobb, F. L.; Gray, W. S. ; Grant M. D. Passed-Smith, W. H. ; McKay, J. D. ; Bigelow, H. V. ; McPhee Margaret ; Grant, R. J. ; Grant, M. F.; Murray, R. H. ; Putnam, James ; McDonald, P. M. ; Milligan, G. S. ; Crawford, James A. ; Johnson, E. W.; Tattrie, Geo. ; Morris C.; Hattie, J. H.

## Political Economy.

Class I-Mackintosh, John; Mackay, A. W.; Grant, R. J.; Forbes, E. ; Bigelow, A. V. Class II-Mackay, J. D.; Jamieson, Harriet ; Johnson, E. W. ; Grant, M. F. ; Robinson, D. M. PassedPutnam, James; Fraser, H. M. ; Hattie, J. H. ; Smith, W. H. ; Crawford, James A. ; Macdonald, P. M. ; Maclean, C. A. ; Jobb, F. L. ; Martin, A. ; Morrison, J. S. M. ; Bell, John; Annand, E. ; Murray, R. H. ; Tattrie, George; Grant, M. D. ; Gunn, A. D.; Mackay, D. M.

## advanced Political Efonomy.

Class I-Finlayson, D. ; Ross, George ; Thompson, W. S. ; Murray, Lucy. Class II-Putnam H. ; Passed-Mitchell, G. F. ; Morris, C.

## Junior Philosophy.

Class I-*Stirling, J. ; (*Butler, G. K. *Robins, E. P. ;) *Ross, Jennie ; *Strathie, P. G.) Class II-*Doyle, J. J. ; (Foster, H. H. Hepburn, W. M. ; Macdonald, Blanche ;) (Archibald, Adams ; Duchemin, H. P.) Passed.-(Frame, D. A. ; Fraser, D. A. ) (Fraser, A. L. ; Layton, Jas. ; Jordan, E. E. ;) MeNairn, W. W.; Rodgerson, J. A. C. ; Currier, F. A. ; (Gunn, A. D. ; Morton, R. T. ;) McDonald, D.; Church, Nina E.; (Bent, Tillie A. ; Lawson T., ;) Smith A.

## Senior Philosophy.

Class I-*Mackintosh, J. ; *Mackay, A. W. ; *McArthur, S. J. ; *Grant, R. J. Class II-*Ross, G. E. ; Smith, W. H. ; (Murray, Lucy C. ; Mackay, J. D. ;) Brehaut, E. ; Grant, M. F.; (Macdonald, P. M.; *McPhee, Margaret.) Passed-(Annand, E. E ; Jobb, F. L.; Macdonald, Ida G. ;) (McDonald, A. D. ; McKenzie, Ellen ; Parker, L. W. ;) (Crawford, J. A. ; Milligan, G. S. ; Tattrie, G. P. ;) Johnson, E. W.

## Ethics.

Class I-*Mackay, A. W.; (Mackintosh, J.; *McArthur, S. J. ;) *Keefler, R. T. Class 1 I-(*Hobrecker, Clara ; *McKay, T. C. ; *Ross, Geo, E. ;) *Arthur, George ; Macdonald, Ida G. Passed-(Kirke, J. H. ; McDonald, A. D. ;) Barnstead, A. S. ; Douglas, E. A.

## Mathematics.

Second Year.-Class I-Mack; Robins; Hepburn ; Lawson; Foster; Butler ; Stirling ; Macdonald, Miss B. Class II-Archibald, A. D. Passed-Jordan ; Ross, Miss ; W. ; Fraser ; Strathie ; Doyle ; Macdonald, D; Church Miss N.; Smith; Bent, Miss T. A.; Duchemin; Frame; Morton; Layton; Forrest ; Rodgerson; Lange ; Macdonald, N. H. ; Morris. Passed in Geometry and Mensuration.Currier ; McNairn.

First Year.-Class I-McNeill, M. ; Cumming, M. ; (Cock, Daniel; Kennedy Alexander ;) McTntosh, D. ; Robb, A.; Ross, W. D.; Sutherland, G. A. Class II-McKay, T.; Forbes, W.; Sedgewick, W.; Munroe, ; MeGregor, R. M. ; Stirling, A. D. Passed-Bell, J.;
*Took the additional work for distinction.

Baker, Miss E. ; Grant, G. ; Hood, G. ; Campbell, ; Farquharson ; Irving; Macdonald; Mahon; Ross, D. C.; Currie; Johnston; Cummings; Dickie ; McRae-Passed in Geometry-Archibald, E. H.; Marshall, Miss.

## Physics.

Senior Physics.-Class I-McKittrick, F. J. A. Class IIRoss, Mary S. ; McKay, T. C. Passed-Forbes, E. W.; Martin, A. J.

Junior Physics. -Class I-Mack, E. E. ; Class II-Ross, Mary S. ; Grant, M. F. ; MacKay, J. D. ; Grant, R. J. Passed-Bigelow, H. V. ; Smith, W. H. ; McPhee, Margaret ; Putnam, J. F. ; Johnson, E. W. ; Gray, W. S. ; McKenzie, Ellen M. ; Fraser, H. M ; Hebb, Bertha B. ; Lange, K. C. A. ; Tattrie, G. P. ; Jobb, F. L. ; Parker, W. L. ; Grant, M. D. ; Crawford, J. A. ; Milligan, G. S. ; Macdonald, P. M.

Practical Physics.-Class $I$-(Ross, Geo. E. ; McKay, T. C.) Class II-(McKittrick, F. J. A.; Martin, A. J.) Passed-McKay, D. M.

Organio Chemistry.
Class II-D. G. McKay

## Practical Chemistry (Advanced.) <br> (Special and quantitative work.)

Class II-George, Arthur ; Robinson, D. M.; McKay, D. G.; O'Brien, R. F. ; McKay, T. C.

## Practical Chemistry (Systematic.) <br> (Course of qualitative analysis.)

Class $I I$-Forbes, E. W. ; Grant, M. D.; Lange, Kristian ; Mack, E. E. ; Murray, Lucy C. ; McDonald, Ida G. ; Thompson, Williard S. ; Putnam, J. F.; Forrest, William D. ; McPhee, Margaret J. ; Martin, A. ; McDonald, N. H.

## Ingoranic Chemistry.

Class I-MeIntosh, D. Class $I I$-Sutherland, G. A. ; Cumming, M. ; McNeill, Murray ; Cock, Daniel G. Passed-MacGregor, R. M. ; Robb, Alexander F. ; Mackay, W. R. ; Morrison, M. ; Monroe, J. G. ; Irving, T. ; Hill, Amy ; McRae, D. ; McRae, W. R. ; Sedgewick, William ; Grant, George ; Hood, George ; Cummings, A. G.; Johnson, James R. ; Ross, William, D. ; Campbell, A. H.; Baker, Elma; Currie, W. D. ; Dickie, Gordon ; Ross, D. C. ; Hill, A. M. Kennedy, Alexander G.; Macdonald, W. A.; Archibald, E. H.; Mahon, H. ; Forbes, William ; Murray, John C. ; McDonald, Alexander ; Murray, L. W. ; McKinnon, M. ; McInnes, Harry ; Stirling, A. D.; Chisholm, Winnifred B.; Marshall, Emily M.; Hetherington, E. F.

## Sotany.

Class I-McKay, T. C. ; Robinson, D. M. Class II-Kirk, J. H. ; Keefler, R. T.; Annand, Edward; Dickie, Gordon ; Putnam, H. Passed-McRae, W. R.

Anatqmy.
Class II-O'Brien, R. F. Passed-Arthur, G.
Physiology.
Passed-O'Brien, R. F. ; Arthur, G.

Histology.
Class II-O'Brien, R. F.
Mechanical Drawing.
Passed-McKittrick, F. J. A.; Macdonald, William A.
Drawing and Modelling.
Passed-Lange, Kristian Ch. A.; Forrest, William D.

## FACULTY OF LAW.

## DEGREE EXAMINATIONS.

(Containing the names arranged in the order of merit in the First and Second Class and alphabetically in the Pass List, of Students who have passed in the various subjects.)

## International Law.

Class I.-Woodworth ; Stairs ; Cameron ; Bennett : Graham, R. B. Class II.-Puddington; Grierson; Brown; Rowlings; Munro ; Thompson, W. E. Passed.-Anderson ; Burns ; Crowe ; Fulton, J. A. ; Kenny ; MacCoy ; March ; Montgomery ; Payzant ; Russell ; Tilley.

## Marine Insurance.

Class I.-Graham, R. B. Class II.-March ; Graham, R. H. ; Stairs : Bennett, Passed.-Anderson; Brown; Crowe ; Fulton; Kenny; MacCoy ; McDonald, A. F. ; Munro ; Payzant ; Rowlings ; Russell; Thompson ; Tilley; Woodworth.

## Evidence.

Class I.-Cameron; (Woodworth Payzant, J. A. ;) Munro; Hewson ; (March ; Grierson.) Class II.-Copp ; Irving ; Hill ; Graham, R. B. ; Montgomery ; Rowlings ; Borden ; (Robertson ; Anderson ;) (Burns ; Paysant, W. L. ; Puddington.) Passed.-Bennett ; Brown ; Crowe ; Fulton ; Graham, R. H. ; Kenny ; MacCoy ; McDonald, A. F. Russell; Stairs; Tilley.

Equity (Third Year.)
Class I.-Cameron; Woodworth; Brown ; Bennett ; Graham, R. H. ; Anderson ; Hewson; Payzant, J. A. ; Rowlings; Puddington; Class II.--Borden ; Grierson; Robertson; Graham, R. B. ; Munro. Russell ; March; Stairs ; Hill. Pussed.-Copp; Crowe; Fulton; Irving ; Kenny ; MacCoy ; McDonald, A. F. ; Montgomery ; Payzant, W. L.; Tilley.

Sales.
Class I.-Brown ; Graham, R. B. ; Bennett; Fraham, R. H.; Stairs ; Russell ; Woodworth ; Cameron ; Payzant, J. A. ; Class II.Puddington; McDonald, A. F. ; Hewson ; Borden ; Munro ; Mareh ; Hill; Anderson; Grierson; Fulton; Rowlings. Passed.-Copp; Crowe; Fulton; Irving; Kenny; MacCoy; Montgomery; Payzant, W. L. ; Robertson ; Tilley.

Constitutional Law.
Class I.-Thompson, W. S. ; Barnstead; Finlayson; Keefler. Class II.-Borden; Hill; McDonald; Robertson. Passed.-Copp; Hewson ; Irving.

Conflict of Laws.
Class I.-Thompson, W. E.; Graham, R. H. Class II.-Hill Robertson. Passed,-Borden; Copp; Irving.

## Real Property.

Class I.-Thompson ; Montgomery ; Grierson ; Gerrior ; Graham, R. H. ; Fullerton; Grant ; Pineo. Class II.-Irving; Copp; King; Lovitt; Robertson; Outhit; McLean; Borden; McDonald, A. F. Passed.-Crosby ; Fraser, T. M. ; Gillies ; Hewson; Hill ; Mcllreith ; Payzant, W. L. ; Ross ; Shaw ; Tremaine; Vickery.

## Crimes.

Class I.-Grant; Crosby ; Keefler ; King; Fullerton. Class II.Outhit; Pineo ; Finlayson ; Barnstead; Gerrior ; Tremaine; McLean. Passed.-Beales ; Gillis; Gunn ; Lovitt; Mcllreith; Ross; Shaw; Vickery.

## Contracts.

Class I.-Fullerton ; Pineo ; Outhit; Grant; Keefler ; Thompson ; King ; Lovitt; Gerrior; Tremaine. Class II.--Gillis; Barnstead ; Vickeryl; McLean; Fraser ; Finlayson. Passed.-Beales ; Crosby ; Mcllreith ; McLeod ; Ross ; Shaw.

## Torts.

Class I.-Outhit. Class II.-Pineo. Passed.-Beales; Crosby; Fraser, T. M. ; Fullerton ; Gerrior ; Gillis ; Graham, R. H. ; Grant; King ; Lovitt ; McDonald, A. F. ; McIlreith ; McLeod ; Murray ; Ross ; Shaw ; Tremaine ; Vickery.

## Constitletional History.

Class II.-Grant ; Bigelow ; Crosby ; Outhit ; Lovitt. Class II.McLean ; King; Gerrior; Pineo. Passed.-Fnllerton; Gillis 3 McIlreith ; Murray ; Putnam ; Ross ; Shaw ; Tremaine; Vickery.

## FACULTY OF MEDICINE.

## degree examinations.

## CLASS LISTS.

(Containing the names arranged in order of merit of all students who have passed in the subjects of the various classes.)

## Anatomy.

McDonald, John Clyde; Murphy, George Nelson ; (Dechman, Andrew Arthur ; Ross, Alexander ;) Simpson, Henry Osmond; Murray, George William,.

## Physiology.

McDonald, John Clyde; Murphy, George Nelson; Dechman, Andrew Arthur; Murray, George William (suppl.) ; (Ross, Alexander ; Moore, Ernest Fraser.)
materia medica.
Murphy, George Nelson.
Chemistry.
McDonald, John Clyde; Murphy, George Nelson; Dechman, Andrew Arthur; Moore, Ernest Fraser; Ross, Alexander; Brown, Mattie Wyman.

Practical Chemistry.
Moore, Ernest Fraser ; McDonald John Clyde; Murphy, George Nelson; Brown, Mattie Wyman; Wood, Hubert; Farrell, Edward Dominick, (pass.)

## Histology.

McEwen, Henry E. ; McDonald, John Clyde ; (Smith, Frederick Forbes ; Williamson, Samuel); Moore, Ernest Fraser; Murphy, George Nelson ; Olding, Clara Mary, ; Lloyd, Cyrus Dekkar ; Smith, Owen Van Buskirk ; McDonald, William Henry, ; Rindress, Horace ; Churchill, John Locke ; Murray, Duncan; Murray, George William, (suppl.) ; Fairbanks, Harry Gray, (suppl.) ; Minard, Ralph Waldo; (Bennet, George Arlington; Cameron, John J.; Farrell, Edward Dominick ; McPhail, Donald Thomas,) pass.

## Botany.

McEwen, Henry E.; Smith Frederick Forbes; Murphy, Georg ${ }^{\text {e }}$ Nelson ; Lloyd, Cyrus Dekkar ; (Churchill, John Locke ; Olding, Clara Mary); Moore, Ernest Fraser ; (Brown, Mattie Wyman; McDonald, Wm. Henry ; Williamson, Samuel); Murray, Duncan; (McPhail, Donald Thomas ; Minarả, Ralph Waldo), pass.

## Surgery.

Byers, David Walter ; Rice, Frank Ernest; Meyer, Edward James; McAulay, Murdoch William; MacGeorge, Thomas; Coady, Patrick Francis.

## Clinical Surgery.

(Byers, David Walter ; Meyer, Edward James ; McAulay, Murdoch William) ; Rice, Frank Ernest; Coady, Patrick Francis ; MacGeorge, Thomas, (pass.)

## Medicine.

Meyer, Edward James ; Rice, Frank Ernest; McAulay, Murdoch William ; Coady, Patrick Francis; Byers, David Walter;; MacGeorge, Thomas.

Clinical Medicine.
(Rice, Frank Ernest; MacGeorge, Thomas,) ; Meyer, Edward James; Coady, Patrick Francis; Byers, David Walter; McAulay, Murdoch William.

Obstetrics and Diseases of Women and Children.
Rice, Frank Ernest ; Meyer, Edward James ; Byers, David Walter ; Coady, Patrick Francis; McAulay, Murdoch William; MacGeorge, Thomas.

## Medical Jurisprudence and Hygiene.

MacGeorge, Thomas, ; Byers, David Walter ; Simpson, Henry Osmond.

## GRADUATES OF THE UNIVERSITY.

## N. B.-Degrees printed with the names have been obtained in

 other Universities.Graduates are requested to notify the President of errors or omissions in the following list.

The signs and numbers prefixed in some cases to the names have the following significations :-
${ }^{1}$ Graduated with First Rank Honours in Classics.
${ }^{2}$ Graduated with Second Rank Honours in Classics.
${ }^{3}$ Graduated with First Rank Honours in Latin and English.
${ }^{4}$ Graduated with Second Rank Honours in Latin and English.
${ }^{5}$ Graduated with First Rank Honours in Greek and English.
${ }^{6}$ Graduated with Second Rank Honours in Greek and English.
${ }^{7}$ Graduated with First Rank Honours in English and German.
${ }^{8}$ Graduated with Second Rank Honours in English and German.
${ }^{9}$ Graduated with First Rank Honours in English and English History.
${ }^{10}$ Graduated with Second Rank Honours in English and English History.
${ }^{11}$ Graduated with First Rank Honours in Philosophy.
${ }^{12}$ Graduated with Second Rank Honours in Philosophy.
${ }^{13}$ Graduated with First Rank Honours in Mathematics and Mathematical Physics.
${ }^{14}$ Graduated with Second Rank Honours in Mathematics and Mathernatical Physics.
${ }^{15}$ Graduated with First Rank Honours in Experimental Physics and Chemistry.
${ }^{18}$ Graduated with Second Rank Honours in Experimental Physics and Chemistry.
${ }^{17}$ Graduated with General Distinctlon of the First Rank.
${ }^{18}$ Graduated with General Distinction of the Second Rank.

+ Governor-General's Gold Medalist.
$\ddagger$ Governor-General's Silver Medalist.
§ Sir William Young's Gold Medalist.
* DeMill Gold Medalist.
- Mackenzie Gold Medalist
a Sometime Munro Tutor in Mathematics.
$b$ Sometime Munro Tutor in Classics.
Note.-By resolution of the Senate the terms "Honours " and "High Honours" will hereafter be used instead of "Second Rank and First Rank Honours"; and "Distinction" and "Great Distinction" instead of "General Distinctions of Second Rank and First Rank."
$\ddagger^{14}$ Adams, H. S., Jesuits' College, Montreal. ..... B. A., 1884
$\ddagger^{1}$ Aiton, W., Sussex, N. B. ..... B. A., 1885
Allan, Rev. John M., Edinburgh .

$\qquad$
M. A. 1876
Allison, Edmund P., Sackville, N. B

$\qquad$ ..... B. A., 1889 ; Ll. B., 1891
Allison, Rev. Matthew G., St. Martins, N. B ..... B. A., 1886
Anderson, A. H., B. A., Lunenburgh, N. S. ..... Le. B., 1893
Annand, Rev. Joseph, New Hebrides. ..... B. A., 1869 ; M. A., 1872
Annand, Edward E., Truro, N. S . ..... B. A., 1893
Archibald, Rev. F. W., M. A., B. D., Ph. D., (obit.). ..... B. A., 1877
${ }^{17}$ Archibald, Sara E., Academy, New Glasgow ..... B. A., 1892
Archibald, Rev. W. P., Cavendish, P. E. I...B. A. 1873 ; M. A., 1878
Armstrong, B. H., Halifax. Le. B., 1890
Armstrong, E. H. Yarmouth ..... LL B., 1888
Arthur, George, Alberton, P. E. I ..... B. Sc., 1893
${ }^{14}$ Bakin, F. W. M., Digby ..... B. A., 1892
Barnstead, A. S., Halifax ..... B. A., 1893
$\S^{13}$ Baxter. Agnes S., Halifax B. A., 1891 • M. A., 1892
Bayne, Prof. H. A., Ph., D., F. R. S. C., (obit.) ..... B. A., 1869 ;
M. A., 1872.
Bayne, Rev. S. E., Mabou ..... B. A., 1871
$\dagger^{2}$ Bell, F. H., Halifax B. A., 1876
$\dagger{ }^{\dagger}$ Bell, J. A., Riverside, Cal ..... B. A., I883
Bennett, A. W., Sackville, N. B ..... LL. B., 1885
Bennett, R. B., Hopewell Cape, N. B. ..... LL. B., 1893
Bethune, J. L., M. P. P., Baddeck, C. B ..... M. D., C. M.. 1875
Bill, E. M., B. A., Shelburne ..... LL. B., 1892
Blackadar, H. S., B. A., Halifax ..... Le. B., 1892
Blanchard, C. W., Truro ..... B. A., 1880
Boak, H. W. C., Halifax ..... LL. B., 1885
Bowser, William J., Vancouver, B. C ..... Ll. B., 1890
${ }^{1}$ Brehaut, J. W., Westerly, Rhode Island ..... B. A., 1891
${ }^{12}$ Brown, E. N., Lower Neweastle, N. B ..... B. A., 1889
Brown, H. W , B. A., Wolfville ..... Ll. B., 1893
Bruce, Rev. W. T., M. D., Valley Station, N. S ..... B. A., 1872
Bryden, Rev. J. W., Selkirk ..... B. A., 1873
${ }^{12}$ Buchanan, James Jost, Sydney, C. B. ..... B. A., 1887
Burgess, Rev. J. C., Danville, Col., U. S. A. B. A., 1867
${ }^{14}$ Burkitt, Robert J., Athenary Ireland ..... M. A., 1890
Byers, D. W., New Annan, Col. Co ..... M. D., C. M., 1893
Cahan, Charles H., M. P. P., Halifax B. A, 1886 ; Lı. B., ..... 1890
Cairns, Rev. J. A., M. A , Upper Musquedoboit. ..... B. A., 1878
Calder, Fred, Port Hood, C. B ..... Le. B. 1892
Calder, Rev. John, West Bay, C. B ..... B. A., 1886
Calkin, W. S., Truro, N. S ..... B. A., 1887
Cameron, A. G., Newton, Gaysborough Co. ..... B. Sc , 1882
${ }^{1 b}$ Cameron, C. S., Halifax ..... B. A., 1879
$\ddagger$ Cameron, Rev. J. H., Bass River, N. B ..... B. A., 1878
Cameron, William, Merigomish ..... B. A., 1873
Cameron, Rev. J. J., Shakespere, Ont. ..... M. A., 1871
Cameron, D. A., Sydney, C. B ..... LL. B. 1893
Campbell, Alexander J., Truro. B. A., 1886 ; ..... Le. B., 1889
Campbell, Alexander, Sydney, C. B. ..... Ll. B., 1889
Campbell, D. A., Halifax, N. S. ..... M. D., C. M., 1874
Campbell, D. F., E. River, St. Mary's ..... B. A., 1890
Campbell, George G., M. D.. Truro ..... B. Sc., 1885
$a \S^{14}$ Campbell, George M., M. D., Halifax, N. S ..... B. A., 1882
Campbell, J. R., Jr., Dorchester, N. B. ..... Ll. B., 1888
Campbell, R. S. Tatamagouche ..... B. A., 1892
Campbell, William R,, Truro ..... B. A., 1887
Carmichael, J. M., New Glasgow, N. S.. B. A., ..... 1872
Carr, Rev. A. F. Campbelton, N. B. B. A , 1868 ; ..... M. A., 1871
Carson, Rev. G. S., Pictou, N. S ..... B. A, 1882
Carter, Titus James, Andover, N. B ..... LL. B., 1887
Carter, William D., Richibucto, N. B ..... LL. B., 1886
Casey, C. E., B. A., Amherst, N. S ..... LL. B., 1892
Chambers, F. B., TruroChambers, R. E., TruroB. A., 1877
Chapman, A. E., Salisbury, N. B ..... B. A., 1890
Chase, Rev. J. H. Onslow .B. A., 1866 ; M. A., ..... 1869
Chisholm, Donald, Antigonish ..... M. D., C. M., 1874
Chisholm, Joseph A., Halifax ..... Ll. B., 1886
Christie, Rev. T. M. (obit) ..... B. A., 1868
Clarke, Daniel McD., West River, Pictou Co., N. S. ..... B. A., 1888
Cluney, Andrew, Halifax ..... LL. B., 1887
Coady, Patrick S. F., Margaree, C. B ..... M. D. C. M., 1893
${ }^{10}$ Coffin, Rev. Fulton J., Trinidad ..... B. A., 1886
Coffin, Rev. F. S., M. A., Mount Stewart, P. E. I. ..... B. A. 1885
${ }^{* 9}$ Coffin, Victor E., Cornell University, N. Y ..... B. A., 1887
Cogswell, G. A., Academy, Truro ..... B. A., 1890
Congdon, F. H., Halifax ..... LL. B., 1891
Congdos, Fred T., B. A., LL. B., (Toronto) Halifax, ad eundem gradum,
LL. B., 1889.
${ }^{2}$ Coops, Frank H., Academy, New Glasgow ..... B. A., 1887
Corbett, J. E., Truro ..... Li. B., 1892
Costley, Alfred, Halifax ..... B. A., 1881
Cox, George H, Shelburne ..... B. A., 1891
Cox, Robinson, Stewiacke ..... M. D., C. M., 1875
Creelman, Rev. D. F., (obit.). B. A., 1873 ; M. A., 1880
$\dagger^{14}$ Creelman, H. G., B. Sc., Halifax ..... B. A., 1881
Creighton, J. G. A., Montreal. ..... B. A., 1868
Creighton, H. S., Dartmouth. ..... B. A. 1880
$\dagger^{11}$ Creighton, James E., Assoc. Prof. of Phil. Cornell Univ., Ithaca, N. Y.B. A., 1887 .
Crowe, Walter, Sydney, C. B Ll. C., 1886
$\dagger^{10}$ Crowell, Rev. Edwin, Yarmouth, N. S..... B. A., 1880 ; ..... M. A., 1891
Cummings, Selden W., B. A., Truro, N. S ..... Le. B., 1889
Cruikshanks, Rev. W., B. D., Montreal ..... B. A., 1872
Davidson, J. F., Pinos Altos, Grant Co., New Mexico. ..... B. A., 1882
Davidson, James McG. Halifax. B. A., 1889 ; LL. B., 1891
DeWolfe, G. H., Halifax M. D., C. M., 1872
Dickie, Alfred, Upper Stewiacke B. A., 1879 ; M. A., 1883
Dickie, Henry, Upper Stewiacke B. A., 1883
Dill, Rev. E. M., B. D., Parrsbore ..... B. A., 1884
Dockrill, G. O. M., New Westminster, B. C ..... LL. B. 1893
Douglas, Ernest A., Maitland ..... B. A., 1893
Doyle, Matthew N., Halifax ..... LL. B., 1892
Doull, W. S., Halifax B. A., 1875 ; LL., B., 1885
Drysdale, G. N., Seatle Washington, Ter. ..... M. D. C. M., 1892
Duff, Kenneth, Lunenburg ..... B. A., 1873
Emmerson, R. R. J. (obit.) ..... B. A., 1879
Fairweather, F. L., Sussex, N. B. ..... LL. B., 1890
Fairweather, Stewart L., St. JohnFinlayzon, Duncan, Grand River, C. B.B. A., 1893
Fisher, Rev. J. M., Lawrencetown, N. S. ..... B. A., 1890
${ }^{12}$ Fitzpatrick, H. H. K., LL. B., Stellarton .. B ..... M. A., 1885
Fitzpatrick, Rev. James, Salisprings ..... B. A., 1875
Forbes, Antoinette, Academy, Yarmonth ..... B. A., 1887
Forbes, E. W., Dartmouth, N. S ..... B. A., 1893
Forrest, James, Halifax B. A., 1868 ; M. A., 1872
Forsythe, George O., B. A., Port Hawkesbury, C. B..... Ll. B., 1889
Frame, J. F., Halifax ..... LL. B., 1890
${ }^{11}$ Fraser, Alex., West River, Pictou Co., N. S ..... B. A., 1889
Fraser, A. H. K., Port Hood, C. B ..... LiL. B., 1892
Fraser, Hon. D. C., M. P., New Glasgow. ..... B. A., 1872
Fraser, Rev D. S., Springside, Col. Co ..... B. A., 1874
Fraser, Rev. Donald, Upper Kennetcook ..... B. A., 1877
Fraser, J. G., New Glasgow ..... B. L. , 1892
Fraser, Rev. John K. G., Alberton, P. E. I. ..... B. A., 1889
$\ddagger$ Fraser, Rev. W. M., Halifax B. Sc., 1880 ; ..... B. A., 1883
Fraser, W. R., Wright High Sch., Baltimore, Md ..... B. A., 1882
Frazee, Victor G., Halifax. ..... B. A., 1889
Fulton, Eben, Middle Stewiacke, (obit.) ..... B. A., 1890
${ }^{* 9}$ Fulton, Edward, Lower Stewiacke. ..... B. A., 1889
Fulton, E. M., Cornell University, Ithaca, N. Y. ..... LL. B., 1892
Fulton, J. A., Lower Stewiacke. ..... Ľ. B., 1893
Fulton, G. H., M. D., C. M. ..... B. A., 1876
Fulton, W. H., Halifax. B. A., 1888 ; LL. B., 1892
*99 Gammell, Isaac, Montreal ..... B. A., 1885
†George, Rev. J. L., M. A., Belleville, Ont. B. A., 1878
Gilpin, E., Jr., A. M., F. G. S., F. R. S. C., Inspector of Mines,
Halifax. . . . . . . . . . . . . . . . . . . . (causâ honoris) Le. D., 1892
Goodwin, Emily M., St. John ..... B. A., 1891
Graham, R. B., Brookfield ..... Ll. B., 1893
Graham, R. H., New Glasgow, N. S ..... B. A., 1892
Grant, David K., Riverton, Pictou Co. B. A., 1888 ; M. A., 1891
Grant, Very Rev. G. M., D. D., F. R. S. C., Principal Queen's Coll.,
Kingston, Ontario (causâ honoris) ..... LL. D., 1892
Grant, William, North Sydney, C. B M. D., ..... C. M., 1892
Grant, W. R. (obit.) B. A., 1877
Gratz, H. G., Sunbury Co., N. B. ..... B. A., 1892
Gregory, E. C., Antigonish. ..... LL. B., 1888
Grierson, John A., Weymouth Bridge .B. A., 1891 ; L. B., 1893
Grierson, Robert, Halifax ..... B. A., 1890
Gunn, Rev. Adam, Cardigan, P. E. I. ..... B. A., 1872
Hamilton, C. A., New Germany ..... C. M., 1891
Hamilton, C. F., B. A. (obit.) ..... LL. B., 1890
Hamiltor, H. H., Pictou B. A., 1877
Hanright, Fred. W., B. A., Halifax LL. B., 1887
${ }^{9}$ Harrington, Emily B., Halifax ..... B. A., 1892
Harvey, Rev. McLeod, Newport ..... B. A., 1889
Henry, Joseph K., Shubenacadie ..... B. A., 1889
Henry, W. A., Halifax Ľ. B., 1886
${ }^{2}$ Herdman, Rev. J. C., B. D., Calgary, N. W. T. B. A., 1874 ;
M. A., 1887.
Herdman, W. C., Pictou B. A., 1874 ; M. A., 1881
Herdman, A. W., Pictou ..... B. A., 1887
$\ddagger^{11}$ Hill, A. R., Cornell University, Ithaca, N. Y. ..... B. A., 1892
Hiltz, C. W. (obit.). M. D., C. M., ..... 1862
Howay, F. W., New Westminster, B. C ..... Ll. B , 1890
Howatt, Cornelius A., Alberton, P. E. I. ..... B. A., 1893
$\ddagger^{11}$ Hugh, David D., Cornell University, Ithsca, N. Y.. ..... B. A., 1891
Hunter, John, California ..... B. A., 1873
Irwin, Archer, Halifax ..... M. D., C. M., 1892
Ires, W. B., Pictou ..... LL. B., 1885
Jennison, Hedley V., New Glasgow. ..... Li. B., 1885
${ }^{11}$ Johnson, George F., Upper Stewiacke ..... B. A., 1892
Johnstone, Rev. G. M. (obit.) ..... B. A., 1888
Johnson, Isaac W., Tatamagouche M. D.,Johnson, J. B., Loch Broom, N. SB. A., 1892
Johnstone, L. M., Halifax, N. S. ..... LL. B., 1892
Jones, Frank, Digby . ..... B. A, 1884
Jones, H. T., Halifax. ..... LL. B-, 1888
${ }^{12}$ Jordan, Elijah J., Murray Harbor, P. E. I. ..... B. A., 1891
*Jordan, Rev. L. H., B. D., Montreal ..... M. А., 1878
Keefler, Ralph Tupper, Bridgewater, N. S ..... B. A., 1893
Kennedy, James S., Y'ort Philip, N. S ..... B. A., 1891
Kenney, J. B., Halifax. ..... LL. B., 1893
Kent, H. V., Truro, N. S ..... M. D., C. M., 1890
Kinsman, F. S., M. D., Centreville ..... B. A , 1880
Knowles, J. H., M. D., New Bedford, Mass. ..... B. A., 1882
Laird, Rev. Alex., Ferrona, Pictou County, N. S. ..... B. A., 1890
$\dagger^{1}$ Laird, A G., Ph. D., Instructor in Greek, Cornell University, Ithaca,New York.B. A., 1889
Laird, G. A., Manitoba ..... B. A., 1877
Landells, R., Cedar Hill, B. C. ..... B. A., 1882
Lane, C. W., Lunenburg, N. S ..... LL. B., 1887
${ }^{12}$ Langille, R. M., LL. B., New Glasgow. .... B ..... M. A., 1888
LeNoir, M. U., HalifaxLewis, Rev. Abner W., B. D., N.W.TB. A., 1886
${ }^{18}$ Lewis, A. W., Principal High Sch., Campbeltown, N. B. ..... B. A., 1890
Lindsay, A. W. H., M. B. C. M., Halifax ..... B. A., 1870 ;
M. D., C. M., 1875.
Lippincott, Aubrey, M. D., Pittsburgh, Pa. ..... B. A., 1867
Locke, R. 'I'., Lockeport ..... B. A., 1885
Logan, H. J., Amherst. ..... LL. B., 1891
${ }^{11}$ Logan, J. D., Pictou, N, S. ..... B, A,, 1893
Logan, Melville, Haliāax ..... B. A., 1873
Logan, Rev. Richmond, Santa Monica, Cal. B. A., 1877 ; M. A., ..... 1880
Lovett, Henry A., B. A , Truro, N. S. ..... LL. B., 1889
Lyons, William A., Halifax, N. S. ..... LL. B., 1887
McArthur, S. J., Tyne Valley, P. E. I B. A. 1893
McAulay, M.W., Grand River, C. B M. D., C. M., 1833
McBride, Richard, New Westminister, B. C. ..... LL. B., 1890
McCov, W. B., B. A., Halifax ..... LL. B., 1893
MeCharles, R. W., Winnipeg, Man. ..... M. D. C. M., 1892
McColl, A., New Glasgow, N. S. ..... B. Sc., 1883
McCready, Charles A., Moncton, N. B. ..... Li. B., 1888
McCully, Frank A , B. A., Sussex, N. B ..... LL. B., 1887
McCurdy, J. F., Halifax ..... B. A., 1891
McCurdy, S. T., New Glasgow ..... B. A., 1877
McDonald, A. F., Hopewell, N. S. ..... B. A., 1892
McDonald, A. J., B. A., Sydney, C. B ..... LL. B., 1891
McDonald, A. J., Malagawatch, C. B. ..... B. A., 1892
McDonald, C. D., Halifax, N. S B. A., 1873
McDonald, Rev. Donald, B. D., Port Hastings, C. B. ..... B. A., 1884
McDonald, Ed. M., Pictou ..... LL. B., 1887
McDonald, Joseph, North Sydney, C. B. ..... LL. B., 1891
$\ddagger^{14} \mathrm{Mc}$ Donald, J. A., Halifax B. A., 1883 ; LL. B., 1886
McDonald, J. H., (obit.) ..... B. A., 1867 ; M. A., 1871
McDonald, L. X., Sydney, C B. ..... Lu. B., 1892
McDonald, Robert J., Hopewell, N. S. ..... B. A., 1889
McDonald, William, Truro B. A., 1888 ; ..... Li. B., 1890
McDonald, W. M., Halifax ..... B. A., 1888
McDonald, Ida Grace ..... B. A., 1893
McDowell. Isaac, (obit) ..... B. A., 1876
McGlashen, J. A., New Glasgow ..... B. A., 1891
McGeorge, Thomas, Belfast, Ireland. ..... M. D. C. M., 1893
McGregor, Rev. Daniel, Amherst ..... B. A., 1874
MacGregor, Prof. J. G., D. Sc., F. R. SS. E. \&. C., Halifax..B. A., 1871M. A., 1874.
${ }^{14}$ McGreger, T. S., Little Bras D'or B. A., 1882
McInnes, Hector, Halifax Academy ..... LL. B. 1888
${ }^{18}$ McIntosh, D. S., Port Hood, C. B ..... B. A., 1892
${ }^{19}$ McIntosh, J. A., Halifax ..... B. A., 1892
McKay, Adams A., B. A., Halifax ..... Ľ. B., 1888
${ }^{14}$ Mackay, A. H., B. Sc., F. R. S. C., Supt. of Education, Halifax B. A., 1873 ; (causâ honoris) LL. D., 1892.
${ }^{16}$ Mackay, D. O., Heathbell, Fictou Co. ..... B. A., 1890

- ${ }^{15}$ McKay, Ebenezer, Johns Hopkins' University, Balt., M.D. ..... B. A., 1886
${ }^{14}$ McKay, H. M., Academy, Pictou, N. S. ..... B. A., 1888
Mackay, Rev. Kenneth, Richmond, N. B ..... B. A., 1868
McKay, M. S., Cariboo River, N. S ..... B. A., 1892
${ }^{+15}$ McKay, Neil F., Regina, N. W. T. ..... B. A., 1886
McKay, D. McG., Lorne, Pictou Co., N. S. ..... B. A., 1893
${ }^{18}$ McKay, Thomas Calvin, Dartmouth, N. S. B. A., 1893
McKeen, G. IV., Baddeck, C. B ..... B. Sc., 1892
McKeen, Rev. J. A., Orono, Ontario ..... B. A., 1873
$\alpha \S^{14}$ McKenzie, A. S., Lecturer on Physics, Bryn Mawr College, Pa.,B. A., 1885.McKenzie, Hugh, TruroB. A., 1872 ; M. A., 1875
McKenzie, Prof. J. J., Ph. D. (obit.) B. A., 1869 ; ..... M. A., 1872
McKenzie, Rev. James, Pugwash ..... B. A., 1878
McKenzie, Rev. J. W., East St. Peter's, P. E. ..... B. A., 1882
McKenzie, Rev. W. J., West Bay, C. B ..... B. A., 1888
McKinnon, D. A., Georgetown, P. E. I ..... LL. B., 1887
McKinnon, John A., Halifax B. A., 1890 ; LL. B., ..... 1892
McIntosh, D. C., Springville, N. S. ..... B. A., 1890
$\ddagger$ McKittrick, Burgess, Lunenburg ..... B. A., 1877
McLatchy, Henry F., Hillsboro', N. B. ..... Lt. B., 1887
McLean, A. K., Lunenburg, N. S ..... Ľ. B., 1892
${ }^{2}$ McLean, I. M., M. D. ..... B. A., 1879
McLean, Rev. J. A., Harvey, N. B ..... B. A., 1876
McLean, J. B., Hopewell, N. S ..... B. A., 1891
McLean, C. A., Englishtown, C. B ..... B. A., 1893
McLennan, Daniel, Port Hood, C. B ..... LL. B., 1888
McLennan, Rev. J. W., B. D. ..... M. A., 1887
McLennan, S. J., Sydney, C. B ..... B. A., 1888
McLeod, Rev. A. W., Ph. D., Vale, Pictou Co. ..... B. A., 1875 ;
${ }^{12}$ McLeod, Ambrose W., Dunstaffnage, P. E. I. ..... B. A., 1888
McLeod, Rev. Donald, Priceville, Ontario.. ..... B. A., 1874
$\dagger^{5} \mathrm{McLeod}$, F. J., Charlottetown Royalty, P. E. I. ..... B. A., 1890
${ }^{* 9}$ McLeod, George, Murray River, P. E. I ..... B. A., 1888
McLeod, J. M., M. A., Valleyfield, P. E. I ..... B. A., 1885
McLeod, Rev. J. W. (obit) B. A., 1876 ; M. A., 1880
 ..... B. A., 1884
$\S^{13}$ VicLeod, Malcolm J., Belfast, P. E. I ..... B. A., 1887
McMillan, C. E., Academy, Port Hawkesbury ..... B. A., 1891
MeMillan, Finlay, Sheet Harbor, N. S. ..... M. D., ..... C. M., 1872
McMillan, F. A., Alberry Plains, P. E. I. ..... B. A., 1891
$\ddagger$ McMillan, Rev. G. W., Malpeque, P. E. I ..... B. A., 1875
McNaughton, Elizabeth, Sheffield, St. John, N. B. ..... B. A., 1891
McNaughton, Rev. Sarnuel, Preston, G.B., B.A., 1867 ; ..... M. A., 1870
MeNeil, Alex., B. A., Halifax, N. S. ..... L工. B., 1891
McNeill, Albert H., Vancouver, B. C ..... LL. B., 1889
${ }^{9} \mathrm{McNeill}$, Charlotte M., Halifax ..... B. A., 1887
McNeil, Roderick, St. Catherine's, P. E. I. . ..... B. A., 1892
McPhee, D. L., North Sydney, C. B. ..... LL. B., 1890
${ }^{2 M c R a e}$, A. W., M. A., St. John, N. B ..... B. A., 1886
${ }^{12}$ McRae, A. O., Academy, Pictou, N. S ..... B. A., 1893
McRae, William (obit.) ..... M. D., C. M., 1872
Magee, Edgar A., Vancouver, B. C. ..... LL. B., 1888
Magee, W. H., Cornell University, Ithaca, N. Y B. A., 1891
March, S. E., Bridgewater, N. S Ľ. B., 1893
${ }^{14}$ Martin, K. J., Charlottetown, P. E. I. ..... B. A., 1885
Martin, Albert, V'alleyfield, P. E. I ..... B. A., 1893
Mason, Rev. W. A., Georgetown, P. E. I. ..... B. A., 1877
Mathers, F. F., Halifax . ..... Lu. B., 1892
Matheson, Rev. J. A., B. D., Davisburgh, N. W. T. ..... B. A., 1888
Mellish, Humphrey, Halifax.. B. A., 1882 ; ..... Le. B., 1890
Meyers, E. J., Halifax ..... M. D., C. M., 1893
Millar, Rev. E. D., Yarmouth, N. S ..... B. A., 1869
Millar, George ..... B. A., 1890
Miller, J. J., Halifax ..... B. Sc., 1883
Milliken, A. E., Moncton, N. B. Ll. B., 1886
Montgomery, John, St. John B. L., 1891 ; LL. B., ..... 1893
Mooney, P. C. C., Halifax Ľ. B., 1886
${ }^{18}$ Moore, C. L., Academy, Pictou ..... B. A., 1891
Morash, A. V., Lunenburg. ..... B. A., 1891
Morine, A. B., St. John's, Newfoundland. ..... Lu. B., 1892
$a \S^{18}$ Morrison, A. M., John Hopkins' Univ., Balt. . . M. D., B. A., 1888
Morrison, Aulay, New Westminster, B. C L工. B., 1888
Morrow, Arthur B., M. B., C. M. (Edin.); ad eundem gradum, M. D., C. M., 1893.
Morse, C., Ottawa ..... Lu. B., 1885
Morton, Joseph H., M. D., Shelburne. ..... B. A., 1876
$\S^{13}$ Morton, Silvanus A., Academy, Halifax, N. S......... . B. A., 1886
Muir, Ethel, Halifax. B. L., 1891 ; M. L., 1893
Muir, W. H., L. R. C. P. \& S. Edin., Truro...M. D., C. M., 1875
Munro, Rev. Christopher, Oxford, N. S. ..... B. A., 1891
Munro, G. W., 17-27 Vandewater Street, New York ..... B. A., 1878
Munro, Rev. J. R., Antigonish B. A., 1876
Munro, H. H., Yarmouth Lc. B., 1893
Murray, J. S. (obit.) B. A., 1877
${ }^{11}$ Murray, Lucy C., Studholme, N. B. ..... B. A., 1893
a§s ${ }^{14}$ Murray, Prof. D. A., Univ. of City of New York ..... B. A., 1884
Murray, R. G., St. John, N. B. Ľ. B., 1892
Murray, W. C., Prof. Dal. Col., M.A. (Edin.); ad eundem gradum,M. A., 1893.
Newcombe, E. L., LL. B., Deputy Minister of Justice, Ottawa,B. A., 1878 ; M. A., 1881.${ }^{1}$ Newcombe, Margaret F. (Mrs. J. S. Trueman), Ladies' College,
Halifax B. A., 1885
${ }^{14}$ Nicholson, Alfred, M. A., Southport, P. E. I. ..... B. A., 1886
Notting, Thomas, Halifax ..... L.. B., 1890
O'Brien, Robert F., Noel, Hants Co. ..... B. Sc., 1893
${ }^{18}$ Oliver, A. C. L., Digby. ..... B. A., 1891
Oxley, G. H., B. A., Oxford, N. S. Le. B., 1890
${ }^{12}$ Oxley, J. M., LL. B., Ottawa B. A., 1874
Paton, Vincent J., Bridgewater, N. S B. A., 1889 ; Ľ. B., 1891
Patterson, George G., New Glasgow. ..... B. А., 1882 ; М. A., 1887 ;
Le. B., 1889.
Payzant, John A., B. A., Halifax ..... Lц. B., 1893
Pitblado, Colin, M. D., C. M. (obit.) ..... B. A., 1876
Pollok, A. W. (obit.) ..... B. A., 1872
Putnam, Homer, Lower Onslow, N. S ..... B. A., 1889
Puddington, H. F., St. John, N. B. ..... Ľ. B., 1893
Putnam, William G., Maitland ..... B. A., 1887
Putnam, Harold, Truro, N. S. ..... B. A., 1893
Rattee, Rev. E. J., St. Francis, N. B ..... B. A., 1890
$\S^{13}$ Reid, A. G., M. B., C. M., Halfax ..... B. Sc., 1883
${ }^{11}$ Ritchie, Eliza, Ph. D., Asso.-Prof. of Philosophy, Wellesley Coll.,B. L., 1887 .
Rice, F. E. Digby ..... M. D., C. M., 1893
Robert, Cassimir, Arichat, C. B ..... M. D., C. M., 1875
Roberts, J. A., Bridgewater, N. S. LL. B., 1890
Robertson, H. McN., Barrington, N. S. LL. B., 1886
Robertson, S. N., North Bedeque, P. E. I. B. A., 1892
Robertson, T. R., Kentville B. A., 1888 ; Ľ. B., 1890
${ }^{1}$ Robinson, Alexander, Vancouver, B. C. B. A., 1886
${ }^{17}$ Robinson, C. B., Kentville. ..... B. A., 1891
${ }^{14}$ Robinson, G. E., Vancouver, B. C. B. A., 1886
Robinson, Kev. J. M., Moncton B. A., 1873
Robinson, D. M., Sussex, N. B. ..... B. A., 1893
Rogers, Rev. Anderson, Windsor ..... B. A., 1887
Rogers, H. W., Amherst ..... LL. B., 1887
Ross, Alexander, Principal of Restigouche Grammar School, Dal- housie, N. B. B. A., 1887
Ross, Henry T., Bridgewater ..... LL. B., 1889
Ross, Rev. William, Prince William, N. B. ..... B. A., 1873
${ }^{5}$ Ross, Hedley, Stanley Bridge, P. E. I. ..... B. A., 1893
${ }^{17}$ Ross, George E., Newport, N. S. ..... B. A., 1893
${ }^{14}$ Rowlings, G. A. R., Halifax B. A., 1890 ; LL. B., 1893
Ruggles, N. C., Lunenburg ..... LL. B., 1891
Russell, Rev. A. G., Oyster Bay, L. I., N. Y. ..... B. A., 1871
Russell, Joseph A., Vancouver, B. C... LL. B., 1887
Russell, Frank W., Dartmouth ..... Ľ. B., 1893
Sangster, H. W., B. A., Windsor ..... LL. B., 1892
${ }^{17}$ Schurman, G. W., Cornell University Ithaca, N. Y. B. A., 1890 ;LL. B., 1892.
Scott, Rev. Ephraim, Montreal B. A., 1872 ; M. A., 1875
Scott, Prof. H. McD., B. D., Chicago ..... B. A., 1870
Sedgewick, J. A., Halifax. B. A., 1881 ; Ľ. B., 1885
Sedgewick, Robert, Judge Sup, Court of Canada B. A., 1867 ; (causâ honoris) LL. D., 1893.
Shaw, A. E., B. A., Windsor ..... Le. B., 1891
${ }^{10}$ Shaw, Henry C., Stanhope, P. E. I. B. A., 1887
$\ddagger^{1}$ Shaw, James C., M. A., Vancouver, B. C. B. A., 1887
Shaw, Robert (obit.) B. A., 1866
Simpson, Rev. Isaac, New York State, U. S. A. B. A., 1868
Sinclair, J. A., St. John, N. BLL. B., 1890
Smith, Rev. D. H., 'Truro B. A., 1867 ;B. A., 1867
Smith, Rev. Edwin, StewrackeB. A., 1867
Smith, E. B., Truro ..... B. A., 1890
Smith, H. McN., Halifax ..... B. Sc., 1884
${ }^{10}$ Smith, Rev. James F., (obit.) B. A., 1886 ;
LL. B., 1892
Smith, S. B., St. John
B. A., 1889
Smithers, Rev. Allan, Waterford, N. B
B. A., 1888
${ }^{10}$ Soloan, D. M., Principal New Giasgow High Sch
B. A., 1881
Spencer, Rev. W. H., Montague, P. E. I.Stairs, H. B., HalifaxB. A., 1891 ; LL. B., 1893
Stevens, D. J., Halifax ..... Le. B., 1890
Stewart, Alexander F. ..... B. A., 18 S 7
${ }^{14}$ Stewart, Anne A B. Sc., 1886
${ }^{13}$ Stewart, Dugald, M. D., Bridgewater B. A., 1886
Stewart, F. I., Academy, Sydney ..... B. A., 1889
$+{ }^{+14}$ Stewart, James McG., Pictou ..... B. A., 1876
Stewart, Rev. Thomas, B. D., Dartmouth ..... B. A., 1882
Stramberg, H. M., New Westminster, B. C ..... B. A., 1875
Sutherland, Rev. J. M., Virden, Man. ..... B. A., 1869
Sutherland, Robert (obit.) M. D., C. M., ..... 1872
${ }^{+9}$ Sutherland, Rev. J. S., Sussex, N. B ..... B. A., 1888
Taylor, W. B. (obit.). ..... B. A., 1884
${ }^{10}$ Thompson, Rev.A. W., M. A., Couva, Trinidad, W. I.B. A., ..... 1885
Thompson, A. E., Halifax ..... B. A., 1880
Thompson, Hon. Sir J. S. D., K. C. M. G., Premier and Minister
of Justice, Ottawa . . . . . (causâ honoris), LL. D., 1892
Thompson, Stanley R. LL. B., 1886
Thompson, Walter K., Halifax ..... LL. B., 1887
Thompson, F. W., Merigomish ..... B. A., 1891
Thompson, Willard S., New Glasgow ..... B. A., 1893
Thompson, W. E., Halifax . Ľ. B., 1893
Thorburn, W. M., I. C. S., Madras Pres., India ..... B. A., 1870
Tilley, L. P. D., St. John, N. B. LL. B., 1893
Tobin, Thomas F., Halifax. LL. B., 1889
Torey, E. J., Windsor. ..... B. A., 1882
Troop, Arthur G., B. A., Dartmouth ..... LL. B., 1886
Trueman, A. I., St. John, N. B B. A., 1872 ; ..... M. A., 1878
$b+^{+2}$ Trueman, Prof. J. S. (obit.) ..... B. A., 1882
Trueman, W. H., St. John, N. B ..... Ľ. B., 1892
Tufts, Rev. W. M., M. A., Bedeque, P. E. I ..... B. A., 1885
$\dagger{ }^{ }$Tupper, J. W., John Hopkins' Univ., Balt. ..... M. D., B. A., 1891
Turnbull, G. D., Upper Musquodoboit. M. D., C. M., 1892
Turner, D. F. D., London, G. B ..... B. A., 1884
${ }^{+14}$ Waddell, Prof. John, Ph. D., D. Sc., Kingston, Ont ..... B. A., 1877
Wallace, Rev. "John, Lone City, Aınadon, Cal., U.S.A.B. A., 1870
Wallace, W. B., Halifax LL. B., 1885
Walsh, W. W., Halifax Ll. B., 1886
Webster, K. G. T., Yarmouth, N. S. B. A., 1892
Wells, William W., Point DeBute, N. B ..... LL. B., 1886
West, T. F., Prince of Wales College, Charlottetown ..... B. A., 1891
${ }^{14}$ Weston, Clara P., White River Junction, Vt ..... B. A., 1892
${ }^{14}$ Weston, R A., Principal High Sch., Concord, Cor. Vt. ..... B. A., 1892
White, T. H., Shelburne ..... LL. B., 1891
Whitford, Joseph A., Bridgewater, N. S ..... LL. B., 1889
Whitman, Alfred, Halifax ..... B. A., 1878 ; LL. B., 1885
Wickwire, H. H., B. A., Digby ..... LL. B , 1891
Woodworth, P. C., Kentville, N. S. ..... M. D., C. M., 1892
Woodworth, C. M., B. A., South Edmonton, N. W. T. . Li. B., 1 ..... 1893
STUDENTS, 1892-93.
FACULTY OF ARTS.
GRADUATE STUDENT-M. $\mathrm{L}_{\mathrm{I}}$ COURSEx
Muir, Ethel, B. L .....  Halifax.
UNDERGRADUATES.In Arts.
FOURTH TEAR.
Annand, Edward Ernest ..... Truro.
Barnstead, Arthur Stanley ..... Halifax.
Douglas, Ernest Augustus. ..... Maitland.
Finlayson, Duncan Grand River, C. B.
Forbes, Edgar William Dartmouth.
Howatt, Cornelius Alfred Summerside, P. E. I.
Keefler, Ralph Tupper Bridgewater.
Logan, John Daniel. ..... Pictou.
Logan, Jotham Wilbert. ..... Pictou.
- McArthur, Samuel Johnston ..... Tyne Valley, P. E. I.
McDonald, Ida Grace. ..... Sherbrooke.
Mackay, Donald McGregor ..... Lorne.
Macrae, Archibald Oswald ..... St. John, N. B.
McKay, Thomas Calvin ..... Dartmouth.
McLean, Charles Archibald Englishtown, C. B.
Martin, Albert John Daniel ..... Valleyfield, P. E. I.
Murray, Lucy Christine. Studholm, N. B
Putnam, Harold. Lower Onslow.
Robinson, David Magee. . Sussex, N. B.
Ross, George Edward Newport, Hants.
Ross, Hedley Duncan Vicars.. Stanley Bridge, P. E. I.Thompson, Williard Sutherland.
New Glasgow.

THIRD TEAR
Bigelow, Harry Veeder. ...................... Truro.
Brehant, Ernest . ............................ Murray Harbor South, P.E.I.
Dickson, Henry Chase........................ . Onslow
Fraser, Hugh McLeod ..... Pictou.
Grant, Robert J Sunny Brae.
Grant, Milton Daniel Hopewell, N. S
Grant, Melville Finlay Cow Bay, C. B.
Gray, William Smith Hopewell, N. S
Hebb, Bertha Boyd Bridgewater.
Hobrecker, Clara Charlotte. Halifax.
Janieson, Harriet Jane ..... Halifax.
Johnson, Ebenezer William Upper Stewiacke.
Macdonald, Peter McLaren. ..... Pictou.
Macintosh, John. Malagawatch.
MacKay, Angus William Grand River, C. B.
Mackay, John Daniel Earltown.
McKenzie, Ellen Margaret Stellarton.
McPhee, Margaret ..... Scuth River, Antigonish.
Murray, Robert Harper ..... Halifax.
Putnam, James Fleming ..... Maitland.
Ross, Mary Sophia ..... North Bedeque, P. E. I.
Simpson, Frank Stnart ..... Halifax.
Smith, William Henry New Glasgow
Tattrie, George Phillips ..... River John.
Yorston, Frederick ..... Pictou.
SECOND YEAR.
Arehibald, Adams Douglas Halifax.
Bent, Tillie Agatha Farmington, King's Co.
Butler, George Killam Kelley's Cove, Yarmouth.
Church, Nina Elizabeth ..... Bedford.
Doyle, Joseph James ..... Halifax.
Duchemin, Henry Pope Charlottetown, P. E. I.
Foster, Arthur Hayward Pictou Landing.
Frame, David A. Shubenacadie.
Fraser, Daniel A. ..... New Glasgow.
Hepbuin, William Murray ..... Pictou.
Jordan, Edward Elliott Bridgetown.
Lawson, Thomas Waterville, King's Co.
Layton, James Smith. ..... Elmsdale.
Macdonald, Blanche Hopewell, N. S.
McDonald, Donald Orwell, P. E. I.
Morton, Rupert Freeman ..... Milton, Queen's Co.
Robins, Edward Proctor Bedeque, P. E. I.
Ross Jennie Wright North Bedeque, P. E. I.
Smith, Alexander. Clydesdale, Antigonish Co.
Sterling, John Clifton, P. E. I.
Strathie, Ralph Grant Harbor Grace, Nfld.
EIRST YEAR.
Baker, Elma Sheet Harhor, Halifax Co.Bell, John . . . . . . . . . . . . . . . . . . . . . . . . . . . . New Glasgow.
Chisholm, Winnifred B. ..... Halifax.
Cock, Daniel George West River, Pictou.
Cummings, Alfred Graham Lower Onslow.
Cummings, Melville ..... Truro.
Currie, William Douglas. ..... Halifax.
Forbes, William. .Little Harbor, Pictou.
Grant, George Alexander. ..... Trinidad.
Hetherington, Eva F. ..... Halifax.
Hill, Allan Massie. ..... Halifax.
Hood, George. Truro.
Macneil, Murray . St. John, N. B.
Mahon, Harry Edmund ..... Halifax.
McGregor, Robert Malcolm. New Glasgow.
McIntosh, Douglas. New Glasgow.
McRae, Duncan Murdoch. Baddeek, C. B.
Morrison, John Strople Metzler. St. Peters, C. B.
Murray, John Carey ..... Halifax.
Murray, L. Wilbur. Amherst.
Robb, Alexander Francis ..... St. John.
Ross, William Daniel. ..... Stanley Bridge, P. E. L.
Sedgewick, William Middleton Tatamagouche.
Sterling, Alexander Dinwoodie ..... Clifton, P. E. I.Sutherland, George Adam. ................. Earltown.
In Letters.
first year.Johnston, James RobinsonHalifax.
GENERAL STUDENTS:
Archibald, Eben H........ ........... ..... Truro.
Barnstead, Laura Geddes ..... Halifax.
Brown, James Taylor. ..... Halifax.
Burton, Frederick Murray Halifax.
Campbell, Alvin Henry. Milford.
Crawford, James Andrew. Cardigan, P. E. I.
Creighton, Graham. ..... Halifax.
Currier, Frank Allison Upper Gagetown, N. B.
Dickie, Laura Upper Stewiacke.
Ernst, Sophie Elizabeth ..... Lunenburg.
Farquharson, William Oban. ..... Halifax.
Foster, Lemuel Heath Deacon Dunstaffnage, P. E. I.
Fraser, Alexander Lewis. Blue Mountains.
Gordon, George Sinclair ..... Halifax.
Gunn, Alexander Donald St. Mary's, Pictou Co.
Hattie, Joseph Howe. Caledonia, Guys. Co.
Hill, Amy Halifax.
Hobrecker, Lottie ..... Halifax.
Hughson, James Edward A ylesford
Irving, Thomas Mill Branch, Kent. Co.
Jobb, Frank Leslie. Great Village.
Kennedy, Alexander G. Union Centre, Antig. Co.
Kirk, Joseph Howe. Riverdale, Lunenburg Co.
Liechti, Bertha ..... Halifax.
MacDonald, Alexander James. North Sydney.
MacKinnon, William Thomas Morris. Amherst.
Mackintosh, Harriet ..... Halifax.
Macrae, George Farquhar. Baddeck.
Marshall, Emily Mary ..... Liverpool, N. S.
Maxwell, Ellen Halifax.
Maxwell, George Herbert. ..... Halifax.
McDonald, Alexander Donald Charlottetown, P. E. I.
McKay, William Roderick Springville, Pictou Co.
McKay, William Park. ..... Truro.
McKenzie, John. Pictou.
McRae, William Ross. ..... Baddeek.
McNairn, William Wallace. Buctouche, N. B.
McVicar, Ronald ..... Cow Bay, C. B.
Milligan, George Seaton. St. John, N. B.
Mitchell, George Fletcher ..... Canning.
Morris, Clarence H. Windsor, N. S.
Munroe, James Gilmore ..... River John.
Oxley, Frances A ..... Oxford.
Parker, Lewis William ..... Canning.
Rodgerson, James Alexander Cummings . Mount Stewart, P. E. I.
Ross, David C. Blanchard Road
Ross, Hugh Cow Bay, C. B.
Thompson, Albert Murray Newport.
Ward, Charles Wellesley.. Melvern Square, Anap. Co.
SPECIAL CLASSES IN ENGLISH.
Shakespeare Course.
Afternoon Class.

Achworth, Mrs. M. E. Armstrong, Miss A. F. Anderson, Miss A. M.
Bayne, C. A.
Black, Miss E.
Borden, Mrs.
Barefoot, Mrs.
Burns, Miss W. Burgess, Mrs. J. G.

Cahan, C. H.
Chipman, Miss B.
Courtney, Miss M.
Chisholm.
Creighton.
Corbett, Mrs. F. D
Coleman, Miss F.
Duffus, Mrs. Stairs
Duffus, Mrs. John

Forbes, Miss M. F.
Forbes, Miss S. A.
Frye, Miss J.
Grant, Miss L.
Grant, Mrs. M.
Gray, Miss M.
Geldert, Mrs. J.
Hening.
Howard.
Harding.
Harrington, Mrs. W. D.
Harrington, Miss E. B.
Jolly, Lieut-Col.
Jolly, Mrs.
Kellogg, W. B.
Kenny, Mrs. J. F. Longley, Mrs.
Lyde, Miss Edith
Morrow, Mrs. J.
McInnes, Mrs. H.
McKay, Mrs. A. H.

McKenzie, Miss
McLean, Miss
Oellers, Miss
Oxley, Mrs. F.
Paint, Miss
Payzant, Mrs. C. M.
Parsons, Miss M.
Prescott, Miss
Robertson, Miss
Slayter, Mrs.
Starr, Mrs. C. C.
Stairs, Miss H.
Stairs, Miss A.
Stairs, Mrs. Geo.
Silver, Mrs. H.
Thomson, Miss K. B.
Thompson, Mrs. T.
Troop, Mrs. H.
Voudy, Miss A. J.
Wilson, R. J.
Wood, Miss E.

```
FRIDAY EVENING CLASS.
```

Allen, Thos. C.
Allen, W. J.
Allison, Rev. D. P.
Bateman, Miss J. R.
Brines, Miss M. C.
Creighton.
Cunningham, M.
Cuuningham, A. M.
Cook, A. G.
Fielding, Hon. W. S.
Fuller, L. J.
Frame, Miss C.
Weeks, 0.

Frame, S. R.
Fyshe, James
Grierson, F.
Harvey, G.
James, T. C.
Marshall, G. P.
Macdonald, R.
MacPherson, Miss L.
Mooney, P. C. C.
Roy, J. E.
Stewart, I. C.
Stairs, W. J., Jr.

## SPECIAL CLASS IN PSYCHOLOGY.

Ackhurst, Minna
Allen, Elizabeth G.
Butler, Elise R.
Christie, Annie
Murphy, M.
McLean, Emma
Sayre, Julia H.
Benoit, J. Alphonse
Campbell, Robert

Chesley, Robert
Morrison, H. Thomas
Macritchie, J. M.
MacTavish, Neil
Davidson, Lilla Augusta
Fraser, A. Ethel
Marshall, Lillian
McKay, Mary Alexandra
Wilkie, Florrie A.

# FACULTY OF PURE AND APPLIED SCIENCE. UNDERGRADUATES. <br> FOLRTH YEAR. 



## GENERAL STUDENTS.

Eager, R. Frank. . . . . . . . . . . . . . . . . . . . . . . . Halifax.
Macdonald, Newman Hall.................... . Sherbrooke, N. S.
MacInnes, Harry Walter . . . . . . . . . . . . . . . . . Halifax.
Mack, Edward Emmerson . . . . . . . . . . . . . . Mills Village.

EVENING CLASSES IN INDUSTRIAL CHEMISTRY.*<br>Bell, Charles, Book-keeper.<br>Brims, Robert, Brewery Manager.<br>Burns, John E., City Water Inspector.<br>Davidson, E., Metal Worker and Plumber.<br>Dodd, Maynard, Assistant Electrician Cable Steamer " Minia."<br>Fairgrieve, Robert S., Brewery Manager.<br>Frame, S. R., Book-keeper.<br>Gaul, R. E., Teacher, St. Mary's School.<br>Gordon, William, Manager, McDougall's Distillery.<br>Mott, William Anderson, Soap Works' Manager.<br>McCowan, Alexander, Chief Cooper, Mc Dougall's Distillery.<br>O'Donnell, Percy, Photographer.<br>Reardon, Thomas, Painter.<br>Sandberg, John, Manager, Lindberg's Brewery.<br>Watt, George G., Clerk.<br>Webster, William, Painter.<br>West, Charles W., Consulting Engineer.<br>Wheeler, George, Photographer.<br>Wilson, John A., Clerk, Nova Scotia Sugar Refinery.<br>Zwicker, Rufus, Machinist.

[^17]
## FACULTY OF LAW. UNDERGRADUATES:

## THIRD YEAR.

| Anderson, Albert Hudson, B. A. | Lunenburg. |
| :---: | :---: |
| Bennett, Richard Bedford | Hopewell Cape, N. B. |
| Brown, Harry Whidden, B. A | Wolfville, N. S. |
| Burns, Clement Bancroft, B. A. | Halifax. |
| Cameron, Daniel Alexander | Sydney, C. B. |
| Crowe, Robert William, B. A | Halifax. |
| Fulton, Joseph Avard. | Lower Stewiacke. |
| Graham, Robert Blackwood | Brookfield, N. S. |
| Grierson, John Arthur, B. A. | Kentville. |
| Kenny, Joseph Burke | Halifax. |
| March, Stephen Edgar | Bridgewater. |
| Montgomery, John, B. L | St. John', N. B. |
| MacCoy, Wensley Blackall, B. | Halifax. |
| Munro, Henry Havelock. | Yarmouth. |
| Payzant, John Albert, B. A | Halifax. |
| Puddington, Henry Fisher. | St. John, N. B. |
| Rowlings, George Anderson Row | Musquodoboit Harbor. |
| Russell, Frank Weldon | Dartmouth. |
| Stairs, Henry Bertram, B. | Halifax. |
| Thompson, William Ernest | Halifax. |
| Tilley, Leonard Percy DeWolfe | t. John, N. B. |
| Woodworth, Charles Milton, B. A | Weston, N. S. |

## SECOND YEAR.

Borden, Henry Cliffurd. . . . . . . . . . . . . . . . Canning.
Copp, Arthur B. . . . . . . . . . . . . . . . . . . . . . Jolieure.
Fraser, James Gordon, B. L................ New Glasgow.
. (traham, Robert Henry . . .................. New Glasgow.
Hewson, Edgar Ellis, B. A............... Oxford.
Hill, William Arthur Gesener . . . . . . . . . . . Sydney.
Irving, Robert Archibald ................. Buctouche.
McDonald, Alvin Fraser, B. A..... . . . . Hopewell.
Payzant, William Lewis, B. A........... . Halifax.
Robertson, Struan Gordon, B. A. . . . . . . . New Glagow.

## FIRST YEAR.

Crosby, Leeman Brooks, B. A. . . . . . . . . . . . Hebron.
Fullerton, Charles Percy . . . . . . . . . . . . . . . . Amherst.
Gerrior, Edward Lavir, B. A. . . . . . . . . . . . Bir Tracadie.
(iillis, Roderick Malcolm, B. A. . . . . . Pictou.
Grant, David Kenzie, M. A. .... .... . . Riverton.
King, Harry Wyeth DeWolfe.... ..... . Windsor.
Lovett, Laurence Arthur . . . . . . . . . . . . . Kentville.
McIlreith, Robert . . . . . . . . . . . . . . . . . . . . Halifax.
Duthit, James Francis ............... Melvern Square, An. Co'y
Pineo, Avard Vernon, B. A.. .......... Wolfville.
Ross, George William................. Sherbrooke
Shaw, George Smith .................. St. John.
Tremaine, Charles Frederick........... Halifax.

## GENERAL STUDENTS,

| arn |
| :---: |
| Bigelow, Harry Ve |
| Doyle, Mathew Nicholas . . . . . . . . . . . . Halifax. |
| Finlayson, Duncan................ . . . . Grand River. |
| Fraser, Thomas Munro . . . . . . . . . . . . . . Hopewell. |
| Frazee, Victor, B. A. . . . . . . . . . . . . . . . . Halifax. |
| Gunn, Alexander Donald......... ..... St. Mary's. |
| Keefler, Ralph Tupper............ . . . . Bridgewater |
| McLean, Charles Archibald . . . . . . . . . . . . Englishtown. |
| McLeod, Crofton Uniacke. . . . . . . . . . . . . South Brookfield. |
| Murray, Robert Harper. . . . . . . . . . . . . Halifax. |
| Putnam, Harold..................... . Lower O |
| Thompson, Willard Sutherland........ . . New Glas |
| ery, James Harris.... . . . . . . . . . . . . Oxford. |

## FACULTY OF MEDICINE. UNDERGRADUATES.

 FOURTH YEAR.| Byers, David Walter | New Annan. |
| :---: | :---: |
| Coady, Patrick Francis. | Margaree Forks, C. B. |
| McAulay, Murdoch Wi | Grand River, C. B. |
| MacGeorge, Thomas | Belfast, Ireland. |
| Meyer, Edward James . | Halifax. |
| Rice, Frank Ernest. | Digby. |

THIRD YEAR.
Cogswell, William Forlong . ..... . ........ Port Williams, King's Co.
Dechman, Audrew Arthur ........ .... . . .Sherbrooke.
Murray, George William............... . . . Halifax.
Simpson, Henry Osmond . . . . . . . . . . . . . . . . Dartmouth.
SECOND YEAR.

| Bennett, George Arlington | lifax. |
| :---: | :---: |
| Brown, Mattie Wyman | Yarmouth. |
| Farrell, Eảward Dominick | Halifax. |
| McDonald, John Clyde | Riverside Corner, Hants. |
| Moore, Ernest Fraser | Halifax. |
| Murphy, George Nelson.. | Windsor. |
| O'Brien, Robert Faulkner. | Noel. |
| Ross, Alexander. . | North Earltown. |

FIRST YEAR.


## APPENDIX．

## EXAMINATION PAPERS．1892－93．


#### Abstract

FACULTY OF ARTS， $\qquad$ M上ATエエOUエATエON

AND SENIOR MUNRO EXHIBITIONS AND BURSARIES． 

LATIN． （For Matriculation．） Examiner．．．．．．．．．．．．．．．．．．．．．．．．．．．．Joнn Johnson，M．A． Time ：Three Hours． N．B．－Candidates for Matriculation only will take Part I or Part II， together with Part IV．Candidates for Scholarships will take Parts I，II，III

CASAR ：Gallic War，Books iv，v．VIRGIL ：Eneid，Book III．

\section*{I．}

A．Translate ： （a）His constitutis rebus et consilio cum legatis et quaestore com－ municato，ne quem diem pugnae praetermitteret，opportunissima res accidit，quod postridie ejus diei mane，eadem et perfidia et simulatione usi Germani frequentes，omnibus principibus majoribusque natu adhib－ itis，ad eum ad castra venerunt：simul，ut dicebatur，sui purgandi causa quod contra atque esset dictum，et ipsi petissent，proelium pridie commisissent；simul ut，si quid possent，de indutiis fallendo impetrarent． （b）（Duces Nerviorum）Ambiorigem ostentant fidei faciendae causa ：errare eos dicunt，si quicquam ab his praesidii sperent qui suis rebus diffidant；sese tamen hoc esse in Ciceronem atque Populum．


Romanum animo, ut nihil nisi hiberna recusent atque hanc inveterascere consuetudinem nolint; licere illis iocolumibus per se ex hibernis discedere, et quascumque in partes velint sine metu profiscisci.

1. What relations do the ne and the two quod clauses bear to their main sentences in Aa. Why have the quod clauses and the simul ut clauses different moods?
2. "Errare eos dicunt, si quicquam ab his praesidii sperent qui suis rebus diffidant : sese tamen hoe esse in Ciceronem et P. R. animo, ut nihil nisi hibernarecusent." Give the speakers' own words.
3. Parse, giving rules for cases and moods: "mane," "natu," "sui," " animo," "praetermitteret," "petissent," "possent," "nolint."
4. When did Caesar land in Britain? What does he tell us about the origin and appearance of the inhabitants, and the products of the island ?

## II.

B. Translate :
(a) Rursus ad oraculum Ortygiae Phoebumque remenso hortatur pater ire mari, veniamque precari : quam fessis finem rebus ferat; unde laborum temptare auxilium iubeat; quo vertere cursus.
(b) Tollite me Teucri ; quascumque abducite terras; hoe sat erit. Scio me Dauais e classibus unum, et bello Iliacos fateor petiisse Penatis; pro quo, si sceleris tanta ent iniuria nostri, spargite me in fluctus, vastoque immergite ponto. Si pereo, hominum manibus periisse iuvabit.

1. Note poetical syntax, and give usual phrases :
2. Parse, giving rules for cases and moods, "remenso," "ferat," " petiisse," "Penatis," " juvabit."
3. These words have two or more meanings, according to difference of quantity, part of speech, \&c. :
malis, velis, manibus, placemus, reduces, solo, satis.
4. Explain these lines :
(a) et formidatus nautis aperitur Apollo,
(b)
(c)
geminosque Triones,
qui nuuc
ore, Arethusa, tuo Siculis confunditur undis.
5. Scan the first two lines of B (a).

## III.

1. What impersonal verbs take the (a) dative, (b) accusative?
2. The word "country" must be translated differently according to meaning ; give simple examples.
3. What is the Latin for: In London (Londinium) ; in the city of London ; in the prosperous city of London; he came to me in London.
4. Express in other ways: "his rebus constitutis," $(\mathrm{A}, a)$ : "fidei faciendae causa " ( $\mathrm{A}, \mathrm{b}$. )
5. What impersonal phrases are followed by quin.
(c.) Write in Latin: The moon happened to be full that night. In the whole of Gaul there was not a person that was not afraid of being conquered some day by Caesar. Pardoning the wicked is almost the same thing as condemning the innocent. Which of you two entailed greater loss and disgrace on the nation, it is hard to say; I hope you will both before long repent your crimes.

## IV.

1. Decline thronghout, either: "res," "principibus," "castra," "illis," "se," if Part I be taken ; or: "pater," "mari," "rebus," " hominum," " quo," if Part II be taken.
2. Give the same part in the other degrees of comparison as, majoribus, bono, fortius (adverb), multum, summā, humilis.
3. Give the Latin words for: 26 : 348 : 875 th.
4. Write throughout (a) Fut. indic. act. and imperf. subj. pass. of scribo: (b) Perf. indic. act, and imperative act of vincio. (c) Pres. and imperf. subj. act. of volo (I wish).
5. What relations are expressed by the ablative? What verbs take a dative?
6. What verbs are followed by (a) an infinitive ; (b) accus. and infinitive?
7. One Latin word will express each of the following phrases : "against my will;" "in his lifetime ;" " with a good conscience ;" "somewhat ofton;" " by this time;" "for a long time."
8. Translate into Latin : The troops started at once and marched with the utmost speed to relieve the garrison. He lived for many years in Zome, but at the age of eighty he was forced by the senate to leave the sity and remove to Naples. Undoubtedly almost all persons believe in the existence of a God.

> GREEK.
> (For Matriculation.)
> Examiner........................... John Johnson, M. A.

## XENOPHON : ANabasis, Books I, II, VII.

## Time: Three Hours.

N. B.-Candidates for Matriculation only will take Part I or II or III (omitting questions marked with an asterisk), together with Part V. Candidates for Scholarships will take Parts I, II, 1II, $I V$, (omitting questions morked thus $\dagger$ ).

## I.

A. Translate:



 इт



(b.) оік $\dot{\eta} \nu \lambda \alpha \beta \varepsilon i v: ~ \dot{\varepsilon} \sigma \tau \iota ~ \lambda a \mu \beta a v \varepsilon ı v . ~ W h y ~ a r e ~ d i f f e r e n t ~ i n f i n i-~$ tives used?
(c.) हoтaбav: What tense is this equivalent to and why so ?
2. Parse, giving rules for cases: i$i \pi \pi \omega \nu, \dot{\varepsilon} \lambda a \phi$ siots, $i \pi \pi \varepsilon ́ \omega \nu, \pi o \sigma i ́$.

+4. Why is this work called the Anabasis? When did the events. described in it take place?

## II.

## B. Translate :









 Tòv voĩv: What form wou!d be used in Latin to express this?
 Latin phrase?
 $a \dot{u} \tau \bar{̣}$.
+3. Parse, giving chief parts in use: خ̀ $\rho \varepsilon \sigma \kappa \sigma \nu, ~ \dot{a} \pi о \lambda \varepsilon ́ \sigma a \iota, ~ \delta \iota \varepsilon \sigma \pi \alpha \hat{\alpha} H a \iota$, à $\lambda \sigma \theta \tilde{\eta}$.
4. Why was it ever doubted that Xenophon wrote this work?

## III.

## C. Translate :






 тарєка́入єбеv.
*1. (a.) Eitto $\tau \iota s$ ăv. What would the meaning be without àv?

 $\theta \eta \nu$. What particle seems wanting in this sentence?
2. Parse, accounting for cases and moods: $\Delta i ́ a, \pi \tilde{a} \sigma a v$, oiv $\varepsilon v, \pi \alpha \rho a$ $\sigma \chi \varepsilon i v, a ̉ \pi o \delta \iota \delta \dot{v} a \iota$.
3. What is the last event mentioned in the Anabasis?

## IV.

1. Decline in the sing.: кр $\varepsilon \alpha$, and in the pl. $\beta a \sigma \iota \lambda \varepsilon v{ }^{\prime}$.
2. Compare : Өäтtov, фíhos.
3. Form the aor. imperative act. and pass. of: $\pi \hat{\varepsilon} \mu \pi \omega$, $\sigma \tau \hat{\varepsilon} \lambda \lambda \omega$, бiঠюu.
4. Express in orat. obl. after a past tense by two ways : $\dot{\sigma} \beta a \sigma i \lambda \varepsilon \dot{v}$ s

5. How are Yes and No variously expressed?
6. What is the meaning of these phrases : кuf ${ }^{\circ} \dot{\eta} \mu$ ह́рaì-кат̀̀ $\tau \grave{o}$ ciкós

7. Translate into Greek: It is very pleasant to be one's own master.-This was the way in which the barbarians were conquered by the Greeks.-Those boys of yours are too young to travel far.-The same night the generals want about and ordered all to leave the village as soon as possible.-After the battle of Salamis many of the Athenians, thinking they were now safe, went back to the city.

## V.


2. Compare : бофós, á yäós, $\sigma \omega \dot{\phi \rho \omega \nu, ~ \mu i \lambda \lambda \alpha . ~}$
3. What are the Greek words for : $16,54,237, \kappa^{\prime} \zeta^{\prime}$.
4. Give the chief parts of: $\tau \ell \mu a ́ \omega, ~ \gamma \rho \alpha ́ \phi \omega, ~ i \sigma \tau \eta \mu \iota$.
5. Conjugate through the moods, (giving open and contracted forms) (a) the present act. of $\tau \mu \mu a \dot{\omega}(b)$ the present passive of $\delta \eta i \sigma \omega$.
6. Write one form of (a) each active participle used of $\lambda \varepsilon i \pi \omega$, тi$i \not \eta \mu$, (b) each passive participle of $\tau \mu \mu \dot{a} \omega, \sigma \tau \varepsilon ́ \lambda \lambda \omega$.

## FRENCH.

Examiner .................................. Professor Liechti.
(Fior Matriculation.)

## Time : Three Hours.

A. Translate :-Charles XII.-Il quitta la Russie en 1698 n'ayant encore régné que deux années, et alla en Hollande, déguisé sous un nom vulgaire, comme s'il avait été un domestique de ce même le Fort, qu'il envoyait ámbassadeur extraordinaire auprès des Etats-généraux. Ar،ivéà Amsterdam inscrit dans le rôle des charpentiers de l'amirauté des Indes, il y travaillait dans le chantier comme les autres charpentiers. Dans les intervalles de son travail il apprenait les parties des mathématiques qui peuvent être utiles à un prince, les fortifications, la navigation, l'art de lever des plans. Il entrait dans les boutiques des ouvriers, examinait toutes les manufactures, rien n'échappa à ses observations. De là il passa en Angleterre, où il se perfectionna dans
la science de la construction des vaisseaux : il repassa en Hollande, et vit tout ce qui pouvait tourner à l'avantage de son pays.-

1. Parse and give pıincipal parts of: quitta, alla, avait, eté, pouvait. Write down in full the Indic. present and the F'uture present of avait and éte.
2. Pierre quitta la Russie en 1698. Write this sentence in the negat.-interrogat, form, and express the date 1698 in French. Give the French equivalents for: 1892; the nineteenth century. To-day ls the 17 th of September. How old are you? I am twenty-one years old.
3. En 1698. Parse en and explain its use in this form, State your reasons why en cannot be used in sentences like the following: My relatives (parents) are in Great Britain. My friend arrived in London last week. In the country.
4. Rien n'échappait à ses observations. Account for the presence of $n$ ' in this sentence, and name the pincipal negations. Translate: Give me something to write. Parse ses, and write down its corresponding pronominal form.
5. His mother. Her father. The world-its history. Her Majesty, the Queen of England. His Majesty, the Emperor of Germany. Translate these sentences and explain peculiarities in the use of these possess. adjectives.
B. Translate:-Il parut devant Narva à la tête de cette grande armée, le ler Octobre, dans un temps plus rude en ce climat que ne l'est le mois de Janvier à Paris. Le czar, qui dans de pareilles saisons faisait quelquefois quatre cents lieues en poste, à cheval, pour aller visiter lui-même une mine ou quelque canal, n'épargnait pas plus ses troupes que lui-même: il savait d'ailleurs que les Suédois, depuis le temps de Gustave-Adolphe, faisaient la querre au coeur de lhiver comme dans lété : il voulut accoutumer aussi ses Moccovites à ne point connaître de saisons, et les rendre un jour pour le moins égaux aux Suédois. Ainsi dans un temps où les glaces et les neiges forcent les autres nations, dans les climats tempérés, à suspendre la guerre, le czar Pierre assiégeait Narva à trente degrés du pôle ; et Charles XII s'avançait pour le secourir.
6. A la tête de cette grande armée. Cette admits of two mascul, forms, mention them and illustrate their use. Write down in French the mascul. and femin. of : sweet, new, handsome, old, dear, pretty.
7. Tête. Explain the use of the signs : '; ' ' ${ }^{\prime}$. Distinguish between $a$ and à ; parle and parlé ; sur and sûr.
8. Le czar qui dans de pureilles saisons. Illustrate the difference between qui and que: (1) as relative pronouns; (2) as interrogat. pronouns. Parse de in the sentence above, and account for its presence. Translate: This rich man has money, but he has no friends. The students have books. Wonderful inventions.
9. Quatre cents lieues. Certain nnmbers admit of inflection in certain cases. Translate the following, and state your reasons for the inflection or non-inflection of these numbers in snch sentences: The army consisted of (comptait) two hundred thousand men. Two hundred and eighty persons died (moururent) in one day. He has lost five hundred and fifty dollars. There were three hundred persons in the room.
10. Compose a complex sentence in French: (1) in the interrogat.; (2) negative, and (3) interrog.negative form.

## GERMAN.

Examiner
Professor Liechti.
(For Matriculation.)
Time: Three Hours.

## A. Translate:-Der Wanderer und die Quelle.

Ein Wanderer kam in heissesten Sommer zu einer Quelle. Er war stark und lange gegangen ; Schweiss stand auf seiner Stirne und seine Zunge war vom Durste fast vertrocknet. Da sah er dies silberhelle Wasser, glaubte hier neue Kräfte zu sammeln, und trank mit gierigen Zügen. Aber die schneidende, zu schnell abwechselnde Kälte wirkte so schädlich auf ihn, dass er zu Boden sank.-"Ach, schändliches Gift !" rief er. "Wer hätte unter einem, so reizenden Anschein solch eine Boskeit vermuthet?"
"Ich ein Gift?" sprach die Quelle. "Wahrlich, du verläumdest mich. Sieh, die Flur rings umber grünet und lebt durch mich. Von mir tränken sich die Heerden, und Tausende deiner Brüder fanden hier Erfrischung und Labetrank. Nur Uebermaass und Unvorsichtigkeit von deiner Seite machen dir den Genuss schädlich. Ich bin schuldlos an deinen Schmerzen und selḅst an deinem Tode, sollte er dir auch bevorstehen.

1. Im heissesten Sommer. Account; (a) for the contraction im; (b) fer the termination esten in heissesten. Prefix the defin. article to heissesten Sommer, and decline these words in the 4 cases singular and plural.
2. Dass er zu Boden sank. Parse dass, and illustrate the difference between dass and das; decline the latter word in the four cases singular and plural. Write the genitive sing. and the nomin. plural of: Boden, Quelle, Gift, Bosheit, Tod, Mann, Herr, Sohn.
3. Write the first sentence of passage A: $(a)$ in the plural ; $(b)$ in the negat. interrog. form, sing. Decline ein, and translate: No man. I have not seen him. No, he is not at home.
4. Die schneidende Kălte. Decline this sentence in the 4 cases sing. 'with and without the article. When does the adjective remain uninflected? State an example.
5. Ich bin schuldlos an deinen Schmerzen. Write this sentence with the subject in the plural and the object in the singular. Parse and give principal parts of : kam, war, glaubte, hätte, sprach, sollte.

## B. Translate :-Gute Geduld.

Ein Franzose ritt eines Tages auf eine Brücke zu, die so schmal war, dass zwei Reiter einander kaum darauf ausweichen konnten. Ein Engländer betrat zugleich das entgegengesetzte Ende derselben, und als Beide auf der Mitte waren, wollte keiner dem Andern Platz machen. "Ein Engländer geht keinem Franzosen aus dem Wege," sagte der Britte. Der Franzmann erwiederte: "Mein Pferd ist auch ein Engländer!" Aber der Engländer machte sich wenig aus diesem Einfalle, sondern sagte: "Ich kann warten; ich habe hier die schönste Gelegenheit, die heutige Zeitung zu lesen, bis es euch gefällt, Platz zu machen." Also zog er kaltblütig eine Zeitung aus der Tasche, wickelte sie auseinander und las darin eine Stunde lang, während dass der Franzose eine Pfeife Taback hervornahm und zu rauchen anfing. Die Sonne neigte sich allmählig gegen die Berge hinab und sah nicht aus, als ob sie die Thoren noch lange anschauen wollte:

1. Can you account for the position of the prepos. $z u$ in the first clause of this passage. Write the plural of : Franzose, Tages, Br cke. Can you give another term for : eines Tages? Turn into German: The day is fine. We shall have a fine day.
2. Die so schmal war. Parse die, and state what other word may be used instead of it in this connection. What ease or cases, number and gender do the following words represent: dem, der, den, die.
3. Als Beide auf der Brücke waren. What case does auf govern ; if you were to write : auf DIE Brücke instead, how would you have to alter the sentence? Why is the verb waren at the end of the clause, instead of after the subject?
4. Mein Pferd ist auch ein Engländer. Write this sentence in the plural.
5. Point out all the prepositions and the regular verbs in passage B.

## MATHEMATICS.

$\qquad$
(For Matriculation.)

## ARITHMETIC AND ALGEBRA.

Time : Thref Hours.

1. A man who has 10,000 dollars worth of stock that sells at 90 per cent., yielding only 3 per cent., sells out and invests the proceeds in stock selling at 135, and yielding $5 \frac{1}{4}$ per cent. What, if any, is his anuual gain?
2. Find the Vulgar Fraction equivalent to the Decimal, $\cdot 37837$.
3. Divide $6 x^{4}+5 x^{3}+6 x^{2}-17+6$ by $6 x^{2}-7 x+2$.
4. Resolve into the simplest factors you can, $8 a^{8}+27 b^{3}$, and $(x+a)^{4}-(x-a)^{4}$.
5. Given the simnltaneous equations,

$$
\left.\begin{array}{r}
5 x+11 y=146 \\
11 x+5 y=110
\end{array}\right\} \text { to find } x \text { and } y .
$$

6. Solve the equation, $\frac{4 x-8}{10}-\frac{20-x}{4}+\frac{x+\frac{1}{2}}{3}=6 \frac{1}{8}$.
7. Reduce to their simp'est form, for Arithmetical calculation, the following, viz. $\sqrt[3]{\sqrt{2 \frac{1}{2}}}, \quad \sqrt[3]{5 \frac{4}{4}}, \frac{11}{3 \sqrt{2}-\sqrt{7}}$.
(For Scholurships, \&c.)
8. A. B, and C are three Algebraic expressions. Find the Least

The Highest Common Factor of A and B is $m$, Common Mulof $B$ and $C$ is $n$, tiple of $A, B$, " " " " " of C and A is $p$. and C .
also $m, n$ and $p$ have no common measure, $i$. e., are prime to each other.
9. A Quadratic Equation when solved would, at first sight, seem to have four roots (solutions) but has really only two. Shew this.
10. Solve the Quadratic, by the ordinary method of "completing the square," $2 x^{2}-8 a^{2}=15 a x$.

## GEOMETRY.

Time: Three Hours.

1. If one side of a triangle be produced, the exterior angle thus formed is greater than either of the interior opposite avgles. Prove this for one of the angles.
2. If a triangle and a parallelogram be upon the same base and between the same parallels, the area of the triangle is half that of the parallelogram.
3. If a straight line be bisected and also divided otherwise, the rectangle of the two unequal parts is equal to the difference of the squares of half the line and the part of it between the points of section.
4. A parallelogram having been constructed equal to a given space, make (1) a rectangle equal to it, and (2) a square equal to it.

> (For Scholarships, \&c.)
5. If from a point without a circle, straight lines be drawn to the convex circumference, the least is that which, when produced, passes through the centre; and of the others that which makes a greater angle with the least line is greater than that which makes a less.
6. If from a point without a circle, two straight lines are drawn, ${ }^{0}$ one of which touches the circle and the other cuts it ; the difference of the squares of the line to the centre and the radius is equal to the rectangle of the segments of the cutting line.
7. If from the angles of the triangle, $\mathrm{A}, \mathrm{B}, \mathrm{C}$, perpendiculars be drawn to the opposite sides; of the six angles thus formed at A, B and C , three alternate ones are equal to the other three.
8. If the intersection of the diagonals of a rectangle be the centre of a circle, from any point in whose circumferevce perpendiculars are drawn to the sides of the rectangle, shew that twice the sum of the squares of these lines $=$ the squares of the diagonal of the rectangle + the square of the diameter of the circle.

## ENGLISH.

Examiner . .............. Archibald MacMechan, Ph. D.
(For Matriculation.)
Time: Threr Hours.

1. Composition.-

Relate in your own words :
(a) What Hamlet says and does the first time he sees the Ghost, or,
(b) What happens when the players represent the death of Hamlet's father, or,
(c) How, according to Longfellow, the Acadian peasants were carried away from Grand Pré, or,
(d) The adventures of Evangeline and Gabriel Lajeunesse after leaving Acadia.
2. "In-doors, warm by the wide-mouthed fire-place, idly the farmer Sat in his elbow-chair and watched how the flames and the smokewreaths
Struggled together like foes in a burning city. Behind him
Nodding and mocking along the wall, with gestures fantastic, Darted his own huge shadow, and vanished away into darkness. Faces clumsily carved in oak, on the back of his arm-chair Laughed in the flickering light, and the pewter plates on the dresser Caught and reflected the flame, as shields of armies the sunshine."
(a) Analyse fully.
(b) Parse the words in italics.

## HISTORY AND GEOGRAPHY.

Examiner .
President Forrest.
Time: Three Hours.
Candidates for Matriculation only may omit any two questions in each section.

## ENGLISH HISTORY.

- 1. Give the outlines of Britisk History to times of Saxon invasion.

2. What changes did the Norman Conquest introduce into England.
3. Give a brief account of the reign of Henry II.
4. What was the condition of Ireland in the reign of Charles I.
5. What was the condition of religious liberty in England during reign of James II.
6. In what wars was England engaged during present century. Give brief description.
7. Write short notes on any three of following subjects: Conquest of Wales, Battle of Bannockburn, Constitutions of Clarendon, Petition of right, Union of Scotland with England. Reform Bill of 1832.

## CANADIAN HISTORY.

1. Write a brief history of Louisburg.
2. What was the first English settlement in Nova Scotia? Give a short account of it.
3. Write short notes on Jacques Car tier, de Monts, Daniel Kirke, Paul Mascarene, Louis Riel.
4. What were the most important events of Nova Scotian history from 1740-1760.
5. How many provinces were there in British North America in the year 1791, and what were they?
6. Give a short account of the Ashburton Treaty.
7. Write a short account of history of Manitoba and North-West Territories.

## GEOGRAPHY.

1. Give leading rivers of Asia. In what directions do they flow ?
2. The Vosges, the Jena, the Carpathians, Mt. Everest, Mt. Chimberazo, Mt. Blanc, Mt. Rosa, Mt. St. Elias. Give position.
3. Following parallel 24 North round the world beginning at the Atlantic, through what countries would you pass. 23 South.
4. In what direction is London from Paris; Berlin from Paris; St. John from Yarmouth; Charlottetown from Halifax ; Ontario from Quebec.
5. Name the cities of the world, with a population of more than a million.
6. Bound Russia, Austria, Stave of New York, Ohio, Antigonish Co., Albert N. B.
7. Locate: Munich, Pisa, Hamburg, Dantzig, Kurtendji, Adrianople, Duluth, Puebla, Guelph, Moncton, Harrisburg, Hartford, Montpelier.

## SENIOR MUNRO EXHIBITIONS AND BURSARIES.

A-CLASSICS.

## LATIN.

Examiner..........................John Johnson, M. A.
time: Three Hours.
A. Translate :
(a) Metellus. . imminuit anctoritatem suam quod habet dicis causa promulgatum illud idem de Clodio; Auli autem filius, O di immortales! quam ignavus ac sine animo miles! quam dignus qui Palicano sicut facit os ad male audiendnm cotidie praebeat! Agraria autem promulgata est a Flavio sane levis, eadem fere, quae fuit Plotia.

(b). Ligarianam praeclare vendidisti: posthac quicquid scripsero, tibi praeconium deferam; Quod ad me de Varrone scribis, scis me antea orationes aut aliquid id genus solitum scribere, ut Varronem nusquam possem intexere; postea autem quain haec coepi ф८лодоү́́т $\varepsilon \rho \alpha$, jam Varro mihi denuntiaverat magnam sane et gravem $\pi \rho \circ \sigma \phi \omega \nu \eta \sigma \iota$. Biennium praeteriit, cum ille Kah $u \pi \pi i ́ \delta \eta s$ adsiduo cursu cubitum nullum processerit ; ego autem me parabam ad id, quod ille mihi mississet, ut
 ascribit, aíкє ঠvvŋ́aı.

1. "Habet dicis causa," et cetera. What objection is there to the reading in the text? What change has been suggested ?
2. Explain : (a) "illud idem de Clodio :"
(b) "qui Palicano," et cetera;
(c) "Varronem. . . intexere;"
(d) "ille K $a \lambda \lambda \iota \pi i \delta \eta \varsigma^{\prime}$ " et cetera.
3. Parse "dicis," "Ligarianam," "praeconium," "id genus," "ut" (before avitū).
B. Translate :

> Doctor argutae fidicen Thaliae Phoebe, qui Xantho lavis amne crines Dauniae defende decus Camenae, levis Agyieu.
spiritum Phoebus mihi, Phoebus artem carminis nomenque dedit poetae ; virginum primae puerique claris patribus orti,

Deliae tutela deae fugaces lyncas et cervos cohibentis arcu Lesbium servate pedem meique pollicis ictum,
rite Latonae pueruin canentes, rite crescentem face Noctilucam, prosperam frugum celeremque pronos volvere menses.

1. Note some poetical phrases in this passage, and give the ordinary expressions.
2. Explain the appropriateness of the words "Dauniae, "Camenae," "levis Agyieu," "Lesbium."
3. Quote some passages in this book in which Horace refers to his position as a poet.
4. Scan the following lines, and name the metres :
(a) O mutis quoque piscibus-
(b) Con sul que non unius anni-
(c) Quae cura patrum quaeve Quiritium.
C. Translate this passage from a letter not prescribed :

## M. CICERO IMP. S. D. M. CAELIO AEDILI CUR.

1. Putarasne umquam accidere posse, ut mihi verba deessent, neque solum ista vestra oratoria, sed haec etiam levia nostratia? desunt autem propter hanc causam, quod mirifice sum sollicitus, quidnam de provinciis decernatur; mirum me desiderium tenet urbis, incredibile meorum atque in primis tui, satietas autem provinciae, vel quia videmur eam famam consecuti, ut non tam accessio quaerenda quam fortuna metuenda sit, vel quia totum negotium non est dignum viribus nostris, qui maiora onera in re publica sustinere et possim et soleam, vel quia bel i magni timor impendet, quod videmur effugere, si ad constitutam diem decedemus.
2. De pantheris per eos, qui venari so'ent, agitur mandatu meo diligenter; sed mira paucitas est et eas, quae sunt, valde aiunt queri, quod nihil cuiquam insidiarum in mea provincia nisi sibi fiat; itaque constituisse dicuntur in Cariam ex nostra provincia decedere.-(ad Fam. II. II.)
D. Translate into Latin :

Persenna marched so quickly on Rome that he reached the Sublician Bridge before there was time to destroy it. Then a noble Roman named Horatius Cocles, with two friends, posted themselves at the end of the bridge and defended it against the whole Etruscan host, while the Romans were cutting it off behind them. When it was all but destroyed, his friends drew back and Horatius was left alone to bear the whole attack of the enemy. When the last beam fell into the river, with a prayer to the Tiber to receive him and bear him up, he plunged into the stream and swam safely across to the other side.

## GREEK.

Examiner ..........................Jomn Johnson, M. A.

## HERODOTUS: Book VI.

## A. Translate :

Time: Three Hours.











1. Notice any un-Attic syntax or meaning of words.
2. Change orat. recta and orat. obliqua in the extract to the opposite.
3. What are the Ionic forms of : $\varepsilon \dot{v} \theta \dot{v}$, $\omega v \nu$, oivv, $\pi \dot{o} \tau \varepsilon \rho o v ; \theta a \tilde{v} \mu a$ ?
4. Explain the last sentence.

## B. Translate :








1. Kaì $\dot{\phi} \phi t \eta \sigma a v$ к. $\tau . \lambda$. Write this clause in a shorter form.
2. 'A $\begin{aligned} & \text { nvaioo dè } ̀ \varsigma ~ \pi o \delta \tilde{\omega} v \kappa . ~ т . ~ \\ & \lambda\end{aligned}$. What word is unnecessary in this sentence?
3. ¿̀ Kvvorápyei. What was this? Decline the word.
4. Parse fully : $\dot{\varepsilon} \phi \theta \eta \sigma a \nu$, à $\nu \alpha \kappa \omega \chi \varepsilon \dot{\varepsilon} \sigma a \nu \tau \varepsilon \varsigma$, (giving derivation); also

C. Translate this extract from a book not prescribed :









D. Translate into accentuated Attic Greek: We are told by Herodotus in the sixth book of his history that some Athenians after the battle of Marathon wanted to betray their city to the enemy, and with that object showed a shield from afar to the Persians who were just setting sail from Marathon, and that in this way the latter learned that Athens was without a garrison. It happened however thar Miltiades, the Athenian general, on the very day he beat the Persians marched back to Athens with all his forces and thus anticipated the arrival of the Persians who had to round the promontory of Sunium. It would be difficult to believe that men could fall into such a depth of baseness, did we not hear of many such cases among the Greeks.

## B.-MATHEMATICS.

$\qquad$
Examiner C. Macdonald, M. A.

GEOMEIRY AND TRIGONOMETRY.

## Time: Three Hours.

1. ABC is a triangle, right-angled at C , and CD is perpendicular to AB . Prove $\mathrm{BD}: \mathrm{DA}$ in the duplicate ratio of of $\mathrm{BC}: \mathrm{CA}$.
2. If there be two pencils of lines, one of which is harmonic and the other inharmonic, and if they be cut respectively by transversals, is there any feature common to the two kinds of section?
3. If from P , the point of intersection of a common tangent to two circles with the line joining their centres, any line be drawn cutting the circles, it divides them into similar segments.
4. $\mathrm{AA}^{\prime}$ and $\mathrm{BB}^{\prime}$ are the major and minor axes of the Ellipse, C being the centre: and PN is any ordinate. Prove the property $\mathrm{PN}^{2}: \mathrm{AN} . \mathrm{NA}^{\prime}:: \mathrm{CA}^{2}: \mathrm{CB}^{2}$. (Hence infer a striking relation between an Ellipse and its auxiliary circle.)
5. Give an easy method of describing an Ellipse, proving the method.
6. ABCD is any Quadrilateral : find, from your knowledge of Trigonometry, an Equation connecting the tangents of the angles.
7. ABC is a spherical triangle, right-angled at C. Given, according to usual notation, $a$ and B . Find the other two sides, writing the logarithmic equations for determining them.
8. In a horizontal plain, three points $\mathrm{A}, \mathrm{B}, \mathrm{C}$, are in the same straight line which passes through the foot of a tower, and the angles of elevation of the tower at these successive points were as $1,2,3$; also, $\mathrm{AB}=a$ feet, $\mathrm{BC}=b$ feet. Shew how, from these measurements, the height of the tower could be found, Trigonometrical Tables, \&c. being allowed.
9. There are just $n$ value, and no more of the expression $\frac{1}{n}$
$(\cos \theta+\sqrt{-1} \sin \theta)$; and how are they obtained
10. Given two circles and their radical axis; you can find any number of circles coaxial with them. How? (Construction and proof.)

## MISCELLANEOUS.

Time: Three Hours.

1. If two circles of radii $r$ and $r^{\prime}$, cut each other orthogonally, their common chord $=\sqrt{\frac{2 r r^{\prime}}{r^{2}+r^{2}}}$.
2. $\mathrm{OA}, \mathrm{OB}, \mathrm{OC}$ are the distinces of the orthocentre of the triangle

3. From your knowledge of the relations of the roots of an equation to the coefficients, find the roots of the following, laving as given that they are in Arithmetical progression :-

$$
16 x^{3}-48 x^{2}+47 x-15=0
$$

4. Resolve the fraction $\frac{2}{1-x-2 x^{2}}$ into two fractions; and shew that the coefficient of $x^{n}$ in the expansion of the given fraction is $\frac{2}{3}\binom{n+1}{2^{ \pm}}$, according as $n$ is even or odd.
5. A man whose whole fortune is $M$ invests it at $r$ per cent., and lives forthwwith at the rate of A annually, which is in excess even of his first year's income. Find after how many years ( $n$ ) he will be a beggar.* (Logarithmic Equation : $\left.n=\frac{\operatorname{loq} \mathrm{A}-\log (\mathrm{A}-\mathrm{M} \cdot)}{\log \mathrm{R}}\right)$.
6. $\theta=\tan ^{-1} 1$ : find $4 \theta$, nearly. What use can this result be applied to? Illustrate fully.
7. Given $\begin{aligned} & \theta \sqrt{-1} \\ & =\cos \theta\end{aligned}+\sqrt{-1} \sin \theta=\cos \theta(1+\sqrt{-1} \tan \theta)$ : deduce from this a series expressive of $\theta$ in terms of its tangent. Could you find any use for the other series you have obtained?
8. Find the limiting value of $\frac{x-\sin x \cos x}{x^{3}}$, as $x$ tends to be $=0$.
9. In Logarithmic Tables, the sines, cosines, \&c., are arranged in a certain order : Explain the reason of this order.
[^18]
## C.-ENGLISH.

Examiner .... ............Archibald MacMechan, Ph. D.
Time: Thrbe Hours.
(N. B. - Not more than two questions to be attempted in each group).

## A.

1. What is the place of English in the Indo-European family of languages?
2. Explain the peculiarities and importance of the Southern dialect of Old English.
3. How did the Norman Conquest affect English grammar, and the number of words in the language.

## B.

4. "I will have all my beds blown up, not stuft :

Down is too hard; and then mine oval room Fill'd with such pictures as Tiberius took From Elephantis, and dull Aretine But coldly imitated. Then my glasses Cut in more subtle angles, to disperse And multiply the figures as I walk. My mists of perfume, vapoured 'bout the room, To lose ourselves in; and my baths, like pits To fall into ; from whence we will come forth, And roll us dry in gossamer and roses."-
Is this speech typical of the time? Describe the speaker's character, and his part in the play.
5. How does Jonson satirize the Puritans in The Alchemist ?
6. What dramatic purpose is served by the quarrel with which the play opens?

## C.

7. "Mounsieur Cobweb, good mounsieur, get you your weapons in your hand, and kill me a red-hipped humble-bee on the top of a thistle ; and, good mounsieur, bring me the honey-bag."

Describe the speaker's character.
8. What are the various comic elements in Midsummer Night's Dream?
9. "A goodly portly man, i' faith, and a corpulent; of a cheerful look, a pleasing eye and a most noble carriage ; and, as I think, his age some fifty, or, by 'r lady inclining to three-score, and now I remember me, his name is $\qquad$ ."
Supply the missing name. What is the speaker's part in the play?
D.
10. "He prayeth best, who loveth best, All things both great and small;"
Do you consider this to be the moral of the poem? Show how it forms the natural ending of the foregoing narrative.
11. "I would build that dome in air,"

Was this promise even fulfilled? What is the context? Show how the poem from which it is quoted is emblematical of Coleridge's life.

> 12. "And to be wrath with one we love Doth work like madness in the brain."

Relate the events which lead up to this expression, and name the speaker.

## D. - CHEMISTRY, AND EITHER PHILOSOPHY OR PHYSICS.

> CHEMISTRY.

Examiner.
Prof. Lawson.

## All these questions to be answered.

1. The atoms of certain elements are equivalent to each other ; those of other elements are not equivalent, their capacity for combina tion being unequal ; this capacity is called atomicity. Discuss fully the theory of atomicity. What does the atomic number indicate? What does the equivalent number represent?
2. Show, by examples, the manner in which hydracids and oxacids behave with bases, so as to form salts. "The salts are formed by the substitution of metal for the hydrogen of the acids." Explain clearly what this means, and whether it is a simple statement of experimental fact or an imaginative thought, or a theory? or what? What is meant by the terms respectively : Neutral, Acid, and Basic Salts.
3. Give an account of the metal Potassium, as regards its forms of occurrence in nature, and the part taken by its compounds in plant growth. How is the metal obtained, and what are its chemical and physical properties? What is the general character, as regards solubility, of the salts of Potash. By what tests is this base detected? Give a brief outline of the commercial process for preparing carbonate. of soda from common salt.
4. Give an account of the metal Calcium as regards its modes of occurrence in nature. Explain fully the chemical changes brought about by "burning" limestone; "slaking"; formation of "mortar" and "setting" of the same;-also the "boiling" of plaster, and its use in making casts, \&c. How is the presence of lime salts in natural waters accounted for? and how are marl deposits formed? Give tests for the presence of lime in water. What is meant by superphosphate of lime ?

## PHILOSOPHY.

Examiner
Professor Seth.

## Time: Three Hour.

1. Distinguish carefully between (a) a sensation and a precept; (b) an image and a concept.
2. Give an account of the Muscular Sensations, their chief varieties, and the various theories of their physiological basis.
3. Explain the psychological controversy between Nominalism and Conceptualism, and indicate your own solution.
4. Explain the difference between Association and Comparison.
5. What is the relation of Feeling to Knowledge and to Action? Give Dr. Murray's classification of the Feelings.
6. Outline Dr. Murray's analysis of Volition.
7. Give the Contradictory, Contrary, and Converse of this proposition: "On earth there is nothing great but man."
8. Prove that the conclusion of a syllogism must be negative in the Second Figure, and particular in the Third.
9. Explain briefly and illustrate the following terms:-Argumentum ad hominem. Ignoratio elenchi. Hypothesis. Plurality of Causes. Empirical law.
10. Test the following arguments :-
(a) Since the virtuous alone are happy, a man must be virtuous if he is happy, and he must be happy if he is virtuous.
(b) The doom of our opponents is sealed; for they said that if they won this election, their ultimate success was certain, and they have been defeated.
11. State and illustrate the Method of Difference, and the Double Method of Agreement; show the distinction between other methods; and indicate their common dependence upon the law of Universal Causation.
12. "All inference properly so-called consists in passing from the known to the unknown."

Is this true both of Induction and of Deduction, or of either?

## PHYSICS.

Examiner
Professor MadGregor.

## thme: Threr Hours.

N. B.-Answer nine of the following questions. All have equal value.

1. A uniform straight rod $A B$ rests in a box with smooth vertical sides AC and DE , and a smooth horizontal floor AE , in a plane perpendicular to the sides and floor. The end A of the rod is in contact both with the side AC and the floor AE. The other end B projects beyond the edge of the box on which the rod rests at D. Given the length and weight of the rod and the dimensions of the box, find the forces exerted on the rod by the box.
2. A body of 100 grms. mass, attached to a fixed point by a string 2 metres long, is allowed to fall from rest from the position in which the string is horizonal. Find the kinetic and potential energy in the position in which the string makes on angle of $30^{\circ}$ with the vertical ; and show that their sum is equal to the initial potential energy, and to the kinetic energy when the body has reached its lowest position.
3. Describe two methods of measuring the specific gravity of a liquid, obtaining the formulæ for the specific gravity in terms of the quantities observed. Having found the specific gravity, how would you determine the density of the liquid ?
4. A tube 6 feet in length, closed at one end, is half filled with mercury, and is then inverted with its open end just dipping in a mercury trough. If the barometer stand at 30 inches, what will be the weight of the mercury inside the tube?
5. Describe one method of analysing musical notes ; and give some account of the results of such analysis as revealing the cause of the difference in character between musical notes of the same pitch and loudness from different instruments.
6. A small object is placed 5 inches from a concave spherical mirror of 6 inches focal length. Where is the image produced? What is the magnification? Draw a diagram shewing the course of the rays by which the image is produced.
7. Give an account of the structure of $n$ simple form of spectroscope. - Trace the course of the rays of light as they pass through its various parts - Shew how this instrument enables us to detect the presence of terrestrial substances in the solar atmosphere.
8. A solid whose volume is 1 cu . inch at $0^{\circ} \mathrm{C}$ and 1.006 cu . in. at $100^{\circ} \mathrm{C}$ is weighed in a certain liquid at these two temperatures, the loss of weight at the former temperature being 1800 grains and at the latter 1750 grains. Find the co-efficient of expansion of the liquid.
9. Describe fully two methods of measuring specific heat, indicating the chief sources of error and giving modes of diminishing or eliminating the errors.
10. Calculate the latent heat of steam from the following observa-tions:-

$$
\begin{aligned}
& \text { Weight of empty calorimeter . . . . . . . . . . . . . . . . . } 326.3 \text { grns. } \\
& \text { calorimeter and water before condensa- } \\
& \text { tion of steam . . . . . . . . . . . . .... } 757.7 \text { " } \\
& \text { 6 calorimeter and water after condensa- } \\
& \text { tion of steam . . . . . . . . . . . . . . . . } 804.0 \\
& \text { Temperature of steam supplied . . . . . . . . . . . . . . . . . } 100^{\circ} \mathrm{C} \text {. } \\
& \text { 6 Water before supply of steam.... } 7^{\circ} .5 \mathrm{C} \text {. } \\
& \text { " " after } \quad \text { ".... } 65^{\circ} .2 \mathrm{C} \text {. }
\end{aligned}
$$

Specific heat of material of calorimeter . . . . . . . . . . 0.09
11. Prove that the magnetic force due to a bar magnet at any point on the axis of the magnet produced, is equal to $2 m d /\left(d^{2}-l^{2}\right)^{2}$, where $m$ is the magnetic moment of the magnet, $2 l$ its length, and $d$ the distance of the point from its centre.
12. Shew how resistances (electrical) are measured by means of Wheatstone's Bridge, proving the property on which the mode of measurement is based.
13. A current from a battery of 4 Daniell's cells was sent through a resistance box and a Tangent Galvanometer of negligible resistance. With a resistance of 58 ohms in the box a deflection of $55^{\circ}$ was obtained; and when the resistance was increased to 131 ohms, the deflection fell to $35^{\circ} .5$. Find the resistance of the battery, given that $\tan 55^{\circ}=2 \tan 35^{\circ} .5$.

TIME TABLE-FACULTY OF LAW

| Hours. | Monday. | Tuesday. | Wednesday. | Thursday. | Friday. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 to 10 | .................. | Const. History. | .. ... | Const. History. |  |
| 10 to 11 | Constitutional Law. |  |  | Constitutional Law. | International Law. |
| 15 to 12 | Shipping. | Conflict of Laws. | Bills and Notes. Crimes. |  | Equity. |
| 12 to 1 |  |  | Contracts. | .............. . | Contracts. |
| 4.30 to 5.30 | Real Property, |  |  | Partnership. | Torts. |
| 8 to 9 |  |  |  |  |  |


[^0]:    *Students seeking a First or Second Class Distinction are examined in this additional subject. An " unseen" passage will also be set for translation.

    + For private reading for a First Class.

[^1]:    *Students seeking a First or Second Class Distinetion are examined in this additional subject. An "unseen "passage will also be set for translation.
    $\dagger$ For private reading for a First Class.

[^2]:    *See page 39, s. 8.

[^3]:    $\ddagger$ This work is published in two volumes. The first of these-" A Treatise on Elementary Trigonometry "-is sufficient for the ordinary class.
    $\dagger$ An extra hour for some part of the session may be required.
    *The hour of meeting on Fridays may possibly be changed at the opening of the session.

[^4]:    Text Book-Goodale's Physiological Botany, being vol. II of Gray's Botanical Text Book.) Field Books for Summer Work-Gray's Manual of Botany of the Northern States; Gray's How Plants Grow, with Lawson's Fern Flora of Canada, as Appendix, (Mackinlay.)

[^5]:    * The " ordinary" subjects are those not marked with an asterisk in § I.

[^6]:    * So far as the provisions of the Time Table permit.

[^7]:    * So far as the provisions of the Time Table permit.

[^8]:    Books recommended: History of Literature: Saintsbury, Brooke. Clarendon Press "Mermaid" and Arber Editions of Elizabethan works. "Best Elizabethan Plays."

[^9]:    *Matriculation consists in entering the name upon the Register of a University as an undergraduate, not in the mere passing of a Matriculation Examination.

[^10]:    * If in any year, there should not be a sufficient number of students to form a class in this subjret, the lectures will not be given, but the students will pursue a course of reading under the supervision of the Lecturer. The practical part of the class work will always be carried out.

[^11]:    * If in any year there should not be a sulficient num.ber of students to form a class in this subject, the lectures will not be given, but the students will pursue a course of reading under the surpervision of the Lecturer. The practical part of the class work will always be carried out.

[^12]:    * If there should not be a sufficient number of students to form a class in this snbject, the lectures will not be given, but the student will pursue a course of reading under the supervision of the lecturer. The practical part of the class work will always be carried out.

[^13]:    Undergraduates taking Courses A, E, F, G, H, and those taking B, if they are to enter the Special Course in Physics and Physical Chemistry, must give special attention to Mathematics in the Second Year. Unless they pass a satisfactory examination in this subject, they are not allowed to enter the Advanced Mathematics Class in the Third Year.

[^14]:    Latin for 1893, Cesar, Gallic War, Bks. V and VI. : or Virgil, Æneid, Bk. III.
    Latin for 1894. The same as for 1893.
    Greek for 1893, Xenophon, Anabasis. Bk. I. or II. or VII.
    Greek for 1894. The same as for 1893.
    In French, Voltaire's Charles XII., Books I. and II. or Octave Fenillet : Le Roman d'un jenne homme pauvre. In German, Adler's Reader (Appleton \& Co.), Dritter Abschnitt, or Schiller's Der Neffe als Onkel, Act I.
    $\dagger$ These books are mentioned to show the extent of knowledge expected. Other books may of course be used by candidates.

[^15]:    *The Medicine Examination will include questions in Pathology and Bacteriology.
    $\dagger$ The Surgery Examination will include questions in Opthalmology, Otology, etc.

[^16]:    *The Provincial Museum, in the New Provincial Building, Market Square, contains collections illustrating the Mineralogy, Geology and Zoology of the Province, and is open to the public daily; it may be conveniently used by Students.

[^17]:    These classes were commenced in 1890, and have been continued during the past three winters. In 1890-91, the subjects of Lecture were Nomenclature, Notation, General Principles, and the more important Non-Metallic and Metallic Elements and their compounds. In 1891-92, subjects of Lecture, Principles of Organic Chemistry, with special regard to the Carbohydrates and chemical changes in germination, and during processes of Malting, Brewing, \&c. In 1892-93, the students took special laboratory work relating to the particular industries in which they were interested. No fees have been charged for these evening classes during the last two years.

[^18]:    * All accounts paid at the end of the year.

